

BABYLONIAN DIVINATORY TEXTS CHIEFLY IN THE SCHÖYEN COLLECTION

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Volume 18

MANUSCRIPTS IN THE SCHØYEN COLLECTION



CUNEIFORM TEXTS VII

Babylonian Divinatory Texts

Chiefly in the Schøyen Collection

by

A. R. George

with an appendix of material from the papers of W. G. Lambert[†]

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Statement of Provenance

(OWNERSHIP HISTORY)

The holdings of pictographic and cuneiform tablets, seals, and incantation bowls in the Schøyen Collection were collected in the late 1980s and 1990s and derive from a great variety of collections and sources. It would not have been possible to collect so many items, of such major textual importance, if it had not been based on the endeavor of some of the greatest collectors in earlier times. Collections that once held tablets, seals, or incantation bowls now in the Schøyen Collection are:

1. Institute of Antiquity and Christianity, Claremont Graduate School, Claremont, California (1970–94)
2. Erlenmeyer Collection and Foundation, Basel (*ca.* 1935–88)
3. Cumberland Clark Collection, Bournemouth, UK (1920s–1941)
4. Lord Amherst of Hackney, UK (1894–1909)
5. Crouse Collection, Hong Kong and New England (1920s–80s)
6. Dring Collection, Surrey, UK (1911–90)
7. Rihani collection, Irbid (*ca.* 1935) and Amman, Jordan (before 1965–88) and London (1988–)
8. Lindgren Collection, San Francisco, California (1965–85)
9. Rosenthal Collection, San Francisco, California (1953–88)
10. Kevorkian Collection, New York (*ca.* 1930–59) and Fund (1960–77)
11. Kohanim Collection, Tehran, Paris and London (1959–85)
12. Simmonds Collection, UK (1944–87)
13. Schaeffer Collection, Collège de France, Zürich (1950s)
14. Henderson Collection, Boston, Massachusetts (1930s–50s)
15. Pottesman Collection, London (1904–78)
16. Geuthner Collection, France (1960s–80s)
17. Harding Smith Collection, UK (1893–1922)
18. Rev. Dr. W. F. Williams, Mosul (*ca.* 1850–60)

These collections are the source of almost all the tablets, seals, and incantation bowls. Other items were acquired through the auction houses Christie's and Sotheby's, where in some cases the names of their former owners were not revealed.

The sources of the oldest collections, such as Amherst, Harding Smith, and Cumberland Clark, were antiquities dealers who acquired tablets in the Near East in the 1890s to 1930s. During this period many tens of thousands of tablets came on the market, in the summers of 1893 and 1894 alone some 30,000 tablets. While many of these were bought by museums, others were acquired by private collectors. Some of the older private collections were the source of some of the later collections. For instance, a large number of the tablets in the Crouse collection came from the Cumberland Clark, Kohanim, Amherst, and Simmonds collections, among others. The Claremont tablets came from the Schaeffer collection, and the Dring tablets came from the Harding Smith collection.

In most cases the original findspots of tablets that came on the market in the 1890s to 1930s are unknown, like great parts of the holdings of most major museums in Europe and the United States. The general original archaeological context of the tablets and seals is the libraries and

archives of numerous temples, palaces, schools, houses and administrative centers in Sumer, Elam, Babylonia, Assyria, and various city states in present-day Syria, Turkey, Iraq, and Iran. Many details of this context will not be known

until all texts in both private and public collections have been published and compared with each other.

Martin Schøyen

MANUSCRIPTS IN THE SCHØYEN COLLECTION



CUNEIFORM TEXTS

- Vol. I. Jöran Friberg, *A Remarkable Collection of Babylonian Mathematical Texts*
Sources and Studies in the History of Mathematics and Physical Sciences
New York: Springer, 2007
- Vol. II. Bendt Alster, *Sumerian Proverbs in the Schøyen Collection*
Cornell University Studies in Assyriology and Sumerology 2
Bethesda, Md.: CDL Press, 2007
- Vol. III. Stephanie Dalley, *Babylonian Tablets from the First Sealand Dynasty in the Schøyen Collection*
Cornell University Studies in Assyriology and Sumerology 9
Bethesda, Md.: CDL Press, 2009
- Vol. IV. A. R. George, *Babylonian Literary Texts in the Schøyen Collection*
Cornell University Studies in Assyriology and Sumerology 10
Bethesda, Md.: CDL Press, 2009
- Vol. V. Miguel Civil, *The Lexical Texts in the Schøyen Collection*
Cornell University Studies in Assyriology and Sumerology 12
Bethesda, Md.: CDL Press, 2010
- Vol. VI. A. R. George, *Cuneiform Royal Inscriptions and Related Texts in the Schøyen Collection*
with contributions by M. Civil, G. Frame, P. Steinkeller,
F. Vallat, K. Volk, M. Weeden, and C. Wilcke
Cornell University Studies in Assyriology and Sumerology 17
Bethesda, Md.: CDL Press, 2011
- Vol. VII. A. R. George, *Babylonian Divinatory Texts Chiefly in the Schøyen Collection*
Cornell University Studies in Assyriology and Sumerology 18
Bethesda, Md.: CDL Press, 2013

Other volumes in preparation

Series Editor's Preface

The cultural legacy of Mesopotamia continues to be more broadly illuminated with the seventh volume from the Schøyen Collection (MSCT 7 = CUSAS 18), once again from the pen of Andrew George. With its publication the CUSAS and Schøyen series continue to function as the major vehicles for the preservation and dissemination of an astonishing variety of new sources written in Sumerian and Akkadian/Babylonian. These new sources enhance greatly our understanding of Mesopotamian history, economics, religion, law, culture, and language from the Archaic and eventually through the Neo-Babylonian periods, thereby covering most of Mesopotamia's historical periods. No series in recent history can compare with the speed and scope of publication that the CUSAS series is providing.

The recent publication of the first Sealand Dynasty economic records by Stephanie Dalley (CUSAS 9 = MSCT 3) placed the Sealand dynasty and two of its rulers on firm historical footings for the first time. The current volume, containing fifty-five previously unpublished divination texts, some entirely new to the genre, opens a window on what must have been a rich and varied literary tradition that flourished during that dynasty. Divination texts represent one of the more difficult and intriguing literary genres from Mesopotamia and George's masterful editions and analyses of the astonishing variety of new divination sources from the Sealand dynasty and from the otherwise unidentified locations of the northern Babylonian city of *Tigunānum* and the southern Babylonian city of *Dūr-Abiešuh* add much to this genre. They reveal the existence of different, non-canonical, traditions outside main-

stream, southern Babylonia, from where most of our sources have emerged until now. George's publication includes selections from the lamented Wilfred Lambert's *Nachlass*. These particularly welcome additions preserve for posterity Lambert's meticulous work, along with those texts he carefully recorded and on which he had begun an extended commentary. In keeping with the general format of this series, all texts are provided with accompanying full apparatus, which include transliterations, translations, commentaries, copies, and photos so that scholars and students may continue to reliably study and elaborate these new sources for Mesopotamian civilization. In addition, photos of most tablets also may be accessed and enlarged for more detailed study at <http://cuneiform.library.cornell.edu/collections> and the *CDLI*.

Much continues to be written publicly and spoken privately against the publication of texts without excavated context. In spite of the incontrovertible importance of the thousands of texts that have been published so far in this series and the many studies that have been appearing, and will continue to appear, based on their availability, there still are those individuals and organizations that simply refuse to admit that their views and imposed regulations have done more harm than good. Rather than encouraging the recording, preservation, dissemination, and publication of unprovenanced texts, they choose rather to ignore or suppress them. Those who retain the baseless position that texts without excavated context have little value hardly warrant even a brief response. The input and international cooperation of scholars for this and other volumes are sufficient indica-

tions of the widespread support of the CUSAS and MSCT publications and a rejection of the policies of those journal and book editors who prefer to impose censorship and otherwise choose to suppress knowledge.

Special thanks are due to Martin Schøyen, who continues to open his remarkable collection to scholars for study and publication, to

Andrew George for the astonishing effort that has gone into the preparation of this and previous CUSAS and MSCT volumes, to Renee Gallery Kovacs for her continuous help and advice, and to the anonymous donor, who provided the generous subsidy that made this large and handsome volume available at a moderate price.

David I. Owen
Curator of Tablet Collections
Jonathan and Jeannette Rosen
Ancient Near Eastern Studies Seminar
Department of Near Eastern Studies
Cornell University, Ithaca, New York
March 17, 2013

Acknowledgments

This book presents the results of a study of forty-three cuneiform tablets undertaken in Norway, England and America during the years 2005–2012. The research was underpinned by a grant from the British Academy and a research allowance provided by the Faculty of Languages and Cultures at the School of Oriental and African Studies, University of London. In Norway I enjoyed as ever the generous hospitality and friendship of Elizabeth Sørenssen, Martin Schøyen and Jens Braarvig. In America I was twice a visitor to the Jonathan and Jeannette Rosen Ancient Near Eastern Studies Seminar of Cornell University, and the pampered guest of David and Susan Owen in Ithaca and of Frank and Renee Kovacs in California. Renee Kovacs initiated my interest in the Schøyen Collection's omen texts and was also of enormous help in facilitating my study of the other tablets published here. To all these institutions and individuals, and to the anonymous collector who allowed me access to those other tablets and supported my work on them, I am deeply grateful.

Photographs of tablets in the Schøyen Collection were prepared by agents of the Schøyen Collection and the Norwegian Institute for Palaeography and Historical Philology, by Klaus Wagensohn of the University of Oxford and by the author, and are reproduced by kind permission of Martin Schøyen and Jens Braarvig. Images of most of the tablets in the anonymous collection were made at the Rosen Seminar, Cornell University, and are published here by generous leave of David I. Owen, Curator of the Tablet Collections. I am indebted to Robert Englund of the University of California, Los Angeles, for giving these images a home online at the website of the Cuneiform Digital Library Initiative.

Many of the texts presented here were read in seminar with colleagues and students, especially at the London Cuneiforum in SOAS but also at the Department of Culture Studies and Oriental Languages, University of Oslo. The contribution of these seminars to my understanding of the texts has been substantial and I express my gratitude to those who accompanied me in these readings. My work on the Tigunānum tablets treated in Chapter V has benefited substantially from reading fifteen tablets in Japan from transliterations prepared by Professor Akio Tsukimoto of Rikkyo University, Tokyo, with whom Dr. Daisuke Shibata of Tsukuba University kindly put me in touch. I record here my appreciation of Tsukimoto's generosity in sharing his work with me, and my thanks for his own comments on my editions of texts Nos. 18–21. Dr. Abraham Winitzer of Notre Dame University very kindly read through the editions of the Old Babylonian omen lists in Chapter III and made some very helpful observations. Faults that remain rest with the author alone.

I am also grateful to Professor Stefan Maul of the University of Heidelberg for sending me a draft of his unpublished chapter, *Die Inspektion der Opfervögeln*, and to Dr. Erle Leichty of the University of Pennsylvania for sharing with me his work on two Cornell tablets. Lastly I record my indebtedness to David Owen, and not only because he has accepted into his beautifully produced CUSAS series this latest installment of cuneiform texts from the Schøyen Collection. His persistence and leadership in effecting the publication of the dispersed intellectual and historical legacy of ancient Mesopotamia earn the admiration of all those who value knowledge.

A.R.G.
Buckhurst Hill
March 2013

Abbreviations

<i>AbB</i>	Altbabylonische Briefe III = R. Frankena, <i>Briefe aus der Leidener Sammlung</i> . Leiden, 1968 VII = F. R. Kraus, <i>Briefe aus dem British Museum</i> . Leiden, 1977 IX = M. Stol, <i>Letters from Yale</i> . Leiden, 1981 X = F. R. Kraus, <i>Briefe aus kleineren westeuropäischen Sammlungen</i> . Leiden, 1985 XI = Stol 1986 XIV = K. R. Veenhof, <i>Letters in the Louvre</i> . Leiden, 2005	<i>BAM</i>	F. Köcher, <i>Die babylonisch-assyrische Medizin in Texten und Untersuchungen</i> . 6 vols. Berlin, 1963–80
		<i>BBR</i>	= Zimmern 1901
		<i>BE</i>	The Babylonian Expedition of the University of Pennsylvania, Series A: Cuneiform Texts
		<i>VI/1</i>	= H. Ranke, <i>Babylonian Legal and Business Documents from the Time of the First Dynasty of Babylon</i> . Philadelphia, 1906
		<i>BM</i>	Tablet signature, British Museum, London
<i>ABRT</i>	J. A. Craig, <i>Assyrian and Babylonian Religious Texts</i> . Assyriologische Bibliothek 13. 2 vols. Leipzig, 1895–97	<i>BRM</i>	Babylonian Records in the Library of J. Pierpont Morgan IV = Clay, 1923
<i>ACh</i>	C. Virolleaud, <i>L'astrologie chaldéenne, le livre intitulé "enuma (Anu) ih Bêl," publié, transcrit et traduit Istar</i> = <i>ACh</i> fasc. 3 and 7, Paris, 1908 and 1909 <i>Sîn</i> = <i>ACh</i> fasc. 1 and 5. Paris, 1908 and 1909 <i>Supp.</i> = <i>ACh</i> fasc. 9 and 10. Paris, 1910	<i>CAD</i>	<i>The Assyrian Dictionary of the Oriental Institute of the University of Chicago</i> . Chicago, 1956–2010
		<i>CBS</i>	Catalogue of the Babylonian Section, tablet signature, University Museum, Philadelphia
		<i>CCT</i>	Cuneiform Texts from Cappadocian Tablets in the British Museum 4 = S. Smith, <i>CCT</i> 4. London, 1927
<i>AHw</i>	W. von Soden, <i>Akkadisches Handwörterbuch</i> . 3 vols. Wiesbaden, 1965–81	<i>CDLI</i>	Cuneiform Digital Library Initiative, http://cdli.ucla.edu/
<i>AO</i>	Antiquités orientales, tablet signature, Musée du Louvre	<i>CT</i>	Cuneiform Texts from Babylonian Tablets, &c, in the British Museum 3 = L. W. King, <i>CT</i> 3. London, 1898 4 = T. G. Pinches, <i>CT</i> 4. London, 1898 8 = T. G. Pinches, <i>CT</i> 8. London, 1899 18 = R. C. Thompson, <i>CT</i> 18. London, 1904 20 = R. C. Thompson, <i>CT</i> 20. London, 1904 28 = P. S. P. Handcock, <i>CT</i> 28.
<i>ARM</i>	Archives royales de Mari V = G. Dossin, <i>Lettres. TCL</i> 26. Paris, 1951 VI = J.-R. Kupper, <i>Lettres. TCL</i> 27. Paris, 1953 26/I = Durand 1988		
<i>Bab</i>	Field number, excavations at Babylon on behalf of the Deutsche Orient-Gesellschaft, 1899–1917		

- London, 1910
 30 = P. S. P. Handcock, *CT* 30. London, 1911
 31 = P. S. P. Handcock, *CT* 31. London, 1911
 38 = C. J. Gadd, *CT* 38. London, 1925
 39 = C. J. Gadd, *CT* 39. London, 1926
 40 = C. J. Gadd, *CT* 40. London, 1927
 41 = C. J. Gadd, *CT* 41. London, 1931
 44 = T. G. Pinches, *Miscellaneous Texts*. London, 1963
 51 = C. B. F. Walker, *Miscellaneous Texts*. London, 1972
- CTN Cuneiform Texts from Nimrud
 IV = D. J. Wiseman and J. A. Black, *Literary Texts from the Temple of Nabû*. London, 1996
- DN Divine Name
- EA J. A. Knudtzon, O. Weber and E. Ebeling, *Die El-Amarna-Tafeln*. Vorderasiatische Bibliothek 2. Leipzig, 1915
- EAE *Enûma Anu Ellil*, astrological-omen series
- Emar VI D. Arnaud, *Recherches au pays d'Aštata*
 4 = Arnaud 1987
- Ern. Tablet signature, State Hermitage Museum, St Petersburg
- GAG W. von Soden, *Grundriss der akkadischen Grammatik*. 2nd edn. *Analecta Orientalia* 33/47. Rome, 1969, 3rd edn 1995
- GEN Gilgameš, Enkidu and the Netherworld, Sumerian literary composition
- Gilg. Epic of Gilgameš, Babylonian narrative poem
- HISM Object signature, Hirayama Ikuo Silkroad Museum, Yamanashi, Japan
- HSM Tablet signature, Harvard Semitic Museum, Cambridge, Mass.
- HY Field number, excavations at Tell Yelkhi (Hamrin), Iraq
- IM Tablet signature, Iraq Museum, Baghdad
- K Kuyunjik, tablet signature, British Museum, London
- KAR E. Ebeling, *Keilschrifttexte aus Assur religiösen Inhalts*. 2 vols. Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft 28, 34. Leipzig, 1915–23
- KBo Keilschrifttexte aus Boghazköi
 I = H. Figulla and E. Weidner, *KBo* I. Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft 30, 1. Leipzig, 1916
- KUB Keilschrifturkunden aus Boghazköi
 IV = E. Weidner, *KUB* 4. Berlin, 1922
 37 = F. Köcher, *Literarische Texte in akkadischer Sprache*. Berlin, 1953
- LB Tablet signature, de Liagre Böhl Collection, Leiden
- LKA E. Ebeling, *Literarische Keilschrifttexte aus Assur*. Berlin, 1953
- MAH Tablet signature, Musée d'Art et d'Histoire, Geneva
- MB Middle Babylonian
- MDP *Mémoires de la Délégation en Perse*, etc.
 57 = Labat 1974
- MLC Tablet signature, J. Pierpont Morgan Library collection, Yale University, New Haven, Conn.
- MS Manuscript Schøyen, object signature, Schøyen Collection, Oslo and London
- MSCT Manuscripts in the Schøyen Collection
 6 = A. R. George *et al.*, *Cuneiform Royal Inscriptions and Related Texts in the Schøyen Collection*. Cornell University Studies in Assyriology and Sumerology 17. Bethesda, Md.
- Msk Field number, excavations at Meskeneh, Syria
- MSL Materials for the Sumerian Lexicon
 IX = B. Landsberger, *The Series HAR-ra = hubullu Tablet XV and Related Texts*. Rome, 1967
 X = B. Landsberger and E. Reiner, *The Series HAR-ra = hubullu*

- Tablets XVI, XVII, XIX and Related Texts.* Rome, 1970
 XI = E. Reiner (ed.), *The Series HAR-ra = hubullu, Tablets XX–XXIV.* Rome, 1974
 XIV = Civil *et al.* 1979
- Ni Nippur, tablet signature, Archaeological Museum, Istanbul
 PBS Publications of the Babylonian Section, the Museum of the University of Pennsylvania
 II/2 = A. T. Clay, *Documents from the Temple Archives of Nippur Dated in the Reigns of the Cassite Rulers.* Philadelphia, 1912
 VII = A. Ungnad, *Babylonian Letters of the Hammurapi Period.* Philadelphia, 1915
 VIII/1 = E. Chiera, *Legal and Administrative Documents from Nippur, Chiefly from the Dynasties of Isin and Larsa.* Philadelphia, 1914
- OB Old Babylonian
 R H. C. Rawlinson *et al.*, *The Cuneiform Inscriptions of Western Asia*
 V = T. G. Pinches, *A Selection from the Miscellaneous Inscriptions of Assyria and Babylonia.* 2nd impression. London, 1909
- RA *Revue d'Assyriologie*
 Rm Rassam, tablet signature, British Museum, London
 RN Royal name
 SAA State Archives of Assyria
 II = S. Parpola and K. Watanabe, *Neo-Assyrian Treaties and Loyalty Oaths.* Helsinki, 1988
 IV = Starr 1990
 VIII = Hunger 1992
 X = S. Parpola, *Letters from Assyrian and Babylonian Scholars.* Helsinki, 1993
- SB Standard Babylonian
 Sm Smith, tablet signature, British Museum, London
 STT O. R. Gurney, J. J. Finkelstein and P. Hulin, *The Sultantepe Tablets.* 2 vols. London, 1957, 1964
 TCL Textes cunéiformes du Louvre
- VI = F. Thureau-Dangin, *Tablettes d'Uruk à l'usage des prêtres d'Anu au temps des Séleucides.* Paris, 1922
 XVII = G. Dossin, *Lettres de la première dynastie babylonienne* I. Paris, 1933
- TIM Texts in the Iraq Museum
 IX = J. J. A. van Dijk, *Cuneiform Texts: Texts of Varying Content.* Leiden, 1976
- TLB Tabulae cuneiformes a F. M. Th. de Liagre Böhl collectae, Leidae conservatae
 II = J. J. A. van Dijk, *Textes divers.* Leiden, 1957
 IV = R. Frankena, *Altbabylonische Briefe.* Leiden, 1965
- TMB F. Thureau-Dangin, *Textes mathématiques babyloniens.* Leiden, 1938
- UCLM Tablet signature, R. H. Lowie Museum of Anthropology, University of California, Berkeley, Calif.
- UMM Tablet signature, University Museum of Manchester
- Uruk *Spätbabylonische Texte aus Uruk*
 I = Hunger 1976
 II = von Weiher 1983
 III = von Weiher 1988
 IV = von Weiher 1993
- VAS Vorderasiatische Schriftdenkmäler der Königlichen [Staatlichen] Museen zu Berlin
 XXII = H. Klengel, *Altbabylonische Texte aus Babylon.* Berlin, 1983
 XXIV = J. J. A. van Dijk, *Literarische Texte aus Babylon.* Berlin, 1987
- VAT Vorderasiatische Abteilung Tontafeln, tablet signature, Vorderasiatisches Museum, Berlin
- Voc. Vocabulary
 YBC Tablet signature, Yale Babylonian Collection, New Haven, Conn.
- YOS Yale Oriental Series, Babylonian Texts
 X = Goetze 1947a
 XI = J. van Dijk *et al.* 1985
- ZA *Zeitschrift für Assyriologie*

Introduction

Ancient Mesopotamian divinatory texts fall into several genres. The most important and numerous are the scholarly and pedagogical texts: omen lists, which are overwhelmingly the most common kind of divinatory text, model tablets, commentaries and other scholia. These intellectual forms are academic, and served to elaborate, illustrate and comment on the theoretical principles of Babylonian divination. The academic texts bear witness to many different disciplines. Without attempting a comprehensive list of divinatory media, it is enough to list the principal disciplines: portents were observed in the inspection of the body of sacrificial sheep and, less commonly, birds, particularly their internal organs (extispicy, Babylonian *bārûtu*, from *bārû* “haruspex”); in the appearance of oil poured on water (lecanomancy), of smoke rising from burning incense (libanomancy), and of flour dropped on to a surface (aleuromancy); in eclipses and planetary movements (astrology) and in natural phenomena such as thunder and earthquakes (collected in the late series *Enūma Anu Ellil*); in multiple births, human and animal, and malformations of stillborn fetuses (teratomancy, series *Šumma izbu*); in the local environment, where portents were observed in a wide variety of contexts, including topography and the built and natural environments, agriculture and animal husbandry, the movement of animals and birds (augury), the behavior of humans, the flames of lamps and torches, and in isolated events such as chariot accidents,

the perceived movement of cult statues and vehicles, etc. (collected in the first-millennium series *Šumma ālu*); in sleep and dreams (oneiromancy); in the human face and body (physiognomy, series *Alamdimmū* etc.); and in symptoms of sickness (diagnosis and prognosis, series *Sagig*).¹

These various disciplines all fall into one of two distinct categories of divination that are characterized by different approaches to the observation of portents and the response that follows. The first category involves the interpretation of unprovoked portents (*omina oblativa*). The disciplines here are astrology, teratomancy, augury and other techniques that comprise the passive observation of the natural and built environment and its populations, animal and human. These divinatory techniques seek to decode signs that occur without any human intervention.

Divination is often described as a means of predicting the future. In ancient Mesopotamia it was not so simple as that, except in its medical application. Outside the diagnostic and prognostic omens, divination was a type of soothsaying only in that observed signs were considered to correlate with events that usually had not happened yet. The characteristic formal lists of omens paired off portents and predictions, the former as a conditional clause (“If such and such is seen,” called the protasis), the latter as its outcome (“then such and such will happen,” the apodosis). A lunar eclipse on the fifteenth

¹ A careful description and comprehensive bibliography of the various categories of omen text is given by Maul 2003. For *Šumma ālu* see in addition Freedman 2006; for *Enūma Anu Ellil* also Reiner and Pingree 2005, Gehlken 2012.

day of the third month, for example, was paired with a statement predicting the death of a king in a palace revolt (text No. 13: 21). It can already be seen that an analogy is operating in this omen: the eclipse of one of the major celestial bodies leads to a prediction of the demise of an earthly ruler. From that obvious beginning arose the discipline of astrology. The theoretical underpinnings of Babylonian divination will be considered later. For the moment one may remark that the equation of sun and moon with heads of state meant that astrology was a divinatory discipline of especial importance in government and diplomacy.

In studying Babylonian omen texts it is important to reject the pairing of portent and prediction as evidence of fatalism, in the sense of an inevitable, pre-determined future. The king whom we met in the previous paragraph did not have to die. The Babylonians and Assyrians understood naturally occurring, unprovoked portents not as statements of a fixed future but as communications from the gods that invited a response from those who could decode them. If the signs were unfavorable, they were taken as warnings, and it was then imperative to eliminate their threat by magic means. The ancient text known today as the Diviner's Manual instructs that an evil prognostication would only occur if it was not eliminated by the correct magical response (Oppenheim 1974: 200 l. 46). This elimination was achieved through apotropaic rituals accompanied by incantations, by litanies chanted to appease the gods, or by both. These two activities were known respectively in Babylonian as *āšipūtu* (from *āšipu* "exorcist, medicine-man") and *kalūtu* (from *kalū* "lamentation-singer"). The response to ill-boding signs was articulated in ancient Mesopotamia as the dispelling of evil (Babylonian *namburbū*, Maul 1994). Averting the consequences of bad portents was not a matter of small-time superstition; it was a central concern of ancient Mesopotamian religion.

The second category of divination comprises techniques that were perceived to induce a

portent. They typically involve the ritual use of a divinatory medium especially chosen and prepared for the purpose. The ritual's purpose was to invite the divine authorities, explicitly or tacitly, to encode ominous signs in the medium for the diviner to decipher. In ancient Mesopotamia the most prominent discipline here was extispicy, in which the divinatory medium was the body and insides of a sacrificial victim, usually a male lamb. Other media were oil, smoke and flour, which are mostly attested in a very few texts of the early second millennium but suspected of being commonly practised nonetheless. The expensive technique of extispicy, patronized by the royal court and the wealthy, naturally attracted more scholastic attention than divination by cheaper media.

Divination by induced portent is often referred to as provoked or impetrated (*omina impetrativa*). This kind of divination worked as a warning system in the same way as the first but, in addition, lent itself early to the development of a question-and-answer dialogue, in which, after due ritual, the diviner first posed a question to the gods (the oracular query) and then sought their answer in the divinatory medium. The question was phrased so as to elicit a simple response, positive or negative. Questions could be asked on all manner of topics, private and public: the safety and health of an individual, the prospects of success in trade, marriage and war, the right time to embark on a journey or military manoeuvre, the correct moment to conduct a religious ritual or dedicate an image, appointments of officials and priests, etc.

In extispicy the answer to the client's question was acquired by cross-referencing ominous signs with their predictions, as set out in lists of omens. Their form is the same combination of protasis and apodosis as in unprovoked omens. In provoked omens the apodosis carried hermeneutic value, identifying the portent as favorable or unfavorable. A majority of favorable portents observed in the extispicy indicated a positive answer to the oracular query, a majority of unfavorable portents communicated the reverse.²

² On the theory and practice of Babylonian extispicy see, e.g., Jeyes 1980, Maul 2003: 77–83, Veldhuis 2006.

This procedure of question and answer probably first emerged as a method of corroborating the value of unprovoked portents. Uncertainty in their interpretation could be resolved through extispicy, by asking the appropriate question. Historical instances of the corroborative function of extispicy in responding to unprovoked omens are documented in the correspondence of diviners. At the court of Mari on the middle Euphrates in the eighteenth century, extispicies were reported to have been done to determine whether an ill-boding lunar eclipse compromised the king's safety (it did not), to clarify the significance of dreams, and to identify the causes of illness (*ARM* 26/I nos. 81–83, 136, 142). At the Assyrian court in the seventh century, documents report extispicies performed to assess the import of a bird of ill omen and the implications of symptoms of sickness (*SAA* X nos. 183 and 315).

By virtue of its perceived capacity for checking the intentions of the gods, extispicy was an important tool in good government. It became the preferred divinatory technique in determining that decisions in matters of strategic importance to the state — royal, military, political, economic and religious — were made in accordance with divine approval. The correspondence from Mari shows that extispicy was already much employed by the state and its servants in the eighteenth century BCE (Durand 1988: 3–373, Heimpel 2003: 173–248). The response to portents called for the co-operation of men trained in different academic disciplines. The collaboration of astrologer (*Enūma Anu Ellil* expert), lamentation-singer (*kalū*), exorcist-cum-medicine man (*āšīpu*) and haruspex (*bārū*), is well attested at the Assyrian court (Parpola 1993), and was assuredly necessary in earlier periods too.

It has been noted that the prediction in the apodosis of a typical Babylonian omen is not a

prophecy of a fixed outcome but a warning. Alongside this must be considered another essential point, that the combination of portent and prediction is an intellectual construct. This becomes clear if the two elements of the omen are studied separately.

Portents were usually naturally occurring signs that were ostensibly rooted in observation. This led to the view, once widely current in Assyriology, that ancient Mesopotamian divination was based on real experience. However, recent studies of the omen corpora have discredited that view (e.g. Koch-Westenholz 1995: 13–19, Brown 2000: 108–13, Rochberg 2009, Winitzer 2011). There are several reasons for rejecting the old position. A telling one is provided by a small number of portents that describe impossible events that could never have been observed. Already in the Old Babylonian period, lists of omens incorporated such events as portents. Such portents have not yet been collected systematically. Good examples in Old Babylonian tablets occur in lunar-eclipse lists, as demonstrated in the introduction to texts Nos. 13 and 14 in Chapter V, but the most conspicuously absurd example known to me is the sun sighted at midnight.³ The existence of impossible portents does not mean that the compilers of omens were stupid. These men lived in a world where, as now, a lifetime of experience taught each and every one of them that the sun sets at dusk and rises at dawn. Just as today, their ancestors had conceived a model of the universe to account for this. Though their model was one in which the sun passed around the earth, there was no more room in it for a sighting of the sun at midnight than there is in today's scientifically proved model, in which the earth orbits the sun. And on the basis of experience and model, Babylonians generally were surely inclined, just as we are today, to infer this about the future, that the sun would never be seen at midnight.

³ BM 97210: 3–4: DIŠ ^dšamaš(utu) ina qablītim (murub) ^{im} innamir(igi.duḥ) ba-ar-tum a-na šarrim (lugal) ^a¶ (If) the sun is sighted in the middle watch (of the night): revolt against the king." The existence of this tablet has been reported by Francesca Rochberg (Rochberg-Halton 1984: 132 n. 21, 1988: 9 n.

5, Rochberg 2006: 340) and Matthew Rutz (2006: 72 n. 42). Its text, in late Old Babylonian script, is known to me from photographs posted online at <http://www.britishmuseum.org/research.aspx> and a transliteration by C. B. F. Walker. I am grateful to all three scholars for permission to quote it here.

What happened in divination, it seems, was that the compilers of omens consciously rejected that inference. They thought not only in terms of their own experience and the received wisdom of their models, but they deliberately imagined phenomena which they had not experienced, even though such phenomena contradicted the model and were against all expectations. They can only have done this by reasoning that they were without *empirical* evidence that such phenomena could not occur. If so, it can be said that they adopted a strictly empiricist response to the natural world, resisting the temptation of jumping to conclusions on the basis of their own limited experience and inherited expectations. In this suspicion of inductive inference they anticipated the position taken by the eighteenth-century Scottish empiricist philosopher David Hume. Events that conflict with natural laws can be *reasoned* not to be possible, but they cannot be *experienced* not to be possible.

So much for portents. The predictions were any one (sometimes two) of a large repertoire of many hundreds of standard sentences. The very fact that they are so standardized speaks for their origin in reason rather than experience. It has become ever more apparent that Babylonian scholars employed several methods in attaching a prediction to a portent: the common tools were symbolism, analogy, paranomasia, etymological speculation and folkloric allusion (e.g. Starr 1983a: 8–12, Glassner 1984, Rochberg 2004: 55–58, 2009: 20–22, George 2010). In astrology it has already been noted that the major celestial bodies, sun and moon, were interpreted as symbolic counterparts of earthly rulers, and the eclipse of such a body signified the analogous demise of a king. In extispicy too the same devices were at work. For example, the gall-bladder, the major feature of the visceral surface of the sheep's liver, was often understood to stand for the king, a symbolic equation. Thus the presence underneath the liver of two gall-bladders — one more than usual — usually signified rivalry between two rulers (or would-be rulers). Right was the side identified with the client's interests (equivalent in Cicero's terminology to *pars familiaris*), left with those of his opponent (*pars hostilis* or *inimica*). If the left-hand

of the two gall-bladders was wrapped around the right, it signified usurpation of the throne (text No. 9 §5), a prediction that maps by analogy the portent's dominance of good (right) by bad (left) on to the field of the two rulers. From the point of view of the diviner's client, often the king, the prediction of a usurper is naturally unfavorable, and would be reckoned with the negative omens.

The hermeneutic tools operating in the case of the two gall-bladders are clear. The constructed nature of the typical omen finds further expression in the elaboration of systematic patterns in both portent and prediction. So in text No. 10 §§8'–10' portentous smears of blood on different parts of the gall-bladder attract predictions of wounds to different members of the royal entourage — minister, diviner and cup-bearer. Other patterns associate different parts of an observed feature with such variables as sections of the army (e.g. No. 25 §§1–3 and parallels) and times of day and night (e.g. No. 25 §§4–9 and parallels).

While it remains the case that in many omens the connection between portent and prediction is obscure to us, the combination of portent and prediction was probably always without empirical basis, that is, without foundation in historical precedent. It is true that in later lists of astrological omens some lunar-eclipse portents were matched not with predictions but with a limited number of past historical events — notably the downfall of Akkade and the sack of Ur in the reign of king Ibbi-Suen — but there are good grounds for rejecting these as arising from an actual coincidence of the portents and these events in history (Al-Rawi and George 2006: 24). Similarly the omens often called “historical,” in which a portent is associated with a legendary or historical ruler, such as Gilgameš or Sargon of Akkade, are also of dubious historical worth, even if some of them were composed as late as the reign of Ashurbanipal (Starr 1985). In making the connection between a portent and a supposed historical context, several of them employ such hermeneutic techniques as analogy and paranomasia, and they are of value for neither the history of events nor the history of divination (Cooper 1980, Starr 1986).

It is clear from the two tell-tale features of impossible portents and artificially generated predictions that in the periods from which we have evidence, ancient Mesopotamian divination was no longer dependent on empirical observation, if it ever had been. Diviners were using sets of theoretical rules to generate and encode new omens, and were able to elaborate the existing corpus almost limitlessly (Winitzer 2006). In the first millennium BCE a considerable scholarship grew up that was concerned with the theoretical basis of extispicy, reflecting especially on the hermeneutic links between portent and prediction, and the positive or negative value of that prediction. A problem for modern scholars is that while we can identify some of the rules in play, we do not fully understand this Babylonian language of signs (George 2010, Frahm 2010).

One corollary of the breaking of the connection between the matter of the prediction and the prospective repetition of historical events is that the predictions can be studied from non-historical perspectives. They have already been presented as evidence for daily life, public and private (Oppenheim 1936, Nougayrol 1971b, Koch-Westenholz 2002b). They are more interesting still as sources for Babylonian psychology. In characterizing omen apodoses as “didactic rather than functional,” Ivan Starr has rightly observed that they “serve as a reflection of the fears and aspirations of the people of Mesopotamia, rather than as statements of reality” (Starr 1986: 630). The topics do indeed illustrate many universal human anxieties. Prominent subjects in the private realm are the faithfulness of wives, the profligacy of heirs, the success of the harvest and business, the loss of property and livestock, the threats of drought and famine, lions and rabid dogs, sickness and plague, etc. In the public domain the anxieties expressed relate chiefly to the king: usurpation of the throne, loyalty of ministers and sons, success of the army, social unrest and rebellion, loss of territory and wealth, etc.

A further corollary lies in the history of ideas. The newly clarified intellectual context of omen lists has led them recently to be characterized as texts “where one may speculate about

the meaning of things” (Veldhuis 2006: 493). Babylonian scholars speculated relentlessly on meaningful interconnections in the observed universe, for example between constellations, cities, plants and minerals (Weidner 1967) and, more pertinently, between ominous parts of the liver, deities, months and constellations (von Weiher 1993 no. 159). Divination took part in this “cosmic network of interrelations” (Koch-Westenholz 2000: 12). Speculation about hidden meaning was the hallmark of Babylonian scholars’ theoretical exploration of the world and its contents. The list was their equally characteristic format for conveying knowledge. The omen lists, which represent a large proportion of the achievement of Babylonian scholarship, constitute as a whole an important statement about the Babylonians’ understanding of the world. In elaborating thousands of examples of hidden interrelations between realities and ideas, the manifold lists of omens are the outcome of cumulative attempts to embrace the entire universe in a system of reciprocal inferences. As an intellectual concept this can perhaps be seen as a Babylonian counterpart to the more modern idea of a universal “theory of everything.”

Not all ancient Mesopotamian divinatory texts are academic and theoretically based. Alongside the omen lists and other scholarly and pedagogical texts are compositions of more practical application, deriving from the professional practice of divination. Some of these texts are prescriptive, serving to maintain correct procedures, especially the ritual acts that preceded an act of extispicy and the various prayers that accompanied those acts (Starr 1983a, Zimmern 1901: nos. 1–20, 71–101). Others are more ephemeral, arising from particular instances of practice: reports on the outcome of individual acts of extispicy (Kraus 1985, Koch-Westenholz 2002a), and documents that report or record other ominous portents, on earth and in the sky; particularly numerous are astrological reports sent to the Assyrian court in the seventh century BCE (Hunger 1992). The oracular queries that were put to the deity in the course of the ritual of acts of extispicy were originally ephemeral, but professional pride ensured that many queries of reli-

gious and historical importance were retained in academic libraries and became part of the traditional scholia in Babylonia and Assyria (Lambert 2007, Starr 1990).

The purpose of this volume is to make public those cuneiform texts in the Schøyen Collection that fall into the category of ancient Mesopotamian divinatory texts. The Schøyen Collection does not hold examples of all the genres noted above, for products of the later periods in the history of cuneiform writing are very rare in the collection. Not surprisingly, it has very few exemplars of the canonical omen series and lacks completely omen commentaries and astrological reports. No Assyrian documents are present: as the volume's title suggests, the texts are all composed in varieties of Babylonian.

The volume is divided into chapters, partly by genre, partly by period and partly by provenance. Chapter I contains two divination prayers, one highly literary and unusual, and an oracular query, all written in the Old Babylonian period, i.e. the third and fourth centuries of the second millennium BCE (texts Nos. 1–3). Three Old Babylonian extispicy reports populate Chapter II, one deriving from the archive of Dūr-Abiešuh and reflecting a precise moment in history, the others probably academic model texts (Nos. 4–6). Chapter III gives editions of five Old Babylonian lists of extispicy omens, all treating ominous features of the sheep's liver and gall-bladder (Nos. 7–11). Five Old Babylonian omen lists pertaining to other divinatory disciplines (teratomancy, lunar eclipses, medical diagnosis and prognosis, and household portents) are collected in Chapter IV (Nos. 12–16). Two chapters are devoted to the presentation of divinatory texts, mostly omen lists, from the decades either side of the end of the Old Babylonian period: five late Old Babylonian omen lists from Tigunānum in northern Mesopotamia in Chapter V (extispicy and teratomancy, Nos. 17–21), and eleven texts from a scholarly archive dating back to the first Sealand dynasty in Chapter VI (extispicy, teratomancy, Nos. 22–32). Two Middle Babylonian omen lists from the late second millennium occupy Chapter VII; one treats extispicy, the other lunar eclipses in the third month (Nos. 33–34). Chapter VIII

presents Neo-Babylonian manuscripts of sections of two of the great canonical omen series of the first millennium, Tablet I of *Šumma izbu* (human pregnancy and birth, No. 35) and Tablet LXXIX of *Šumma ālu* (augury, No. 36). Chapter IX is given over to model tablets and related objects: two depict different arrangements of the sheep's colon, one perhaps is an atypical example of a model sheep's liver (Nos. 37–42). In Chapter X is edited an unusual text that has some of the formal characteristics of an omen list but is not a succession of decoded portents (No. 43).

Not all the tablets in this volume are held by the Schøyen Collection. Ten members of the Sealand archive treated in Chapter VI are currently in a private collection whose owner wishes to remain anonymous. The same collection provided one example each of the genres divination prayer and extispicy report. The appendix makes available seventeen tablets whose whereabouts are unknown at the time of writing: a selection of the divinatory texts from Tigunānum recorded in the scholarly papers of the late W. G. Lambert (Nos. I–XVII).

This book adds to current knowledge fifty-five previously unpublished divinatory tablets. Some of them are important for the rareness of the texts they contain — especially an exceptionally well-preserved Old Babylonian tablet of teratomancy (No. 12), two early lunar-eclipse omen tablets (Nos. 13–14), a huge tablet of household omens, written in eighteen columns but sadly not fully legible (No. 16), and a tablet of prognostic omens (No. 15). Other tablets report the presence of Babylonian divination in places from which little evidence for it has so far been available: eastern Babylonia in the period of the first Sealand dynasty, which emerges as a link between Old Babylonian divinatory scholarship and the omen texts written at Susa later in the second millennium (Nos. 22–32); and the palace of king Tunip-Teššub at Tigunānum in north Mesopotamia, where a tradition of divination associated with the temple of Adad in Aleppo was studied alongside texts originally imported from Babylonia (Nos. 17–21, appendix Nos. I–XVII).

In addition to the gain in primary sources and in understanding of the transmission of Babylonian divination to the periphery and its evolution there, this book also adds to the picture, already painted above, of the huge variety of divinatory techniques developed in ancient Mesopotamia. Three texts report two divinatory media that are new to us, both belonging to the category of provoked omens and both attest-

ed on the northern fringes of Mesopotamia: a bird's heart dropped in water (texts Nos. 18 and appendix No. XV), which is a technique that combines extispicy with lecanomancy; and a ewe confined in a building overnight (appendix No. II), which is a practice that seeks to induce by artificial means a portent similar to those that occur without human provocation in the animal-behavior omens of *Šumma ālu*.

Catalogue

<i>Text</i>	<i>Description</i>	<i>Measurements in mm (W×H×D)</i>	<i>Collection number</i>
1	Clay tablet, portrait format, near complete Divination prayer, Old Babylonian, 13+13 ll.	47×65×22	MS 3363
2	Clay tablet, portrait format, top half Divination prayer, Old Babylonian, 13+14+2+3 ll.	44×68×19	—
3	Clay tablet, square, complete Oracular petition, Old Babylonian, 10+1+10 ll.	51×53×20	MS 3057
4	Clay tablet, portrait format, near complete Extispicy report, Late Old Babylonian, Abiešuḥ, 19+[x]+21+4 ll.	53×114×29	MS 3218/6
5	Clay tablet, landscape format, near complete Extispicy report, Old Babylonian, undated, 12+4 ll.	88×53×25	MS 3058
6	Clay tablet, portrait format, complete Extispicy report, Old Babylonian, undated, 11+11+2 ll.	44×54×15	—
7	Clay tablet, near square format, complete Liver omens (<i>naplaštum</i>), Old Babylonian, 12+13 ll.	77×90×22	MS 2225
8	Clay tablet, landscape format, complete Liver omens (<i>naṣraptum</i>), Old Babylonian, 9+9 ll.	77×57×25	MS 3066
9	Clay tablet, landscape format, complete Liver omens (gall-bladder), Old Babylonian, 12+9 ll.	73×58×24	MS 3078
10	Clay tablet, portrait format, near complete Liver omens (gall-bladder, <i>naplaštum</i>), Old Babylonian, 2+2 cols., 26+19+26+25 ll.	64×109×33	MS 3295
11	Clay tablet, portrait format, major portion Liver omens (<i>ubānum</i>), Old Babylonian, 2+2 cols., 23+24+11+8 ll.	100×117×30	MS 2813

<i>Text</i>	<i>Description</i>	<i>Measurements in mm (W×H×D)</i>	<i>Collection number</i>
12	Clay tablet, portrait format, complete Malformed-birth omens, Old Babylonian, 60+45 ll.	118×171×30	MS 3000
13	Clay tablet, portrait format, near complete Lunar-eclipse omens, Late Old Babylonian, 26+3+31 ll.	110×180×40	MS 3118
14	Clay tablet, portrait format, near complete Lunar-eclipse omens, Late Old Babylonian, 46+40 ll.	130×220×40	MS 3117
15	Clay tablet, portrait format, lower three-quarters Diagnostic and prognostic omens, Old Babylonian, 22+2+26 ll.	78×104×32	MS 2670
16	Clay tablet, portrait format, near complete Domestic omens, Old Babylonian, 8+1+9 cols., obv.: 23+34+29+35+37+35+34+28 ll.; right edge: 20 ll.; rev.: 19+27+30+31+29+31+35+35+27 ll.; top edge: 8 ll.; left edge: 4 ll.	240×210×50	MS 3104
17	Clay tablet, fragment Liver omens (gall-bladder), Late Old Babylonian, Tigunānum, 12 ll.	37×70×28	MS 2796
18	Clay tablet, portrait format, top two-thirds Bird's-heart omens, Late Old Babylonian, Tigunānum, 17+18+2+1 ll.	97×103×23	MS 1807
19	Clay tablet, portrait format, lower two-fifths Malformed-birth omens, Late Old Babylonian, Tigunānum, 25+25+2 ll.	110×109×28	MS 1805
20	Clay tablet, portrait format, top portion Malformed-birth omens, Late Old Babylonian, Tigunānum, 17+9 ll.	79×89×37	MS 1806
21	Clay tablet, portrait format, lower two-fifths Malformed-birth omens, Late Old Babylonian, Tigunānum, 7+4+16 ll.	70×72×34	MS 2797
22	Clay tablet, landscape format, major portion Omens, carcass of sacrificial animal, 1st Sealand dynasty, 36+30 ll.	127×114×26	—
23	Clay tablet, portrait format, major portion Liver omens (<i>pū tābu</i>), 1st Sealand dynasty, 40+3+13 ll.	130×163×34	—

<i>Text</i>	<i>Description</i>	<i>Measurements in mm (W×H×D)</i>	<i>Collection number</i>
24	Clay tablet, upper right portion Liver omens (<i>bāb ekalli, šulmi</i>), 1st Sealand dynasty, 26+28+4 ll.	105×88×32	—
25	Clay tablet, top portion Liver omens (<i>kak imitti</i>), 1st Sealand dynasty, 21+15 ll.	115×78×20	—
26	Clay tablet, portrait format, major portion Liver omens (<i>kak šumēli</i>), 1st Sealand dynasty, 41+24 ll.	94×130×23	—
27	Clay tablet, lower right fragment Liver omens (gall-bladder), 1st Sealand dynasty, 39+42 ll.	85×136×32	—
28	Clay tablet, portrait format, top half Lung omens, 1st Sealand dynasty, 28+15 ll.	101×96×22	—
29	Clay tablet, portrait format, lower half Malformed-birth omens, 1st Sealand dynasty, 28+3+32 ll.	112×100×23	—
30	Clay tablet, landscape format, right-hand portion Omen apodoses, 1st Sealand dynasty, 19+7 ll.	73×64×23	MS 2420
31	Clay tablet, portrait format, lower half Gut omens, Middle Babylonian, Sealand, 40+4+39 ll.	115×126×32	—
32	Clay tablet, upper left fragment Diagrams of gut, 1st Sealand dynasty, 3+6 ll.	47×95×28	—
33	Clay tablet, square, near complete Liver (<i>manzāzu</i> etc.) and lung omens, Middle Babylonian, 30+19 ll.	75×70×24	MS 3176/2
34	Clay tablet, landscape format, left portion + patch Lunar-eclipse omens, Middle Babylonian, 10+8 ll.	82×55×23	MS 3119
35	Clay tablet, portrait format, top portion Human-birth omens, <i>Šumma izbu</i> I, Neo-/Late Babylonian, 21+12 ll.	94×70×28	MS 1808
36	Clay tablet, portrait format, lower portion Augury, <i>Šumma ālu</i> LXXIX, Neo-Babylonian, 2+2 cols., 30+34+33+28 ll.	105×126×33	MS 1687
37	Clay tablet, square, near complete + patch Diagrams of gut, Old Babylonian, uninscribed	57×55×18	MS 3080

<i>Text</i>	<i>Description</i>	<i>Measurements in mm (W×H×D)</i>	<i>Collection number</i>
38	Clay cone, complete Diagram and model of gut, Old Babylonian, uninscribed	35×35	MS 3195
39	Clay tablet, square, complete Drawing of spiral labyrinth, Old Babylonian(?), uninscribed	93×93×20	MS 4515
40	Clay tablet, portrait format, complete Drawing of spiral labyrinth, Old Babylonian(?), uninscribed	103×117×20	MS 3194
41	Clay tablet, portrait format, near complete 8 drawings of labyrinths, Old Babylonian(?), uninscribed	83×116×20	MS 4516
42	Clay model, cut down Model of liver(?), Middle Babylonian, 6+5+1 ll.	42×66×9	MS 3034
43	Clay tablet, landscape format, near complete List of deformed(?) sheep, Old Babylonian, 16+1+17+1 ll.	90×62×23	MS 3331

Concordances

1. Concordance of tablet numbers in the Schøyen Collection (MS) and text numbers in this volume.

<i>MS No.</i>	<i>Text No.</i>	<i>MS No.</i>	<i>Text No.</i>	<i>MS No.</i>	<i>Text No.</i>
1687	35	3000	12	3176/2	33
1805	19	3034	42	3194	40
1806	20	3057	3	3195	38
1807	18	3058	5	3218/6	4
1808	36	3066	8	3295	10
2225	7	3078	9	3331	43
2420	30	3080	37	3363	1
2670	15	3104	16	4515	39
2796	17	3117	14	4516	41
2797	21	3118	13		
2813	11	3119	34		

2. Concordance of text numbers in this volume and entry numbers in the database of the Cuneiform Digital Library Initiative (CDLI), which offers high-resolution images of all the objects published in this book, sometimes in a fuller photographic record. The URL of an individual tablet at CDLI is the domain address <http://cdli.ucla.edu/> followed by the CDLI entry number, e.g. text No. 1 has the URL <http://cdli.ucla.edu/P252304>.

<i>Text No.</i>	<i>CDLI No.</i>	<i>Text No.</i>	<i>CDLI No.</i>	<i>Text No.</i>	<i>CDLI No.</i>
1	P252304	16	P252113	31	P431308
2	P431298	17	P251842	32	P431309
3	P252066	18	P250501	33	P342641
4	P342689	19	P250499	34	P252128
5	P252067	20	P250500	35	P250502
6	P431299	21	P251843	36	P250457
7	P251421	22	P431300	37	P252089
8	P252075	23	P431301	38	P274588
9	P252087	24	P431302	39	P253616
10	P252236	25	P431303	40	P274587
11	P251860	26	P431304	41	P253617
12	P252027	27	P431305	42	P252040
13	P252127	28	P431306	43	P252272
14	P252126	29	P431307		
15	P251708	30	P251603		

3. Concordance of previous publication with text numbers in this volume

<i>Publication</i>	<i>Text No.</i>
Friberg 2007: 219, 489	39
Friberg 2007: 223	38
Friberg 2007: 224, 490	40
Friberg 2007: 228, 489	41
Leichty and Kienast 2003	36

4. Published duplicates and parallel texts

<i>Publication</i>	<i>Text No.</i>
AO 7539 (Nougayrol 1971a)	31
BM 13915 (Aro and Nougayrol 1973 no. 3)	9
<i>EAE XVII/2</i>	34
<i>Šumma ālu LXXIX</i>	36
<i>Šumma izbu I</i>	35
YOS X 31	10
YOS X 56	12

The sub-collection of mathematical cuneiform texts in the SchA,yen Collection makes a substantial addition to the known corpus of such texts. It contains 121 texts, not counting 151 multiplication tables and 53 small weight stones. According to the catalog at the end of the Index of Subjects belowÂ It is the most comprehensive treatment of a set of Babylonian mathematical texts ever published and will open up this subject to a new generation of students, mathematicians, and historians of science. JÃ¶ran Friberg is Professor Emeritus of Mathematics at Chalmers University of Technology, Sweden. Similar Babylonian clay tablets, often ascribed to divinatory purposes and bearing labyrinthine designs are documented, including several in the SchA,yen Collection. While some of the designs are superficially similar to labyrinths of the "classical" type (see illustration opposite), other, more complex designs, are somewhat more akin to the plans of puzzle mazes, although in most cases there is simply one path in to the centre and another path out. Jeff Saward, September 2010.Â The text and illustrations in this reprint are Â© Labyrinthos/Hans LyngsgÃ¥rd 2017 as appropriate. Personal copies are permitted, but permission must be sought for any commercial reproduction - www.labyrinthos.net. Labyrinthos Archive. xxiv Babylonian Divinatory Texts Measurements Collection Text Description in mm (WHD) number 12 Clay tablet, portrait format, complete 11817130 MS 3000 Malformed-birth omens, Old Babylonian, 60+45 ll. 13 Clay tablet, portrait format, near complete 11018040 MS 3118 Lunar-eclipse omens, Late Old Babylonian, 26+3+31 ll. Home Â» MAA Publications Â» MAA Reviews Â» A Remarkable Collection of Babylonian Mathematical Texts: Manuscripts in the SchA,yen Collection: Cuneiform Texts I. A Remarkable Collection of Babylonian Mathematical Texts: Manuscripts in the SchA,yen Collection: Cuneiform Texts I. JÃ¶ran Friberg. PublisherÂ How to Get a Better Understanding of Mathematical Cuneiform Texts.- Old Babylonian Arithmetical Hand Tablets.- Old Babylonian Arithmetical Table Texts.- Old Babylonian Metrological Table Texts.- Mesopotamian Weight Stones.- Neo-Sumerian Field Maps (Ur III).