

# MESOPOTAMIA IN MINNESOTA

Cuneiform Texts in Twin Cities Collections

By Eva von Dassow

with contributions by

Gretchen Anderson and Mark Gill

Catalogue of an exhibition held at the

Science Museum of Minnesota

May 4-June 15, 2002

and at the

O. Meredith Wilson Library, University of Minnesota

October 28-December 20, 2002

and July 1-September 30, 2003

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## ACKNOWLEDGMENTS

Thanks are due to many who contributed to the creation of this exhibit, “Mesopotamia in Minnesota,” and of this catalogue, by lending artifacts, lending a hand, granting permission to publish, or granting funds to support the work. First, I gratefully acknowledge the following individuals and institutions for lending their cuneiform tablets for exhibit and for granting permission to publish them: the University of Minnesota Libraries, and in particular Timothy Johnson, Curator, Special Collections and Rare Books; Linda Hatcher of Forest Lake, Minnesota; and the Science Museum of Minnesota. Special thanks go to the staff of the Science Museum, Division of Research and Collections, for assisting in creating and installing the exhibit: Gretchen E. Anderson, Conservator (who also contributed Ch. 5 of this catalogue); Lori Benson, Collections Manager; Jackie Hoff, Registrar; Deborah Schoenholz, Science Publications Specialist; Orrin C. Shane III, Curator of Archaeology and Head of Anthropology; and Adrienne Todd-Walden, Curatorial Assistant. Verne Anderson, artist and Science Museum volunteer, created the Sumerian mailman and the brick wall which feature in the exhibit. Thanks are also due to Tim Ready of the Science Museum and Ahn Na Brodie of the University Libraries for photographing the artifacts and permitting the reproduction of their photographs in both print and digital media. Permission to publish the photographs illustrating this booklet was kindly granted by the Science Museum of Minnesota, the University Libraries, and the Minneapolis Institute of Arts.

Five University of Minnesota students participated in creating both the exhibit and the catalogue: Kris Anderson, who organized the latest installation of the exhibit; Ella Buell, who made the map featured in the exhibit and the catalogue; Matthew James Buell, who designed web pages for the cuneiform collections; Mark Gill, who contributed Ch. 4 to the catalogue; and Victoria Keller, who created the layout of the catalogue and prepared it for publication. These students’ work on this project was supported by grants from the University of Minnesota’s Undergraduate Research Opportunities Program. I thank my students for their work, and the Undergraduate Research Opportunities Program for funding it.

I am also grateful to two Sumerologists, Miguel Civil of the Oriental Institute, University of Chicago, and Marcel Sigrist, of the École Biblique d’Archéologie Française in Jerusalem, for their assistance in accurately reading and interpreting these tablets (responsibility for any errors of fact or interpretation remains mine).

Lastly, thanks are due to the Department of Classical and Near Eastern Studies (CNES), University of Minnesota, and to Timothy Johnson, Curator of Special Collections and Rare Books, for providing ongoing logistical and financial support to the project. To Barbara Lehnhoff, Executive Secretary of CNES, whose tireless assistance has been indispensable in bringing the work to fruition, is addressed special gratitude.

## TABLE OF CONTENTS

Acknowledgments	.....p. 2
Table of Contents	.....p. 3
Introduction	
Map of the Ancient Near East (by Ella Buell)	.....p. 4
The invention of cuneiform writing in Mesopotamia	.....p. 5
Organization and presentation of texts in this catalogue	.....p. 7
Ch. 1. Sumer in the Ur III Period	
I. Counting sheep in Sumer	.....p.10
II. Time and place	.....p. 20
III. Sealing tablets	.....p. 21
IV. Provisions for gods and people	.....p. 28
V. On the road, and home again.	.....p. 31
Ch. 2. Old Babylonian Kingdoms	
Royal Building Inscriptions	.....p. 34
Ch. 3. Temple and State in First Millennium Babylonia	.....p. 38
Ch. 4. How Cuneiform Tablets Came to Minnesota	
By Mark Gill	.....p. 41
Ch. 5. Conservation of Cuneiform Tablets and Cones	
By Gretchen Anderson	.....p. 43
Appendix I. Further Reading.	.....p. 46
Appendix II. Catalogue of Cuneiform Texts in Twin Cities Collections.	....p. 48

## INTRODUCTION



Map created by Ella Buell

### Map of the Ancient Near East

**Red: Ancient Names**



**Black: Ancient Cities**



**Grey: Modern Countries**


**Note: The ancient as well as the modern channels of the Tigris and Euphrates Rivers are shown.**

## The invention of cuneiform writing in Mesopotamia


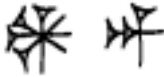









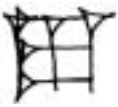



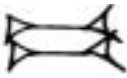
Over five thousand years ago, the people dwelling in southern Iraq (Mesopotamia) invented one of the world's earliest systems of writing. They did not do so in order to write stories or letters, nor yet to publicize the deeds of gods or kings, though soon enough writing came to be used for those purposes. They invented writing in order to account for the receipt and distribution of resources. For their numbers had grown, and their society had become complex, in the alluvial plains of the lower Tigris and Euphrates rivers, an environment which required attentive management in order to sustain a large population. Hence the need for organizing labor and resources; hence the need for accounting and accountability. The accounting system the people of ancient Iraq developed comprised both a method of recording information, by symbolizing language in writing, and a method of authenticating and authorizing records and transactions, by sealing them with personal or official seals.

These people, whose language was Sumerian, developed written signs to represent numbers, things, words, and sounds. All of the signs were originally pictograms – that is, little schematic pictures of things, actions, or concepts. But these signs could be used to represent either the things of which they were pictures, or the sounds of the words for those things. For example, a picture of water  could stand either for “water” or for the sound of the word for water, which was “A” in Sumerian. And a picture of a person's head  could stand either for “head” or for the sound of the word for head, which was “SAG” in Sumerian. By using signs to represent syllables (like “a” and “sag”), as well as to represent things and words for things, all elements of language could be encoded in writing. Moreover, elements of any language could be encoded in writing – not only Sumerian, but also Akkadian, the Semitic language of Mesopotamia, or Elamite, an ancient language of southwest Iran, could be written using these signs.

Clay was chosen as the standard medium of writing, for it was readily available, yet durable when sun-dried or baked. Reeds, which grow abundantly along the riverbanks of Iraq, were used to make writing implements. For most types of written records, clay was formed into rectangular tablets, but for certain purposes discs, cones, and other shapes were used. To write on clay, one would impress the tip of a reed stylus into the surface in order to make each stroke of a sign. These strokes acquired the appearance of triangular wedges, so the modern discoverers of this ancient writing system called it “cuneiform”– Latin for “wedge-shaped.” Meanwhile, although the original pictograms were oriented vertically with the pictures right side up, they came to be turned on their sides and written left to right, since that was the easiest way for right-handed scribes to write without smearing their clay. So the signs illustrated above,  and  , came to look like this:

TF and .

In the cuneiform writing system, there are about 600 different signs. Most of these signs are polyvalent, meaning that each sign can have more than one value, either as a logogram or a syllable sign, or both. Signs representing words are logograms. On the following page are some more examples of cuneiform signs, which you can identify on the tablets illustrated in this catalogue. The signs are shown in their original pictographic form as well as their developed “cuneiform” shape, with sample logographic and syllabic values.

pictogram	cuneiform	logographic values (Sumerian words)	syllabic values
		dingir, "god" an, "sky"	an, ìl
		mu, "year" mu, "name"	mu
		utu, "sun" ud or u <sub>4</sub> , "day" babbar, "bright, white"	ut, u <sub>4</sub> , tú, par
		še, "grain, barley"	she
		gud or gu <sub>4</sub> , "ox"	(none)
		udu, "sheep" dib, "take"	lu, dib
		du, "go, walk" gub, "stand"	du, gub
		kaš, "beer"	kash, bi

As indicated above, cuneiform writing developed as a component of an accounting system, the other component of which was the use of seals. Many transactions required authorization, and many written messages and other records required authentication. This was accomplished by impressing the seal of the person or institution responsible for the transaction or message onto the clay record of it. Seals were little cylinders or stamps, usually made of stone, carved with pictorial scenes and often with an inscription naming the seal owner. When a seal was pressed or rolled onto a clay tablet, it left its distinctive impression, in reverse. The seal impression served to uniquely identify the owner of the seal – like a signature, or like the seals still used today on certain official documents – hence to authenticate or authorize the written record in the seal owner's name. Seals were im-

pressed not only on cuneiform tablets, but on clay envelopes of tablets, on clay jar stoppers, and on clay sealings applied to baskets, bags, and doors (see the example of a sealed tag for a cuneiform file-basket, UMN 19). By this means a storeroom, container, or written record was protected against entry, tampering, or alteration without the oversight of the individual in possession of the seal with which it had been sealed.

As well as functioning to authenticate written records, secure containers against tampering, and so on, seals were aesthetic objects and communicative devices in their own right. The pictorial scene and inscription carved on a seal might reflect its owner's status and position in society, or might convey the relations thought to link the divine and human social order (see examples illustrated below, in Section III "Sealing Tablets"). In some periods, mythological or ritual scenes were portrayed on seals; in other periods, scenes of social life and productive activity were favored. Beautiful stones, or stones thought to have amuletic properties, were often chosen for the material of seals, which thus acquired the character of jewelry. Seals could be worn as ornaments, on brooches, bracelets, or rings, ready for use when the wearer needed to do something like seal a document.

Cylinder seals appear to have been originally a Mesopotamian invention (at least in the Old World), developed specifically for rolling on clay; seals in cylindrical form were used concurrently with cuneiform writing, in Mesopotamia and beyond. Stamp seals of various types have a much wider distribution, and were used not only in conjunction with writing on clay but also with many writing systems other than cuneiform, for which papyrus, parchment, and other materials were employed as writing media.

Cuneiform was in use for over three thousand years in Mesopotamia and neighboring regions of the Near East. Though it originated essentially as a tool of accounting, soon after its invention the cuneiform writing system came to be employed to write letters, treaties, votive inscriptions, advertisements, hymns, magical incantations, literature, propaganda, indeed almost all types of texts. Besides Sumerian, Akkadian, and Elamite, cuneiform was used to write in several other languages, notably Hittite and Hurrian. During the first millennium BCE, cuneiform was gradually replaced by the alphabet – very gradually; the latest cuneiform tablets date to the first couple of centuries CE!

## **Organization and presentation of texts in this catalogue**

This booklet is the catalogue for the exhibit "Mesopotamia in Minnesota," held first at the Science Museum of Minnesota, May 4- June 15, 2002, then at the O. Meredith Wilson Library at the University of Minnesota, October 28- December 20, 2002 and July 1- September 30, 2003. The exhibit and catalogue showcase many of the cuneiform tablets and cones kept in the collections of the Science Museum of Minnesota and of the University of Minnesota, Special Collections and Rare Books (in the Elmer L. Andersen Library), as well as one tablet in private hands. The cuneiform texts in these collections all come from southern Mesopotamia, and date to the 21<sup>st</sup>, 19<sup>th</sup>, and 6<sup>th</sup> centuries BCE. This catalogue therefore includes one chapter for each of those three periods, followed by a brief fourth chapter about the history of the collections, and a fifth chapter about the conservation of cuneiform tablets. The 21<sup>st</sup> century, or the Ur III period, is the period represented by the largest number of texts, therefore the chapter on Ur III tablets is the longest, and is subdivided into five sections focussing on specific topics. Instead of simply being presented in order by date or by accession number, with a catalogue heading, text, and photos of each item, in the fashion of a traditional catalogue, the tablets and cones presented herein are grouped by period and by topic within the framework of a discussion of their context and contents; the catalogue information itself is relegated to an appendix. In the case of the majority of the tablets and cones, the entire text written on the artifact is presented in transliteration and in English translation, along with photographs, at

the point when the artifact is introduced; however, some of the longest texts are only described or summarized, so as not to interrupt the flow of the discussion. This mode of presentation, whereby the texts illustrate a discussion focussed on the historical and cultural context in which they were produced, will, it is hoped, communicate more than a straightforward catalogue would.

The cuneiform tablets and cones are identified herein by the accession numbers assigned to them in the collections where they are now kept, or in previous publications (with the exception of the single tablet in private ownership). The artifacts are not re-numbered for this publication, therefore their numbers do not correspond to the order in which they appear in the following chapters. A catalogue of all the cuneiform texts in the collections represented here appears at the end of this booklet as Appendix II.

A few words about the conventions used in transliterating cuneiform texts are in order. Transliteration is the rendering of the signs of one writing system into the signs of another, in this case rendering cuneiform signs into the characters of the Roman alphabet. Since the cuneiform writing system, consisting of logographic and syllabic signs, is very different from an alphabetic writing system, and since the languages written using cuneiform have somewhat different phonological inventories (sets of sounds) from the languages that, like English, are written using the Roman alphabet, special conventions and diacritics are employed in order to transliterate cuneiform texts and to represent the languages in which they were written. The conventions of which the reader of this catalogue will want to be apprised include the following:

- When transliterating from Sumerian, all signs are transliterated in lowercase roman type, whether they are functioning as logograms or as syllable signs (often identical in Sumerian); however, signs the reading of which is uncertain may be rendered with uppercase characters. When transliterating from Akkadian, signs functioning as logograms are transliterated in uppercase roman type and signs representing syllables in lowercase *italic* type.

Within the translations and discussion of the texts, Sumerian words are set in roman type with expanded spacing, while Akkadian words are set in *italics*.

- Some cuneiform signs can function as “determinatives,” or classifiers: determinatives precede or follow a series of signs and serve to indicate what type of entity is denoted by that series of signs. For instance, the sign for “deity,” which is *d i n g i r* in Sumerian, normally precedes the names of specific deities, in order to indicate to the reader that the sign sequence so marked spells a divine name; when it functions this way, the dingir-sign is transliterated as a superscript lowercase “d” – thus, <sup>d</sup>En-líl is “(the god) Enlil.” Similarly, the sign for “place,” which is *k i* in Sumerian, follows names of places, both cities and countries, to indicate that the sign sequence so marked is a place-name, and when it functions this way the ki-sign is transliterated superscript – thus, Unug<sup>ki</sup> is “(the place) Uruk.”

- Different cuneiform signs which have the same syllabic value are distinguished by accent marks and by subscript numerals, e.g., u, ú, ù, u<sub>4</sub>, u<sub>5</sub>, etc. The accent marks have nothing to do with pronunciation.

- Cuneiform texts, like all manuscripts, are often poorly preserved. Square brackets [ ] indicate loss of text due to a break or other damage to the artifact. Sometimes it is possible to guess at what was written where the text is broken, in which case the missing sign(s) may be restored within square brackets.

- Scribes who wrote cuneiform texts, like all writers, occasionally made mistakes and wrote signs incorrectly, omitted signs, or added unnecessary signs. An exclamation point in the transliteration indicates an incorrectly written sign; triangular brackets < > enclose signs omitted by the scribe, and reversed triangular brackets > < indicate extra signs erroneously written by the scribe. The letter x (which transliterates no phoneme represented in cuneiform) is used to stand for uninterpretable

signs.

- Letters marked with diacritics are used to denote phonemes of Sumerian or Akkadian which either do not exist in English or are not represented by distinct letters. The following letters with diacritics are encountered in the transliterations in this booklet: Ḫ, ḫ = “kh,” Ṣ, ṣ = “ts,” Š, š = “sh,” Ṭ, ṭ = an emphatic “t.” (This is not the full range of diacritics employed for accurate phonetic representation, but a simplified system is adequate for our purposes here.)

- Proper names are here capitalized both in transliteration and in translation, for ease of comprehension.

These texts can be rather laconic, omitting information that was known to their intended readers. In translation, material enclosed within parentheses ( ) is supplied to facilitate smoother and fuller comprehension on the part of the modern reader.

N.B.: The photographs show all the artifacts at their actual size.

## **Ch. 1 – SUMER IN THE UR III PERIOD**

The kings of Ur ruled Mesopotamia during the 21<sup>st</sup> century BCE, for the third time in history according to Mesopotamian tradition; so we call this the Ur III period. In order, the Ur III kings were Ur-Nammu, Shulgi, Amar-Suen, Shu-Suen, and Ibbi-Suen. They fought many wars, created an empire, and developed a highly organized bureaucracy through which to govern their realm. Myriads of cuneiform tablets, recording every transfer of every type of resource, were produced by accountants in the service of the Ur III state. The tablets presented in the following sections are some examples of these accountants' "clay-work."

### **I. Counting sheep in Sumer**

In the 38<sup>th</sup> year of his reign, Shulgi founded a new administrative center a few miles downstream from Nippur, one of the chief cities of Sumer, on the Euphrates. This new foundation was called Puzrish-Dagan, an Akkadian name meaning "under the protection of (the god) Dagan," and it was devoted primarily to handling revenues in livestock from all parts of the realm. Puzrish-Dagan was, in fact, an "internal revenue service" bureau of the Ur III state. Here, vast numbers of oxen, cows, sheep, goats, and other livestock were registered and allocated in various accounts and for various purposes, day by day and year by year. Some of the animals registered by the accountants at Puzrish-Dagan would serve as sacrificial offerings for the gods, others as food for dignitaries, state employees, or troops.

All this administrative activity generated lots of clay tablets recording the receipt, transfer, and disbursement of all those animals. When, in the late 19<sup>th</sup> century of the current era, digging for cuneiform tablets became a lucrative occupation, the site of Puzrish-Dagan (whose modern name is Drehem) was found to yield quite a rich bounty. Thus it happens that the accounting of sheep, goats, and other cattle during the Ur III period is a subject well represented in modern cuneiform tablet collections, as well as in the study of ancient Sumer.

Numerous livestock, received from different sources and allocated for different purposes, are listed on the following tablet from Puzrish-Dagan, dated to the 48<sup>th</sup> year of Shulgi's reign (illustrated on the next page).

(obverse)



(Sumerian text)

[x] gu<sub>4</sub> 55 udu  
 40 u<sub>8</sub> 5 máš  
 ki Na-ap-la-núm mar-tu-šè  
 gir Ur-<sup>d</sup>Utu àga-uš  
 Àrad-mu maškim  
 7 gu<sub>4</sub> 3 áb  
 3 udu 11 máš  
 ba-ug<sub>7</sub> é-dub-ba-šè  
 šà mu-túm nam-ra-ak  
 𒀭ar-š<sup>ki</sup>  
 1 sila<sub>4</sub> <sup>d</sup>En-líl  
 mu-túm zabar-dab<sub>3</sub>

(translation)

[x] oxen, 55 sheep,  
 40 ewes, 5 goats,  
 from Naplanum, the Amorite;  
 controller, Ur-Utu the guard;  
 Arad-mu is the requisitioner.  
 7 oxen, 3 cows,  
 3 sheep, 11 goats,  
 slaughtered, for the office,  
 out of the delivery of plunder  
 of (the land) Harshi;  
 1 lamb, (for the god) Enlil,  
 delivery of the z a b a r d a b -  
 official.

(reverse)






1 sila<sub>4</sub> <sup>d</sup>Nanna  
 1 máš <sup>d</sup>INNIN  
 mu-túm en <sup>d</sup>INNIN  
 1 sila<sub>4</sub> <sup>d</sup>En-líl  
 1 sila<sub>4</sub> <sup>d</sup>Nin-líl  
 mu-túm Šeš-da-da sanga  
 1 sila<sub>4</sub> <sup>d</sup>Na-na-a  
 mu-túm énsi Šuruppak<sup>ki</sup>  
 zabar-dab<sub>3</sub> maškim  
 1 áb 6 u<sub>8</sub> 6 ùz 4 máš  
 šu-gíd é-muḥaldim-šè u<sub>4</sub> 16.kam  
 ki Na-sa<sub>6</sub>-ta ba-zi  
 iti Á-ki-ti  
 mu ús-sa Ki-maš<sup>ki</sup> ba-ḥul  
 mu-ús-sa-bi

1 lamb – (the god) Nanna;  
 1 kid— (the goddess) Inanna;  
 delivery of the priest of Inanna.  
 1 lamb – (the god) Enlil;  
 1 lamb – (the goddess) Ninlil;  
 delivery of Sheshdada, temple  
 manager.  
 1 lamb— (the goddess) Nanaya;  
 delivery of the governor of  
 Shuruppak;  
 the z a b a r d a b is requisitioner.  
 1 cow, 6 ewes, 6 goats, 4 kids,  
 delivery for the kitchen, day 16.  
 Disbursed by Nasa.  
 Month of the Akitu (festival),  
 Year after the year after Kimash  
 was destroyed.

SMM 12

Photos courtesy of the Science Museum of Minnesota

Records of single deliveries or transfers of livestock were written according to a standard format, as follows:

	(translation)	(Sumerian text)	(obverse)
object of the transaction: the day on which it occurred:	5 sheep, day 10,	5 u du u <sub>4</sub> 10.kam	
who performed what type of transaction:	from Abbasaga, Nalu	ki Ab-ba-sa <sub>6</sub> -ga-ta Na-lu <sub>5</sub>	
			(reverse)
The record concludes with the month: and the year date:	took in charge. Month of the festival of Ninazu, Year Enunugal was installed (as priest of) Inanna (of Uruk)	ì-dab <sub>5</sub> iti ezen <sup>d</sup> Nin-a-zu mu En-unu <sub>6</sub> -gal <sup>d</sup> Innin ba-ḥun	
On the tablet's left edge a total was often written (here somewhat damaged):	5 (sheep)	5	(left edge) 

### UMN 5

(The arabic numeral 5, on the reverse, was written on the tablet by the dealer who sold it.)

Here is a similar record, written in the same year, the fifth year of Amar-Suen's reign:

	(Sumerian text)	(translation)
(obverse)		
	6 sila <sub>4</sub> 1 máš u <sub>4</sub> 30.kam ki Ab-ba-sa <sub>6</sub> - ga-ta	Six lambs, one (goat-)kid, day 30, from Abbasaga,
(reverse)		
	In-ta-è- a ì-dab <sub>5</sub> iti maš-dà-kú mu En-unu <sub>6</sub> - gal <sup>d</sup> Innin ba-ḥun	Intaea took in charge. Month of eating gazelle, Year Enunugal was installed (as priest of) Inanna
(left edge)		
	7	7 (animals)

### SMM 3

Photos courtesy of the Science Museum of Minnesota

In both of the foregoing tablets, Abbasaga, head of the Puzrish-Dagan cattle administration, disbursed the animals, and they were received by another member of the Puzrish-Dagan staff, Nalu in one case and Intaea in the other case. As time went on in the Ur III period, bureaucratic procedures increased in complexity, and the number of personnel involved in every transaction increased accordingly. So the same kind of record written a decade later, in the seventh year of Shu-Suen's reign, required the participation of an additional administrator as the "controller":

(obverse)



(Sumerian)

6 udu ú  
 1 máš  
 ba-ug<sub>7</sub>  
 u<sub>4</sub> 22.kam  
 ki Ur-kù-nun-na-  
 ta

(translation)

Six grass-fed sheep,  
 one goat,  
 slaughtered,  
 day 22,  
 from Urkununna,

(reverse)



Šul-gi-uru-mu  
 šu-ba-ti  
 g̃r Ĥu-la-al  
 du[b-sa]r  
 iti ezen Šul-gi  
 mu Šu-Šu-EN.ZU  
 lugal Ur<sup>ki</sup>-ma-ke<sub>4</sub>  
 ma-da Za-ab-ša-  
 li<sup>ki</sup> mu-ĥul

Shulgi-urumu  
 received;  
 controller, Ĥulal  
 the scribe.  
 Month of the festival of Shulgi,  
 year Shu-Suen,  
 king of Ur,  
 smote the land of Zabshali.

(left edge)




7 udu


7 sheep


## SMM 10

Photos courtesy of the Science Museum of Minnesota

Likewise, the following tablet, from the sixth year of Shu-Suen's reign, records the disbursement of two oxen by one administrator, which were requisitioned by another administrator, under the oversight of a third, who functioned as the "controller"—almost like the procedure for disbursement of funds in a modern institution!

(translation)	(Sumerian text)	(obverse)
One fattened ox, on behalf of the couriers; one grass-fed ox, on behalf of the ration-men; for the kitchen; Arad-mu is the requisitioner. Midnight ceremony of day 27.	1 gu <sub>4</sub> niga mu kas <sub>4</sub> -e-ne-šè 1 gu <sub>4</sub> ú mu lú-šuku-ra-ke <sub>4</sub> -ne-šè é-muḥaldim-šè Árad-mu maškim á-gi <sub>6</sub> -ba-a u <sub>4</sub> 27.kam	

		(reverse)
Disbursed by Dudu. Controller: Irrishum the s a r r a b d u (-official). Month of the festival of Mekigal, year Shu-Suen, king of Ur, a great stela for (the deities) Enlil and Ninlil erected.	ki Du-ú-du-ta ba-[zi] gír Ìr-ri-šum sár-ra-ab-du iti ezen- <sup>d</sup> Me-ki-gál mu <sup>d</sup> Šu- <sup>d</sup> EN.ZU lugal úri <sup>ki</sup> -ma na-ru-a maḥ <sup>d</sup> En-líl <sup>d</sup> Nin-líl-ra mu-ne-dù	

		(left edge)
2 oxen	2 gu <sub>4</sub>	

**SMM 7**

Photos courtesy of the Science Museum of Minnesota

Periodically, in each bureau at Puzrish-Dagan, all the little tablets were collected and the information they recorded was transferred onto large account tablets. One such tablet is this account statement, which records incoming and outgoing sheep and goats for a ten-day period during year 8 of Amar-Suen's reign:

First, deliveries are listed, in two columns, beginning on the left with the balance remaining from the previous statement:

64 sheep, remainder of  
the account balance of day 21

Each entry is marked off by horizontal rulings, as on a ledger. The entries record how many animals were received from specific individuals, on successive days, from specific towns ...



**UMN 4, obverse**

... and the record continues over the lower edge (unreadable due to water damage) to the reverse, where columns are ordered right to left; the deliveries are totalled at the top of the right-hand column, then after a blank line expenditures are listed, beginning with:

Expenditures of the term of service:  
20 sheep, (for the) kitchen, day 28,  
10 sheep, day 30

Totals of the expenditures probably appeared at the top of the damaged left column of the reverse. There follows a total for the entire statement:

481  
disbursed;  
difference: 46 sheep

and after a blank space, the name of the administrator in charge, and the date:

Balanced account of Allamu.  
Month of the festival of Mekigal,  
year the priestess of Eridu was installed.



UMN 4, reverse

On the tablet's left edge the scribe noted the period covered by this account statement:



u<sub>4</sub> 21-ta u<sub>4</sub> 30-šè – “From day 21 to day 30”

This brief note on the left edge, and the totals on the left edges of many of the small tablets, probably served the purposes of organizing all these clay records and finding specific tablets when they were needed, analogous to the information on the spine of a book or the label on a file folder.

Accounts of livestock were also kept in places other than Puzrish-Dagan. The city of Umma, located in northeastern Sumer, was a provincial capital in the Ur III realm, and there too the remains of vast cuneiform archives have been found. Here is a record of sheep from Umma, dated to Amar-Suen's sixth year, which is similar to the records from Puzrish-Dagan:

(obverse)



2 udu  
 ki A-lu<sub>5</sub>-lu<sub>5</sub>-ta  
 siskur<sub>2</sub> g̃ir  
 Du-ú-du<sub>11</sub> igi-du<sub>8</sub>  
 iti ezen <sup>d</sup>Amar-  
<sup>d</sup>EN.ZU

Two sheep,  
 from Alulu,  
 (for an) offering; controller,  
 Dudu the overseer.  
 Month of the festival of  
 Amar-Suen,

(reverse)



mu a-rá 2.kam  
 Ša-šú-ru-um<sup>ki</sup>  
 ba-ḫul

Year Shashrum was  
 destroyed for the  
 second time.

### UMN 3

Another record of sheep from Umma, dated to Amar-Suen's fifth year like two of the Puzrish-Dagan tablets above, differs from those in format because it was written for a different purpose in a different administrative context. It lists several sheep and a goat which were collected from the woods along the river, where they had evidently gone astray:

(obverse)



1 udu Lú-kal-la	1 sheep, Lukalla
1 udu Ur-Šá-ra	1 sheep, Ur-Shara
1 udu Ur-giš	1 sheep, Ur-gish
1 udu Ḫu-un-sa <sub>6</sub> -mu	1 sheep, Hunsamu
1 udu Ur-ru	1 sheep, Urru
1 udu Nī-du <sub>10</sub> -ga-mu	1 sheep, Nidugamu
1 udu	1 sheep
1 ùz	1 goat,

(reverse)



udu didli tir-íd-gal-	individual sheep, from the Forest of the Great Canal
1 udu Lugal-á-zi- da gudu <sub>4</sub>	One sheep, Lugal-azida, the anointing-priest
1 udu Ur-tar-luḫ tir	One sheep, Ur-tar-luḫ, the forester
šu.nigin 9 udu bar-su-ga	Total: 9 sheep, fleece plucked,
Šu.nigin 1 ùz	Total: 1 goat
udu ú dab <sub>5</sub> -ba	Grazing sheep, captured.
mu En-unu <sub>6</sub> -gal	Year Enunugal was
ḫInnin ba-ḫun	installed (as priest of) Inanna

## SMM 2

Photos courtesy of the Science Museum of Minnesota

The forests of Umma, where the animals listed on this tablet had apparently gone astray, were riverine woodlands which were managed on behalf of the state by a corps of foresters. The forestry corps was organized into work crews, each of which managed its assigned forest under the supervision of a foreman, and the entire corps was under the charge of an overseer. The work crews usually consisted of men from certain families who in effect inherited their duties to take care of specific forests. Ur-tar-luḫ, who is mentioned in this text, was the overseer in charge of the forests of Umma during the later years of Shulgi's reign and most of Amar-Suen's reign.

## II. Time and place

The date formulae appearing in these records are of historical interest, because in the type of dating system employed in the Ur III state, as in most Mesopotamian states, the years were named rather than numbered. Each year of a king's reign was named after an important event, such as a military success, a cultic appointment, or the construction of a temple, canal, or fortification. Thus the series of year names constitutes a running account of the events that the royal administration considered most significant or most worth publicizing. The year names encountered in the tablets presented in this chapter commemorate the following events:

### a. War:

- Shulgi's victory over Kimash, a land in southwestern Iran (years 46-48)
- Amar-Suen's victory over Shashrum, north of Mesopotamia in the Zagros Mountains (year 6)
- Amar-Suen's victory over Huhnuri, another land in southwestern Iran (year 7)
- Shu-Suen's victory over Zabshali, another land in southwestern Iran (year 7)

### b. Cultic appointments

- appointment of a priestess of Nanna, in Ur (Shulgi, year 43)
- installation of a priest of Inanna, in Uruk (Amar-Suen, year 5)
- installation of a priestess of Enki, in Eridu (Amar-Suen, year 8)
- installation of a priestess of Nanna, in Gaesh (Amar-Suen, year 9)

### c. Cultic works:

- Shu-Suen's dedication of a stela for Enlil and Ninlil (year 6)
- Shu-Suen's dedication of a boat for Enlil and Ninlil (year 8)

### d. Defensive works:

- Shu-Suen's construction of a wall to keep out the Amorites (years 4-5)

(Of course Shu-Suen's wall, perhaps built across Mesopotamia from the Tigris to the Euphrates somewhere near Baghdad, did nothing to keep out the Amorites, any more than the Great Wall of China kept out the Huns. Many Amorites dwelt within the Ur III realm since its beginning, in any case, and many others interacted with it through commerce and diplomacy, as is attested by the presence of Naplanum the Amorite in SMM 12, above.)

Even the tiniest and most trivial records are usually dated by month and year. While the year names provide historical information, the month names indicate where in Mesopotamia a tablet was written, for, although the Ur III kings ruled a highly centralized state, they did not impose a single calendar on all the cities of their realm; each major city had its own local calendar in which the months had distinct names. Therefore, on the basis of the month names used in the date formulae, it is possible to ascertain from what site come Ur III tablets which, having been purchased on the antiquities market, lack archaeological provenience. But it is difficult to tell where the rare undated tablet comes from, like this one, the reverse of which is blank:

(obverse)



3 udu

Three sheep,

1 sila<sub>4</sub>

one lamb,

Lugal-<sup>gis</sup>kiri<sub>6</sub>

(from?) Lugal-kiri,

Da-gi ì-  
dab<sub>5</sub>

Dagi took in  
charge.

#### SMM 4

Photo courtesy of the Science Museum of Minnesota

The dealer who sold this tablet (and most or all of the others presented here), Edgar Banks, gave its provenience as Jokha, the site of ancient Umma.

### III. Sealing tablets

Nowadays we sign our documents and letters, and stamp certain documents with official seals, in order to assure their authenticity and to convey personal or official authorization. For the same purposes, people in ancient Mesopotamia sealed their clay documents, using small stone stamps or cylinder seals. As described in the introduction above, a seal was carved with a pictorial scene and often with an inscription as well, and it was pressed or rolled onto the surface of an inscribed tablet (or other objects that required sealing) so as to leave its distinctive impression on the clay. The impression of a specific seal uniquely identified the owner or user of that seal, and conveyed his or her authorization of what was recorded on the tablet.

Here is a picture of an inscribed cylinder seal, with a modern impression:



The Minneapolis Institute of Arts

This seal bears a three-line inscription identifying its owner, a woman named Mullilatum:

(text)

(translation)

Mu-ú-li-la-tum

Mullilatum,

DUMU.SAL Be-lum

daughter of Bēlum,



GUDU<sub>4</sub> dKA.DI

anointed (priest) of (the god) Ishtaran.

Women as well as men often owned and used seals. The provenience of this seal is unknown, but because it belonged to the daughter of a priest of Ishtaran, god of the city of Der (not to be confused with the goddess Ishtar), it may originally have come from the region of Der, located east of central Mesopotamia.

The Sumerian word for seal was *k i š i b*; this word could also denote a sealed object. In the text of a sealed tablet, *k i š i b* precedes the name of the individual who sealed the tablet, thus: *k i š i b so-and-so*, “seal of so-and-so,” as in each of the tablets presented in this section.

The first of these, a tablet from Umma dated to the 43<sup>rd</sup> year of Shulgi’s reign, is a barely legible receipt for beer, sealed by a clerk named Umani:

	(Sumerian text)	(translation)
(obverse)		
	5 dida sig <sub>5</sub>	5 (measures) fine beer
	7 dida gin	7 (measures) regular beer
	NI.NAM.KI-šè-x	... (untranslatable)
	ù? é-ku-ru-da	...
	ki Lú-kal-la-ta	from Lukalla
(reverse)		
	kišib Û-ma-ni	seal of Umani.
	iti šu-numun	Month of sowing,
		(seal impression)
	mu en <sup>d</sup> Nanna maš-e ì-pàd	year the priestess of Nanna was chosen by the omens.

### SMM 6

Photos courtesy of the Science Museum of Minnesota

A seal was normally rolled so that its impression was oriented perpendicular to the text of the tablet. Thus the seal impression is more easily seen if the tablet is turned on its side, as in this photograph:



Umani impressed his seal on the reverse of the tablet, in a space left blank for that purpose between the month and the year-name. He rolled his seal so as to make the picture carved on the seal show clearly in the impression on the tablet – see the little seated goddess? Umani’s seal also bore an inscription, or legend, giving his name, title, and father’s name. The seal legend reads: Û-ma-ni / dub-sar / dumu Nam-ḥa-ni, “Umani, scribe, son of Namḥani.”

This next tablet was sealed by an official named Lugal-emaše, who rolled his seal all over the tablet as well as in the space left blank between the month and the year-name. In contrast to Umani, Lugal-emaše rolled his seal so as to make the inscription carved on it, rather than the picture, show clearly in the impression. The legend on Lugal-emaše’s seal has the same format as Umani’s; it reads: Lugal-é-maše-e / dub-sar / dumu Lugal-kù-ga-ni, “Lugal-emaše, scribe, son of Lugal-kugani.” The tablet, which dates to the seventh year of Amar-Suen’s reign, records a three-acre plot to be harvested by a swineherd:

(obverse)



3 gán še še-gur<sub>10</sub>-a  
a-ša giš-ma-nu  
Da-da sipa šaḥ  
kišib Lugal-é-maše-  
e

3 acres barley, for harvest,  
Field of the Ash Trees  
Dada, the swineherd.  
Seal of Lugal-emaše.

(reverse)



iti še-gur<sub>10</sub>-ku<sub>5</sub>  
  
mu Ḫu-ḫu-nu-ri  
ki ba-ḫul

Month of the barley harvest,  
  
(seal impression)  
year Ḫuḫnuri was destroyed.

## SMM 7

Photos courtesy of the Science Museum of Minnesota

Dada was to harvest a plot within an arable tract called “Field of the Ash Trees,” located in the area of Umma. This tract was named for a native Near Eastern variety of ash tree, which was cultivated in southern Mesopotamia. Its wood was used to make weapons and tools – probably to make the Sumerian equivalent of bats and hockey sticks, too!

From another administrative bureau in Umma comes this receipt for reed mats, dated to the ninth year of Amar-Suen, sealed by one Lu-Ninshubur:

(obverse)



2 kid-šú-má  
 ki-lá-bi ½ sar  
 má-zì-da-šè  
 ki Ur-<sup>d</sup>Šul-pa-  
 ę

2 reed mats,  
 their size ½ sar,  
 for a flour(-transport) boat,  
 (in the) place of Ur-Šulpae.

(reverse)



kišib Lú-<sup>d</sup>Nin-  
 šubur  
  
 šà bal-a  
 mu en ga-eš  
 ki ba-ḥun

Seal of Lu-Ninshubur.  
  
 Within the term of office,  
 year the priestess (of Nanna of  
 the town) Gaesh was installed.

**UMN 1**

Here the reverse of the tablet is shown sideways, so the picture on the seal impression is right side up:



The figure visible in this impression is an intercessory goddess, depicted standing behind a worshipper before a deity (whose figures did not come out in the impression); the worshipper represents the seal-owner, Lu-Ninshubur. The legend on his seal reads: Lú-<sup>d</sup>Nin-šubur / dub-sar / dumu Ur-<sup>giš</sup>gigir / mu-sar <sup>d</sup>Šára, “Lu-Ninshubur, scribe, son of Ur-gigir, scribe of (the god) Shara.” The reader may have noticed that all these accountants or officials, Umani, Lugal-emaḫe, and Lu-Ninshubur, bore the title d u b - s a r, “scribe.” The title “scribe” seems to have connoted prestige and status in Mesopotamia in a way analogous to modern titles like “Ph.D.”

Human resources were the object of account-keeping just as produce, livestock, and the products of human labor were. The following tablet from Umma records numbers of laborers required for specific tasks, and it was sealed by the superintendent, Akalla:

(obverse)



86 guruš	86 laborers,
u <sub>4</sub> 1-šè	for one day,
zi-ga <sup>giš</sup> pisan(?)	levy of ... (?);
107 guruš u <sub>4</sub> 1-šè	107 laborers, for one day,
íd <sup>d</sup> Amar- <sup>d</sup> EN.ZU-e-	stationed at the
gá-ra-da gub-ba	Amar-Suen-egar canal;
7 guruš tu	7 sick laborers;

(reverse)



8 guruš u <sub>4</sub> 1-šè a-da	8 laborers, for one day,
gub-ba	stationed on the water;
ugula Lú-sig <sub>5</sub>	Lu-sig, foreman.
kišib A-kal-la nu-bànda	Seal of Akalla, the superintendent.
mu En-unu <sub>6</sub> -gal	Year Enunugal was installed (as
<sup>d</sup> Innin ba-ḥun	priest of) Inanna (of Uruk).

(left edge)



201, 7 tu	201 (laborers), 7 sick
-----------	------------------------

**UMN 9**

Notice how the numerals are written on this tablet. Mesopotamian mathematics was based on the sexagesimal system (that is where we get our 360-degree circle), and place value notation was used in writing numbers. In cuneiform, a vertical stroke  $\Upsilon$  can stand for 1, 60, or 1/60, depending on its position in relation to other numbers (and on what is being counted or measured), while an angle stroke  $\llcorner$  stands for 10. Thus, in the first line of the obverse (above), 86 is written  $\Upsilon \llcorner \llcorner \llcorner$  (1×60, 2×10, 6); in the fourth line, 107 is written  $\Upsilon \llcorner \llcorner \llcorner \llcorner$  (1×60, 4×10, 7); and on the left edge, the total of 201 men, excluding sick ones, is written  $\llcorner \llcorner \llcorner \llcorner \llcorner$  (3×60, 2×10, 1). (When numbers were used to measure, rather than to count, different systems of notation were employed with different types of measurements, e.g., distance, area, capacity, and weight.)

The seal with which Akalla, the superintendent, sealed the foregoing record of laborers (UMN 9) bore a legend reading: A-kal-la / dub-sar / dumu Ur-nigin-gar šùš, “Akalla, scribe, son of Ur-nigin-gar, the equerry.” Akalla used many other seals too, over the course of his long and successful career in Sumerian administration. Typically, among officials in the Ur III period, every significant step up the career ladder was marked by the acquisition of a new seal, reflecting the seal-owner’s status and position. Akalla reached the pinnacle of his career when, in the eighth year of Amar-Suen’s reign, he became governor (e n s i) of Umma, an office he held through most of Shu-Suen’s reign. As governor, he used two successive seals portraying him before the enthroned king of Ur, each of which was inscribed with both his own and the king’s name and titles; the earlier of these two seals named Amar-Suen as king, the later Shu-Suen.

Akalla sealed the following receipt for flour and dates, from the fifth year of Shu-Suen’s reign, with the second of the seals he used as governor. The first three lines of the text of this receipt consist of numerals representing capacity measures, in descending order by size, followed by the words for the commodities measured. These lines are rather squashed, almost erased in places, by the repeated impression of the seal:

(obverse)



6; 4, 2(bán), 1 síla	6 g u r, 4 (PI), 2 b á n, 1 s ì l a
dabin gur	barley flour,
4(bán), 1 síla zì gur	4 b á n, 1 s ì l a flour,
1 síla zú.lum	1 s ì l a dates,
ki Ur- <sup>d</sup> Nu-muš-da-	from Ur-Numušda.
ta	
kišib énsi-ka	Seal of the governor.

(Tablet in private collection)

(reverse)



iti <sup>d</sup>Dumu-zi

Month of Dumuzi,

(blank line)

mu-ús-sa <sup>d</sup>Šu-<sup>d</sup>EN.ZU

Year after the year Shu-Suen,

lugal <sup>Ú</sup>ri<sup>ki</sup>-ma-ke<sub>4</sub>

king of Ur, built the

bàd Mar-tu mu-ri-

Martu wall (called)

iq Ti->ni<-id-ni-

“Holding-back-the-Tidnum.”

im mu-dù

On the obverse of this tablet, Akalla repeatedly impressed the part of his seal that was carved with the seal legend. On the reverse, however, he took care to roll out the entire cylinder so that both the legend and the pictorial scene were clearly impressed (again almost obliterating part of the text written on the clay). The pictorial scene carved on Akalla’s seal depicts an audience with the king, a scene that was standard for the seals of high officials like him during the Ur III period. Akalla, bare-headed and shaven, stands before the enthroned king, who holds a goblet in his right hand; a lunar crescent floats in the space in front of the king’s head, and behind Akalla stands a supporting goddess (the figure of the goddess is only partially impressed, to the right of the seal legend, in this impression):



(Reverse of the same tablet, turned sideways)

Behind the figure of the king is carved the seal legend, its text disposed in two rows of vertical lines ordered right to left. The seal legend reads, “Shu-Suen, mighty king, king of Ur, king of the four regions: Akalla, governor of Umma, your servant.” Thus the seal legend and the pictorial scene proclaim the same message in concert: both the picture and the inscription highlight the king’s supreme position in the world, and simultaneously communicate the seal-owner’s proximity and direct subordination to the king.

## V. Provisions for gods and people

The gods of Sumer required elaborate cultic service from their human worshippers. In their grand temple complexes, daily offerings were brought to them, hymns were sung for them, and rituals were performed to maintain their involvement with the community. The temples where the gods dwelt had to smell nice, of course, so perfumes and incense were provided in abundance. Among the scents the Mesopotamian gods loved were those derived from the forests of Lebanon – from cedar and other resinous trees. This tablet, from the archives of the city of Umma, lists almost 100 pounds of aromatics, including cedar, juniper, and cypress, which would have been imported from the area of Lebanon. It also lists an aromatic that may be from a land in the opposite direction: the island of Dilmun, modern Bahrain, in the Persian Gulf.

(obverse)



12 ma-na gi	12 minas (fragrant) reed
1 $\frac{2}{3}$ ma-na šim dūg	1 $\frac{2}{3}$ minas sweet aromatics
12 ma-na erin	12 minas cedar
12 ma-na šim za-ba-lum	12 minas juniper resin
8 $\frac{2}{3}$ ma-na ar-ga-núm	8 $\frac{2}{3}$ minas <i>arganum</i> (resin)
3 $\frac{1}{2}$ ma-na šim gú-KU?	3 $\frac{1}{2}$ minas ... (aromatic)
12 ma-na šim IM	12 minas ... (aromatic)
12 ma-na šu-úr-me	12 minas cypress
7 $\frac{2}{3}$ ma-na šim KÀD?	7 $\frac{2}{3}$ minas ... (aromatic)

(reverse)



5 ma-na šim NI.TUK	5 minas Dilmun?-aromatic
1(bán) 2 sìla šim gu <sub>4</sub> -ku-ru	12 liters g u <sub>4</sub> - k u - r u -aromatic
1(bán) 2 sìla še-li	12 liters pine seeds(?)
8 sìla šim gán	8 liters g á n-aromatic
1(bán) 5 sìla šim gam-gam-ma	15 liters g a m - g a m - m a aromatic
	(blank line)
é-kišib šabra-ta	from the steward's storehouse
dŠara-mu-túm	Šara-mutum
šu-ba-ti	received.

## UMN 6

Human society and the divine were united in symbiosis, according to Mesopotamian conceptions of the cosmos: the gods would provide for their creatures, who must also serve and provide for their creators. Hence the cults of the gods were in large measure funded by the state. Kings built and furnished temples throughout their realm, and the temples received supplies from the state administration. Each temple employed a large staff to perform cultic services and to manage the gods' estates; the maintenance of temple personnel also absorbed state funding.

The state employed an enormous workforce in a variety of departments, in addition to the temples. Canals had to be dug and maintained, as attested by UMN 9 (above); defensive walls had to be built, as attested by the name of Shu-Suen's fifth year (see the later tablet sealed by Akalla, above); forests had to be managed (SMM 2) and fields cultivated (SMM 7); and all those sheep and goats had to be pastured, milked, sheared, and their wool made into garments – these are just of the few of the tasks for which the state required laborers, not to mention the troops who helped the king do all the smiting of enemy lands commemorated in many year names! All those troops and laborers had to be fed and clothed, and accounts of the rations provided to them had to be kept. The most basic rations were barley and wool; depending on their status and the type of work they did, many workers also received beer, meat, oil, and other commodities. On the following page is a tablet recording the rations of barley and wool provided to a group of women and children in Umma.

The tablet lists the amounts allocated for every individual, each of whom is recorded by name. Every adult woman received 30 liters of barley per month, and one piece of woolen fabric. Some of the women had children, for whom smaller amounts were provided, 10 to 15 liters of barley and one to one and a half pounds of wool. The entries on the list are formulated as follows. The first symbol indicates the administrative category of the individual: a semicircle-----> for an adult woman and a vertical stroke for a child. -----> The next signs indicate the amount of the barley ration:

the sign with three horizontals crossed by one vertical means three b á n-measures, which is about 30 liters, -----> a single horizontal crossed by a vertical means one b á n-

measure, plus five little verticals meaning five s ì l a-measures -----> makes about fifteen liters. Then the entry gives either 1 t ú g - ú - k a l-----> (woolen fabric), for women, or for children, 1 (pound) -----> or 1½ pounds of wool. Lastly, the name of the woman child is recorded; children are listed immediately following their mothers, and identified as “her child.”

A few individuals were recorded absent, z à h -----> in Sumerian, hence got no ration. The tablet breaks off ...



**UMN 10, obverse**

but the list continues on the other side, and as usual the text concludes with its date: the seventh month of the year the land Huhnuri was destroyed, which was the seventh year of Amar-Suen's reign.



**UMN 10, reverse**

## V. On the road, and home again

The Ur III state employed people in positions high and low, to do all sorts of work, from rat-catcher to diplomatic messenger. Many employees of the state had to travel within and outside the realm of Ur in the course of doing their jobs. When they did so, they were entitled to eat and rest at the roadside inns maintained at way stations on the state road system. To obtain victuals and drink at these inns, state employees would submit little clay vouchers itemizing the provisions to which each person was entitled, like this one from Umma.

(obverse)

There are altogether 28 lines of writing on this tiny tablet!  
It itemizes rations for seven men: they each get 3-5 liters of beer, 3-5 liters of porridge, and a few ounces of condiments (onion, oil, and seasoning). Some of the men are entitled to more and better beer, others only get regular beer.



(lower edge)



(reverse)

The amounts of each item for all the men are totalled up at the end of the list: 10 liters fine beer, 19 liters ordinary beer, 18 liters porridge, one liter and five shekels onion, and so on ...



(upper edge)



and the text concludes with its date: day 24 in the fifth month of the year after the year Shu-Suen built the wall to keep out the Amorites (the fifth year of his reign).

**SMM 5** (actual size)

Photos courtesy of the Science Museum of Minnesota

Tablets of this type have come to be known as “messenger texts,” because in many cases the recipients of rations are identified as messengers or couriers who are en route from place to place. Possibly such tablets were made so small because couriers, or other personnel travelling on the job, had to carry many of them at a time.

At the end of every month, all the vouchers redeemed at each way station were collected in a sack and a courier transported them to the central administrative office at Umma, the provincial capital, to be checked, filed, and stored. The quantities of food and drink recorded on the vouchers were totalled up and written on a clay tag, which served as a label for the box or basket containing that month’s vouchers. The clay tag was first formed around the cord tying the basket closed, then the totals from the vouchers in the basket were written on the clay tag, and finally two officials sealed the tag with their cylinder seals. On the following page is one such sealed clay tag, which records the totals of rations disbursed at a way station called “Girsu River Tower” during the fifth month of Shu-Suen’s eighth year of reign.



[side A]

The first side of this three-sided tag records a quantity of  
 <----beer (k a š, in Sumerian), of ordinary quality, then  
 <----fine beer, and more ordinary  
 <----beer  
 – then goes on to list amounts of porridge, flour,  
 barley, and sheep, some full-fleeced, others plucked.



[side B]

The second side continues, listing one goat,  
 quantities of condiments, and bran for fodder;  
 the list concludes:

“Regular allotments, couriers in Girsu River Tower;  
 conveyor, Luduga, messenger.”



[side C]

On the third side, the functionaries who sealed the  
 tag were named, and the record was dated to  
 the 30<sup>th</sup> day of the fifth month of the year that  
 Shu-Suen, king of Ur, made a magnificent boat  
 for the god Enlil and the goddess Ninlil (his  
 eighth year of reign).

**UMN 19**

This tag was sealed and the record confirmed by Lukalla and Ur-Nungal (both of whom had the title dub-sar, “scribe,” like most of the officials who sealed tablets; see above, section III), and in addition a messenger, Luduga, was named in the text as conveyor (or “controller,” see above, section I). The contents of the basket which the tag sealed, and therefore the contents of the textual record on the tag and in the basket, were in this way certified by the responsible authorities.

Two components of the filing system for accounts on clay have now been observed: notes on the left edges of tablets (above, section I), to facilitate organizing and retrieving specific records that might be stacked or shelved with their left edges out; and storing groups of records in boxes or baskets whose contents were identified by inscribed clay labels. Here is another example of a clay label, in this case shaped like a tablet:

(obverse)



pisan dub-ba  
dub dib-ba níg-ka, šà  
GIŠ.KÚŠU<sup>ki</sup>  
Ur-e<sub>11</sub>-e  
ì-gál

Basket of tablets:  
tablets of accounts within  
Umma,  
belonging to Ur-e-e.

(reverse)



mu <sup>d</sup>Šu-<sup>d</sup>EN.  
ZU lugal-e na-rú-  
a maḥ <sup>d</sup>En-líl  
<sup>d</sup>Nin-líl-ra [mu-]  
ne-dù

Year Shu-Suen,  
the king, erected  
a great stela  
for Enlil and Ninlil.

**UMN 8**

Through this tablet runs a hole, where there was a string attaching it to the basket it labelled.

## Ch. 2 – OLD BABYLONIAN KINGDOMS: Royal building inscriptions

Once upon a time, in the 19<sup>th</sup> century BCE, there was a king named Sin-kashid. He was not a very important king, but he ruled over an important city in southern Mesopotamia, the city of Uruk. There he rebuilt the temple, which was called Eanna, “House of Heaven,” and then he built his own palace. He labelled his palace from the inside, by having lots of little clay cones and tablets inscribed and embedded within its walls. All the cones and tablets bore the same text, more or less (some had additional lines), recording the king’s name and titles and the construction of his palace. The text was written in Sumerian, still the language of literature and of the cult, although Akkadian was by this time the dominant spoken language in Mesopotamia. Here is what the cones and tablets say:

UMN 13, obverse



(Sumerian Text)

𒂗EN.ZU-kà-ši-id  
 nita kala-ga  
 lugal Unug<sup>ki</sup>-ga  
 lugal Am-na-nu-um  
 ú-a É-an-na  
 u<sub>4</sub> É-an-na  
 mu-dù-a  
 é-gal

(translation)

Sin-kashid,  
 mighty man,  
 king of Uruk,  
 king of the Amnanum,  
 provider of the Eanna,  
 when the Eanna he had built,  
 the palace  
 (cont’d next page ...)

UMN 14, beginning



SMM 1, middle

Photo courtesy of the Science Museum of Minnesota



**UMN 13, reverse**

nam-lugal-la-ka-ni      of his kingship  
mu-dù                      he built.

**UMN 14, end**



These inscribed cones and tablets were laid in reed mats (see the hole made by a reed in UMN 14 when the cone was still moist?) between courses of bricks in the building's walls. Their purpose was to inform later generations: the cones and tablets would ensure that, long after Sin-kashid was gone and his palace had fallen into ruin, anyone who found the ruins and read the inscriptions lying within would know that Sin-kashid ruled here and this was his palace! And that is what happened – though surely Sin-kashid did not imagine his home would be excavated by foreigners from across the seas nearly four millennia after his lifetime. In the early 20<sup>th</sup> century of our era, inscriptions such as these had begun circulating on the antiquities market, and subsequently archaeologists opened excavations at the site of Uruk. Among the structures identified was Sin-kashid's palace, wherein were found still more cones and tablets like those that antiquities hunters had already dug out; nearly 300 exemplars of these cones and tablets of Sin-kashid are now known, dispersed in numerous museum and private collections.

A couple of generations before Sin-kashid, there was a king named Lipit-Ishtar who ruled the city of Isin, located upstream from Uruk along the Euphrates River. Lipit-Ishtar is nowadays best known for issuing a law code, as the more famous King Hammurabi of Babylon did later. When he published his laws, Lipit-Ishtar also built Enisisa, the “House of Justice,” and he had its construction recorded on lots of clay cones like the one on the following page.



**UMN 15, beginning**



**UMN 15, middle**



**UMN 15, middle**



**UMN 15, end**

The Sumerian text written on this cone is disposed in two columns:

col. i		col. ii	
<sup>d</sup> Li-pí-it-eš <sub>4</sub> -tár	Lipit-Ishtar,	šà-ge túm-a	the favorite of
sipa sun <sub>5</sub> -na	humble shepherd	<sup>d</sup> Innin-me-en	Inanna am I.
Nibru <sup>ki</sup>	of Nippur,	u <sub>4</sub> nì-si-sá	When justice
engar zi	true farmer	Ki-en-gi Ki-uri-a	in Sumer and Akkad
Uri <sub>5</sub> <sup>ki</sup> -ma	of Ur,	i-ni-in-gar-ra-a	I established,
mùš nu-túm-mu	ceaseless provider	Nam-ga-ru-um	at Namgarum,
Eridu <sup>ki</sup> -ga	of Eridu,	ki-rib-ba	the eminent place
en me-te	priest fit for	dingir-re-e-ne-ka	of the gods,
Unug <sup>ki</sup> -ga	Uruk,	É-nì-si-sá-a	the House of Justice
lugal Ì-si-in <sup>ki</sup> - na	king of Isin,	mu-dù	I built.
lugal Ki-en-gi Ki- uri	king of Sumer and Akkad,		

Almost one hundred exemplars of this inscription are known. Unfortunately, unlike Sin-kashid's palace at Uruk, no remains of Lipit-Ishtar's House of Justice have been identified in excavations at the site of Isin.

Sin-kashid and Lipit-Ishtar were following traditional practice when they had these inscriptions mass-produced on clay and stuck into the walls or foundations of their buildings. By their time, royal building inscriptions of this kind had been widely used in Mesopotamian palaces, temples, and various other constructions for centuries, and would continue to be used long afterwards. In fact, such inscriptions were actually sought, dug up, and read by the scholarly staff of later kings, especially in the Neo-Assyrian and Neo-Babylonian periods (early first millennium BCE), and especially for the purpose of building temples. It was essential to build a temple in the right place, a place acceptable to the deity whose dwelling the temple was to be. Finding an inscription commemorating an earlier king's construction of a temple would assure that the proper site for constructing the temple anew had been identified – a site already consecrated and hallowed by the divine presence. The rulers of Assyria and Babylon therefore sometimes mention in their own building inscriptions the finding of an earlier ruler's inscription during the preparatory stages of construction or renovation, and occasionally such finds were preserved in what seem to have been palace or temple “museums.”

### Ch. 3 – TEMPLE AND STATE IN THE NEO-BABYLONIAN PERIOD

The Neo-Babylonian Empire lasted nearly a century, from Nabopolassar's ultimately successful fight to overthrow the Neo-Assyrian Empire, beginning in 626 BCE, until the conquest of Babylon by Cyrus the Great, king of Persia, in 539 BCE. That century was the last period during which Babylon and southern Mesopotamia enjoyed independence under native rule, until the creation of the modern state of Iraq in the 20<sup>th</sup> century of the current era. The kings of the Neo-Babylonian Empire were Nabopolassar, Nebuchadnezzar (II), Amel-Marduk, Neriglissar, Labashi-Marduk, and Nabonidus. Although, following biblical usage, this series of rulers is often referred to as the Chaldaean Dynasty, none of these kings appears to have been of Chaldaean origin, and together they constitute not a single ruling lineage but three: Neriglissar was a usurper, and so was Nabonidus. Despite domestic power struggles, these kings presided over an age of prosperity for Babylonia, during which culture and science flourished.

The Neo-Babylonian period, including the Persian period inaugurated by Cyrus' conquest, was characterized by the growth of what we might call private enterprise. Much of this entrepreneurial activity was thoroughly integrated with the interdependent economies of temple and state. The temples continued to occupy a dominant position in Mesopotamian economy and society, as they had for millennia. Temples operated workshops that employed large staffs, and owned enormous estates that were often worked by dependent labor, but managed by independent contractors. Meanwhile, in every temple the duties of providing for the cult were typically shared out among local citizens in the form of prebends: holding a prebend entailed the responsibility to provide some element of cultic service for a specific period annually, for example, beer for the meals of the goddess Ishtar throughout the month of Nisan (roughly March), but the prebend also provided income to its holder, so that members of the local community were in effect shareholders in their city's temples.

As in the case of Ur III tablets, myriads of Neo-Babylonian tablets have been unearthed and studied, yielding information on a very fine scale about many aspects of Mesopotamian society and institutions during the mid-1<sup>st</sup> millennium BCE. However, Neo-Babylonian tablets are far more poorly represented than Ur III tablets in cuneiform collections in the Twin Cities; we have only one to present here. This is the latest, or youngest, cuneiform tablet in this catalogue. It is a promissory note for barley owed to the temple of the goddesses Ishtar and Nanaya in the city of Uruk, and it is dated to the 25<sup>th</sup> day of the tenth month of the first year of the reign of Nabonidus, the last native king of Babylonia. In our calendar, that date is January 15, 554 BCE.

(obverse)



(reverse)



Babylonian text:

(obverse)

1 ME GUR ŠE.BAR NÍG.GA <sup>d</sup>GAŠAN šá UN[UG<sup>ki</sup>]  
<sup>u</sup> <sup>d</sup>Na-na-a ina ŠE.BAR šá ina IGI <sup>1</sup>[<sup>d</sup>U.G]UR-PAP  
A-šú šá <sup>1d</sup>Na-na-a-DÙ ina muḫ-ḫi  
<sup>1</sup>A-mat-su-ÛRU A-šú šá <sup>1</sup>Šá-di-ki  
ina <sup>iii</sup>SIG<sub>4</sub> ina UNUG<sup>ki</sup> i-nam-din

(reverse)

<sup>lu</sup>mu-kin-nu <sup>1d</sup>AG-šu-zib-an-[ni]  
LÚ SAG LUGAL <sup>1d</sup>AG-SUR A-šú šá  
<sup>1</sup>GI-<sup>d</sup>AMAR.UTU A <sup>1</sup>ŠU-<sup>d</sup>Na-na-a  
(blank line)  
<sup>lu</sup>ŠID <sup>1d</sup>INNIN-GIN-A A-šú šá <sup>1</sup>NUMUN-ía  
UNUG<sup>ki</sup> <sup>iii</sup>AB UD 25.KÁM  
MU 1.KAM <sup>d</sup>AG-IM.TUK LUGAL TIN.TIR<sup>[ki]</sup>

Translation:

One hundred *kur* barley, property of  
(the goddesses) Lady of Uruk  
and Nanaya, out of the barley which  
is at the disposal of Nergal-našir,  
son of Nanaya-ibni, is charged against

Amassu-ušur, son of Shadiki.

In the month of Simanu, in Uruk, he  
will pay (the barley).

Witnesses: Nabu-shuzibanni,

the royal official; Nabu-etir, son of

Mushallim-Marduk, descendant of  
Gimil-Nanaya;

Scribe: Ishtar-mukin-apli, son of  
Zeriya

Uruk, Tebetu, day 25,

year 1 of Nabonidus, king of Babylon.

## SMM 9

Photos courtesy of the Science Museum of Minnesota

SMM 9 is written in accord with the standard formula for promissory notes in the Neo-Babylonian period: first the object of the debt is identified, then the creditor is named, then the debtor, and finally the stipulations for repayment are stated; supplementary clauses may be worked into this format as necessary. Following the body of the document is the list of witnesses – for all documents in this period were witnessed— after which the scribe wrote his own name, the place where the document was issued, and the date. Just like Ur III records, Neo-Babylonian documents are almost always dated; in the Neo-Babylonian period, however, unlike the Ur III period, the years of each king’s reign were numbered rather than being named.

The Eanna, since time immemorial Uruk’s main temple – which Sin-kashid had renovated thirteen centuries earlier (see Ch. 2, above) – was the earthly dwelling of the sky-god An and of his daughter Inanna, Queen of Heaven, whose Akkadian name was Ishtar. Many deities associated with An and Ishtar were also worshipped in the Eanna, while there were other temples elsewhere for An and Ishtar’s local hypostases. The epithet “Lady of Uruk” simultaneously conveys Ishtar’s supremacy in the Eanna, and distinguishes Ishtar of Uruk from her other manifestations. Ishtar was the goddess of love and war, and in the Eanna she is paired with Nanaya, another love goddess. The estates, flocks, storehouses, and dependent personnel of the Eanna were said to belong to this pair of goddesses. The human managers of the deities’ property administered the temple’s vast estates, often assuring their efficient cultivation by leasing large arable tracts to contractors. The contractors would then parcel the land out to cultivators, who owed their produce to the goddesses, i.e., the temple management, at harvest-time.

Nergal-našir, the nominal creditor for the barley which is the object of the promissory note SMM 9, was one such contractor; he is known from various other records in the archives of the Eanna. Amassu-ušur, the debtor, was perhaps a cultivator who worked a parcel of the Eanna’s land as a tenant farmer, subleasing his plot annually from Nergal-našir. His debt of 100 *kur* barley – an amount equivalent to about 18,000 liters— would then have arisen from his obligation to turn over the yield of the land he cultivated to the temple, via Nergal-našir. However, this particular promissory note is not directly connected to the schedule of cultivation: it was issued in the month of Tebetu, which corresponds roughly to January, two months after barley was sown and two months before it was harvested, while payment was due in Simanu, which corresponds roughly to June, one month after the barley harvest. Perhaps, therefore, Amassu-ušur’s obligation arose from other circumstances; but about this one can only speculate, since like most such promissory notes this document does not explicitly indicate how the debt was incurred.

For whatever reason, this document was issued in duplicate. The duplicate of SMM 9 is a tablet kept in the Yale Babylonian Collection, accessioned as NBC 4501, which was recently published in a volume of the Yale Oriental Series (see the catalogue entry in Appendix II).

## Ch. 4 – HOW CUNEIFORM TABLETS CAME TO MINNESOTA

In the late 19<sup>th</sup> and early 20<sup>th</sup> century, when the disciplines of Ancient Near Eastern Studies were young and links with the Bible were eagerly sought, many academic institutions in the United States began to acquire collections of cuneiform tablets and related artifacts. One of the most active dealers in this trade was Edgar James Banks, and it was through his hands that most, perhaps all, of the cuneiform tablets now in Minnesotan collections came here. Around the start of the 20<sup>th</sup> Century, Banks, an amateur archaeologist, bought hundreds of tablets in the Ottoman Empire and sold them in small batches to museums, libraries, universities, and seminaries across the United States. These tablets were dug up by locals at the many ruin mounds of Mesopotamia, and the Ottoman government did not assiduously regulate the trade in such antiquities. Edgar Banks led an interesting life: in addition to selling tablets, he excavated the ruins at Bismya, started a movie company, and searched for Noah's ark.

The extant records indicate that many of the cuneiform tablets in the collections of both the University of Minnesota Libraries and the Science Museum of Minnesota, as well as the single tablet from a private collection, were originally acquired from Banks. Banks's tablet dealership is likely to have been the source of other tablets, for which no acquisition records survive, as well.

Although the acquisition records for the University's cuneiform collection are incomplete, on the basis of correspondence kept in the University Archives we know that the library bought eight tablets from Edgar Banks in 1913. Four tablets, UMN 1, 3, 5, and 13, were definitely purchased from Banks, because along with them are preserved handwritten notes describing the tablets and giving their prices, and the handwriting on the notes has been identified as that of Banks by Dr. Ewa Wasilewska, a scholar at the University of Utah who is writing a biography of him. Tablets UMN 2, 7, 8, and 11 are marked with arabic numerals written in pen, which is a feature of many tablets sold by Banks, so we can trace these four tablets to him as well, with a fair degree of certainty. We also know that Banks was the source of at least one of the two cones in the University's collection, probably UMN 14, which has an arabic numeral written on its base.

Mrs. Kate Koon Bovey donated at least one tablet to the University, but the records do not indicate which one. Mrs. Bovey donated several large lots of books to the library in the early 1940s, so it seems likely that she donated her tablet or tablets at that time.

The latest addition to the University's collection, UMN 19, was donated by Karen Moynihan in August 2001. Karen Moynihan received it from the collection of her father, T. Donald Wallace, and before its acquisition by Wallace it was in the collection of L. D. Sullivan, of St. Paul, Minnesota (see the bibliography, Appendix I, and catalogue entry, in Appendix II, for reference to its original publication when it was in Sullivan's collection).

Like the University, the Science Museum of Minnesota bought many of its tablets from Edgar Banks. Charles W. Ames, one of the Science Museum's founders, started that institution's cuneiform collection when he purchased nine tablets, SMM 1 to SMM 9, from Banks and donated them to the Museum in 1915. All of these have prices and descriptions written by Banks similar to those of the University tablets positively attributed to him. Two other tablets were added later, although it is not clear when, and one more was donated in 1988.

There is a chance that SMM 10 and SMM 11, the Museum's two tablets for which acquisition records are not extant, may have been purchased in response to a 1918 letter from Banks offering tablets for sale. No real evidence exists for this suggestion, aside from the existence of the letter, the plausible date, and the lack of other known sources of tablets. Banks's letter is very interesting, in any case, because he writes that the proceeds from selling cuneiform tablets would go to the American war effort in World War I.

The latest addition to the Science Museum's cuneiform collection, SMM 12, came in March 1988, when Wilfred E. Dugas donated a tablet he had received as a gift from his grandmother. His grandmother, Nettie Louella Dugas, had gotten it from a professor named Dietrich Lange, who bought it from Edgar Banks.

Finally, among the tablets published in this booklet is one tablet in private hands, which is owned by Linda Hatcher of Forest Lake. She inherited it from her father, whose father had purchased it from Banks, as attested by a typescript note describing the tablet and giving its price as \$7: on the edge of the typescript note is a faded handwritten note guaranteeing the tablet's authenticity, signed by Edgar J. Banks.

## Ch. 5. - CONSERVATION OF CUNEIFORM TABLETS AND CONES

The preparation of an exhibition involves many elements that are normally invisible to the public. Among the most important of these is the conservation of the objects to be displayed. Before museum objects are put on display, they must first be examined by a conservator, to ascertain whether they are in good enough condition to endure exhibition; conservation procedures may then be undertaken to clean, stabilize, or repair the objects. The cuneiform tablets and cones in the collections of the University of Minnesota and the Science Museum received thorough conservation treatment for the first time, when they were prepared for the exhibition “Mesopotamia in Minnesota.”

### A. Description and condition

Conservation begins with a description of the objects and a condition assessment, including evaluation of storage conditions and past conservation treatments, in order to determine what treatments may at present be required. When a conservation treatment is undertaken, it must be done methodically and with great care, so as to minimize any risk to the object and ensure its long-term preservation. It is also important that treatments be reversible, for instance, coatings and adhesives that are applied to stabilize and repair objects should be removable without damage.

The cuneiform tablets and cones, made of buff-colored clay, had been fired to varying degrees, possibly in modern times. Some had been fired in an oxidized atmosphere (the lighter-colored ones), and others in a reduced atmosphere (the darker-colored ones). One tablet, UMN 10, is minimally fired if at all, and its clay body is very soft; it is broken in two, and fragments readily break off from its surface.

Most of the tablets and cones were in relatively good condition before conservation, and the inscriptions on them were largely readable. At some point in the past, they had been coated with an undetermined substance, possibly cellulose nitrate. This had probably been done to consolidate the tablets and protect their surface, but the procedure had backfired. As the coating aged, it peeled and cracked, damaging the surface it was meant to protect. In some cases, moreover, sand and soil from the objects' ancient burial environment had become impacted into the coating, reducing the clarity of the script.

All the tablets and cones were tested for the presence of chlorides, which are soluble salts (like table salt); all tested positive. Chlorides are commonly found in clay and in ceramic materials. They present a danger to ceramics when the chloride crystals begin to grow, affecting the fabric of the object they are moving through. This process, usually activated by high humidity, can severely damage the object's structure and surface. One tablet, UMN 4, which was otherwise in quite stable condition, was partially encrusted with a crystalline growth that obscured several lines of text. The tablets and cones in the University's collection were stored in book boxes without proper padding, often together with old paper notes relating to their acquisition and the contents of the texts. Many of these notes were disintegrating. Some paper is made of wood pulp and is highly acidic, causing disintegration of the paper. This presents a danger in that it results in the loss of the original documentation relating to these artifacts, and such documentation is important for understanding the artifacts and their modern history. The tablets and the cone belonging to the Science Museum's collection are cushioned in padding made of polyethylene foam block and lined with polyester batting and a non-woven non-abrasive fabric, which are accepted archival materials.

## B. Treatment

Once the condition assessment is done, a treatment proposal is made. In the case of these cuneiform tablets and cones, the following treatments were determined to be necessary:

- Test solubility of coating; remove or reduce coating, if warranted, and if the object is stable enough.
- Desalinate the clay fabric of the artifacts.
- Remove impacted soil.
- UMN 10: Adhere fragments with acrylic adhesive.
- UMN 4: Remove crystalline growth if possible.

For the University's tablets and cones, it was also decided that storage mounts should be constructed, and the paper notes should be encapsulated in mylar.

Different solvents were tested to determine the solubility of the coating, and it turned out to be most soluble in acetone. Each of the tablets and cones was wrapped in cotton gauze, to protect the surface during removal of the coating, and placed in an individual bath of acetone. The bath became cloudy and yellow after two days, at which time fresh acetone was added. The objects were removed from the bath after 3-6 days, once it was no longer discolored.

The objects were then desalinated by soaking in a bath of distilled water. The bath was changed daily, until it tested negative for chlorides. The length of time each object spent in the bath varied from one week to three weeks, depending on the object's size and degree of salinity. The bath also removed much of the soil and staining from the surface of the clay. The crystals on the surface of UMN 4 proved to be water soluble, and they were completely removed by the end of treatment.

N.B.: this treatment can be applied only to fired ceramics; unfired clay dissolves in water!

Here are photographs of the obverse of UMN 4 taken before conservation, and after the conservation treatment removed the crystals from its surface:



The remaining impacted soil was removed from the surface of the tablets and cones mechanically, during examination under a microscope.

UMN 10, the tablet that was broken and prone to fragmenting, was reassembled with an acrylic adhesive that can be removed with acetone. N.B.: Because it had been only minimally fired, this tablet was NOT soaked in a desalination bath, as the bath might have dissolved the tablet itself!

For the University's tablets and cones, storage mounts were constructed of polyethylene foam block and lined with polyester batting and a non-woven synthetic fabric. The objects are thus safely cushioned in their boxes, and the non-woven synthetic fabric will reduce surface abrasion. The paper notes were encapsulated in polyester film to reduce damage from handling, but will require further treatment to remove acids; a paper conservator should undertake this treatment. The paper documentation should be photocopied onto high-quality rag paper to prevent loss of data.

### C. Results and conclusions

The treatment of the cuneiform tablets was successful: they are now more physically and chemically stable, and because they are cleaner they are easier to read. It should be emphasized that conservation procedures are a delicate business, and can be anxiety-producing! If done improperly, or undertaken without making the right observations and doing the right tests, the treatment may irreparably damage the artifact. A case in point: it was determined that UMN 10 had been barely if at all fired, and as a result of this determination UMN 10 did not go through the desalinization process, for this treatment would have been more dangerous to the tablet than the chlorides that are present in its fabric. Applying the wrong treatment, or performing the treatment incorrectly, may destroy ancient artifacts rather than preserving them. Therefore conservation treatments should not be attempted by persons without proper training, but should be undertaken only by trained conservators with the right equipment and materials. The purpose of conservation is to restore and preserve the objects, so that they last as long as possible, and in the best possible condition.

## APPENDIX I. Further Reading

This appendix provides bibliographic references for readers who want to know more about the texts and the topics discussed in the foregoing pages, and for those who want to check on the author's interpretations. First come references to previous publications of the texts presented here, then the references are arranged by topic in an order corresponding to the arrangement of this catalogue.

Most of the cuneiform texts presented here were published previously in:

Jones, Tom B., and John W. Snyder. *Sumerian Economic Texts from the Third Ur Dynasty: A Catalogue and Discussion of Documents from Various Collections*. Minneapolis: University of Minnesota Press, 1961.

This book is referred to by the abbreviation *SET* in Appendix II (below), where reference to previous publication (if any) of each text is given along with the catalogue information. *SET* provides transliterations of the texts only, without photographs or translations.

The tablet SMM 9 appeared in an unpublished doctoral thesis:

Spar, Ira. "Studies in Neo-Babylonian Economic and Legal Texts." Ph.D. dissertation, University of Minnesota, 1972.

There SMM 9 was presented in annotated transliteration and translation (as Text No. 9, pp. 91-93). The duplicate of this tablet has been published, in autograph copy (but no transliteration or translation), as no. 30 in the following volume:

Beaulieu, Paul-Alain. *Legal and Administrative Texts from the Reign of Nabonidus*. Yale Oriental Series, Babylonian Texts, vol. 19. New Haven: Yale University Press, 2000.

All the cuneiform tablets and cones belonging to the University of Minnesota Libraries are now republished on-line, in transliteration and translation, with photographs and brief notes:

Buell, Matthew James, Mark Gill, and Eva von Dassow. "The Cuneiform Inscriptions of the University of Minnesota." Sept. 2002. <<http://special.lib.umn.edu/rare/cuneiform/>>

And the cuneiform collection of the Science Museum of Minnesota is on-line at:

<<http://www.smm.org/research/Anthropology/cuneiform/cuneiform.php>>

### I. Introduction: The invention of cuneiform writing in Mesopotamia

Readers wanting to know more about the cuneiform writing system, and about its modern decipherment, should turn first to the following concise introduction:

Walker, C.B.F. *Cuneiform*. Vol. 3 in *Reading the Past*. Berkeley: University of California Press, 1987.

About seals and the use of seals, see:

Collon, Dominique. *First Impressions: Cylinder Seals in the Ancient Near East*. Chicago: University of Chicago Press, 1987.

More generally, for basic information about almost any topic in the history and culture of Mesopotamia and neighboring cultures, the following work is recommended:

*Civilizations of the Ancient Near East*, 4 vols. Jack Sasson, ed. New York: Scribners, 1995.

## II. Ch. 1 – Sumer in the Ur III Period

Although so many tablets from the Ur III period are extant, most of the literature on this period and its documents is highly specialized. While numerous general works on Mesopotamian history, or on Sumerian culture, give an overview of the Ur III period, the only comprehensive, up-to-date synthesis is the following:

Sallaberger, Walther. “Ur III-Zeit.” Part II in Walther Sallaberger and Aage Westenholz, *Mesopotamien: Akkade-Zeit und Ur III-Zeit*. Orbis Biblicus et Orientalis 160/3. Universitätsverlag Freiburg Schweiz, 1999.

Those interested in the Ur III period and Ur III tablets should turn to Sallaberger’s work, German dictionary in hand. The administrative center at Puzrish-Dagan is the subject of a special study:

Sigrist, Marcel. *Drehem*. Bethesda, MD: CDL Press, 1992. [French]

Anyone who wishes to survey the history of the Ur III realm through the lens of the year names can browse these at the following web site:

Sigrist, Marcel and Peter Damerow. “Mesopotamian Year Names.” Sept. 25, 2001. <<http://cdli.ucla.edu/DL/Yearnames>>

Two additional special studies are referred to here, because they provided the basis for the discussion of (respectively) SMM 2 and UMN 19:

Steinkeller, Piotr. “The Foresters of Umma: Toward a Definition of Ur III Labor.” Pp. 73-115 in M. A. Powell, ed., *Labor in the Ancient Near East*, American Oriental Series, vol. 68. New Haven: American Oriental Society, 1987.

Veldhuis, Niek. “A Multiple Month Account from the Gu’abba Rest House.” *Zeitschrift für Assyriologie* 91 (2001), pp. 85-109.

## III. Ch. 2 – Old Babylonian Kingdoms: Royal Building Inscriptions

All extant Old Babylonian royal inscriptions, including the exemplars presented in Ch. 2 above, are edited in the following substantial volume:

Frayne, Douglas. *Old Babylonian Period (2003-1595 BC)*. Royal Inscriptions of Mesopotamia, Early Periods, Vol. 4. Toronto: University of Toronto Press, 1990.

This sub-series is abbreviated RIME, and the texts published therein are numbered consecutively within the volumes of the sub-series.

#### IV. Ch. 3 – Temple and State in First Millennium Babylonia

A treatment of Neo-Babylonian documents pertaining to private families and public institutions, elaborating on the documents' archival, legal, and economic context, may be found in:

Spar, Ira, and Eva von Dassow. *Cuneiform Texts in The Metropolitan Museum of Art*, vol. 3: *Private Archive Texts from the First Millennium B.C.* New York: The Metropolitan Museum of Art, 2000.

#### V. Ch. 4 – How Cuneiform Tablets Came to Minnesota

The career of Edgar James Banks is an important element of the story of how, and why, collections of cuneiform tablets and other ancient Near Eastern antiquities were formed during the early 20<sup>th</sup> century in the United States. Banks's career is the subject of an ongoing investigation by Ewa Wasilewska, who has published the following article on the topic:

Wasilewska, Ewa. "The Forgotten Indiana Jones." *The World and I Online*. August, 2000. <<http://www.worldandi.com/Public/2000/August/indy.html#top>>

Banks's own publications include a report on his excavations at the Mesopotamian site of Adab (Bismya):

Banks, Edgar James. *Bismya or the Lost City of Adab*. New York: Putnam, 1912.

### **Appendix II. Catalogue of Cuneiform Texts in Twin Cities Collections**

This appendix catalogues all cuneiform tablets, tags, and cones kept in the collections of the Elmer L. Andersen Library's Division of Special Collections and Rare Books, at the University of Minnesota, and the Science Museum of Minnesota. These are the only two institutional collections in Minneapolis and St. Paul which now own cuneiform texts inscribed on artifacts of clay. In the past, large collections of cuneiform tablets were also kept by the Minneapolis Institute of Arts, the Walker Art Center, and the St. Paul Public Library, but these three cuneiform collections were deaccessioned at separate times over the past four and a half decades. The Minneapolis Institute of Arts, however, still owns artifacts inscribed in cuneiform other than clay tablets and cones. Besides the collections of the University of Minnesota and the Science Museum of Minnesota, two cuneiform texts in private hands are known to the author at this time: the tablet sealed by Akalla as gover-

nor of Umma, published in Ch. 1, Section II of this booklet, which belongs to Linda Hatcher of Forest Lake, Minnesota; and another cone of Lipit-Ishtar bearing the same text as the cone of Lipit-Ishtar in the University of Minnesota's collection, presented in Ch. 2 above, which is currently on loan from a private collection to the Minneapolis Institute of Arts.

The cuneiform collection of the Science Museum of Minnesota consists of 11 tablets and one cone, and that of the University of Minnesota consists of 17 tablets and tags and two cones. The majority of these inscribed artifacts are fully or partially (re-)published in Chs. 1-3 of this booklet; catalogue entries for all 31 of them appear below. Each catalogue entry contains up to 12 items of information about the artifact, in three categories, as follows:

A. Identification and recording of the object:

1. The object's accession number(s) in the collection where it is kept. **SMM** is the siglum for cuneiform texts in the collection of the Science Museum of Minnesota; **UMN** is the siglum for cuneiform texts in the collection of the University of Minnesota (formerly, **UM** was used, but this permits confusion with the cuneiform collection of the University of Michigan). The appropriate siglum followed by the artifact's number, e.g., **SMM 1** or **UMN 1**, serves as the heading for each entry. Most of the cuneiform texts in the Science Museum have two accession numbers, both of which are given following the heading.
2. Reference to previous **publication** of the cuneiform text, if any. Most such references are to *SET* (Tom B. Jones and John W. Snyder, *Sumerian Economic Texts*; for bibliographic abbreviations, see Appendix I, above). If the artifact is among those presented in this booklet, reference to the chapter and section number where it appears is appended here.
  - 2a. Any known **duplicate** of the same text, with reference to its publication.
3. The object's acquisition history, that is, **from** whom it was **acquired** by the collection that now owns it, and when it was acquired, if known.
  - 3a. Any information accompanying the artifact which relates to its acquisition history, in particular, numbers written on the object, other than its current accession number. Edgar J. Banks, an early 20<sup>th</sup>-century dealer in ancient Near Eastern antiquities (see Ch. 4, above), apparently made a practice of numbering the tablets and cones he had for sale in discrete lots; hence, the presence of an arabic numeral written in ink on the artifact is a likely indicator of the artifact's passage through Banks's tablet dealership, even in the absence of records pertaining to its acquisition.

B. Content and historical context of the object:

1. Brief **description** of the artifact and the text written on it.
  - 1a. If the artifact is **sealed**, this is noted and the identity of the sealer is indicated.
2. **Period** from which the object comes, both in historical and chronological terms (e.g., Ur III Dynasty, c. 21<sup>st</sup> century BCE).
3. **Provenience** of the object, that is, where it originally comes from; the ancient name of the city of origin is followed by the modern name of the site, in parentheses.
4. If the text is dated, the **date** of the text in the native chronological system used by its author (e.g., Shulgi, year 38, month 11); when knowable, this date is translated into its modern equivalent.

C. Physical description of the object:

1. **Measurements** of the object, in centimeters (H = height, W = width, Th = thickness).
2. A brief statement of the object's **condition**, that is, intact or not, baked or not (if known), deteriorating, recently conserved, etc. N.B.: none of these tablets, tags, and cones is likely to have been intentionally baked in antiquity.

The terms in boldface in the itemized list above serve as rubrics for the information given in the catalogue entries. Cuneiform texts in the collection of the Science Museum are catalogued first, followed by those in the collection of the University of Minnesota.

**SMM 1** – SMM 14/1 = 14/18

Publication: *SET* 336; RIME 4.4.1.4, exemplar no. 44; *Mesopotamia in Minnesota*, Ch. 2

Acquired from: Charles W. Ames, 1915

Description: Inscribed clay cone; building inscription for Sin-kashid's palace

Period: Isin-Larsa (early Old Babylonian), c. 19<sup>th</sup> century BCE

Provenience: Uruk (Warka)

Measurements: H 5.6 cm; base diameter, 3.8 cm

Condition: Intact; baked. Cleaned, March 2002.

**SMM** – SMM 14/2 = 14/19

Publication: *SET* 143; *Mesopotamia in Minnesota*, Ch. 1, Section I

Acquired from: Charles W. Ames, 1915

Description: Cuneiform tablet; account of small cattle

Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE

Provenience: Umma (Jokha)

Date: Amar-Suen, year 5

Measurements: H 4.8, W 3.9, Th 1.9 cm

Condition: Intact; baked. Cleaned, March 2002.

**SMM 3** – SMM 14/3 = 14/20

Publication: *SET* 16; *Mesopotamia in Minnesota*, Ch. 1, Section I

Acquired from: Charles W. Ames, 1915

Description: Cuneiform tablet; receipt for small cattle

Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE

Provenience: Puzrish-Dagan (Drehem)

Date: Amar-Suen, year 5, month 1, day 30

Measurements: H 3.1, W 2.9, Th 1.3 cm

Condition: Intact; baked. Cleaned, March 2002.

**SMM 4** – SMM 14/4 = 14/21

Publication: *SET* 135; *Mesopotamia in Minnesota*, Ch. 1, Section II

Acquired from: Charles W. Ames, 1915

Description: Cuneiform tablet; receipt for small cattle

Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE

Provenience: Umma? (Jokha)

Date: undated

Measurements: H 2.2, W 2.0, Th 1.2 cm

Condition: Intact; baked. Cleaned, March 2002.

**SMM 5** – SMM 14/5 = 14/22

Publication: SET 223; *Mesopotamia in Minnesota*, Ch. 1, Section V  
Acquired from: Charles W. Ames, 1915  
Description: Cuneiform tablet; voucher for rations (“messenger text”)  
Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE  
Provenience: Umma (Jokha)  
Date: Shu-Suen, year 5, month 5, day 24  
Measurements: H 2.8, W 2.3, Th 1.2 cm  
Condition: Intact but for break on obverse; baked. Cleaned, March 2002.

**SMM 6 – SMM 14/6 = 14/23**

Publication: SET 127; *Mesopotamia in Minnesota*, Ch. 1, Section III  
Acquired from: Charles W. Ames, 1915  
Description: Cuneiform tablet, sealed; receipt for beer  
Sealed by Umani, son of Namḥani  
Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE  
Provenience: Umma (Jokha), Iraq  
Date: Shulgi, year 43, month 6  
Measurements: H 4.1, W 4.2, Th 1.7 cm  
Condition: Broken and mended; baked. Cleaned, March 2002.

**SMM 7 – SMM 14/7 = 14/24**

Publication: SET 266; *Mesopotamia in Minnesota*, Ch. 1, Section III  
Acquired from: Charles W. Ames, 1915  
Description: Cuneiform tablet, sealed; record of field to be harvested  
Sealed by Lugal-emaḥe, son of Lugal-kugani  
Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE  
Provenience: Umma (Jokha)  
Date: Amar-Suen, year 7, month 1  
Measurements: H 4.0, W 4.2, Th 1.4 cm  
Condition: Intact; baked. Cleaned, March 2002.

**SMM 8 – SMM 14/8 = 14/25; clay cast**

Publication: none  
Acquired from: Charles W. Ames, 1915  
Description: Clay cast of cuneiform tablet  
N.B.: The actual tablet is missing from the collection. It is now represented therein by a clay cast, mostly illegible, which was probably made in 1952. Except for the measurements, which necessarily were taken from the cast, the information given here describes the original tablet.  
Period: Neo-Babylonian (Chaldaeian Dynasty), c. 6<sup>th</sup> century BCE  
Provenience: Uruk (Warka)  
Date: Nebuchadnezzar, year 16, month 12, day 4 = March 9, 588 BCE  
Measurements: H 3.2, W 4.8, Th 1.6 cm  
Condition: At the time of its acquisition in 1915, the tablet was described as in good condition.

**SMM 9 – SMM 14/9 = 14/26**

Publication: Ira Spar, –“Studies in Neo-Babylonian Economic and Legal Texts” (unpublished Ph.D. dissertation, University of Minnesota, 1972), no. 9 (pp. 91-93); *Mesopotamia in Minnesota*, Ch. 3.

Duplicate: Nies Babylonian Collection 4501, published as YOS 19, no. 30 (for full bibliographic reference, see Appendix I).

Acquired from: Charles W. Ames, 1915

Description: Cuneiform tablet; promissory note for barley

Period: Neo-Babylonian (Chaldaeian Dynasty), c. 6<sup>th</sup> century BCE

Provenience: Uruk (Warka)

Date: Nabonidus, year 1, month 10, day 25 = Jan. 15, 554 BCE

Measurements: H 3.7, W 5.0, Th 1.8 cm

Condition: Intact; baked. Cleaned, March 2002.

### **SMM 10 – SMM 14/60**

Publication: *SET* 38; *Mesopotamia in Minnesota*, Ch. 1, Section I

Acquired from: unknown

Description: Cuneiform tablet; receipt for small cattle, slaughtered

Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE

Provenience: Puzrish-Dagan (Drehem)

Date: Shu-Suen, year 7, month 8, day 22

Measurements: H 3.5, W 3.1, Th 1.5 cm

Condition: Intact; baked. Cleaned, March 2002.

### **SMM 11 – SMM 14/61**

Publication: *SET* 126

Acquired from: unknown

Description: Cuneiform tablet; copy of receipt for flour

Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE

Provenience: Nippur

Date: Shulgi, year 43, month 2

Measurements: H 3.7, W 3.3, Th 1.6 cm

Condition: Broken and mended; baked. Cleaned and re-glued, March 2002.

### **SMM 12 – A88:3:1**

Publication: *Mesopotamia in Minnesota*, Ch. 1, Section I

Acquired from: Gift of Wilfred Dugas, 1988; originally purchased from Edgar J. Banks.

The arabic numeral 10 was written in ink on the upper edge, evidently by Banks, the dealer who originally sold the tablet to the man from whom the Dugas family acquired it (on Banks's tablet dealership, see the explanatory description of the catalogue entries, above).

Description: Cuneiform tablet; record of delivery and expenditure of large and small cattle

Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE

Provenience: Puzrish-Dagan (Drehem)

Date: Shulgi, year 48, month 6, day 16

Measurements: H 5.5, W 3.9, Th 1.8 cm

Condition: Intact; partially baked. Cleaned, March 2002.

### **UMN 1**

Publication: *SET* 283; *Mesopotamia in Minnesota*, Ch. 1, Section III

Acquired from: Edgar J. Banks, 1913; purchased for \$4

Description: Cuneiform tablet, sealed; receipt for two reed mats

Sealed by Lu-Ninshubur, son of Ur-gigir

Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE

Provenience: Umma (Jokha)

Date: Amar-Suen, year 9  
Measurements: H 4.0, W 3.8, Th 1.4 cm  
Condition: Intact; baked (?)

## UMN 2

Publication: *SET* 163  
Acquired from: unknown (Edgar J. Banks?)  
Description: Cuneiform tablet; receipt for fodder (faintly sealed?)  
Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE  
Provenience: Umma (Jokha)  
Date: Shu-Suen, year 7, month 11  
Measurements: H 4.0, W 3.9, Th 1.4 cm  
Condition: Intact; baked (?)

## UMN 3

Publication: *SET* 138; *Mesopotamia in Minnesota*, Ch. 1, Section I  
Acquired from: Edgar J. Banks, 1913; purchased for \$1  
The arabic numeral 3 was written in ink on the upper edge, presumably by Banks.  
Description: Cuneiform tablet; receipt for two sheep  
Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE  
Provenience: Umma (Jokha)  
Date: Amar-Suen, year 6, month 7  
Measurements: H 2.5, W 2.3, Th 1.3 cm  
Condition: Intact; baked. Cleaned, August, 2002.

~~UMN 4~~ Ur III Dynasty, c. 21<sup>st</sup> century BCE  
~~Publication: SET 135; Mesopotamia in Minnesota, Ch. 1, Section I~~  
~~Acquired from: unknown (Edgar J. Banks?)~~  
~~Measurements: H 1.3, W 1.3, Th 0.9 cm~~  
Description: Cuneiform tablet; account of small cattle, bureau of Allamu  
Condition: Intact, but for patched(?) lower edge; baked. Cleaned, August 2002.

## UMN 5

Publication: *SET* 17; *Mesopotamia in Minnesota*, Ch. 1, Section I  
Acquired from: Edgar J. Banks, 1913; purchased for \$2  
The arabic numeral 5 was written in ink on the obverse, presumably by Banks.  
Description: Cuneiform tablet; receipt for five sheep  
Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE  
Provenience: Puzrish-Dagan (Drehem)  
Date: Amar-Suen, year 5, month 5  
Measurements: H 3.1, W 2.8, Th 1.5 cm  
Condition: Intact; baked. Cleaned, August, 2002.

## UMN 6

Publication: *SET* 282; *Mesopotamia in Minnesota*, Ch. 1, Section IV  
Acquired from: unknown (Edgar Banks?)  
Description: Cuneiform tablet; list of quantities of aromatics  
Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE  
Provenience: Umma? (Jokha)

Date: undated  
Measurements: H 5.9, W 4.2, Th 2.0 cm  
Condition: Intact; baked (black). Cleaned, August 2002.,

#### **UMN 7**

Publication: *SET 77; Mesopotamia in Minnesota*, Ch. 1, Section I  
Acquired from: Edgar J. Banks, 1913 (?)  
The arabic numeral 2 was written in ink on the lower edge, probably by Banks.  
Description: Cuneiform tablet; record of the disbursement of two oxen  
Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE  
Provenience: Puzrish-Dagan (Drehem)  
Date: Shu-Suen, year 6, month 11  
Measurements: H 4.5, W 3.7, Th 1.8 cm  
Condition: Broken and mended.

#### **UMN 8**

Publication: *SET 327; Mesopotamia in Minnesota*, Ch. 1, Section V  
Acquired from: Edgar J. Banks, 1913; purchased for \$4  
The arabic numeral 7 was written in ink on the upper edge, presumably by Banks.  
Description: Cuneiform label for a tablet basket  
Period: Ur III Dynasty, c.21<sup>st</sup> century BCE  
Provenience: Umma (Jokha)  
Date: Shu-Suen, year 6  
Measurements: H 4.0, W 3.7, Th 1.9 cm  
Condition: Intact; baked. Cleaned, August 2002.

#### **UMN 9**

Publication: *SET 261; Mesopotamia in Minnesota*, Ch. 1, Section III  
Acquired from: unknown (Edgar Banks?)  
Description: Cuneiform tablet, sealed; record of 208 laborers  
Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE  
Provenience: Umma (Jokha)  
Date: Amar-Suen, year 5  
Measurements: H 5.3, W 4.5, Th 1.8 cm  
Condition: Intact; baked. Cleaned, August 2002.

#### **UMN 10**

Publication: *SET 277; Mesopotamia in Minnesota*, Ch. 1, Section IV  
Acquired from: unknown (Edgar Banks?)  
Description: Cuneiform tablet; list of rations for women and children  
Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE  
Provenience: Umma (Jokha)  
Date: Amar-Suen, year 7, month 7  
Measurements: not measured due to unstable condition  
Condition: Broken, surface flaking; partially baked. Mended and conserved, March-April, 2002.

#### **UMN 11**

Publication: *SET 287*  
Acquired from: Edgar J. Banks, 1913 (?)

The arabic numeral 20 was written in ink on the reverse, probably by Banks.

Description: Cuneiform tablet, sealed; receipt for wood and reeds

Seal: impression illegible

Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE

Provenience: Umma (Jokha)

Date: Shulgi, year 38, month 8

Measurements: H 3.8, W 4.4, Th 1.7 cm

Condition: Intact; baked (?).

### **UMN 12**

Publication: *SET* 118

Acquired from: unknown (Edgar Banks?)

Description: Cuneiform tablet; receipt for victuals

Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE

Provenience: Umma (Jokha)

Date: Shu-Suen, year 2, month 7

Measurements: H 4.0, W 3.7, Th 1.7 cm

Condition: Intact, except for chip off upper left corner; baked (black).

### **UMN 13**

Publication: *SET* 338; RIME 4.4.1.2, exemplar no. 35; *Mesopotamia in Minnesota*, Ch. 2

Acquired from: Edgar J. Banks, 1913 (?)

The arabic numeral 5 was written in ink on the lower edge, probably by Banks.

Description: Cuneiform tablet; building inscription for Sin-kashid's palace

Period: Isin-Larsa (early Old Babylonian), c. 19<sup>th</sup> cen. BCE

Provenience: Uruk (Warka)

Measurements: H 6.6, W 4.9, Th 1.8 cm

Condition: Intact; baked. Cleaned, August 2002.

### **UMN 14**

Publication: *SET* 339; RIME 4.4.1.3 (registered incorrectly under RIME 4.4.1.4 as exemplar no. 45);

*Mesopotamia in Minnesota*, Ch. 2

Acquired from: Edgar J. Banks, 1913 (?)

The arabic numeral 8 was written in ink on the cone's base, probably by Banks.

Description: Inscribed clay cone; building inscription for Sin-kashid's palace

Period: Isin-Larsa (early Old Babylonian), c. 19<sup>th</sup> cen. BCE

Provenience: Uruk (Warka)

Measurements: H 5.6 cm; base diameter 3.6 cm

Condition: Intact; baked. Cleaned, August 2002.

### **UMN 15**

Publication: *SET* 340; RIME 4.1.5.4, exemplar no. 64; *Mesopotamia in Minnesota*, Ch. 2

Acquired from: unknown (Edgar Banks?)

Description: Inscribed clay cone; building inscription for Lipit-Ishtar's House of Justice

Period: Isin-Larsa (early Old Babylonian), c. 20<sup>th</sup>/19<sup>th</sup> cen. BCE

Provenience: Isin (Ishan Bahriyat)

Measurements: H 11.4 cm; base diameter, 4.7 cm

Condition: Intact; baked. Cleaned, August 2002.

### UMN 16

Publication: none

Acquired from: unknown (Edgar Banks?)

Description: Cuneiform tablet; barely legible

Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE

Provenience: unknown

Date: unreadable

Measurements: H 3.3, W 2.9, Th 1.5 cm

Condition: Broken and mended; surface eroded.

### UMN 17

Publication: none

Acquired from: unknown (Edgar Banks?)

Description: Cuneiform tablet; barely legible

Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE

Provenience: unknown

Date: unreadable

Measurements: H 2.6, W 2.6, Th 1.9 cm

Condition: Intact, but surface very badly eroded.

### UMN 18

Publication: none

Acquired from: uncertain (Edgar Banks?)

Description: Fragment of cuneiform tablet, sealed

Seal: impression incompletely preserved

Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE

Provenience: unknown

Date: incompletely preserved

Measurements: not measured due to unstable condition

Condition: Fragment from reverse of tablet; surface flaking.

### UMN 19

Publication: *SET* 185; *Mesopotamia in Minnesota*, Ch. 1, Section V

Acquired from: Gift of Karen Moynihan, 2001 (ex. coll. T. Donald Wallace); previously in the collection of L.D. Sullivan.

Description: Cuneiform label, sealed, for tablet sack or basket

Sealed by Lukalla, son of Ur-e-e, and by Ur-Nungal, son of Ur-Shara

Period: Ur III Dynasty, c. 21<sup>st</sup> century BCE

Provenience: Umma (Jokha)

Date: Shu-Suen, year 8, month 5, day 30

Measurements: Side A: H 5.8 cm, W 5.6 cm; Side B: H 5.5 cm, W 5.5 cm; Side C: H 5.1 cm, W 5.4

Condition: Intact, except for chips off left edges of Sides A and B; baked. Cleaned, March 2002.