Elena Devecchi – Gerfrid G.W. Müller – Jana Mynářová

Current Research in Cuneiform Palaeography

Proceedings of the Workshop organised at the 60th Rencontre Assyriologique Internationale Warsaw 2014



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edited by
Elena Devecchi – Gerfrid G.W. Müller – Jana Mynářová



PeWe-Verlag 2015

Gedruckt mit Unterstützung folgender Institutionen:

Bundesministerium für Bildung und Forschung
GA ČR Czech Science Foundation
Faculty of Arts, Charles University in Prague

Bibliografische Information der Deutschen Bibliothek
Die Deutsche Bibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über http://dnb.ddb.de abrufbar.

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Layout und Prepress: PeWe- Verlag, Gladbeck Umschlaggestaltung: PeWe- Verlag, Gladbeck
Umschlagabbildungen: © Gerfrid G.W. Müller

Druck und Verarbeitung: Memminger MedienCentrum AG
Gedruckt auf alterungsbeständigem Papier

Printed in Germany

ISBN: 978-3-68985-038-8

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Preface

In recent years cuneiform studies have witnessed a growing interest in issues variously related to the broadly defined field of palaeography. This led to the establishment of several projects and the initiation of collaborations devoted to the palaeographic analysis of different textual corpora as well as to the development of new methodologies and technologies. As such, the time was ripe to bring together scholars from different disciplines who had been working on such topics and to give them the opportunity to share and discuss their results with an international audience of researchers engaged in Ancient Near Eastern studies.

This inspired the organization of the international workshop *Current Research in Cuneiform Palaeography*, which took place in Warsaw on 23 July 2014, during the 60th Rencontre Assyriologique Internationale. The present volume collects the written version of the papers presented at the workshop, which cover the whole chronological and geographic range of cuneiform studies, from the 3rd to the 1st millennium BC, from Mesopotamia to Syria, Anatolia and New Kingdom Egypt.

The workshop was jointly organized by Elena Devecchi (Munich/Turin), Gerfrid G. W. Müller (Würzburg/Mainz) and Jana Mynářová (Prague). As the organizers of the workshop and the editors of the volume, we would like to express our thanks and gratitude to all participants for their interesting papers, fruitful discussions and contribution to the collegial atmosphere. We would also like to thank the organizers of the 60th Rencontre Assyriologique Internationale for their help and hospitality in accommodating our workshop within the congress. Peter Werner and PeWe-Verlag kindly accepted the volume for publication and were of great assistance in preparing the manuscript for publication.

The publication of the proceedings was made possible by the generous support of the research project of the Czech Science Foundation No. GA ČR P401/12/G168 ("History and Interpretation of the Bible") and by the German Federal Ministry of Education and Research (BMBF) within the project "3D-Joins und Schriftmetrologie" (Grant No. 01UG1235).

Turin, Würzburg and Prague
15 October 2015

Elena Devecchi
Gerfrid G. W. Müller
Jana Mynářová

Abbreviations

A	Tablets in the collections of the Oriental Institute of Chicago
AASOR	Annual of the American Schools of Oriental Research (New Haven – Cambridge)
ABL	R.F. Harper, *Assyrian and Babylonian letters belonging to the Kouyounjik collection of the British Museum*. Chicago 1892–1914.
ADFU	Ausgrabungen der Deutschen Forschungsgemeinschaft in Uruk-Warka (Berlin)
AfO	Archiv für Orientforschung (Berlin – Vienna)
AIA	Tablets in the collections of the Australian Institute of Archaeology, Melbourne
AION	Annali dell'Istituto Universitario Orientale di Napoli (Naples)
ALASP	Abhandlungen zur Literatur Alt-Syrien-Palästinas (Münster)
ANES	Ancient Near Eastern Studies (Louvain)
AO	Antiquités orientales – tablets in the collections of the Musée du Louvre, Paris
AOAT	Alter Orient und Altes Testament (Münster)
ARCANE	Associated Regional Chronologies for the Ancient Near East (Turnhout)
Asb	Assurbanipal
ASJ	Acta Sumerologica – Japan (Hiroshima)
AuOr Supplementa	Aula Orientalis Supplementa (Barcelona)
Ä&L	Ägypten und Levante (Vienna)
BE	The Babylonian Expedition of the University of Pennsylvania (Philadelphia)
BIN	Babylonian Inscriptions in the Collection of James B. Nies, Yale University, New Haven
BiOr	Bibliotheca Orientalis (Leiden)
BM	Tablets in the collections of the British Museum, London
BMC	Tablets in the collections of the Bryn Mawr College
BSOAS	Bulletin of the School of Oriental and African Studies (London)
Camb	Cambyses
CS	Classical Sargonic

CHANE	Culture and History of the Ancient Near East (Leiden)
CRAIBL	Comptes Rendus des séances de l'année ... de l'Académie des Inscriptions et Belles-Lettres (Paris)
CT	Cuneiform Texts from Babylonian Tablets in the British Museum (London)
CTH	E. Laroche, *Catalogue des textes hittites*. Paris 1966. Continued online by S. Košak – G.G.W. Müller: http://www.hethport.uni-wuerzburg.de/CTH/
CUNES	Tablets in the collection of the Cornell University Near Eastern Seminar, Ithaca
CUSAS	Cornell University Studies in Assyriology and Sumerology (Bethesda)
Cyr	Cyrus
DBH	Dresdner Beiträge zur Hethitologie (Dresden – Wiesbaden)
EA	El-Amarna tablets: J.A. Knudtzon, *Die El-Amarna-Tafeln* (VB 2). Leipzig 1915; A.F. Rainey, *El Amarna Tablets 359-379. Supplement to J.A. Knudtzon, Die El-Amarna-Tafeln* (AOAT 8). Neukirchen-Vluyn 1970.
ECTJ	A. Westenholz, *Early Cuneiform Texts in Jena*. Copenhagen 1975.
ED	Early Dynastic
ES	Early Sargonic
FAOS	Freiburger Altorientalische Studien (Freiburg)
FLP	Tablets in the collections of the Free Library of Philadelphia
FZN	Qantir find number
HKM	S. Alp, *Hethitische Keilschrifttafeln aus Maşat* (TTKY VI/34). Ankara 1991.
HSS	Harvard Semitic Series (Cambridge – Winona Lake)
HUCA	Hebrew Union College Annual (Cincinnati)
HZL	Ch. Rüster – E. Neu, *Hethitisches Zeichenlexikon: Inventar und Interpretation der Keilschriftzeichen aus den Boğazköy-Texten* (StBoTB 2). Wiesbaden 1989.
IEJ	Israel Exploration Journal (Jerusalem)
JANES	Journal of the Ancient Near Eastern Society (New York)
JAOS	Journal of the American Oriental Society (Ann Arbor)
JCS	Journal of Cuneiform Studies (New Haven – Baltimore)

KBo	Keilschriftttexte aus Boghazköy (Leipzig – Berlin)
KUB	Keilschrifturkunden aus Boghazköy (Berlin)
LA	Late Akkade
LB	Late Babylonian
(L)NS	(Late) New Script
MA	Middle Assyrian
MAD	Materials for the Assyrian Dictionary (Chicago)
MB	Middle Babylonian
MC 4	P. Steinkeller, *Third-Millennium Legal and Administrative Texts in the Iraq Museum, Baghdad* (Mesopotamian Civilizations 4). Winona Lake 1992.
MCS	Manchester Cuneiform Studies (Manchester)
MDOG	Mitteilungen der Deutschen Orientgesellschaft (Berlin)
MH	Middle Hittite
MOS	Mitteilungen aus den orientalischen Sammlungen (Berlin)
MS	Middle Sargonic or (Hittite) Middle Script
MVN	Materiali per il Vocabolario Neo-Sumerico (Roma)
NA	Neo-Assyrian
N.A.B.U.	Nouvelles Assyriologiques Brèves et Utilitaires (Paris)
NB	Neo-Babylonian
NBC	Tablets in the collections of the Nies Babylonian Collection, Yale University, New Haven
Nbn	Nabonid
NH	New Hittite
OA	Old Assyrian
OAkk	Old Akkadian
OB	Old Babylonian
OBO	Orbis Biblicus et Orientalis (Freiburg)
OECT	Oxford Editions of Cuneiform Texts (Oxford)
OH	Old Hittite
OLA	Orientalia Lovaniensia Analecta (Leuven)
OLZ	Orientalistische Literaturzeitung (Berlin)
Or NS	Orientalia Nova Series (Roma)

OS	Old Script
OSP 1	A. Westenholz, *Old Sumerian and Old Akkadian Texts in Philadelphia Chiefly from Nippur. Part One: Literary and Lexical Texts and the Earliest Administrative Documents from Nippur* (Bibliotheca Mesopotamica 1). Malibu 1975.
OSP 2	A. Westenholz, *Old Sumerian and Old Akkadian Texts in Philadelphia. Part Two: The "Akkadian" Texts, the Enlilemaba Texts, And the Onion Archive* (Carsten Niebuhr Institute Publications 3). Copenhagen 1987.
PBS	Publications of the Babylonian Section, University of Pennsylvania (Philadelphia)
PIHANS	Publications de l'Institut Historique-Archéologique Néerlandais de Stamboul (Leiden)
PPAC 1	Z. Yang, *Sargonic Inscriptions from Adab* (Periodic Publications on Ancient Civilizations 1). Changchun 1989.
PTS	Tablets in the collections of the Princeton Theological Seminary, Princeton
RA	Revue d'Assyriologie et d'Archéologie Orientale (Paris)
RBC	Tablets in the Rosen Babylonian Collection, Yale University, New Haven
RIMB	The Royal Inscriptions of Mesopotamia. Babylonian Periods (Toronto)
RIME	The Royal Inscriptions of Mesopotamia. Early Periods (Toronto)
RlA	Reallexikon der Assyriologie und Vorderasiatischen Archäologie (Berlin)
RS	Ras Shamra find number
RSO	Ras Shamra – Ougarit (Paris – Leuven)
RTC	F. Thureau-Dangin, *Recueil des tablettes chaldéennes*. Paris 1903.
SANER	Studies in Ancient Near Eastern Records (Boston)
SAOC	Studies in Ancient Oriental Civilization (Chicago)
SCCNH	Studies on the Civilization and Culture of Nuzi and the Hurrians (Winona Lake – Bethesda)
SCTRAH	M. Molina, *Sargonic Cuneiform Tablets in the Real Academia de Historia: The Carl L. Lippmann Collection*. Madrid 2014.
SEL	Studi Epigrafici e Linguistici sul Vicino Oriente Antico (Verona)
SLPL	Tablets in the collections of the Saint Louis Public Library

SMEA	Studi Micenei ed Egeo-Anatolici (Roma)
StBoT	Studien zu den Boğazköy-Texten (Wiesbaden)
StBoTB 4	C. Rüster – G. Wilhelm, *Landschenkungsurkunden hethitischer Könige* (StBoT Beiheft 4). Wiesbaden 2012.
ŠŠU	Šamaš-šum-ukin
TBI	F. Pomponio – G. Visicato – A. Westenholz, *Le tavolette cuneiformi di Adab delle collezioni della Banca d'Italia*. Roma 2006.
TeD	Tell el-Dabʿa find number
UF	Ugarit-Forschungen (Kevelaer – Neukirchen-Vluyn – Münster)
Ugaritica V	J. Nougayrol – E. Laroche – C. Virolleaud – C.F.A. Schaeffer, *Ugaritica V, Nouveaux textes accadiens, hourrites et ugaritiques des archives et bibliothèques privées d'Ugarit, commentaires des textes historiques (première partie)* (MRS 16). Paris 1968.
USP	B. Foster, *Umma in the Sargonic Period*. Hamden 1982.
VAT	Tablets in the Vorderasiatischen Abteilung of the Staatliche Museen zu Berlin
VB	Vorderasiatische Bibliothek (Leipzig)
VS	Vorderasiatische Schriftdenkmäler der Königlichen Museen zu Berlin 1–16 (Leipzig)
YBC	Tablets in the Yale Babylonian Collection, Yale University, New Haven
YOS	Yale Oriental Series, Babylonian Texts (New Haven – London – Oxford)
WdO	Die Welt des Orients (Wuppertal – Göttingen)
ZA	Zeitschrift für Assyriologie und Vorderasiatische Archäologie (Leipzig – Berlin)

Wedge Order in Cuneiform: a Preliminary Survey

Jon Taylor
British Museum, London

Abstract

Neo-Assyrian cuneiform displays a set of standardised sequences in which the wedges of each sign were impressed. This paper investigates the sequences found in texts from across the wider cuneiform corpus. Initial investigations suggested a surprising continuity of practice along both geographic and diachronic axes. The Neo-Assyrian order appears to follow a standardised Mesopotamian wedge order established by the mid-second millennium, implemented routinely by scribes until the last days of cuneiform. The roots of this tradition extend back into the third millennium. Limited variation is found in texts during the third millennium, however, thus offering another tool with which to analyse the development of cuneiform during its formative phases.

Introduction

Research by the author into the order in which the constituent wedges of each cuneiform sign were impressed during the Neo-Assyrian period revealed an unexpected lack of variation according to scribe or place or date of inscription.[1] Not only was the order consistent for an individual scribe, but also between scribes active throughout Assyria and the Neo-Assyrian period. Attempts were then made to identify variation in corpora increasingly separated from first millennium Assyria by date and/or provenance. Initial results suggested that the Neo-Assyrian order was a standard Mesopotamian wedge order established already in the second millennium, attested in texts of all types, from Babylonia and Assyria (as well as the periphery), persisting until the end of cuneiform.

Third millennium texts displayed certain sequences that diverge from what later became standard. Such differences have the potential to be useful in the determination of the date and provenance of a text, the identification of influences from practices established in other corpora, and may perhaps even facilitate the distinction of one scribal hand from another.[2] It is the third millennium material where this information can yield the most fruitful results,

1 This research was carried out in 2013–2014 as part of the project 'Nimrud: Materialities of Assyrian Knowledge Production', funded by the AHRC. The results will be published in Taylor forthcoming.

2 More generally, wedge order has the added benefit of helping to detect fakes.

offering us insights into the development of cuneiform during its formative stages. The obvious question is when—and of course how—the standardisation took place. Here attention turned naturally to the Ur III period, and in particular to the reforms of Šulgi. Initial survey had suggested that the Ur III period may indeed have been the crucial moment in fixing wedge order.

This paper addresses the topic in a more structured and systematic way, taking a small sample of material from across the range of cuneiform corpora available to the author in the collections of the British Museum. Although each period in the survey is represented by only a few tablets, the overall number of data points is enough to suggest trends. More in-depth studies of individual corpora will be useful for clarifying the trends that appear in this survey. The present author is producing three such studies: 1) an in-depth study of Neo-Assyrian material (Taylor forthcoming); 2) a larger such study on the tablets from Ur, which provide a significant sample of material ranging from the third to the first millennium BC; 3) a handbook setting out the sign dynamics of cuneiform across its long history.

In the current study, investigation has been conducted in each case by examination of the tablets themselves. The principal criterion for selection was that the tablets should contain several examples where the order of wedges was clear. It is by no means possible to determine wedge order from every tablet,[3] or even every sign on a tablet where order is sometimes visible, and neither is it always possible to determine the order of every wedge in a given sign. An attempt has been made to provide at least three examples of each sign per period. To maximise the value of the examples for comparative purposes (including the application of results after this study), and in order to achieve the survey in a manageable period of time, selection of signs has focussed on nine common signs. These nine signs are presented in three groups, each investigating a type of wedge interaction. I have not multiplied the number of examples presented here beyond a count of three or four (including whatever variations were identifiable), but otherwise no examples have been suppressed. To open the results to closer scrutiny, museum numbers of all the objects used have been given here in Appendix A, and photographs of them have been made available on the Museum's online collections catalogue.[4] For clarity's sake, and ease of print publication, line drawings were produced of the signs to be included in this study. Discussion of previous scholarship on wedge order, and the principles for determining it, can be found in Taylor forthcoming.[5] Detailed assessment of the implications of the results mirrored here will be found in the forthcoming in-depth studies mentioned above.

3 As a rough estimate, maybe a third of tablets yield some information.

4 http://www.britishmuseum.org/research/collection_online/search.aspx. It is harder to determine wedge order from photographs than from the original tablets, and the process is therefore less reliable.

5 For present purposes, it is appropriate to mention that the technique depends on the displacement of clay, and thus is most obvious when the clay of the tablet is wet. This occurs with particular frequency in the Old Assyrian corpus, and with envelopes. Detection is hindered when a seal has been impressed over an inscription.

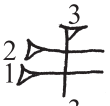
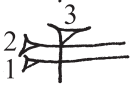
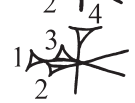
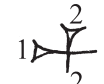
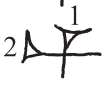
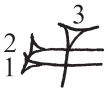
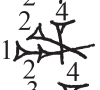
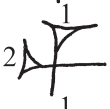
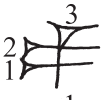
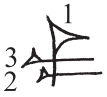
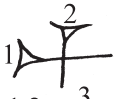
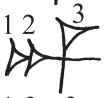
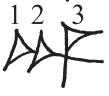
Results

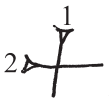
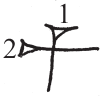
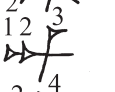
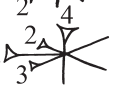
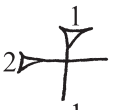
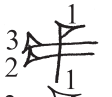
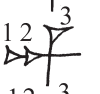
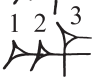
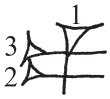
The drawings in the table below are based on individual signs, specifically referenced. They stand as tokens for more widely attested types. They are labelled with numbers representing the order in which the constituent wedges can be seen to have been made.

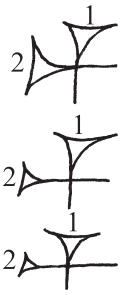
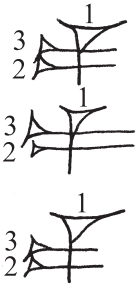
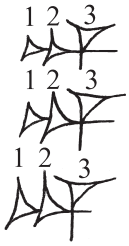
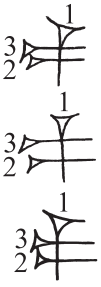
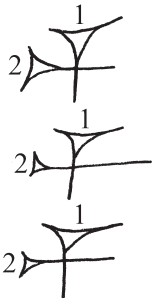
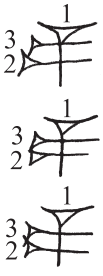
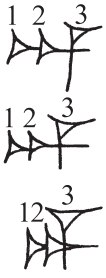
The numbering system used here is based on that pioneered by Sallaberger 1996. Where more than one wedge has the same number, this indicates that their relative sequence is not clear. Numbers of the type 1', 2' etc. indicate relative orders within a wider sequence, the preceding part(s) of which may not be clear. Where the author diverges from Sallaberger's model is in refraining from assigning numbers based on the basic flow of left to right and top to bottom.[6] In a number of situations it is clear that wedges do not flow strictly according to this principle, in both third millennium and later corpora. In addition, the flow from top to bottom is valid only in certain cases; more commonly, the reverse is true. The assignation of numbers according to basic flow unfortunately hinders comparison between the two datasets. I assume, however, that where Sallaberger's stated sequences deviate from what would be expected from his assumed flows, these sequences reflect directly observed orders rather than assumed ones. This would have the effect of providing examples supporting the principles here, while undermining possible counter examples. Except where specified otherwise, numbers of tablets are prefixed BM (e.g. '96591' here refers to BM 96591). The location of each instance of a sign on the tablet in question is described according to surface, column and line number, using the following abbreviations: t = top; b = base; o = obverse; r = reverse; col = colophon. In the discussion that follows, 'rules' referred to are those summarised later in the article.

Group 1								
	MAŠ			PA			AN	
ED		96591 iii4			96581 oiv'3'			21014 oi2
		104726 ovi9			96594 oii'4			15828 oi4
		104726 riii3			104726 riii2			101976 ovii4
					118094 oiii8			104726 riii4

6 Except when these wedges are parallel and equal (see rule 4 below), and except for the assumption that in AMAR the *Winkelhaken* on the left were impressed prior to those on the right.

Group 1			
	MAŠ	PA	AN
OAkk	 123075 r9  26607 05  86297 07	 26288 r8  123066 oi4  123067 r8	 26331 r9  123066 oi9  123067 06
Ur III	 20776 04  26298 02  27462 r3  12998 r3	 26298 r11  14615 oii18  12998 05	 16072 r1  13450 r3  27462 r1  27468 02
OB	 113284 08  16523 r1  97120 01	 16523 r1  15597 02  79904 r7	 28453 05  16828 09  22708 013

Group 1			
	MAŠ	PA	AN
OA	 113289 r2  113319 04  113279 r5		 113319 01  113289 r7  113258 017  113279 011
peri-pheral	 131705 03  131719 03	 131705 01  E29841 r2  131468 04  108565 8’	 131584 oiii14  131468 01  108575 r4’  E29835 r3
MB	 12958 07  13315 r6	 13352 03  13125 02  13159 r1	 13178a 07  13278 04  13253 05

Group 1			
	MAŠ	PA	AN
MA	 128381 6 123387 04’ 98730 r29	 122671 5 123372 013 98731 r13	 122671 5 123387 04’ 123373 01
NB/ LB	 32152 02 30256 01 30853 r17	 28863 07 30853 r4 36669 oii5	 32152 014 42301 01 36417 06’
NA	 K4330 oi28 K4328 oii12 K1662 5	 K1662 col 83-1-18,90 05 81-2-4,150 013	 K1662 3 ND1123 3 83-1-18,90 05