Why the Sciences of the Ancient World Matter

Volume 4

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Robert Middeke-Conlin

The Making of a Scribe

Errors, Mistakes and Rounding Numbers in the Old Babylonian Kingdom of Larsa

Springer

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Why the Sciences of the Ancient World Matter
ISBN 978-3-030-35950-8 ISBN 978-3-030-35951-5 (eBook)
https://doi.org/10.1007/978-3-030-35951-5

This Springer imprint is published by the registered company Springer Nature Switzerland AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

To all my teachers,
past, present and future

Acknowledgements

The impetus for this book[1] came while I pursued my master's degree, when I found myself unable to explain discrepancies in some texts. I wondered whether there might be some reason behind these discrepancies. At the time I could do little other than note the discrepancies and move on in my research. I was training in Assyriology, fascinated by ancient industries and economics and certainly not a historian of mathematics. It would not be until 2011, when the project Mathematical Sciences in the Ancient World (SAW), headed by Karine Chemla and co-directed by Agathe Keller and Christine Proust, put out a call for pre- and post-doctoral fellowships. This project, which was funded by a grant from the European Research Council, had as one of its axes of research state finance administrations and a focus on mathematics in Mesopotamia. The project I imagined focused on rounding numbers as a means to address discrepancies in these texts, in particular, rounding in connection with errors and mistakes. I wanted to explore whether the Old Babylonian scribes intentionally produced deviant values. With the support of my generous wife, I applied for this grant. She has always been my biggest supporter, during and since my Ph.D. work. I owe everything to her.

My project was accepted, and in November 2011 I travelled to Paris to work as a member of the SAW project under the direction of Christine Proust, my advisor. I was quickly counseled to take on a co-advisor, Cécile Michel—I readily agreed. Both were instrumental in guiding my work. I owe much to them. Any fault in this work is my own, any success is truly theirs.

The academic environment fostered by the SAW Project was quite remarkable. In addition to Assyriologists, I worked with Sinologists such as the project's head Karine Chemla, Indologists such as one of the co-directors, Agathe Keller, scholars of Medieval Islamic thought and mathematics, ancient Greek astronomy, modern

[1]The dissertation leading to this work was submitted as part of the SAW project and was made possible through funding from the European Research Council under the European Union's Seventh Framework Program (FP7/2007–2013)/ERC Grant agreement no. 269804. Research since then has been carried out under a fellowship from the Berlin Center for the History of Knowledge, through the Max Planck Institute for the History of Science.

researchers focusing on textual analysis and many others. This interdisciplinary approach to scholarship offered insights into research that necessarily guides my work even if it can be difficult to recognize exactly how.

This work required travel; each available tablet needed collation to witness that a discrepancy was the result of an ancient scribe's work and not a modern mistake, misrepresentation, misinterpretation, etc. In this regard, I would like to thank Christine Desse, the secretary of the Department of Antiquities at the Louvre, Nora Belkebla, the assistant secretary who allowed me to visit and view tablets at the Louvre and especially Norbeil Aouici, the artwork registrar who accompanied me through the Louvre and prepared tablets for my inspection. Thanks are also owed to Dr. Paul Collins, curator of the Ashmolean Museum's Ancient Near East collection, who allowed me access to the collection and even sat with me while I worked with and viewed texts from the Ashmolean Museum. At Leiden University, I would like especially to thank Drs. T. J. H. Krispijn, docent of the de Liagre Bohl collection, who kindly allowed me access to the collection and even took me to lunch. Finally, at Yale's Babylonian Collection where I visited several times, I must thank Prof. Benjamin Foster, curator of the collection, for granting me access to the texts and the rights to publish several texts. In addition, Ulla Kasten, the former associate curator and Dr. Elizabeth Payne, the collection's conservator at the time, as well as Dr. Agnete Lassen, the current associate curator, deserve my gratitude. They prepared tablets for my use and answered my questions. My work could not have been completed without my visits to these collections. These individuals and the institutions they work with were vital to the successful completion of this volume.

I defended my dissertation in June 2015, but following general advice given to me by Prof. Benjamin Foster years ago (before I even began pursuing my Ph.D.), I delayed publishing this work after defending. As he says, it is better to let things sit for a while and then return with fresh eyes and new evidence. In this publish-or-perish academic world, that may seem a bit anachronistic. However, I do believe this advice to be prudent. Problems were solved between my original dissertation and this renewed work. Several important texts have come to light, such as YBC 12273 presented in Chap. 8. The book is far better than it would have been had I rushed to publish. For this reason, I finally completed this book at the Max Planck Institute for the History of Science and I am deeply grateful to this institution for affording me the time to finish this work as the beginning of a new project on scribal numeracy. This book must be credited to many individuals who guided me in my work, allowed me access to vital resources, assisted me along my way and gave judicious advice when needed. Thank you to all who were there to help and guide me.

Robert Middeke-Conlin

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Abbreviations

This list is largely populated by museum and collection numbers. However, three works are so ubiquitous under their glosses that, while it may seem odd to the outsider, it would have led to greater confusion if they were listed under any other name but their abbreviation: the CAD produced by the Oriental Institute of the University of Chicago, the ePSD produced by the Babylonian section of the University of Pennsylvania and finally, the VIM published by the Joint Committee for Guides in Metrology. In addition, some works, such as the Ur Excavation Texts, are best referred to by their publication number and not museum number because these are not always available.

AO	Museum siglum, Louvre, Antiquités orientales, Paris
Ashm	Museum siglum, Ashmolean Museum, Oxford
AUAM	Tablets in the collection of the Andrews University Archaeological Museum
BM	Museum siglum of the British Museum, London
CAD	The Assyrian Dictionary of the Oriental Institute of the University of Chicago https://oi.uchicago.edu/research/publications/assyrian-dictionary-oriental-institute-university-chicago-cad
CAM	Tablets from the collection of the Cincinnati Art Museum, Cincinnati
CBS	Museum siglum of the University Museum in Philadelphia
CDLI	Cuneiform Digital Library Initiative (https://cdli.ucla.edu/)
ePSD	Electronic Pennsylvania Sumerian Dictionary, Babylonian Section, University of Pennsylvania Museum of Anthropology and Archaeology http://psd.museum.upenn.edu/epsd1/index.html
Erm	Museum siglum, State Hermitage Museum, St. Petersburg
HE	Tablets from the collection of the École Pratique des Hautes Études, Paris
HS	Tablet siglum of the Hilprecht Collection, Jena
IM	Museum siglum of the Iraq Museum, Baghdad
LB	Tablets in the Liagre Bohl Collection, Leiden

M	Collection siglum, John F. Lewis Collection, Free Library of Philadelphia
MAH	Museum siglum, Musée d'Art et d'Histoire, Geneva
MHC	Tablets from the collection of the Mount Holyoke College
MLC	Collection siglum, Morgan Library Collection, Yale Babylonian Collection, New Haven
MS	Collection siglum, Martin Schøyen Collection, Oslo
N	Museum siglum, University Museum, Philadelphia
N-T	Field numbers of tablets excavated at Nippur, in Chicago and Baghdad
NBC	Museum siglum, Nies Babylonian Collection
NI	Museum siglum, Archaeological Museum, Istanbul
PTS	Tablet siglum, Princeton Theological Seminary, Princeton
UET 5	Figulla and Martin 1953
UET 6/2	Gadd and Kramer 1966
UET 7	Gurney 1974
UM	Tablet siglum, University Museum, Philadelphia
VAT	Museum siglum, Vorderasiatisches Museum, Berlin
VIM	Joint Committee for Guides in Metrology. 2012 International Vocabulary of Metrology—Basic and General Concepts and Associated Terms, 3rd edition
YBC	Museum siglum, Yale Babylonian Collection

Glosses for Assyriology

Publication glosses are added here for the benefit of the Assyriologist who may be familiar with each text, but under its publication gloss rather than its museum number.

Alexander 1943: BIN 07
Dalley 2005: OECT 15
Dossin 1933: TCL 17
Dossin 1934: TCL 18
Grice 1919: YOS 5
Faust 1941: YOS 8
Feigin 1979: YOS 12
Jean 1926: TCL 10
Klengel 1973: VAS 18
Leemans 1964: TLB 1
Neugebauer 1935-1937: MKT I-III
Neugebauer and Sachs 1945: MCT
Riftin 1937: SVD or SVJAD
Sigrist 1990: AUCT 4
Simmons 1978: YOS 14
Thureau-Dangin 1938: TMB
Von Soden 1985: AHw
Walters 1970: YNER 4

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