Calendars and Festivals in Mesopotamia in the Third and Second Millennia BC

Edited by Daisuke Shibata and Shigeo Yamada

Studia Chaburensia

(StCh)

Edited by Hartmut Kühne

Volume 9

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Contents

Preface

From the latter half of the third millennium to the end of the second millennium BC, various calendar systems emerged and were used in the cities of Mesopotamia and the surrounding regions. A variety of calendars were utilized at different cities until the so-called "Nippur calendar" or "Babylonian calendar" became predominant and was adapted broadly throughout the entirety of Mesopotamia towards the end of the second millennium BC. In order to compare the sources concerning calendars as practiced in different cities in various periods during the second millennium BC and earlier, a conference was held at the University of Tsukuba on March 23–24, 2016, with an international group of experts on the third and second millennia BC in attendance.

The program of the conference in 2016 was as follows:

March 23 (Wed.)
University of Tsukuba, Labo. of Advanced Research B 108
  13:00–17:00
  W. Sallaberger "Calendars in the third millennium BC: seasons, festivals and social identities"
  L. Colonna d'Istria "Calendars and rituals at Mari during the *šakkanakkū* period (end of the 3rd — beginning of the 2nd millennia B.C)"
  K. Maekawa "Seasonality of collective labor in third millennium southern Babylonia"
  M.-G. Masetti-Rouault "Qasr Shemamok/Kilizu: how a Northern Mesopotamian city became Assyrian. Results of the first five years of studies on the site (2011–2015)"

March 24 (Thu.)
University of Tsukuba, Labo. of Advanced Research B 108
  9:00–12:15
  D. Charpin "'Nippur Calendar' and other calendars in the Old Babylonian period"
  A. Jacquet "Calendar and festivals in Mari according to the royal archives"
  N. Ziegler, "The Upper-Mesopotamian calendar (so-called 'Samsi-Addu calendar')"
  C. Michel "Calendars in the Old Assyrian sources"
  13:30–16:45
  O. Rouault "Calendars, month names and local traditions in Terqa in the second millennium BCE"
  D. Shibata and S. Yamada, "Calendars and festivals of Ṭabatum/Ṭabetu and its surroundings in the second millennium BC"
  D. Fleming "The loss of the local calendar at Emar"
  M. Yamada "The *zukru* cycle in Emar in the light of the agricultural rites performed in the firstmonth"

The conference was held as one of a series of study meetings aiming to clarify the scribal culture, society, and history of the Middle Euphrates and Habur areas and their relations to their surroundings during the second millennium BC. The results of the previous meetings, particularly the one held on December 5–6, 2013, has been published as the fifth volume of

Studia Chaburensia: S. Yamada and D. Shibata (eds.), *Cultures and Societies in the Middle Euphrates and Habur Areas in the Second Millennium BC – I: Scribal Education and Scribal Traditions* (2016). The present volume had initially been planned to continue the series with the title: *Cultures and Societies in the Middle Euphrates and Habur Areas in the Second Millennium BC – II: Calendars and Festivals*. However, because this volume deals with a broader geographical area in Mesopotamia and its surroundings while covering a more extended time period in the third and second millennia BC, its title was eventually modified to *Calendars and Festivals in Mesopotamia in the Third and Second Millennia BC.*

This volume includes ten papers from those contributed by the participants of the conference. Through a fresh review of available sources as well as the publication of new texts and documentary and archaeological data, it presents a useful set of studies on calendars employed in upper and lower Mesopotamia and its surroundings. It analyzes the ones used at Ĝirsu, Ebla, Nabada, Ur, Nippur, Mari, Aššur, Kaneš, Terqa, Ṭabatum/Ṭabetu, and Emar from the pre-Sargonic period to the end of the second millennium BC.

W. Sallaberger opens the volume with an article investigating the earliest calendrical systems in Syro-Mesopotamia in the third millennium BC. He scrutinizes various methods of month counting, month names, and seasonal festivals attested in the administrative and legal documents from Ĝirsu, Ebla, and Nabada (Tell Beydar). Furthermore, he analyzes the Early Semitic calendar and the Nippur calendar until the end of the Third Dynasty of Ur. The next article contributed by L. Colonna d'Istria deals with the calendars and festivals attested from Mari during the so-called *šakkanakku* period from the 23rd to the late 19th centuries BC. It traces the transition of the month and festival names and calendrical recording methods from its earlier phase to the later ones and also publishes several new administrative documents from Mari originating from the late *šakkanakku* period.

C. Michel's article provides an up-to-date synthesis of the calendar attested in Old Assyrian sources. It presents the Assyrian lunisolar calendar, which was composed of solar years named by eponyms and lunar months called by a distinct set of month names, both of which were adjusted together. The article also discusses seasonal events and terminology related to time units. D. Charpin's article focuses on the "Nippur calendar" commonly used in southern and central Mesopotamia during the four centuries of the Old Babylonian period. It discusses a variety of questions, such as how exactly the month names were read, how kings interfered with the reckoning of time, and the parallel use of the "Nippur calendar" with other local calendars.

The following two contributions concern the different sets of calendars best attested in the texts from Old Babylonian Mari. The article by N. Ziegler deals with the so-called "Šamšī-Adad Calendar," which was adopted within Šamšī-Adad's kingdom of Upper-Mesopotamia. It analyses the historical process of the imposition and endurance of the calendar in the region, the month names, and their seasonality and relations with other local calendars. This is followed by A. Jacquet's article, which focuses on the calendar used in Mari during the reign of Zimri-Lim. It reveals close interrelations between the intercalated lunisolar calendar and the seasonal and annual festivals practiced at Mari at that time.

The next two articles focus on the middle Euphrates and lower Habur in the post-Mari period. The contribution by O. Rouault discusses the calendars used in Terqa, presenting material from his excavations at the site, including valuable data from the unpublished archive found during the 12th season in 1989. By comparing Rouault's data with the material from the excavations at Ṭabatum/Ṭabetu (Tell Taban) and other sources, the article by D.

Shibata and S. Yamada examines the transition and characteristics of the various calendars used at Terqa and Ṭabatu during the second millennium BC.

The last two papers deal with the calendars of Emar, a city-state that flourished in the great bend of the Euphrates during the late second millennium BC. The article by D. Fleming attempts to locate the evidence for calendars attested in the Emar texts in historical context. The report by M. Yamada studies the cycle of the *zukru* festival that repeated every six or seven years, arguing that this festival functioned as an instrument for timekeeping in Emar.

The volume is equipped at the end with indices of the names of months and festivals, which will hopefully assist readers using the volume in future studies on the calendric traditions in Syro-Mesopotamia during and beyond the periods that this volume covers.

Daisuke Shibata and Shigeo Yamada
Tsukuba, July 2021

Abbreviations

Bibliographical Abbreviations

AAA	*Annals of Archaeology and Anthropology*
AAASyr.	*Annales Archéologiques Arabes Syriennes: Revue d'archéologie et d'histoire*
AbB	Altbabylonische Briefe in Umschrift und Übersetzung
AfO	*Archiv für Orientforschung*
AHw.	W. von Soden, *Akkadisches Handwörterbuch*
AKT	(*Ankara*) *Kültepe Tabletleri / Ankaraner Kültepe-Texte*
AMD	Ancient Magic and Divination
ANES	*Ancient Near Eastern Studies*
AnOr.	Analecta Orientalia
AOAT	Alter Orient und Altes Testament
AoF	*Altorientalische Forschungen*
APHAO	Association pour la Promotion de l'Histoire et de l'Archéologie Orientales: Publications de la Mission archéologique de l'Université de Liège en Syrie
ARET	Archivi Reali di Ebla. Testi: Missione archeologica italiana in Siria a cura dell'Università (degli studi) di Roma "La Sapienza"
ARM	Archives Royales de Mari
ARMT	Archives Royales de Mari. Traduction
ArOr.	*Archív Orientální: Quarterly Journal of African and Asian Studies*
AS	Assyriological Studies
ASJ	*Acta Sumerologica*
ASJ ss	Acta Sumerologica Supplementary Series
ATHE	B. Kienast, *Die altassyrischen Texte des Orientalischen Seminars der Universität Heidelberg und der Sammlung Erlenmeyer-Basel*, UAVA 1
AulaOr.	*Aula Orientalis*
AulaOr. Supp.	Aula Orientalis Supplements
BAH	Bibliothèque archéologique et historique
BASOR	*Bulletin of the American Schools of Oriental Research*
BATSH	Berichte der Ausgrabung Tall Šēḫ Ḥamad/Dūr-Katlimmu
BBVO	Berliner Beiträge zum Vorderen Orient
BBVOT	Berliner Beiträge zum Vorderen Orient – Texte
BiMes.	Bibliotheca Mesopotamica
BIN	Babylonian Inscriptions in the Collection of James B. Nies, Yale University
BiOr.	*Bibliotheca Orientalis, uitgegeven vanwege het Nederlands instituut voor het Nabije Oosten te Leiden*
CAD	A. L. Oppenheim et al., *The Assyrian Dictionary of the University of Chicago*

CB III	Siglum for inventory number of texts in: Ö. Tunca and A. Baghdo (eds.), *Chagar Bazar (Syrie)* III: *Les trouvailles épigraphiques et sigillographiques du chantier I (2000–2002)*
CBCY	P.-A. Beaulieu et al., *Catalogue of the Babylonian Collections at Yale*
CCT	S. Smith et al., *Cuneiform Texts from Cappadocian Tablets in the British Museum*
CDLI	Cuneiform Digital Library Initiative (http://cdli.ucla.edu)
CDOG	Colloquien der Deutschen Orient-Gesellschaft
CHANE	Culture and History of the Ancient Near East
CT	Cuneiform Texts from Babylonian Tablets in the British Museum
CunMon.	Cuneiform Monographs
CUSAS	Cornell University Studies in Assyriology and Sumerology
DP	F. M. Allotte de la Fuÿe, *Documents présargoniques*
ECTJ	A. Westenholz, *Early Cuneiform Texts in Jena*
EDATŠ	F. Pomponio and G. Visicato, *Early Dynastic Administrative Tablets of Šuruppak*
Emar 6	D. Arnaud, *Recherches au pays d'Aštata: Emar* VI/1–4
FAOS	Freiburger Altorientalische Studien
FM	Florilegium marianum
GAG	W. von Soden, *Grundriß der akkadischen Grammatik*, AnOr. 33
GBAO	Göttinger Beiträge zum Alten Orient
GC1	G. Buccellati et al., *Terqa Data Bases* 1, *Graphemic Categorization* 1
HANEM	History of the Ancient Near East. Monographs
HANES	History of the Ancient Near East. Studies
HdOr.	Handbuch der Orientalistik. 1. Abteilung, Der Nahe und der Mittlere Osten
HEO	Hautes Études Orientales
HSS	Harvard Semitic Series
HUCA	*Hebrew Union College Annual*
IAS	R. D. Biggs and D. P. Hansen, *Inscriptions from Tell Abū Ṣalābīkh*, OIP 99
ICK	B. Hrozný, L. Matouš, and M. Matoušovà, *Inscriptions cunéiformes du Kultépé*
ITT	F. Thureau-Dangin et al., *Inventaire des tablettes de Tello: conservées au Musée Impérial Ottoman*
JAOS	*Journal of the American Oriental Society*
JCS	*Journal of Cuneiform Studies*
JEOL	*Jaarbericht van het Voor-Aziatisch-Egyptisch-Gezelschap "Ex Oriente Lux"*
JESHO	*Journal of the Economic and Social History of the Orient*
JNES	*Journal of Near Eastern Studies*
KAM 11	V. Donbaz, *Middle Assyrian Texts from Assur at the Eski Şark Eserleri Müzesi in Istanbul*, WVDOG 146
Kaskal	*Kaskal: Rivista di storia, ambiente e culture del Vicino Oriente antico*
KAV	O. Schroeder, *Keilschrifttexte aus Assur verschiedenen Inhalts*, WVDOG 35

KBo.	Keilschrifttexte aus Boghazköi
KKS	L. Matouš and M. Matoušová-Rajmová, *Kappadokische Keilschrifttafeln mit Siegeln aus den Sammlungen der Karlsuniversität in Prag*
KTP	F. J. Stephens, "The Cappadocian Tablets in the University of Pennsylvania Museum," *Journal of the Society of Oriental Research* 11, 101–136
KTS 1	J. Lewy, *Keilschrifttexte in den Antiken-Museen zu Stambul: Die altassyrischen Texte vom Kültepe bei Kaisarīje*
KTT	Siglum for inventory number of texts in: M. Krebernik, *Tall Biʿa/Tuttul–II: Die altorientalischen Schriftfunde*, WVDOG 100
KTU	M. Dietrich, O. Loretz, and J. Sanmartín, *Die keilalphabetischen Texte aus Ugarit, Ras Ibn Hani und anderen Orten*, Dritte erweiterte Auflage, AOAT 360/1
KUG	K. Hecker and J. Lewy, *Die Keilschrifttexte der Universitätsbibliothek Giessen: unter Benutzung nachgelassener Vorarbeiten von Julius Lewy*
LAK	A. Deimel, *Liste der archaischen Keilschriftzeichen*, WVDOG 40
LAOS	Leipziger Altorientalistische Studien
LAPO	Littératures Anciennes du Proche-Orient
LH	A. H. Podany, *The Land of Hana: Kings, Chronology, and Scribal Tradition*
MAD	I. J. Gelb, *Materials for the Assyrian Dictionary*
MARI	*MARI. Annales de recherches interdisciplinaires*
MARV	H. Freydank et al. (eds.), *Mittelassyrische Rechtsurkunden und Verwaltungstexte*
MCS	Manchester Cuneiform Studies
MDP	Mémoires de la Délégation en Perse
MEE	Materiali epigrafici di Ebla
MesCiv.	Mesopotamian Civilizations
MHEM	Mesopotamian History and Environment. Memoirs
MSL	B. Landsberger et al., *Materialien zum sumerischen Lexikon / Materials for the Sumerian Lexicon*
MTT	Matériaux pour l'étude de la toponymie et de la topographie
NABU	*Nouvelles Assyriologiques Brèves et Utilitaires*
NATN	D. I. Owen, *Neo-Sumerian Archival Texts Primarily from Nippur*
OBGT	R. Hallock and B. Landsberger, "Old Babylonian Grammatical Texts," *MSL* 4, 45–128
OBO	Orbis Biblicus et Orientalis
OBO SA	Orbis Biblicus et Orientalis. Series Archaeologica
OBTCB	Ph. Talon and H. Hammade, *Old Babylonian Texts from Chagar Bazar*, Akkadica Supplementum 10
OBTIV	S. Greengus, *Old Babylonian Tablets from Ishchali and Vicinity*
OBTR	S. Dalley, C. B. F. Walker, and J. D. Hawkins, *The Old Babylonian Tablets from Tell al Rimah*
OIP	Oriental Institute Publications
OLA	Orientalia Lovaniensia Analecta
Or.	*Orientalia*, Nova Series

OrAnt.	*Oriens Antiquus*: *Rivista del Centro per le antichità e la storia dell'arte del Vicino Oriente*
Orient	*Orient: Report/Journal of the Society for Near Eastern Studies in Japan*
OrS	*Orientalia Suecana*
OSP	A. Westenholz, *Old Sumerian and Old Akkadian Texts in Philadelphia, Chiefly from Nippur*
PIHANS	Publications de l'Institut historique et archéologique néerlandais de Stamboul
PIPOAC	Publications de l'Institut du Proche-Orient ancien
Prag I	K. Hecker, G. Kryszat, and L. Matouš, *Kappadokische Keilschrifttafeln aus den Sammlungen der Karlsuniversität Prag*
PSBA	Proceedings of the Society of Biblical Archaeology
PSD	Å. W. Sjöberg et al., *The Sumerian Dictionary of the University Museum of the University of Pennsylvania*
RA	*Revue d'assyriologie et d'archéologie orientale*
RE	Siglum for inventory number of texts in: G. Beckman, *Texts from the Vicinity of Emar in the Collection of Jonathan Rosen*
RGTC	Répertoire géographique des textes cuneiforms, Beihefte zum Tübinger Atlas des Vorderen Orients, Reihe B 7
RIMA	The Royal Inscriptions of Mesopotamia, Assyrian Periods
RIMB	The Royal Inscriptions of Mesopotamia, Babylonian Periods
RIME	The Royal Inscriptions of Mesopotamia, Early Periods
RlA	*Reallexikon der Assyriologie (und Vorderasiatischen Archäologie)*
RTC	F. Thureau-Dangin, *Recueil de tablettes chaldéennes*
SAAB	*State Archives of Assyria. Bulletin*
SANER	Studies in Ancient Near Eastern Records
Santag	SANTAG: Arbeiten und Untersuchungen zur Keilschriftkunde
SBL WAW	Society of Biblical Literature, Writings from the Ancient World Series
SET	T. B. Jones and J. W. Snyder, *Sumerian Economic Texts from the Third Ur Dynasty*
SGKAO	Schriften zur Geschichte und Kultur des Alten Orients
SJAC	Supplement to Journal of Ancient Civilizations
SMEA	*Studi Micenei ed Egeo-Anatolici*
StCh.	Studia Chaburensia
STH	M. I. Hussey, *Sumerian Tablets in the Harvard Semitic Museum*
STT	O. R. Gurney, J. J. Finkelstein, and P. Hulin, *The Sultantepe Tablets*
SVJAD	A. P. Riftin, *Staro-vavilonskie juridičeskie i administrativnye documcnty v sobranijach SSSR*
Syria	*Syria: Revue d'art oriental et d'archéologie*
TC	G. Contenau, F. Thureau-Dangin, and J. Lewy, *Tablettes cappadociennes*, TCL 4, 14, and 19–21
TCBI	F. Pomponio et al., *Tavolette cuneiformi di Adab delle collezioni della Banca d'Italia*
TCL	Textes Cunéiformes. Musée du Louvre, Département des antiquités orientales
TFR	O. Rouault, *Terqa Final Reports*, BiMes. 16 and 29

TPAK	C. Michel and P. Garelli, *Tablettes paléo-assyriennes de Kültepe* 1 (Kt 90/k)
TPR 7	O. Rouault, "Terqa Preliminary Reports No. 7: Les documents épigraphiques de la troiseème saison," *Syro-Mesopotamian Studies* 2/7, 165–180
TSA	H. de Genouillac, *Tablettes sumériennes archaïques: matériaux pour servir à l'histoire de la société sumérienne*
TSBR	D. Arnaud, *Textes syriens de l'age du Bronze récent*, AulaOr. Supp. 1
TSŠ	R. Jestin, *Tablettes sumériennes de Šuruppak conservées au Musée de Stamboul*
UAVA	Untersuchungen zur Assyriologie und Vorderasiatischen Archäologie
UET	Ur Excavations. Texts
UF	*Ugarit-Forschungen: Internationales Jahrbuch für die Altertumskunde Syrien-Palästinas*
VS	Vorderasiatische Schriftdenkmäler der Königlichen/Staatlichen Museen zu Berlin
WO	*Die Welt des Orients: Wissenschaftliche Beiträge zur Kunde des Morgenlandes*
WVDOG	Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft
WZKM	*Wiener Zeitschrift für die Kunde des Morgenlandes*
YOS	Yale Oriental Series. Babylonian Texts
ZA	*Zeitschrift für Assyriologie und Vorderasiatische Archäologie*
ZAW Beih.	*Zeitschrift für die Alttestamentliche Wissenschaft*, Beiheft

Sigla for Inventory Numbers

A.	1. Inventory number of texts from Tell Hariri/Mari
	2. Museum number of objects in the Assur Collection, İstanbul Arkeoloji Müzeleri (Istanbul)
AO	Museum number of objects in the Antiquités Orientales, Musée du Louvre (Paris)
Ass.	Inventory number of objects excavated at Qalat Sherqaṭ/Aššur
IM	Museum number of objects in the Iraqi Museum (Baghdad)
Kt	Inventory number of objects excavated at Kültepe
L.	Inventory number of objects excavated at Tell Leilan
M.	Inventory number of texts from Tell Hariri/Mari
Msk	Inventory number of objects excavated at Meskene/Emar
NBC	Museum number of objects in the Nies Babylonian Collection, Yale University (New Haven)
Schaeffer	Inventory number of objects in the Cl. F.-A. Schaeffer Collection
Sem	Museum number of objects in the Kunsthistorisches Museum Wien
T.	Inventory number of texts from Tell Hariri/Mari
TA	Inventory number of objects excavated at Tell Taya
Tab T	Inventory number of objects excavated at Tell Taban
TH	Inventory number of objects excavated at Tell Hariri/Mari

TM.	Inventory number of objects excavated at Tell Mardikh/Ebla
TMH	Museum number of objects in the Frau Professor Hilprecht Collection of Babylonian Antiquities, Universität Jena (Leipzig)
TQ	Inventory number of objects excavated at Tell Ashera/Terqa
VAT	Museum number of objects in the Vorderasiatisches Museum (Berlin)
YBC	Museum number of objects in the Babylonian Collection, Yale University (New Haven)

Others

AKL	Assyrian King List
DN	Divine name
ED	Early Dynastic
KEL	Kültepe Eponym List
MEC	Mari Eponym Chronicle
MN	Month name
PN	Personal name
REL	Revised Eponym List
ZL	Zimri-Lim

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Calendars, Festivals, and Rituals at Mari during the *šakkanakku* Period: From the End of the Third to the Beginning of the Second Millennium BC

Introduction [1]

The period of the *šakkanakku* of Mari, named after the title of the rulers of Mari in the valley of the Middle Euphrates, extends over almost four centuries, from the placement of a *šakkanakku*, "governor," by the kings of Akkad in the 23rd century BC to the enthronement of Yaḫdun-Lîm at Mari (ca. 1820 BC). Textual data are inconsistent over time, and archaeological data revealed that this long period did not have a uniform material culture. P. Butterlin proposes to divide this long period into four phases based on historical-archaeological data, especially the buildings attributed to *šakkanakku*:[2]

– *Period of šakkanakku-governors*: 23rd century BC. Mari rulers were still under the authority of the kings of Akkad.

– *Period of šakkanakku-restorers* (abbreviated as *Šakk-Re*): 23rd–22nd centuries BC. This period corresponds to the redevelopment of the temple area. From this period, the *šakkanakku* were probably no longer dependent on any political power from the south.

– *Period of šakkanakku-royal* (abbreviated as *Šakk-Ro*): 22nd–mid-20th centuries BC. This period began with the reign of Apil-kīn. He was regarded as a local king by Ur-Nammu, the contemporary king of the Ur III dynasty. Furthermore, his daughter was one of the wives of Šulgi, the second king of the Ur III dynasty, who was thus a daughter-in-law of Ur-Nammu. The palace of Mari ("Grand Palais Royal") seems to have been built at the beginning of this period.

– *Late šakkanakku period*: mid-20th–19th centuries BC. This last period is essentially defined by the ceramic material[3] and lasted from the end of the 20th century BC until around 1820/1810 BC. This is the period of the last *šakkanakku* of Mari before the rise of Yaḫdun-Lîm, an Amorite prince who took the throne of Mari. During the reign of Yaḫdun-Lîm, a reform of writing took place and a more Central-Mesopotamian

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2   Butterlin 2007: 238–243.
3   Butterlin 2007: 240–242. See Pons 1999.

tradition was promoted, departing from the Euphrates tradition of the *šakkanakku* period.[4]

This periodization can be associated with the latest epigraphic discoveries from Mari. Some *šakkanakku* texts were found at archaeological levels dated from just before or contemporary to the construction of the "Grand Palais Royal." These texts exhibit a scribal tradition[5] different from those of the Presargonic (Ville II, before the *šakkanakku* period[6]) or late *šakkanaku* periods (during Ville III).

Most of the texts from the *šakkanakku* period are administrative texts, which occur inconsistently across the period. Only a few administrative texts dated before the late *šakkanakku* period (mid-20th–19th centuries BC) have been published thus far.[7] Many of the texts mention month names, thus allowing a better understanding of the menological tradition from the Presargonic period to the late *šakkanakku*/Amorite periods. However, these texts do not document rituals or other festivals.

The majority of texts from the *šakkanakku* period are dated toward the end of this period (mid-19th century BC).[8] These texts originate in administrative palace offices and are characterized by a Euphratic "scribal tradition" (dialect, local use, and form of logograms).[9] The month names and their order within the calendar are well-established during the late *šakkanakku* period, and in some cases, we can identify several celebrations or festivals addressed in the administrative documents from the late *šakkanakku* period, by comparing them with the texts from the Amorite period and based on the fruits of previous studies on the Mari calendar.[10] However, it remains difficult to interpret and analyze data about festivals precisely because of the style of administrative texts from the late *šakkanakku* period, which is telegraphic or laconic in comparison with the texts from the Amorite period, in particular those from Zimrī-Lîm's reign.

1. Month names in the Mari calendar during the *Šakk-Re*/*Šakk-Ro* period (end of 3rd millennium BC).

The month names used in Mari during the Presargonic period (Ville II) are also found in Ebla and sporadically in southern Mesopotamia during the Sargonic period.[11] The order of the months in the calendar has been a topic of much discussion, but according to D. Charpin, *i-si* was the first month of the year.[12] The order of months for the late *šakkanakku* period is also well-established. Indeed, the month names are largely identical to those of the time of Yaḫdun-Lîm (end of 19th century B.C.).[13]

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4   Durand 1985; Charpin 2012.
5   Colonna d'Istria and Criaud 2014: 382–395.
6   For the terminology "Ville II" and "Ville III," see Margueron 2004.
7   For texts from *Šakk-Re* or *Šakk-Ro* periods, see Colonna d'Istria and Criaud 2014: 367 n. 18.
8   Durand 1985; Colonna d'Istria 2015: 103–104.
9   For the chracterisrics of scribal tradition and dialect from the late *šakkanakku* period, see Limet 1975 and 1976; Westenholz 1978; Durand 1985; Gelb 1992; Durand and Marti 2004; Cavigneaux and Colonna d'Istria 2009; Durand 2009; Colonna d'Istria 2011; Durand 2012; Colonna d'Istria 2014 and 2015; Cavigneaux 2019.
10   Durand 2008; Jacquet 2011.
11   Cohen 2015: 9–18. See the contribution by W. Sallaberger in this volume.
12   Charpin 1993; Cohen 2015: 11; Archi 2017; see Table 2.
13   Jacquet 2008; Cohen 2015: 315–328; see below, 2.1 and Table 2.

The epigraphic discoveries in Mari during the 2006 and 2007 excavations have changed our view of the menological tradition in the Middle Euphrates Valley. Indeed, before these last campaigns, the available documentation was limited to texts dating to the Presargonic, late-*šakkanakku*, and Amorite periods. The nine administrative documents discovered in 2006 and 2007 in Sector P-Sud 2[14] stemmed from a layer of preparation before the settlement of the "Grand Palais Royal." Seven of these documents were dated by month. The tablets TH01-830, TH01-831, TH02-1029, and TH02-1030 from the northern part of the palace can be added to these documents because of their similar archaeological contexts.[15]

Since these texts were discovered at the foundation levels of the "Grand Palais Royal," they can safely be attributed to the *Šakk-Re*/*Šakk-Ro* periods. The interval between the Presargonic period (Mari Ville II) and the late *šakkanakku* period (20th–19th century BC) has been partly documented, and all of these administrative texts have been published by Colonna d'Istria and Criaud (2014; abbreviated here as Syria-1–13). Eight out of the thirteen documents recently published close with "ITI Month Name" (below, Table 1). Another text (Syria-1) with a fragmentary ending concludes with a blank space (*vacat*), which is probably followed by the name of the month [ITI? ...]-*im*. This restoration cannot be completed with accuracy because of the poor condition of the tablet. Nevertheless, it may be possible to restore the month name as [ITI *la-ḫi*]-*im* or [ITI *a-bi*]-*im*, since these month names are known in Mari during the late *šakkanakku* and Amorite periods (period of Yaḫdun-Lîm[16] and Zimrī-Lîm), and especially in some Southern Mesopotamian cities[17] and Susa[18] during the Ur III period.

While some of the month names in these documents are unknown elsewhere, others have parallels in later calendars (see below 2.1, Table 2). Therefore, the two groups could be distinguished from each other, as demonstrated in Table 1.

The text Syria-13 written with a later sign form is the only one dated with the day and the month, as were the documents of the late *šakkanakku* period.

1.1. Specific month names of the *Šakk-Re*/*Šakk-Ro* calendar

1.1.1. ITI ZI-BI-*ra* (Text Syria-3)

The text Syria-3, recording the expenditure of bread during the morning and evening for a period of 23 days, has a more archaic appearance than the other administrative documents from the periods *Šakk-Re* and *Šakk-Ro*. It ends with the date ITI ZI-BI-⌜*ra*⌝. Although the meaning of this month's name is still unclear, the month name seems to be a Semitic term. The absence of a divine determinative suggests that it is a common word, perhaps referring

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14   Colonna d'Istria and Criaud 2014: 367–369.

15   Colonna d'Istria and Criaud 2014: 367.

16   See Table 2.

17   Cohen 2015: 206–207 "Ishan Mizyad." The text IM 95492 from Išān Mizyad, dated from the Ur III period, mentions ITI *la-ḫu-um* which could be the third month of the year as in the Mari calendar (text published in Mahmud Ahmed 1989: 343). Some texts from archives concerning the business of the merchant SI.A-a during the Ur III period and from Northern Babylonia, attest Sumerian month names and several names of month in Akkadian including ITI *la-ḫu-um* (CUSAS 22 54). See Cohen 2015: 207.

18   ITI *la-ḫu-um*: MDP 28 467 (Šū-Sîn, year 2). Other administrative texts from the early Old-Babylonian period attest this month name: *la-ḫu-um* (MDP 18 151) or *la-aḫ-ḫu-um* (MDP 10 texts 15, 28, 41, 51, 53, 91, 94, 95). ITI *a-bi₂*: MDP 54 17 (Ur III period).

Table 1: Administrative documents with the date from the *Šakk-Re*/*Šakk-Ro* period

Group	Primary publication	Object number	Area-provenience	Date at the end of document
group 1	Syria-3	TH07-1	P-SUD 2	(*vacat*)| ITI ZI-BI-⌈*ra*⌉
	Syria-6	TH07-4	P-SUD 2	(*vacat*)| ITI ᵈINANA-*ṣa-ar-ba-at*
	Syria-5	TH07-3	P-SUD 2	(*vacat*)| ITI ᵈNIN.ḪUR.SAG
group 2	Syria-4	TH07-2	P-SUD 2	(*vacat*)| [ITI ᵈ]KUR
	Syria-10	TH01-830	Palace-north part	(*vacat*)| ITI ᵈ[KUR?]
	Syria-7	TH07-5	P-SUD 2	(*vacat*)| ITI *Gi-iz-Gi-zum*
	Syria-8	TH07-6	P-SUD 2	ITI *Gi-iz-Gi-zum*
	Syria-13	TH02-1030	Palace-north part	24 UD | ITI ᵈNIN-KI.TUL₈.KI.TUL₈
	Syria-1	TH06-1	P-SUD 2	(*vacat*)| [ITI? …]-*im*

to a precise moment of worship or agro-pastoral activity. It is possible that this month name is related to *zibibi/arum* attested twice in the Old Assyrian documents from Kültepe/Kaniš, the meaning of which is also unclear.[19]

1.1.2. ITI ᵈINANA-*ṣa-ar-ba-at* (Text Syria-6)

The text Syria-6 recording the distribution of beer to various recipients is dated in the month ITI ᵈINANA-*ṣa-ar-ba-at*. This month name is derived from the name of one of the Inana/Eštar's hypostases, the worship of whom is attested in Mari during the Presargonic period (name of the goddess written ᵈINANA-*zar₃-bat*)[20] and once (at least) during the late *šakkanakku* period (written ᵈINANA-*ṣa-ar-ba-at*).[21]

This goddess is also attested in the archives of Ebla in which the word *ṣarbat*, associated with the divine name INANA, is followed by the determinative KI, suggesting that the word *ṣarbat* meaning "poplar" could be a toponym here.[22] In Presargonic Mari texts, the determinative KI does not seem necessary in spelling the divine name: ᵈLUGAL-*ter-qa₂*, generally understood as "Lord/Master of Terqa," is written without the determinative KI.[23] Furthermore, it seems that in the name of the goddess ᵈNIN-*na-gar₃* "Lady of Nagar," the toponym Nagar is not followed by the determinative KI.[24]

19   Veenhof 2000: 142–143. See the contribution by C. Michel in this volume.
20   In two administrative Presargonic texts, this deity receives various types of flour (Charpin 1987: texts 8 and 9).
21   T.142, see Dossin 1967 and Durand 2008: 198–253.
22   ᵈ*aš-tar₂*, *zar₃-bat*ᵏⁱ: Archi 1993: 75; TM.75.G.10103: obv. ii 22–23 and rev. vi 27–28; MEE 12 35: obv. xxv 8–9. ᵈ*aš-tar₂ ṣa-ar₃-ba-at*ᵏⁱ: ARET 7 9: obv. ix 6.
23   Charpin 1987: texts 8 and 20.
24   Charpin 1987: text 20.

The word *ṣarbat* is a common geographical name that refers to a place attested in Presargonic texts from Ebla[25] and Mari.[26] Although its location cannot be determined with certainty, it is likely to be located in the Syrian Euphrates region upstream of Mari.[27] The Old Babylonian texts from Mari and Tell Rimah (ancient Qaṭṭarā) attest to a toponym *ṣa-ar-ba-at*[ki], located near Qaṭṭarā in southeast Sinjar.[28] A. Archi proposes identifying this toponym with the locality mentioned in the Mari and Ebla archives from the Presargonic period.[29] According to J.-M. Durand, the term *ṣarbat* added to the divine name INANA may not relate to this city attested in the Old-Babylonian documents because of the great distance that separates it from Mari; thus, the word *ṣarbat* would simply mean "poplar forest," without referring to a specific place name.[30]

The use of the divine name [d]INANA-*ṣa-ar-ba-at* as a month name in the *Šakk-Re/Šakk-Ro* calendar shows that this deity was probably one of the important hypostases of INANA/Eštar in Mari. The importance of this deity in Mari is also noticeable in the Presargonic period, as two of the three references to this deity in the Ebla archives are related to Mari.[31]

In Presargonic Mari, there were several sanctuaries of different hypostases of INANA, including the "temple of [d]NINI-ZA.ZA" located to the south of the "via sacra." Several statues were dedicated to [d]NINI-ZA.ZA[32] read [d]INANA-ZA.ZA (or [d]MUŠ₃-ZA.ZA[33]). Apart from these statues, the name of this goddess is attested in one administrative text,[34] which is older than other Presargonic administrative texts mentioning [d]INANA-*zar₃-bat*.[35] In the *Supplément au Dictionnaire de la Bible*, D. Charpin wrote that the reading of [d]NINI-ZA.ZA is probably *Eštar-ṣarbat*.[36] In this respect, it is noteworthy that among the inscribed statues from the temple of "Nini-zaza," the statue of Gullā mentions [d]INANA-GIŠ.TIR,[37] which is a variant of the [d]INANA-ZA.ZA. P. Steinkeller proposes that GIŠ.TIR here could be a scribal error of GIŠ.ASAL₂ "poplar" in Sumerian, *ṣarbatum* in Akkadian.[38] It is likely that the sequence ZA.ZA transcribes the term *ṣarbat* in a syllabic manner: the sign ZA reads *ṣa*, followed by the number 4 read *arba*(*t*). This kind of reading is also found in the name of Erbil in the Assyrian period, [uru]LIMMU₂-AN — the number four (*arba/erba*) is followed by the sign AN, which is read *il₃*.[39] Although G. Marchesi proposed that MUŠ₃.ZA.ZA would be a variant of ŠUBA₃ "a precious stone" and this deity could be *Nawirtum* or *Śubeʾitum*,[40] however, this suggestion does not take into account the variant

25   ARET 7 4: obv. v 1–2: *en-na-i₃* / LUGAL *za-ar₃-ba-at*[ki]; ARET 15 40: obv. v 2–4: PN₁ / PN₂ (from) / *zar₃-bat*[ki]; ARET 16 3: rev. i 1–2: *si-in zar₃-bat*[ki]; TM.75.G.10139: rev. v 5–7: *ʾa₃-bi₂* / *in zar₃-bat*[ki] / ŠU.BA4.TI (Archi 1990: 36 no. 177).
26   Charpin 1987, texts 6 and 17: *iš zar₃-bat*[ki].
27   Bonechi 1992: 331.
28   For the location of the city *Ṣarbat* according to Old-Babylonian texts from Mari, see Durand 1998: 113.
29   Archi 1993: 76.
30   Durand 2008: 239.
31   ARET 7 9: obv. ix 2–6 and MEE 12 35: obv. xxv 1–9.
32   Parrot 1967.
33   Marchesi and Marchetti 2011: 228–229.
34   Cavigneaux 2014: no. 28 (see table for archaeological context).
35   Charpin 1987: nos. 8 and 9.
36   Charpin 2008: 221.
37   Gelb and Kienast 1990: 6–7 (MP4).
38   Steinkeller 1984: 35.
39   For example: text from the reign of Aššur-dan I (1178–1133 BC): Weidner 1935–36: 38 text no. 76: obv. 6; see also MacGinnis 2014: 23.
40   Marchesi and Marchetti 2011: 228–229.

ᵈINANA-GIŠ.TIR/ASAL₂! (Gullā Statue) instead of ᵈINANA-ZA.ZA. Considering that *Eštar-ṣarbat* was a well-known hypostasis of Eštar in Syria and on the banks of Euphrates at the time of the Ebla archives, the identification of ᵈINANA-ZA.ZA with *Eštar-ṣarbat* seems more plausible.

Some Old Assyrian documents from Kültepe mention the goddess *Eštar*-ZA.AT associated with members of one and the same family.[41] Edzard considered a possible link between the ᵈINANA-ZA.ZA and *Eštar*-ZA.AT without determining the answer.[42] Another question is whether *Eštar*-ZA.AT is a short form of ᵈINANA-ZA.ZA with -*at* as a phonetic complement. According to Lewy, *Eštar*-ZA.AT may be read as *Manzât* "rainbow."[43] In addition to references from Mari, the divine name ᵈINANA-ZA.ZA is attested in a text commemorating the construction of her temple in Ur by Enḫeduana, daughter of Sargon of Akkad.[44]

Text Syria-6, dated in ITI ᵈINANA-*ṣa-ar-ba-at,* refers to "*in* NINDA.RI" that may mean "during/ into the NINDA.RI." The composed logogram NINDA.RI (or NIG₂.RE) is also attested in three administrative documents from the late *šakkanakku* period, two from Mari, and one from Terqa. In ARM 19 365,[45] NINDA.RI is a recipient, but the name of the product received has unfortunately been lost. In ARM 19 331,[46] the deposit (*mu-qu₂-tum*[47]) of flour and beer is associated with NINDA.RI. The administrative text from Terqa records the quantity of a product to NINDA.RI (*iš* NINDA.RI) on the 24th day.[48] Even if NINDA.RI remains difficult to understand without further evidence, NINDA.RI could refer to a ritual or a toponym. Note that ARM 19 331 and 365 are dated in the second day and the tenth day of the same month (month v, ITI *ebirtin*) respectively. In the Umma calendar of the third millennium, the month v is called ITI (EZEM) DAL or RI, the meaning of which is subject to debate.[49] Since the element NIG₂ can be used with a meaning close to EZEM in a month name from the Old Akkadian period,[50] it is conceivable that NINDA.RI, read as NIG₂.DAL or NIG₂.RI, refers to a festival the name of which may be similar to the fifth month of the Umma calendar.

1.1.3. ITI ᵈNIN.ḪUR.SAG (Text Syria-5)

The month ITI ᵈNIN.ḪUR.SAG is documented in the text Syria-5 recording expenditure on flour. This month may correspond to a period in which cultic activities related to the worship of the goddess Ninḫursag were concentrated. The importance of this goddess's worship in Mari has already been revealed by the excavations of her temple conducted by A. Parrot[51]; four foundation deposits indicate that its construction is attributed to Niwar-Mēr,[52] brother

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41 Documents associated with Imdi-ilum's family, see Kryszat 2006.
42 Edzard 1967: 53.
43 Lewy 1965.
44 RIME 2.1.1.16.
45 ARM 19 365: 22–32: (*vacat*) ²² 1BARIGA 3BAN₂ 6 SILA₃ *in še₃-er-t*[*e-en*] ²³ 5BAN₂ 2 SILA₃ *in li-li* ²⁴ 4BAN₂ *kir-ba-at* ²⁵ 2BAN₂ 1 SILA₃ *qur-na-a-tum* ²⁶ 5 SILA₃ DAM.MUNUS DINGIR ²⁷ 8 SILA₃ E₂ ᵍⁱˢIŠ.D[E₃] ²⁸ 1BAN₂ SILA₃ E₂ *AB-BA* ²⁹ 5 ½ SILA₃ *qur-na-a-tum* / *pe-da* DINGIR.DINGIR ³⁰ 4 SILA₃ *TU-*⌜*pu-ku*⌝ ³¹ 1 SILA₃ NINDA.RI ³² 1 SILA₃ *šu si₂-ka₃-tin.* (day 10, month v).
46 ARM 19 331: ᵒᵇᵛ·¹ 2BAN₂ + 2 [x] / ZI₃ […] ² 5BAN₂ 8 ⌜SILA₃⌝ / KAŠ ³ NINDA.RI ʳᵉᵛ·⁴ (*vacat*) ⁵ *mu-qu₂-tum* ⁶ *in še₃-er-te-en* ⁷ 2 UD ITI / *e-bir₅-*[*tin*] (day 2, month v).
47 About administrative words in *šakkanakku* texts, see Colonna d'Istria 2014: 176 n. 35.
48 Rouault 2011, text Terqa 9-3: ¹' 1 ⌜*PA₂-AN*⌝ 4 [SILA₃ …] ²' *iš* NINDA.RI ³' 24 UD.
49 Cohen 2015: 180.
50 Cohen 2015: 212; for Old Akkadian ITI NIG₂-A.DARA₄ see Postgate 1976: 90, 94.
51 Parrot 1940.
52 RIME 2.3.4.1.

and predecessor of Ištup-ilum, the builder of temple of LUGAL-*mātim* (so-called "Temple aux lions"). Both *šakkanakku*s reigned during the *Šakk-Re* period.

In the Presargonic period, the cult of this deity is more difficult to elucidate because no explicit mention of this deity has been attested among the Presargonic texts thus far.[53] Although a Presargonic temple was found under the above-mentioned temple built by Niwar-Mēr, there is no evidence suggesting that Ninḫursag was worshipped in this Presargonic temple.

Although the text Syria-5, which is slightly later than the reign of Niwar-Mēr, confirms the status of Ninḫursag as a leading goddess during the *šakkanakku* period, the name of this goddess is no longer used as a month name in the calendar; thus the month's place in the calendar cannot be clearly determined. Her cult is still practiced in later periods, as shown by various administrative texts recording livestock expenditures for the temple of Ninḫursag during the late *šakkanakku* period.[54] Likewise, during the Amorite period, rituals to worship this goddess and the offerings made to her have also been identified.[55] These documents from the later period suggest that the time particularly dedicated to the worship of this deity would have been the month iii, which is the month of *laḫḫum* in the calendars of the late *šakkanakku* and Amorite periods. This may suggest that the month ITI ᵈNIN.ḪUR.SAG is placed in month iii of the calendar from the *Šakk-Re*/*Šakk-Ro* period.[56]

1.2. Month names with parallels in later calendars

The locations of the months ᵈKUR, ᵈNIN-KI.TUL₈.KI.TUL₈, and *Gi-iẓ-Gi-zum* in the calendar can be fixed because these three months are also present in the later calendars as follows.

1.2.1. ITI ᵈKUR — month vi (?) — (Text Syria-4)

The month name attested in the text Syria-4 is partially erased, and only the sign KUR is readable. It is, however, possible to restore the month name as [ITI ᵈ]KUR, since the month name ᵈKUR is known as the month vi in the calendar from the late *šakkanakku* period. In the last line of the text Syria-10, we find a partially broken month name ITI DINGIR [x], which can be restored as ITI ᵈ[KUR].

This month was named after a deity whose worship was well-known from the Presargonic period (Ville II) until the Amorite period (end of Ville III). In the Presargonic period, the name of this deity was written ᵈNIN-KUR, as attested in two administrative texts. In the first text, which records the expenditures of NINDA-SIKIL to various recipients including some gods,[57] ᵈNIN-KUR receives 40 NINDA.SIKIL during the month ITI MA×GAN₂*tenû*-UGUR₂ (the month xii of the Presargonic calendar). The second text records the delivery of cattle for many gods, including ᵈNIN-KUR, probably given for a sacrifice during the month vi (ITI *i-ri₂-iš¹*).[58] During the late *šakkanakku* period, a temple was built for the deity ᵈKUR, where the deity was

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53   Lecompte forthcoming.
54   See below, §2.3; for example, ARM 19 191, 192 and 383.
55   See Jacquet 2011: 28–30.
56   See below, §2.3.
57   Charpin 1987: text 8.
58   Cavigneaux 2014: text 28.

worshipped.[59] After the writing reform during the reign of Yaḫdun-Lîm, the writing ᵈKUR was replaced by ᵈIGI.KUR (with a variant ᵈIGI.ZA.KUR[60]) the Akkadian equivalent of which is *ḫubur/ḫabur*.[61] The Mari texts from the Amorite period also attest to the worship of this deity,[62] and the name of this god is still used for the month vi of the Mari calendar.

These data testify to the importance of this deity in Mari from the Presargonic period to the Amorite period, assuming that ITI ᵈKUR during the period of *Šakk-Re/Šakk-Ro* was the month vi, as in the calendars of the late *šakkanakku* period and the Amorite period. The autumnal equinox probably occurred during this month.[63]

1.2.2. ITI ᵈNIN-KI.TUL₈.KI.TUL₈ — month x (?) — (Text Syria-13)

The month name ITI ᵈNIN-KI.TUL₈.KI.TUL₈ is attested in the text Syria-13, which is the latest of the recently published texts from the *Šakk-Re/Šakk-Ro* periods. This month name corresponds to the month name ᵈNIN-KI.TUL₈ (month x) of the calendar from the late *šakkanakku* period and its writing during the Amorite period (post-writing reform) is ᵈNIN-*bi-ri*. The reduplication of the logogram KI.TUL₈ in the text Syria-13 indicates a plural form, confirming that the month name ITI ᵈNIN-*bi-ri* must be understood as "the Lady of wells," as suggested by J.-M. Durand.[64]

This month name from the Mari calendar is also the name of a deity (ᵈNIN-TUL₈)[65] that was adored in Mari during the Presargonic and the late *šakkanakku* periods (ᵈNIN-KI.TUL₈).[66] The presence of the sign KI in the theonym indicates the topographic nature of the sign LAGAB×TIL (TUL₈), which means "well." The sign KI might have been added to avoid confusion in ancient writing. In the same archives from the late *šakkanakku* period, the logogram GIGIR "cart/chariot" is also written as LAGAB×TIL,[67] but this is a Post-Sargonic writing and can be confusing. The KI added to the theonym may have reduced the risk of confusion with the latter word. Before the Ur III period, the signs meaning "cart" (gigir in Sumerian) and "public fountain" (tul in Sumerian) were written differently. Generally, the word gigir is written with the logogram LAGAB×U (GIGIR₂),[68] while the word tul is written LAGAB×TIL (TUL₈).[69] However, since the Ur III period, the word tul is written LAGAB×U due to the semantic and graphic proximity between pu "well," written LAGAB×U, and tul "public fountain".[70] The word gigir, "cart," is then written with the logogram LAGAB×TIL.

59   Offerings to ᵈKUR: T.142 (Dossin 1967); M.10813 (Durand 1985: 158 n. 50). Temple of ᵈKUR: *ab-ba* IR₁₁ DINGIR E₂ ᵈKUR among the witnesses in the contract M.10556 (Durand 1982); See also below Table 4: TH02-783 and TH02-560c.
60   Durand 1984: 160–161; Durand 2008: 219.
61   For the corresponding Akkadian word *ḫabur/ḫubur* of this god and his infernal nature, see Durand 2008: 219, and also Cohen 2015: 320–321.
62   Jacquet 2011: 28–30.
63   Jacquet 2007: 77; Jacquet 2008: 410.
64   Durand 2008: 220.
65   Cavigneaux 2014: text 28.
66   T.142 (Dossin 1967), ARM 19 183, M.10813 (Durand 1985: 158 n. 50).
67   ARM 19 379, 381 (see below p. 49), 457, 458, 460.
68   During previous period to Ur III, we find sometimes LAGAB×TIL for gigir.
69   Powell 1974: 403 n. 37; Steinkeller 1981: 26–27.
70   Steinkeller 1981: 26.

1.2.3. ITI *Gi-iz-Gi-zum* — month xi (?) — (Texts Syria-7 and Syria-8)

The month name ITI *Gi-iz-Gi-zum* attested in the texts Syria-7 and Syria-8 is also found in the Amorite calendar with the spelling *ki-is-ki-*(*is*)*-zi-*(*im*).[71] As the sign GI in ITI *Gi-iz-Gi-zum* is more likely to denote the syllabary *qi* with the consonant *q*, the name of the month should be *qi-iz-qi-zum* /*qiṣ-qiṣ*(*ṣ*)*um*/. In the Amorite calendar, this month name, which is usually written as *ki-is-ki-*(*is*)*-zi-im*, is interpreted by J.-M. Durand as *kīṣ-kīṣ*(*ṣ*)*im*, meaning "very great cold," and derived from the Semitic root Q/KṢY.[72] Seasonally, this month corresponds to the interval of January/February, the coldest period of the year in Mari.

This month's name is not attested in the late *šakkanakku* calendar. Instead, we find IM.UD.UD as a composed logogram reading either TU₅.BABBAR₂ "white wind"[73] or IM.BABBAR₂ "white storm." The use of IM.UD.UD reveals semantic continuity but a graphical break. In the late *šakkanakku* calendar, IM.UD.UD replaced the syllabically written *Gi-iz-Gi-zum* of *Šakk-Re/Šakk-Ro*. After the reform of the writing, under the reign of Yaḥdun-Lîm, it is observed that the phonetic/syllabic writing, *ki-is-ki-si₂-*(*im*), is partially returned.[74] The use of the logogram IM.UD.UD disappeared with the conquest of the Mari kingdom by Samsī-Addu, who tried to impose an exogenous calendar.[75]

1.3. Conclusion about the month names of the *Šakk-Re/Šakk-Ro* calendar

The month names from the calendar of the *Šakk-Re/Šakk-Ro* periods attested in a few documents broke up with the Presargonic tradition common to Mari and Ebla. This rupture could have occurred due to the emergence of a new writing culture, in which the month names differed significantly despite the influence of the Sargonic tradition.

Among these months, some are no longer attested in the calendar of the late *šakkanakku* period: 1. the month name ZI-BI-*ra* no longer appears in the documentation. 2. Even though the names of the deities of ᵈINANA-*ṣa-ar-ba-at* and ᵈNIN.ḪUR.SAG are no longer used in the menological system, these deities continued to be worshiped in Mari. Others, such as ITI ᵈKUR and ITI ᵈNIN-KI.TUL₈.KI.TUL₈ and ITI *Gi-iz-Gi-zum* are still used as month names but are spelled according to a later scribal practice.

The permanence of some of these month names suggests that the menological tradition of the late *šakkanakku* and Amorite periods may partly find its origin in the time anterior or contemporary to the construction of the "Grand Palais Royal," that is, during the *Šakk-Re/Šakk-Ro* Period.

71   Apart from Mari calendars, this month name is only present in the Diyala Old Babylonian calendars (Ešnunna, Nērebtum, Šaduppum, to Mê-turan, see Greengus 1987 and 2001; Gentili 2002; Cohen 2015). The use of this month name in the *Šakk-Re/Šakk-Ro* calendar suggests that the Diyala tradition shares a common background with that of the Middle Euphrates valley.

72   Durand 2008: 296; Bonechi 1996.

73   Durand 2008: 296.

74   Table 2. Texts from Yaḥdun-Lîm period: ITI IM.UD.UD: ARM 22 138, M.18624, T.364, see Charpin and Ziegler 2003: 57–63; *ki-is-ki-si₂-*(*im*): ARM 8 75 and 70; T.320.

75   The most recent mention of ITI IM.UD.UD occurs in ARM 22 306 (eponymat of Šalim-Aššur, ca. 1790 BC), see Kupper 1984: 182. On the calendar of Samsī-Addu (Šamšī-Adad) see the contribution by N. Ziegler in this volume.

2. Calendar, rituals, and festivals during the late *šakkanakku* period

A few texts from the end of the *šakkanakku* period were derived from Terqa[76] and Tuttul,[77] but most were from Mari. The latter site provided many administrative texts stemming from this period: 466 were published in ARM 19 and about 1,450 (including fragments), similar to those of ARM 19, were excavated during the campaigns from 2001 to 2003.[78]

These texts are written in a Euphratic "scribal practice" (syllabary, logograms, administrative keywords, and dialectal features). The *terminus ante quem* of these documents corresponds to the "writing reform" initiated during the reign of Yaḫdun-Lîm (ca. 1820–1810 BC) that replaced the local "scribal practice" with a new practice emerging from the center of Mesopotamia. This reform caused some dialectal particularities to disappear, making data comparisons between the late *šakkanakku* and Amorite periods difficult.

2.1. The month names of the late *šakkanakku* calendar

The numerous administrative documents from the end of the *šakkanakku* period are dated with the day and month but without any year name. Most of the month names are almost identical to those used after the writing reform. However, the other month names are written with logograms that are later replaced in the writing reform by their syllabic equivalent, thus testifying to the semantic continuity alongside the graphic shift, for example, IM.UD. UD replaced by *kīškī(ṣ)ṣum*, ᵈNIN-KI.TUL₈ by ᵈNIN-*bi-ri* and NIG₂.NI.SAG by *urāḫum* (see below).

The first month of the late *šakkanakku* calendar, written NIG₂.NI.SAG,[79] may represent a non-orthographic writing of NESAG = *nisannum* referring to the "first-offering."[80] Its equivalent during the reign of Yaḫdun-Lîm is *u₂-ra-ḫu-um*, i.e. *urāḫum*. Even if *urāḫum* does not mean "first-offering," this month name also expresses the idea of the beginning of the year. Etymologically, it could be linked with *warḫum* "(new) moon," as is the case of its dialectal Old Assyrian variant *urḫum*. This term may refer to the "first new moon of the new year," probably after the spring equinox. The month vii of this calendar is called AN.AMA.KI (or ᵈAMA.KI). After the writing reform, this month name turned to be a word referring to the "Brazier festival," which corresponds to *kanūnātim* and *kinūnim* — the former is a Northern Mesopotamian form[81] attested from the Yaḫdun-Lîm period, while the latter is a Southern Mesopotamian form known from Samsī-Addu's reign. According to M. E. Cohen, AN.AMA. KI may refer to a chthonic deity, as suggested by the god list AN-*Anum*. J.-M. Durand, on the other hand, proposes that AMA.KI should be considered as a local spelling of the word KI.IZI = *kinūnim*.[82] The last example may be a month xii written KIN. The KIN is replaced after the

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76   Rouault 1996 (list of 28 administrative and legal texts + 7 fragments) and Rouault 2011 (10 texts from late *šakkanakku*).

77   Krebernik 2001. See also Krebernik 2002, 2003; Durand and Marti 2003, 2004.

78   See Colonna d'Istria 2014: 169–172; Colonna d'Istria 2015.

79   Among the documents from Tuttul written in the late *šakkanakku* system, the text KTT 50 (Krebernik 2001), a sheep account, is dated ITI NI.NIG₂.SAG, graphic variant of ITI NIG₂.NI.SAG.

80   Durand 2008: 296; Cohen 2015: 317–318.

81   This word is present in Old Assyrian texts, kt 94/k 250 (see Barjamovic and Larsen 2008), in the Middle Assyrian documents relating to rituals (CAD K), as well as in Aramaic and Arabic (AHw. 481); whereas the Akkadian dialects of Southern Mesopotamia used its variant *kinūnum* (CAD K).

82   Durand 2008: 296.

writing reform by the word *ebūrum* "harvest." During the reign of Yaḥdun-Lîm, we find ITI APIN.DU₈.A also used for the month xii,[83] and during the reign of Sūmū-Yamam, the logogram UD.BURU₁₄ was the equivalent of *ebūrum* for the month name[84] (see Table 2). The use of the sign KIN is here associated with the semantic field of the "harvest" or "to reap." The sign KIN in Sumerian texts can represent a graphic variant for gur "to reap"; in this case, we should transliterate ITI GUR₁₀ instead of ITI KIN. According to M. E. Cohen, ITI KIN would indicate an abbreviated form of the month name ITI ŠE.KIN.KU₅ known in Southern Mesopotamia and whose meaning belongs to the semantic field of the "harvest/to reap."[85]

The order of the months in the late *šakkanakku* calendar is well-established (Table 2), and the meaning and etymology of most month names are commonly accepted:

1- **Spring**: (i) ITI NIG₂.NI.SAG refers to the "first-fruit offering"; (ii) ITI *malkānin* refers to the royal ancestor worship; (iii) ITI *laḥḥim* means "freshness" and "greenery."[86]

2- **Summer**: (iv) ITI *abi* was a month associated with the ancestor ritual; (iv) ITI *ebirtin* may have corresponded to the moment when the herd traveled;[87] (vi) ITI ᵈKUR was a period dedicated to the god Ḥubur.

3- **Autumn**: (vii) AN.AMA.KI was probably linked to the worship of a chthonic deity or related to the "brazier festival"; (viii) ITI ᵈ*da-gan* was named after a prominent deity in the Mari pantheon; (ix) ITI *līliyātin* means "evening."

4- **Winter**: (x) ITI ᵈNIN-KI.TUL₈ means "Lady of the wells"; (xi) ITI IM.UD.UD (or IM.BABBAR₂) refers to the white wind and a cold period of the year; (xii) ITI GUR₁₀ (or KIN) is equivalent to *ebūrum* "harvest," which was used after the writing reform.

Additional month — *tašnītum*: The term *tašnītum* derives from the verb *šanāʾum* "perform a second time, double, repeat." The month name ITI *taš-ni-tin* may have been related to the month name ITI *ša-ni-i*, which is attested in the Sargonic texts from Adab and Lagaš.[88] This additional month might allow adjustments for the difference between the moon-cycle-based months and the sun-cycle-based year. Consequently, an additional month was not present every year.[89] The time of its occurrence during the year cannot be determined because *tašnītum* has a generic meaning during the late *šakkanakku* period, contrary to the Amorite period, in which it is associated with another month fixed to a specific time of the year.[90]

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83 Kupper 1973; Charpin 1994: 178.

84 T.301, TH90.71 (Charpin and Ziegler 2003: 66–69). The texts from Southern Mesopotamia do not include the month name ITI BURU₁₄ or ITI UD.BURU₁₄, although the two logograms UD BURU₁₄ are frequently used in the loan contract formula in Southern Mesopotamia, u₄ buru₁₄-še₃ = *a-na u₄-me e-bu-ri* "until the harvest period" (the Akkadian equivalent is given by the lexical lists). In legal texts from Mari, u₄ buru₁₄-še₃ does not occur, though a month name is mentioned instead. The use of UD.BURU₁₄ as the month name for *ebūrum* in the Mari calendar results from a misunderstanding/misinterpretation of UD.BURU₁₄ in the legal formula because the Mari calendar has a month called "harvest." The use of ITI UD.BURU₁₄ testifies to the import of model contract from the Southern Mesopotamia. For the use of UD.BURU₁₄ in legal texts in Southern Mesopotamia, see Skaist 1994: 149–151.

85 Cohen 2015: 202 and 326.

86 Cohen 2015: 318.

87 Durand 2008: 238.

88 Cohen 2015: 27.

89 Jacquet 2008: 408–414.

90 Jacquet 2007: 63; Jacquet 2008: 408–414. For the Yaḥdun-Lîm period, see examples in Table 2.

Table 2: Calendars of Mari from the Presargonic period to the beginning of the Amorite period
*Reigns of Yaḫdun-Lîm and Sumu-Yamam are abbreviated as YL and SY respectively.

	Presargonic period (Mari Ville II)	Šakk-RE/Šakk-Ro	Late šakkanakku period (19th century B.C.)	Yaḫdun-Lîm and Sumu-Yamam periods (after the writing reform)
i	*i-si*		NIG$_2$.NI.SAG	*u$_2$-ra-ḫi-im*
ii	*(i)-iq-za*		*ma-al-ka$_3$-ni-(in$_4$)*	*ma-al-ka-nim*
iii	*za-ʾa$_3$-tum*		*la$_2$-ḫi-im*	*la-ḫi-im*
iv	*gi-ia$_3$*(NI)		*a-bi*	*a-bi-im*
v	*ḫa-li*		*e-bir$_5$-tin*	*ḫi-bir$_5$-tim*
vi	*i-ri$_2$-sa$_2$ / i-ri$_2$-iš*	d KUR	d KUR	d IGI.KUR
vii	*ga-sum*		d AMA.KI (or AN.AMA.KI)	*ka-nu-na-tim*
viii	*ʾa$_5$*(NI)-*nun(-na)*		d *da-gan*	d *da-gan*
ix	*za-lul*		*li-li$_2$-a-tin / li-li$_2$-wa-tin*	*li-li-a-tim / li-li-ia-tim*
x	*i-ba$_4$-sa*	d NIN‒KI.TUL$_8$.KI.TUL$_8$	d NIN‒KI.TUL$_8$	d NIN-*bi-ri*
xi	MA×GAN$_2$^{tenû}-SAG	*Gi-iz-Gi-zum*	IM.UD.UD	IM.UD.UD *ki-is-ki-si$_2$(-im)*
xii	MA×GAN$_2$^{tenû}-UGUR$_2$		GUR$_{10}$ (or KIN)	(giš)APIN.DU$_8$.A *e-bu-ri-im*

	Months that cannot be located	Additional months	
	zi-Bi-⌈ra⌉	*taš-ni-tin*	*a-bi-im taš-ni-tum* (YL)
	d NIN.ḪUR.SAG		*e-bu-ur$_{(2)}$ taš-ni-tim* (SY)
	d INANA-*ṣa-ar-ba-at*		UD.BURU$_{14}$ *taš-ni-tim* (SY)
	[......]-*im*		

2.2. Festivals and rituals during the late *šakkanakku* period

Data concerning rituals and festivals in this period are discernible, as in the Amorite texts. In the late *šakkanakku* texts, the references such as "*in* + moment/festival" or "*iš* + moment/festival," the counterparts of which in the Amorite texts are "*inūma* + moment/festival" and "*ana* + moment/festival," remain extremely rare. We only exceptionally find explicit mentions of rituals or festivals, such as the *gibbum*-ritual noticeably referenced twice — that is, some food deliveries made to *šarrū* "deceased members of the royal family," as well as the manufacture of *laḫḫum*-bread provided during the month *laḫḫum*.

2.2.1. Prepositions *in/iš* + time/festival

iš pi$_2$-ri$_2$-is ZI-*ri$_2$-im* (ARM 19 248 and 248-bis)

The phrase *inūma pi$_2$-ri-zi-(ir)-ri-im* attested in the Amorite texts reveals that the word *pi$_2$-ri-zi-(ir)-ri-im* refers to a particular moment, probably a festival.[91] Three documents have such references, and two of them give dates: (1) FM 3 120, which records the expenditure of oil for servants of the apartments and *ḫuppûm*-baladins during the *pi$_2$-ri-zi-(ir)-ri-im* in the Abullat garden, is dated on the 28th day of the month xii; (2) FM 3 125 summarizes expenditures of oil during the month xii, including those addressed in FM 3 120.

Among the administrative texts from the late *šakkanakku* period, ARM 19 248 and 248-bis record expenditures for *pi$_2$-ri-is* ZI-*ri$_2$-im*. These two extremely similar documents also date to the end of month xii (ITI GUR$_{10}$). If we had no reference such as *inūma pi$_2$-ri-zi-(ir)-ri-im* in the Amorite texts for comparison, it would be difficult to identify this expression from the late *šakkanakku* period as an important time or festival.

ARM 19 248

obv. 1	1GUR 1BARIGA GUR ŠE.BA / 2 *ka$_3$-ṣa-ri$_2$-in$_4$*	180 liters of barley as rations: (assigned to) 2 packing-supervisors,
2	1BAN$_2$ 2 SILA$_3$ *iš* / *la$_2$-ʾa$_3$-mi$_3$-šu-ni*	12 liters for their (dual) consumption,
3	3 SILA$_3$ *iš* / *si$_2$-me-da-tin*	3 liters for fine flour,
4	4BAN$_2$ 5 SILA$_3$ GEME2.ḪAR(KIKKEN)	45 liters: female miller,
5	2 SILA$_3$ ZI$_3$ 8 SILA$_3$ / KAŠ	2 liters (to produce) flour, 8 liters (to produce) beer
rev. 6	*iš pi$_2$-ri$_2$-is* / ZI-*ri$_2$-im*	for *pi$_2$-ri-is* ZI-*ri$_2$-im*.
7	(*vacat*)	
8	ŠUNIGIN 2 GUR 1BAN$_2$	Total: 250 liters (barley under responsibility) of
9	*šu ma-ma-a-li-a*	Mamma-āliya
10	(*vacat*)	
11	E$_3$.A	Expenditure (from the office of)
12	*še$_3$-un-*^{d}*da-gan*	Šeʿyun-Dagan.[91]
13	30 UD ITI GUR$_{10}$	Day 30, month xii.

ARM 19 248-bis (cf. ARM 19 248)

obv. 1	[.............. ŠE.BA] / [2 *ka$_3$-ṣa-ri$_2$*]-⌈*in$_4$*⌉	[n liters of barley as rations]: [(assigned to) 2 packing-superv]isors,
2	[.................... *iš*] / [*la$_2$-ʾa$_3$-mi$_3$-šu*]-⌈*ni*⌉	[n liters for their (dual) consump]tion,
3	3 SILA$_3$ ⌈*ṣi*⌉-*me-da*-⌈*tin*$^?$⌉	3 liters (for) fine flour,
4	4 BAN$_2$ 5 SILA$_3$ GEME2.ḪAR(KIKKEN)	45 liters: female miller,
5	8 SILA$_3$ *iš pi$_2$-* /	8 liters to *pi$_2$-ri-is* ZI-*ri$_2$-im*.
rev.	*ri$_2$-is* ZI-*r*[*i$_2$-im*]	
6	ŠUNIGIN 2 GUR 8 SILA$_3$	Total: 248 liters,
7	*šu* UD-*tab-bil$_3$-tin*	(barley under responsibility) of UDtabbiltin.
8	[UD].DU.A	Expenditure (from the office of)
9	*i-*[*din*$^?$]-*ma-ma*	Iddin-Mamma.
10	30 UD ITI GUR$_{10}$	Day 30, month xii.

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91   About the ᴘɪʀɪs(*s*)*ir*(*r*)*im*-festival see Jacquet 2011: 55–56.
92   Colonna d'Istria 2013.

ARM 19 248 and 248-bis were obtained from the same office. They record the expenditure of barley, one from the office of Šeʿyun-Dagan, and the other from that of Iddin-Mamma. In ARM 19 248, the total (ŠUNIGIN) is made of different expenditures: only barley is output from the office. Therefore, ARM 19 248: 5–6 should be interpreted as follows: 2 liters (of barley to produce) flour, 8 liters (of barley to produce) beer for *pi₂-ri₂-is ZI-ri₂-im*; and ARM 19 248-bis 5–6: 8 liters (barley) for/to *pi₂-ri₂-is ZI-ri₂-im*.

   This festival may have been important, at least during the Amorite period, as suggested by the month name ITI *pi₂-ri-za-(ar)-ri-(im)*.[93] The period of the month ITI *pi₂-ri-za-(ar)-ri-(im)* may correspond to that of the month *ebūrum* (month xii), which is consistent with the dating of the texts FM 3 120, 125 and ARM 19 248, 248-bis. Even after the destruction of Mari, this month name was still used during the so-called Hana period in Terqa (ITI *pi₂-ri-iz-za-ar-ru*).[94] Month names attested in the Middle Assyrian texts found at Tell Taban, located in the Ḫabur valley, include the month name ITI *pi-ri-*NUMUN (/*periʾ zarʾi*/ "offspring of seed" or "offshoot of seed"), which could be a different spelling or even a reinterpretation of the original month name.[95]

   The meaning of *pi₂-ri₂-is ZI-ri₂-im* in the texts of the late *šakkanakku* and Amorite periods remains difficult to establish.[96] Since double consonant displays are rare in the late *šakkanakku* scribal practice, the expression may be understood as being composed of two different terms, *piris ṣêrim*, as suggested by J.-M. Durand.[97] The second part of the expression cannot refer to *zērum* "seed." Despite the Middle Assyrian attestations of ITI *pi-ri-*NUMUN from Tell Taban, the word for "seed" must be *zarʾum*, as assumed from the word "sowers" *za-ar-u₂-tum /zārʾūtum/*,[98] which is present in the late *šakkanakku* dialect.

in nabriyim "during the nabriyum" (ARM 19 324* and 381)
Among the late *šakkanakku* archives from the palace, only the text ARM 19 324 attests to the wordings "*in* + festival name." This text records the receipt of silver by Eštar-damqa from the office of Iddin-Admu in order to get (or buy) a sheep during the *nabriyum*. As suggested by the mention of *in na-ab-ri₂-i*[*m*], the acquisition of one sheep was motivated by a ritual. Unfortunately, the month name of the date was lost in the lacuna at the end of the text.

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93   See Jacquet 2011: 55–56. ITI *pi₂-ri-za-(ar)-ri-(im)*: ARM 8 40 (Yasmaḫ-Addu period); ITI *pi₂-ri-za-ar-ri*: ARM 9 13 = FM 11 117 (Zimrī-Lîm period); ITI *pi₂-ri-za-ri*: ARM 9 253 (Zimrī-Lîm period).
94   Podany 2002: no. 13: 29.
95   Shibata 2010: 224; Jacquet 2011: 56.
96   Jacquet 2011: 56.
97   Durand and Marti 2004: 128. No commentary about the meaning of *piris ṣêrim*.
98   Cavigneaux and Colonna d'Istria 2009: 57 (texte TH02-290). About the participe in the *šakkanakku* dialect, see Colonna d'Istria 2015: n. 15; Cavigneaux 2019: n. 11.

ARM 19 324*

obv. 1	[n GIN₂] KU₃.BABBAR	[n sheqel] of silver,
2	[SA₁₀] 1 UDU	[price/value] of one sheep,
3	*in na-ab-ri₂-i*[*m*]	during the *nabriyum*,
4	*eš₄-tar₂-dam-qa₂*	Eštar-damqa
rev. 5	[*t*]*am₂-ḫur*	has received.
6	E₃.A	Expenditure (from the office of)
7	*i-din-ad-mu* / NU¹-BANDA₃	Iddin-Admu, overseer/captain.
8	3 UD ⌈ITI⌉ / [MN]	Day 30, month […]

The silver was not given to an ordinary woman: two administrative documents, ARM 19 325 and 340, inform that Eštar-damqa may have been a "priestess" belonging to the temple of the Goddess (*Iltum*).[99] Moreover, according to TH02-56, expenditures were allotted to make her a pair of sandals with leggings.[100] In the text TH02-928 (see below), Eštar-damqa receives a small amount of oil, which could have been provided either for personal use or worship.

The other mention of the word *nabriyum* in the late *šakkanakku* texts is associated with the word "omina" (*a-mu-wa-tum / sa₂ na-ab-ri₂-i*; ARM 19 381).

ARM 19 381

obv. 1	18 *ma-ṣa-ra-at* / BAD₃.KI	18 guards of rempart (or bastion),
2	15 E₂ ᵈNIN-ŠIM	15 (of) temple of deity NIN.ŠIM,
3	6 NINDA.SUM.⌈SUM⌉	6 (of) NINDA.SUM.SUM,
4	3 *iš* ᵍᶦˢGIGIR *sa₂* IN.U	3 for a chariot of straw,
rev. 5	3 *iš* ᵍᶦˢGIGIR / *sa₂* IM	3 for a chariot of clay/mud,
6	1 KUR¹	1 *jar of beer*.[100]
7	(*vacat*)	
8	*a-mu-wa-tum*	*Omina*
9	*sa₂ na-ab-ri₂⁷-i*	of *nabriᵓū*
10	2 UD ITI / ᵈKUR	Day 2, month vi.

ARM 19 381 records the delivery of a kind of beer jar (KUR) to various persons, followed by the reference to *amuwātum* and the date (day 2, month vi). The reference to *a-mu-wa-tum / sa₂ na-ab-ri₂-i* "omina of *nabriyī* (plural obl.)" suggests that this *nabriyum* festival may have been associated with divinations. The same interpretation is also indicated by the term

99   ARM 19 325: obv. ¹ 5BAN₂ ZI₃ / E₂ *il₃-*[*tin*⁷] ² *eš₄-tar₂-da*[*m-qa₂*] ³ *tam₂-*[*ḫur*] ⁴ E₃.⌈A⌉ rev. ⁵ ᵈIM-*tu-ra-a* ⁶ 7 UD ITI / ᵈNIN-KI.TUL₈ "50 liters of flour (for) temple of goddess Iltum, Eshtar-Damqa has received. Expenditure (from the office of) Adad-turaya. Day 7, month x." ARM 19 340: obv. […] ¹' E₂ *il₃-tin* ²' *eš₄-tar₂-*[*dam*]-*qa₂* / *tam-ḫur* rev. (*vacat*) ³' E₃.A ⁴' *i-din-ad-mu* ⁵' [n UD ITI (month name)] "… (for) temple of Iltum, Eshtar-Damqa has received. Expenditure (from the office of) Iddin-Admu. [Day n, month …]."

100 TH02-56: obv. ¹ 2 KUŠ UDU GAL / *iš ku-*⌈*bi-li*⌉ ² 4 GIN₂ ⌈*pu*⌉*-u* ³ 1 1/2 GURUŠ ⁴ *si*⁷-*la₂-min* rev. ⁵ *iš maš-a-*⌈*ni*⌉ / *sa₂ eš₄-tar₂-dam-qa₂* ⁶ (*vacat*) ⁷ E₃.A ⁸ *i-din-il₃-a-ba₄* ⁹ 23 UD ITI / ᵈNIN-KI.TUL₈ "2 skins of adult sheep for leggings, 4 shekels of madder, 1 1/2 (day-wages of) man (from) Silāmin to (do) sandals of Eštar-damqa. Expenditure (from the office of) Iddin-Ilaba. Day 23, month x."

101 ARM 19 356 suggests that the sign read KAMₓ by H. Limet is actually a sign close to the sign KUR, which would be used for a type of beer jar. The total (ŠUNIGIN) 49 liters of beer corresponds in this text to 20 liters + 1 KUR. For this use of the sign, see also ARM 19 355 from the same administrative office and ARM 19 338.

nabriʾ/yum itself, which may have been derived from the root BRʾ/Y. According to the texts from Ur III and Old Babylonian periods, the *nabriyum* festival was held during the winter,[102] and the most likely candidate for the date of the festival is sought at the time around the winter solstice. However, ARM 19 381 is dated in month vi, which seasonally corresponds to the time between the end of summer and early autumn.[103] This date is not consistent with the references to the *nabriyum* festival, which generally took place during the winter. If indeed, the *nabriyum* festival is related to divination on specific days such as the winter solstice, the present attestation of *amuwātum ša nabriyī* dated on the second day of the month vi may refer to divinations performed during the autumn equinox.

Another text, TH03-145 (Appendix no. 1), refers only to 14 *ma-ṣa-ra* / BAD₃.KI, followed by the mention of *a-mu-wa-tum* and the date (day 20 or 30, month x). It is possible that the word *amuwātum* "omina" refers to the divinations carried out at the end of a month for the following month.[104] The absence of a complement (as *nabriyī* in ARM 19 381) could be explained by the fact that divinations were performed during the month x, which never included the solstice or equinox.

2.2.2. The *gibbum*-ritual

References to a festival or a ritual without any preposition are occasionally found alongside the expression "*in* + moment/festival" in the administrative documents from the palace of Mari. Two documents attest to the *gibbum*-ritual (spelled KI-BUM), which is also well-known in the documentation from the Amorite period.[105]

Text TH02-928, preserved only on the obverse of the tablet, records a very small amount of oil delivered for the *gibbum*-ritual. The word *gibbum* is followed by E₂ ^{d}IM, "temple of Adad," which is presumably the place at which the ritual was performed. The second recipient, ŠU.KIR₁₁, the meaning of which is unknown, must be the name of a function or official. Following these words, Eštar-damqa "Priestess of Goddess (*Iltum*)" is mentioned as receiving 30 ŠE of sheep tallow.

TH02-928 (fig. 1: photograph)

obv. 1	⌈5⌉ [ŠE] ⌈*gi₅*⌉-*bum* / E₂ ^{d}IM		5 ŠE (of oil for) the *gibbum*-ritual (in) the temple of Adad,
	2	10 ŠE ŠU.KIR₁₁	10 ŠE (of oil for) ŠU.KIR₁₁,[105]
	3	30 ŠE I₃.UDU / *eš₄-tar₂-dam-qa₂*	30 ŠE of sheep tallow (for) *Eštar-damqa*,
	4	(*vacat*)	
rev.		broken	
		[…]	[…]

In another administrative text (TH02-501) that records the distribution of barley flour (DABIN), the *gibbum*-ritual is referred to as one of the occasions for expenditures. The text adds that the

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102   Jacquet 2007: 98–100; Cohen 2015: 285–297.
103   Jacquet 2007: 77; Jacquet 2008.
104   Durand 2008: 504–505.
105   Jacquet 2011: 38–39.
106   Logogram present in three texts relating to dove (*wantum*) from the Iddin-ilī service, see Cavigneaux and Colonna d'Istria 2009: 56 (TH02-376, TH02-345 and TH02-39).

gibbum-ritual was held at KA₂ *mar-ra-tin*. The next two lines record the expenditure of barley flour for *šarrū* (the dead kings or deceased members of the royal family), and men employed at the temple of Nergal. Unfortunately, the date of this text has been lost.

TH02-501

2′ 1BAN₂ 8 SILA₃ E₂ NINDA.SUM	18 liters (of flour): E₂ NINDA.SUM
3′ n+ 2 SILA₃ gi₅-*bum* | KA₂ / *mar-ra-*⌈*tin*⌉	n+2 liter (of flour): *gibbum*-ritual at KA₂ *mar-ra-tin*
4′ 7 SILA₃ *šar-ru*	7 liters (of flour): *šarrū*
5′ 1BAN₂ 6 SILA₃ ERIN₂ E₂ ᵈKIŠ.UNU.GAL	16 liters (of flour): staff men from the temple of Nergal
6′ ŠUNIGIN 1BARIGA 1BAN₂ 5 SILA₃ DABIN	Total: 75 liters of flour.

According to the Amorite texts, the *gibbum* refers to an animal sacrifice (sheep, lamb, or goat), or even the cremation of the consecrated animal.[107] Furthermore, oil is mentioned several times as being provided for *gibbum*. It should be noted that in the texts, the preposition *ana* is only used when oil is provided for the *gibbum*. The sacrificed animals are qualified by the word *gibbum* without any preposition, suggesting that the animal is the principal element of this ritual. The various references to the *gibbum*-ritual in the Amorite texts seem to reveal that this ritual was not associated with a specific deity or a particular date in the calendar.[108]

These two attestations from the late *šakkanakku* texts are added to many further references to this ritual. Text TH02-501 indicates that flour may be consumed in this ritual in addition to oil. TH02-501 includes the toponym KA₂ *mar-ra-tin* for the first time. According to the text TH02-707, one animal (she-goat or young billy goat) was received at (or for) KA₂ *mar-ra-tim*, probably for sacrifice.[109] The meaning of KA₂ *mar-ra-tin* is ambiguous because of the different meanings of *marratum* as "rainbow," "sea/bitter thing," or "date palm."[110] If the word *marratum* refers to "date palm" in the late *šakkanakku* texts, KA₂ *mar-ra-tin* "entrance or door of the date palm" could be related to the *ki-sa-al* ᵍⁱˢGIŠIMMAR "court of date palm" documented in the Amorite texts from Mari (= court 106 in "Grand Palais Royal").[111] KA₂ *mar-ra-tin* could also designate an area near Mari.

2.2.3. Food deliveries to *šarrū*

The ancestor worship associated with the kingship can be observed in references to food deliveries to *šarrū*. According to A. Jacquet, the word *šarrū* (always written *šar-ru*) could be equivalent to the term *malikū*, which designates dead members of the royal family rather than dead kings in the Amorite texts.[112]

Note that in the late *šakkanakku* writing system, the rulers are designated as ŠAGIN (KIŠ. NITA₂). The logogram LUGAL is also used, however; this is always present in conjunction with another logogram, such as IR₁₁ LUGAL or ᵍⁱˢKIRI₆ LUGAL.[113] As suggested by the divine

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107 Jacquet 2011: 38–39.
108 Jacquet 2011: 38–39.
109 KA₂ *mar-ra-tin* in text TH02-707, see fig. 7.
110 CAD M/1 285–286 s.v. *marratu* A, B, C and D.
111 Durand 1987: 54–58.
112 Jacquet 2002: 61–63; Jacquet 2011: 48–49.
113 For IR₁₁ LUGAL see texts in Colonna d'Istria 2014: 182, 186 and 196–199.

name ᵈLUGAL-*ma-tin*, which corresponds to ᵈ*be-el-ma-tim* in the post-reform writing,[114] the logogram LUGAL designated the word *bēlum*, "lord." Only after the writing reform did the logogram LUGAL refer to the word *šarrum* "king," as in its usual usage. Finally, among the orthographic variants of the month name *malkānin* attested in the late *šakkanakku* texts, ITI EN-*ka-ni-in₄*[115] demonstrates the use of the logogram EN with the meaning "king" in the western tradition.[116]

A new reading of ARM 19 384 reveals that *šar-ru* GAL (currently unique) is mentioned in this document, which records the deliveries of foodstuffs in small quantities referring to 1BAN₂ *šar-ru* GAL, 2 SILA₃ E₂ ᵍⁱˢIŠ.DE₃ followed by a reference to 2 liters (for) the temple of Abba. The other recipients of the section are individuals, most of whom are women, including Eštar-damqa, a priestess. As indicated by the adjective GAL "great" and the reference to E₂ ᵍⁱˢIŠ.DE₃ "throne room," the words *šar-ru* GAL here could designate illustrious dead members of the family, or perhaps deceased previous rulers. Due to the break on ARM 19 384, the date and nature of the food delivered are lost.

TH02-501 (see below for the *gibbum*-ritual) records the delivery of flour to *šarrū*, although its date is lost. The texts ARM 19 258 and TH02-1022 are very similar; thus, they were likely written in the same administrative office, recording the expenditures of emmer flour ZI₃ IMGAGA₃(ZIZ₂.AN) for *šarrū*. These two documents are dated in month v: the former on the 20ᵗʰ day and the latter on the 25ᵗʰ day. Another text TH02-281 dated on the 28ᵗʰ day of the month vi records the expenditures of flour ZI₃.GU delivered from the office of a certain Eštar-lāʾi to various recipients including *šarrū* and E₂ ᵍⁱˢIŠ.DE₃ "throne room."[117]

In addition to flour, *šarrū* received other products. According to TH02-72,[118] the *šarrū* and ᵍⁱˢIŠ.DE₃ received some *BARŠUM*, a cereal product, on the eighth day of the month v. ARM 19 214, a text probably dated to the month xi, records the expenditure of 11 liters of groats (NIG₂. ḪAR.RA) for *šarrū*.

In conclusion, these few texts do not allow us to determine with certainty the presence of constant or consistent food deliveries to *šarrū*. It is not clear which rituals these deliveries are specifically related to. Note, however, that three of the four texts presented here are dated to month v (ITI *ebirtin*).

2.2.4. Baking of *laḫḫum*-bread (Appendix nos. 3–10)

Among the texts derived from the Zanabum office that record expenditures and controls of cereal products on the one hand and wages for women on the other, some texts refer to expenditures for manufacturing *laḫḫum*-bread (*iš* NINDA *la₂-ḫi-im*).[119]

This group of texts consists of eight administrative texts (Appendix nos. 3–10). There are two types of expenditures: (1) the wages of a female worker (always one woman), and (2)

114　Durand 1985: 162–163; Durand 2008: 203–204.

115　Durand 2003: 4 n. 15.

116　Archi 1987.

117　TH02-281: obv. ¹ ⌜4⌝ SILA₃ ⌜x⌝ ⌜ŠU?.KIR₁₁?⌝ ² (*vacat*) ³ 1 SILA₃ *šar-*⌜*ru*⌝ ⁴ 4 SILA₃ E₂ ⌜x x⌝ / *sa₂ a-bar-*[*tin*?] ⁵ 1BAN₂ *kir-ba-at* ⁶ 3 SILA₃ E₂ NINDA.⌜SUM⌝ ⁷ (*vacat*) l.e. ⁸ [x] ⌜x⌝ [...] rev. ⁹ [...] ⌜x-x⌝ / [...] *DA-tu-lum* ¹⁰ (*vacat*) ¹¹ 2 SILA₃ E₂ ᵍⁱˢIŠ.⌜DE₃⌝ ¹² (*vacat*) ¹³ ŠUNIGIN 7 1/2 SILA₃ ZI₃.GU ¹⁴ (*vacat*) ¹⁵ ⌜E₃⌝.A *eš₄-tar₂-la₂-i₃* ¹⁶ 28 UD ⌜ITI⌝ / ⌜ᵈKUR⌝.

118　TH02-72: obv. ¹ 3GUR 1BARIGA GUR 3BAN₂ / *BAR-ŠUM GU₄* ² 2GUR 1BARIGA GUR GUR₇ ³ 1 SILA₃ *de₄-er* ⁴ 1 PA₂-AN 2 AB₂ ⁵ 6 SILA₃ *zi-ra-mun* ⁶ 1 SILA₃ ŠU.KIR₁₁ l.e. and rev. ⁷ 3 1/2 SILA₃ *u-li-/ab-ba* ⁸ 3 1/2 SILA₃ ⌜x x⌝ ⁹ [n SILA₃] ⌜*šar*⌝-*ru* ¹⁰ [n SILA₃] x x ¹¹ [n x] ⌜x⌝ [E₂ ᵍⁱˢ]Š-DE₃ ¹² [E₃-A] ¹³ ⌜*ra*⌝-*ma*-[ᵈ*da*]-⌜*gan*⌝ ¹⁴ 8 UD [ITI] / *e-bir₅*-[*tin*].

119　Cavigneaux and Colonna d'Istria 2009: 60.

the quantity of barley and emmer (1 *PA₂-AN* ŠE and 1 BAN₂ 2 SILA₃ IMGAGA₃(ZIZ₂.AN)). Seven texts stem from the office of Zanabum. Text TH02-733 (Appendix no. 7) mentions the expenditure of a wage from Eštar-lāʾi's office. In addition, note that the terminology is different: 1 MUNUS *sa₂* at the Eštar-lāʾi office, while 1 MUNUS *iš* at the Zanabum office.

These administrative texts were all dated to ITI *la₂-ḫi-im*. Considering the name of the bread produced and the name of the month of its production, it is likely that the NINDA-*laḫḫim* was eaten during the ceremonies held in the *laḫḫum*-month. According to these texts, the ceremonies seem to have taken place around the 20th day of the month.

These texts can be correlated with the *laḫḫêtum*-festival, which is present in the Amorite texts of Mari. In a letter from the reign of Yaḫdun-Lîm, Ḫamatil wrote to Līter-šarrūssu to have him bring various food products so that the king could perform the *laḫḫêtum* in Ṣuprum.[120] According to J.-M. Durand, the term *laḫḫêtum* represents the sacrifices offered in the month of *laḫḫum*. In addition to the reference to *laḫḫêtum*, this letter details all the food products entrusted to Iddin-Dagan, so that the latter could bring them to Ṣuprum. Among the instructions given to Hamatil, Līter-šarrūssu does not mention the type of bread NINDA-*laḫḫum* for the *laḫḫum*-offerings performed in Ṣuprum.

In addition to this letter, three administrative texts dated to the second half of the *laḫḫum* month record expenditures during the *laḫḫiyātum*-festival: the first text,[121] dated on the 15th day, mentions wine jars used during the *laḫḫiyātum* festivals; the second text,[122] dated on the 17th day, records fine oil provided for Dêrîtum and Annunitum during the *laḫḫiyātum* festivals; and the third text,[123] dated on the 30th day, refers to red-gold beads dedicated for Ninḫursag.

2.3. Cattle expenditure for worship (Tables 3 and 4)

The existence of several offices was revealed, thanks to the organization of administrative records arranged by administrators (ARM 19 and texts discovered in 2002 in Mari, partially unpublished). Some deal with the management of livestock, especially the expenditure of cattle for temples (all the divine names are preceded by the term E₂), various other places, and the SANGA (religious intendant, here associated with the palace).

The writing in these documents is elliptical and telegraphic. Considering the nature of the recipients, cattle were probably consumed as sacrifices. Only documents recording a delivery to the SANGA use the terminative preposition *iš* (*iš* SANGA). There is no word preceding all the other recipients, temples, place names, or individuals, while in the Amorite texts the prepositions *ana* or *ina* and the word meaning "sacrifice," SISKUR₂.RE, provide a clearer understanding.[124]

From the kitchens, E₂.MUḪALDIM, sheep, and prepared sheep (such as the *takmīsum*-sheep[125]) were delivered to a place of the cult. Due to the rather telegraphic layout of these

120　Durand 2001: 132–133.
121　ARM 24 80 (= FM 11 169).
122　Jacquet 2011: 167–168 M.18174 (17/iii/ZL7).
123　ARM 25 127 = ARM 32: 327–328 M.7018 (30/iii/ZL7).
124　Jacquet 2011: 29–30.
125　Regarding the meaning of *takmīsum*, see CAD T 83; AHw. 1308, probably a *taprīsum* form of *kamāsum* I. In the list UR₅-ra = *ḫubullum*, this word is the Sumerian equivalent UDU.DIM₃.MA or [UZU.DI]M₃ suggesting that *takmīsum* may designate a prepared sheep.

administrative texts, a literal translation of the texts will be presented in a table (see Tables 3 and 4 below).

An overall reading of these texts organized according to their dates (day and month) reveals that the sanga received sheep fairly regularly. Unfortunately, the reasons for these deliveries are not indicated. The most frequently mentioned temples are those of Dagan, Ninḫursag, the Goddess (*Iltum*), and Bēlet-ekallim (Table 4). Some texts record deliveries of sheep to several temples (for example TH02-523: 14 / v; ARM 19 191: 19 / x; see Tables 3 and 4).

Deliveries to the Dagan temple and the Ninḫursag temple are often connected (ARM 19 192 and 190), exposing the cultic topography in Mari. Text TH02-91 (Appendix no. 11) mentions the delivery of two sheep to the temples of Dagan and Ninḫursag.

Although the Ninḫursag temple received sheep for sacrifice on various occasions throughout the year, month iii seems to have been a special period for the worship of this deity. ARM 19 192 records one sheep for Dagan and two for Ninḫursag. The texts recording a delivery for Ninḫursag alone are all dated in month iii. From the reign of Zimrī-Lîm, ARM 25 125 (M.7019, 6/iii/ZL5) records the silver outlet, for (making) "headbands" (*kulīlī*) of Ninḫursag, "during her descent" (*inūma warādīša*), and ARM 25 127 (M.7018, 30/iii/ZL7 = ARM 32: 327–328) mentions red gold beads as a votive gift (*šūlūtum*) dedicated to Ninḫursag during the *laḫḫiyātum*-festival. It is then possible that the month *laḫḫum* (the month iii) in the late *šakkanakku* calendar was the time for specific festivals in honor of Ninḫursag. In this case, the month iti nin.ḫur.sag mentioned in the text Syria-5 (see below 1.1.3) could be the month iii of the calendar *Šakk-Re*/*Šakk-Ro*, corresponding to iti *laḫḫim* in the late *šakkanakku* period.

Other temples also received sheep, such as the temple of Adad (Table 4: TH02-871 and TH02-403 dated to the month xi) and the temple of Ilaba (Table 4: TH02-689 dated to the month ix). During the month ix, in which Ilaba received sheep for ritual sacrifice, there were also two instances of deliveries for the "Gate of Dagan" (TH02-827 and TH02-289 [Appendix no. 12]). The text TH02-289, recording expenditure from the kitchens, also mentions the delivery of three sheep-*takmīsum* in front of Eštar (*ma-ḫir* ᵈinana). This expression may be an echo of the Eštar-ritual[126] present during the Amorite period that took place in the first half of the month ix.

Among the temples, which are referred to only once in the texts recording expenditures for temples, the temple of Bēlet-bīrī (ᵈnin-ki.tul₈) received a cow on the eighth day of the month x, the month named after this deity.

Finally, among the texts recording sheep controls (gurum₂), ARM 19 210 quotes "*šu* mu.du / *sa₂ za-me-ri₂*" between the controlled objects (i.e., sheep) and the administrative word gurum₂. In this type of text, we usually find the name of the person to whom the sheep belong instead of the "*šu* mu.du / *sa₂ za-me-ri₂*." However, ARM 19 210 is not unique. In addition, TH01-788 has the same structure, mentioning *šu* mu.du / *sa₂ za-me-ri₂ u₂ li-li₂-a-tin*. Moreover, the two texts, ARM 19 210 and TH01-788, date at the end of month iv (iti *a-bi*).

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126   Jacquet 2008: 398; 2011: 22–23.

ARM 19 210
obv.
1.　12 UDU.GA[L]
2.　*šu* MU.DU
3.　*sa₂ za-me-*[*ri₂*]
4.　(*vacat*)
rev.
5.　GURUM₂ *sa₂-lim-*/*be-li₂*
6.　28 UD / ITI *a-bi*

TH01-788 (fig. 2: photograph)
obv.
1.　1 UDU.「GAL」
2.　1 MUNUSᶦ.AŠ₂.GAR₃
3.　*šu* MU.DU
l.e.
4.　「*sa₂*」*za-me-ri₂* / *u₂ li-li₂-a-tin*
rev.
5.　「GURUM₂」*ri₂-im-*/*sa₂-i₃-li₂*「SIPA」
6.　30 LA₂ 1 UD ITI / *a-bi*

In the *šakkanakku* texts, the logogram MU.DU is present in these two texts and other texts belonging to a group of tablets that record donations and counter-donations — the group called "présents somptuaires."[127] In the latter group of texts, the logogram MU.DU expresses the idea of "bringing in" (*šūrubtum*). In ARM 19 210 and TH01-788, "*šu* MU.DU / *sa₂ za-me-ri₂* (*u₂ li-li₂-a-tin*)" is more difficult to render because of the term *za-me-ri₂*, which may refer to either the "musicians" (*zammeri*) or a *zamērī*-festival known during the reign of Zimrī-Lîm, which may have taken place at the end of the month of *abum* (the month iv) and during the month v.[128]

Conclusion

The present chapter examines the *šakkanakku* period by comparing data from both earlier and later periods to obtain better insight into the menological tradition and calendars of the target periods.

　The available documents dating to different phases of the *šakkanakku* periods attest to ruptures and continuities within the menological tradition. A complete break was observed between the Presargonic period and the *Šakk-Re*/*Šakk-Ro* periods at the end of the third millennium BC. However, some of the month names of the *Šakk-Re*/*Šakk-Ro* calendar persisted into later periods (the late *šakkanakku* and Amorite periods) with various spellings matching those present in these periods. The documents from the *Šakk-Re*/*Šakk-Ro* period do not mention any festivals or rituals apart from the NINDA.RI. Only documents from the late *šakkanakku* period provide references to rituals or festivals, most of which have been identified by their persistence during the Amorite period.

127　Cavigneaux and Colonna d'Istria 2009: 62–64.
128　Jacquet 2011: 66.

Table 3: Cattle expenditure for worship according to ARM 19

Ref. ARM 19	Object(s)	Recipient / *Provenance*	Keyword + administrator	date
174	1 adult sheep 1 she-goat	to Sanga	Exp. of Dagan-bāni	07/[…]
175	n … 2 young rams	to Sanga	Exp. of Salim-bēli	n+4/ […]
197	[…] 2 (sheep-)*takmīsum*	Temple of Iltum	Exp. of E2.MUḪALDIM	12/i
172	1 adult sheep	to Sanga	Exp. of Salim-bēli	18/i
169	2 adult sheep 2 ewes	to Sanga	Exp. of Salim-bēli	24/i
205	*44 adult sheep*	*28 of Rimsi-Dagan* *14 Igid-Lîm* *2 Zakirum*	*Control of Salim-bēli*	26/i
184	2 young ram	1: Temple of Iltum 1: Temple of Ninḫursag	Exp. of Salim-bēli	19/ii
192	3 adult sheep	1: Temple of Dagan 2: Temple of Ninḫursag	Exp. of Zizanum.	09/iii
203	*1 cow*	*of Ili-ibbi*	*Control of Salim-bēli*	30/iii
204	*2 cows*	*of Iddin-admu*	*Control of Salim-bēli*	05/iv
166	1 young ram	to Sanga	Exp. of Salim-bēli	06/iv
416	[…]	… Dumuzi	Exp. of E2-MUḪALDIM	15/iv
198	*20 adult sheep*	*of Altilanu*	*Control of Zizanum.*	19/iv
111	1 young ram	to Sanga	Exp. of Salim-bēli	25/iv
210	*12 adult sheep*	*šu* MU.DU *ša zameri*	*Control of Salim-bēli*	28/iv
186	1 adult sheep	Temple of Enki	Exp. of Dagan-bāni	13/v
179	1 young billy goat	to Sanga	Exp. of Dagan-bāni	14/v
167	1 young ram	to Sanga	Exp. of Salim-bēli	16/v
190	1 adult sheep	1: Temple of Dagan 1: Temple of Ninḫursag	Exp. of Salim-bēli	…/v
168	1 young ram	to Sanga	Exp. of Salim-bēli	02/vi
207	*1 adult sheep*	*of Išim-Adad*	*Control of Salim-bēli*	12/vi
193	1 ox 7 sheep 1 (sheep) 1 (sheep) 1 (sheep) 1 (sheep) 1 (sheep)	Dêr Temple of Abba Temple of Baʾiḫ PN PN PN	Exp. of E2.MUḪALDIM	15/vi

Ref. ARM 19	Object(s)	Recipient / *Provenance*	Keyword + administrator	date
419	[…]	[…]	Exp. of Dagan-bāni	24/vi
201	*1 ewe* *2 he-goats*	*of Ili-ibbi*	*Control of Dagan-bāni*	13/vii
202	*7 adult sheep* *3 he-goats*	*of Ibal-Saggar*	*Control of Dagan-bāni*	17/vii
187	1 ewe	to Sanga	Exp. of Zizanum.	28/vii
181	*4 cows*	*Dagan-bāni*	*Exp. of Nidinum, musician*	14/viii
194	<u>1 sheep</u> <u>1/2 adult sheep</u>	<u>Dêr</u> <u>Dayirum</u>	<u>Exp. of E2.MUḪALDIM</u>	<u>20+4?/</u> <u>viii</u>
199	*1 cow*	*of Ili-iddišu*	*Control of Zizanum.*	28/viii
176	4 adult sheep	to Sanga	Exp. of Dagan-bāni	01/ix
200	*1 young cow*	*of Ili-ibbi*	*Control of Gumli-Adad*	01/ix
208	1 ox 1 young cow Total 2 cows	1: lord's garden 1: storage (GANUN)	Exp. of Gumli-Adad	03/ix
303	<u>1 loins/backs of ox</u> <u>2 carcass of sheep</u> <u>2 sheep</u>	<u>Eštar-damqa</u> <u>Dadnum?</u>	<u>Exp. of E2.MUḪALDIM</u>	<u>11/ix</u>
180	1 […]	to [Sanga?]	Exp. of Salim-bēli	12/ix
173	2 adult sheep	to Sanga	Exp. of Dagan-bāni	15/ix
185	<u>1 sheep-GABAx[129]</u> <u>1 sheep-GABAx</u>	<u>Temple of Adad</u> <u>Temple of Dagan</u>	<u>Exp. of E2.MUḪALDIM</u>	<u>01/x</u>
188	<u>1 ox</u> <u>8 sheep</u> <u>1 sheep</u>	<u>PN</u> <u>PN</u>	<u>Exp. of E2.MUḪALDIM</u>	<u>06/x</u>
183	1 cow	Temple of Bēlet-bīrī	Exp. of Salim-bēli	08/x
195	<u>1 sheep</u>	<u>Temple of Iltum</u>	<u>Exp. of E2.MUḪALDIM</u>	<u>11/x</u>
178	1 adult sheep	to Sanga	Exp. of Zizanum.	15/x
191	3 adult sheep?	1: Temple of Dagan 1: Temple of Ninḫursag 1: Temple of Iltum	Exp. of Salim-bēli	19/x
196	3 adult sheep	1: Temple Iltum?/Adad? 1: Terqa? 1: Salim-bēli	Exp. of Salim-bēli	20/x

129   Durand (1983: 12 n. 4) commented on ARM 19 185 and 189, "Les tablettes (collationnées) portent cependant nettement UDU-GAB pour laquelle expression, cf. MSL 8/1: 14 l. 84 = *im-mer ir-ti*." According to TH02-289, we prefer to transliterate GABAx because its form is slightly different from GAB (ARM 19 311, 342). This sign could also designate something done to sheep. Possibly, the sign is formed from a duplication of the sign UŠ2.

Ref. ARM 19	Object(s)	Recipient / *Provenance*	Keyword + administrator	date
302	2 loins/backs of ox 20 loins/backs of sheep	to leatherworker(s)	Exp. of E$_2$.MUḪALDIM	25/x
172-bis	n adult sheep	to Sanga	Exp. of Salim-bēli	21$^?$/x
209	[….]	[….]	Exp. of Salim-bēli	02/xi
435	n (sheep-)*takmīsum* 1 sheep	Temple of Iltum Dêr	Exp. of E$_2$.MUḪALDIM	02/xi
182	1 sheep	PN	Exp. of E$_2$.MUḪALDIM	n+3/xi
177	1 adult sheep	to Sanga	Exp. of Zizanum	13/xi
189	1 sheep-GABA$_x$	Temple of Dagan	Exp. of E$_2$.MUḪALDIM	12/xii
171	2 adult sheep	to Sanga	Exp.of Salim-bēli	26/xii
170	1 adult sheep	to Sanga	Exp. of Salim-bēli	28/xii

Table 4: Cattle expenditure for worship according to archives discovered in 2002

Ref. TH02-	Object(s)	Recipient / *Provenance*	Keyword + administrator	date
758	1 ox	Gate of *marratum*	Exp. of […]	[…]
572v	1 adult sheep	Temple of Bēlet-ekallim	Exp. of […]	[…]
923	1 she-goat n young she-goat n kid (young goat)	to ⌈Sanga?⌉	Exp. of …	[…]
333	1 young she-goat	Dêr	Exp. of Rama-ilī ?	[…]
764d	[…] 1? male lamb?	1: Dêr 1: Temple of Iltum	Exp. of Iluma-rāʾi and Puzur-[…]	[…]
426	2 adult sheep	1: Temple of […] 1: […]	Exp. of Šamaš-Tappê	[…]
571a	2 adult sheep 2 ewes	2: temple […] 2: Dêr?	Exp. of Zizanum	[…]
83	1 ewe 1 lamb	Zizanum	Exp. of Rama-ilī	16/[…]
954	2 lamb	to Sanga	Exp. of Rama-ilī	19/[…]
768a +773i	9 male lambs 6? female lambs	14: Dêr 1: Temple of Iltum	Exp. of […]	29/[…]
667	1 adult sheep 4 ewes 1 she-goat 1 kid (young goat)	1: Temple of Ninḫursag? 1: Temple of Dagan? 1: Dêr? 1: Temple of Iltum? […]	Exp. of […]	3$^?$/[…]

Ref. TH02-	Object(s)	Recipient / *Provenance*	Keyword + administrator	date
173	*30 adult sheep*	*of Igid-Lîm*	*Control of Zizanum*	20/ii
834	*3 adult sheep*	*of PN*	*Control of Zizanum*	25/ii
161	1 kid (young goat)	DU₆.KI	Exp. of Iluma-rāʾi	01/iii
387	1 she-goat 1 kid (young goat)	1: Temple of Ninḫursag 1: Dêr	Exp. of Šamaš-Tappê	01/iii
462	*1 adult sheep* *1 ewe*	*of Kidin-radan*	*Control of Šamaš-Tappê*	01+n/iii
657	*26 adult sheep* *6 ewes* *2 she-goats* *Total: 34 sheep*	*28 of Bazum* *6 of son of Ziq-Eštar*	*Control of Šamaš-Tappê*	04/iii
169	1 fattened-sheep 1 male lamb	Temple of Ninḫursag	Exp. of Iluma-rāʾi	08/iii
113	1 male lamb	Gate of ᵈNIN.NIM	Exp. of Iluma-rāʾi	09/iii
806	1 kid (young goat)	Temple of Ninḫursag	Exp. of Rama-ilī	12/iii
200	*6 ewes* *5 kids*	*of Ilī-iddinaššu*	*Control of Zizanum*	14/iii
684	2 she-goats	internal gate	Exp. of Nari-Dagan	16/iii
317	1 goat […] 1 kid (young goat)	1: Temple de ᵈNIN-*iltin*? 1: DU₆.KI	Exp. of Rama-ilī	17/iii
788	*3 adult sheep*	*of Zatiyi*	*Control of Nari-Dagan*	17/iii
448	2 adult sheep	1: Temple of Šamaš 1: Šama-abī	Exp. of Šamaš-Tappê	18/iii
305d	*n adult sheep*	*of Itar-Adad*	*Control of Šamaš-Tappê*	19/iii
974	n she-goat	to Sanga	Exp. of Rama-ilī	21/iii
30	1 he-goat	Terqa	Exp. of Nari-Dagan	23/iii
36	*1 adult sheep*	*of Zatiyi*	*Control of Šamaš-Tappê*	24/iii
783	3 adult sheep	n: Temple of […] n: Temple of ᵈKUR (*Ḫubur*)	Exp. of Šamaš-Tappê	24/iii
174	*3 ewes*	*of Iluma-rāʾi*	*Control of Zizanum*	27/iii
391	1 ewe	to Sanga	Exp. of Rama-ilī	07/iv
255	1 adult sheep 1 she-goat	to Sanga	Exp. of Zizanum	07/iv
458	5 […]	3: Temple of Iltum 2: lord's garden	Exp. of Zizanum	15/iv
980	1 […]	Temple of Dagan	Exp. of Zizanum	30/iv

Ref. TH02-	Object(s)	Recipient / *Provenance*	Keyword + administrator	date
755	2 [adult sheep] 1 [ewes] 2 lambs 1 kid (young goat) Total: 6 sheep	2: […]-tum 2: Temple of Dagan 1: Temple of Bēlet-ekallim 1: […]	Exp. of Zizanum	02+n/v
523	5 adult sheep	1: Gate of Ilaba 1: Temple of Ninḫursag 1: Temple of Dagan 1: Dêr 1: Temple of Iltum	Exp. of Zizanum	14/v
707	1 she-goat 1 young billy goat	1: Gate of *marratum* 1: Temple of Bēlet-ekallim	Exp. of Rama-ilī	30/v
975	n+2 carcass 2 (sheep-)*takmīsum* […] 1 sheep-⌈GABAx⌉	Dadnum? Temple of Iltum? *bētum* […]	Exp. of E2.MUḪALDIM	[…]/vi
301a +313s	[…]	to Iltum	Exp. of Zizanum	03/vi
1001g	2 young billy goats 1 kid (young goat) […]	[…] n: Temple of Ninḫursag	Exp. of […]	03/vi
264	1 adult sheep	Temple of Iltum	Exp. of Zizanum	19/vi
518	1 adult sheep	Temple of Iltum	Exp. of […]	19/vii
49	2 adult sheep 1 ewe	Dêr	Exp. of Rama-ilī	30/vii
188	1 adult sheep	Dêr	Exp. of Iluma-rāʾi	30/vii
487	1 fattened-sheep	Gate of ᵈMAŠ.TAB.BA	Exp. of Iluma-rāʾi	15/vii
29	*5 adult sheep*	*of Laskan*	*Control of Zizanum*	03/viii
607	*1 young cow*	*of Akka-dayyān*	*Control of Zizanum*	15/viii
412	1 young billy goat 1 young ram	[…]	Exp. of Rama-ilī	17/viii
671	3 kids (young goats)	Temple de ᵈNIN-*iltin*	Exp. of Rama-ilī	17/viii
124	*2 adult sheep*	*of Abu-ḫalam*	*Control of Zizanum*	24/viii
827	1 male lamb, […]	Gate of Dagan	Exp. of Iluma-rāʾi	01/ix
329	[…]	to Sanga	Exp. of Rama-ilī	05/ix
933	1 young ram n she-goat	[…]	Exp. of Rama-ilī	06/ix
304d	n she-goat	[…] of the bank (*e-bir₅-tin*)	Exp. of Rama-ilī	06+n/ix

Ref. TH02-	Object(s)	Recipient / *Provenance*	Keyword + administrator	date
728	2 female lamb	to Sanga	Exp. of Iluma-rāʾi	07/ix
773c	1 adult sheep?	Temple of Bēlet-ekallim	Exp. of […]	08+n/ix
837	1 young cow	Temple of Iltum	Exp. of Zizanum	10/ix
289	1 ox 4 sheep-GABAₓ, 2 (sheep-)*takmīsum* 1 (sheep-)*takmīsum* 3 (sheep-)*takmīsum* 2 sheep 1 sheep-GABAₓ 1 sheep 1 sheep 1 ½ loin/back of ox	Gate of Dagan Temple of Iltum in front of Inana/Eštar Temple of Ilaba lord's garden Enlil Dadnum? palace	Exp. of E2.MUḪALDIM	10/ix
633	1 ewe	to Sanga	Exp. of Iluma-rāʾi	10+n/ix
643	2 male lambs	Temple of Ilaba	Exp. of Iluma-rāʾi	14/ix
811	1 kid (young goat)	to Sanga	Exp. of Rama-ilī	15/ix
91	2 adult sheep	Temples of Dagan and Ninḫursag	Exp. of Zizanum	[…]/x
45	1 kid (young goat)	*bīt tāʾirtin*	Exp. of Rama-ilī	14/x
810	2 ewes 2 male lambs	[…]	Exp. of Iluma-rāʾi	30/x
768c	*n he-goat*	*of Nīr-admu*	*Control of Zizanum*	[…]/xi
871	1 adult sheep	Temple of Adad	Exp. of Iluma-rāʾi	[…]/xi
560c	1 kid (young goat)	Temple of ᵈKUR (Ḫubur)	Exp. of […]	[…]/xi
536	1 […] 1 […] 1 […]	1: Temple of [...] 2: storage (GANUN)	Exp. of […]	05/xi
319	1 ewe	Temple of Iltum	Exp. of Zizanum	15/xi
403	2 sheep-GABAₓ 1 sheep	Temple of Bēlet-ekallim Temple of Adad	Exp. E2.MUḪALDIM	30/xi
765d	1 she-goat 3 kids (young goats)	[…]	Exp. of Rama-ilī	[…]/xii
700	2 he-goats	Gate of ᵈNIN.NIM?	Exp. of Iluma-rāʾi	18/xiii

Notes:

The administrative texts from the late *šakkanakku* period are written according to a local scribal tradition, which presented the livestock and administrative procedures in unique terms as follows.

Terms used to denote various types of livestock:

UDU = sheep UDU.GAL = adult sheep UDU.MUNUS = ewe *kabšum* = young ram SILA₄ = lamb SILA₄.NITA₂ = male lamb SILA₄.MUNUS = female lamb	LAK-20 () = he-goat UZ₃ = she-goat *urāṣum* = young billy goat MUNUS.AŠ₂.GAR₃ = young she-goat MAŠ₂.NITA₂ = kid (young goat)	GU₄ = ox AB₂ = cow SAL.PEŠ.AB₂ = young cow/heifer

Terms used to denote administrative procedures:

E₃.A = "expenditure = Exp." (= ZI.GA after the writing reform)
GURUM₂ (IGI.GAR) = "controlled by/entrusted to" (= *piqittum*/SI.LA₂ after the writing reform)

The administrative procedure is indicated in Tables 3 and 4 by *italic* and underline; the former is used for cattle "controlled by" or assigned to" (GURUM₂) an administrator, and the latter for "expenditures" (E₃.A) from "kitchen" (E₂.MUḪALDIM).

Appendix: Hitherto unpublished palace documents from Mari dated to the late *šakkanakku* period

No. 1: TH03-145. Size: 3.4 × 3.6 × 2.7 cm (fig. 3: photograph)

obv. 1	14 *ma-ṣa-ra*		14 guards,
	2	BAD₃.KI	(of/to) the wall;
		———————	
	3	(*vacat*)	
l.e.	4	[*a*]-*mu-wa-tum*	*omina*
rev.		———————	
	5	⸢30 or 20⸣ UD ITI	Day 30 (or 20),
	6	⸢d⸣NIN-KI.TUL₈	month x.
		———————	
	7	(*vacat*)	

No. 2: TH02-1022. Size: 5.4 × 8.3 × 2.2 cm (fig. 4: photograph)

obv.	1	(*vacat*)	
	2	1 SILA₃ *šar-ru*	1 liter: *šarrū*,
	3	1 SILA₃ *de₄-er*	1 liter: Dêr,
	4	1 BAN₂ *kir-ba-at*	10 liters: blessing goddesses,
	5	1 BAN₂ 5 SILA₃ ⌈E₂ NINDA⌉.[SUM]	15 liters: E₂ NINDA.SUM,
	6	(*vacat*)	
	7	[ŠUNIGIN] 2 BAN₂ [7 SILA₃ (...)]	Total: 27 liters;
l.e.	8	1 BAN₂ LA₂ 1 [SILA₃ …]	9 liters: […],
	9	1/2 ⌈SILA₃ *de₄*⌉-[*er*]		1/2 liter: Dêr,
rev.	10	(*vacat*)	
	11	ŠUNIGIN ⌈1 BAN₂⌉ LA₂ 1/2 SILA₃ […]	Total: 9 1/2 liters …;
	12	1 BAN₂ ḪIR-[…] / *kir-ba-at*	10 liters: … of blessing goddesses,
	13	1 SILA₃ E₂ MUḪALDIM	1 liter: kitchen
	14	(*vacat*)	
	15	ŠUNIGIN 1 BAN₂ 1 SILA₃ ZI₃ IMGAGA₃	Total: 11 liters of emmer flour.
	16	25 UD <ITI> *e-bir₅*-[*tin*]	Day 25, <month> v.

No. 3: TH02-73. Size: 3.6 × 3.3 × 1.5 cm

obv.	1	1 M[UNUS]	(Daily wage of) 1 woman
	2	*iš* NINDA ⌈*la₂*⌉-[*ḫi*]- / ⌈*im*⌉	to (make) bread-*laḫḫum*.
rev.	3	(*vacat*)	
	4	E₃.A	Expenditure (from the office of)
	5	*za-na-bum*	Zanabum.
	6	20 LA₂ 1 UD ITI / *la₂-ḫi*-[*im*]	Day 19, month of *laḫḫum* (month iii).

No. 4: TH02-166. Size: 3.5 × 3.4 × 1.4 cm (fig. 5: photograph)

obv.	1	1 MUNUS	(Daily wage of) 1 woman
	2	*iš* NINDA *la₂-ḫi*- / *im*	to (make) bread-*laḫḫum*.
rev.	3	(*vacat*)	
	4	E₃.⌈A⌉	Expenditure (from the office of)
	5	*za-na-⌈bum⌉*	Zanabum.
	6	21 UD ITI / *la₂-ḫi-⌈im⌉*	Day 21, month of *laḫḫum* (month iii).

No. 5: TH02-574d. Size: 3.5 × 3.5 × 1.5 cm

obv.	1	1 MUNUS	(Daily wage of) 1 woman
	2	*iš* NINDA [*la₂*]- / *ḫi-im*	to (make) bread-[*la*]*ḫḫum*.
rev.	3	(*vacat*)	
	4	⌈E₃.A⌉	Expenditure (from the office of)
	5	*za-*[*na*]*-⌈bum⌉*	Za[na]bum.
	6	n+ 5 UD ITI / *la₂-ḫi-⌈im⌉*	Day n+5, month of *laḫḫum* (month iii).

No. 6: TH02-95. Size: 2.9 × 3.0 × 1.4 cm

obv. 1	1 MUNUS	(Daily wage of) 1 woman
2	*iš* NINDA *la₂-ḫi-* / *im*	to (make) bread-*laḫḫum*.
rev. 3	(*vacat*)	
4	⌈E₃⌉.A	Expenditure (from the office of)
5	[*za*]-⌈*na*⌉-*bum*	[Za]nabum.
6	[n] ⌈UD⌉ ITI / [*la₂*]-*ḫi-im*	Day [n], month of [*la*]*ḫḫum* (month iii).

No. 7: TH02-733. Size: 2.9+ × 3.2 × 1.5 cm (fig. 6: photograph)

obv. 1	1 MUNUS / *sa₂* NINDA *la₂-* / *ḫi-im*	(Daily wage of) 1 woman
rev. 2	(*vacat*)	of bread-*laḫḫum*.
3	E₃.A	Expenditure (from the office of)
4	*eš-tar₂-la₂-*⌈*i₃*⌉	Eštar-lāʾi.
5	20 UD ⌈ITI⌉ / *la₂-ḫi-*[*im*]	Day 20, month of *laḫḫum* (month iii).

No. 8: TH02-309c. Size: 3.2 × 2.9 × 1.3 cm (fig. 7: photograph)

obv. 1	1 *PA₂-AN* ⌈ŠE⌉	60 liters of barley,
2	1BAN₂ 2 SILA₃ ⌈IMGAGA₃⌉	12 liters of emmer,
3	*iš* NINDA *la₂-ḫi-* / {*ḫi*}-*im*	to (make) bread-*laḫḫum*.
rev. 4	(*vacat*)	
5	⌈E₃⌉.A	Expenditure (from the office of)
6	[*za*]-*na-*⌈*bum*⌉	Zanabum.
7	[n] ⌈UD ITI⌉ / [*la₂*]-⌈*ḫi-im*⌉	Day [n], month of [*la*]*ḫḫum* (month iii).

No. 9: TH02-236. Size: 4.6 × 4.4+ × 1.4 cm

obv. 1	[1 *PA₂-AN* ŠE]	[60 liters of barley],
2	[1BAN₂] ⌈2 SILA₃ IMGAGA₃⌉	[1]2 liters of emmer,
3	*iš* NINDA *la₂-ḫi-im*	to (make) bread-*laḫḫum*.
l.e. and rev.		
4	(*vacat*)	
5	E₃.A	Expenditure (from the office of)
6	*za-na-bum*	Zanabum.
7	18 UD ITI / *la₂-ḫi-im*	Day 18, month of *laḫḫum* (month iii).

No. 10: TH02-382. Size: 3.6 × 3.2 × 1.5 cm (fig. 8: photograph)

obv. 1	1 ⌈*PA₂*⌉-*AN* ŠE	60 liters of barley,
2	1BAN₂ 2 SILA₃ IMGAGA₃	12 liters of emmer,
3	*iš* NINDA *la₂-*[*ḫi*]- / *im*	to (make) bread-*la*[*ḫḫ*]*um*.
rev. 4	(*vacat*)	
5	E₃.⌈A⌉	Expenditure (from the office of)
6	*za-na-*⌈*bum*⌉	Zanabum.
7	20+n ⌈UD ITI⌉ / ⌈*la₂*⌉-[*ḫi*]-⌈*im*⌉	Day 20+n, month of *laḫḫum* (month iii).

No. 11: TH02-91. Size: 3.1 × 3.1 × 1.5 cm (fig. 9: hand-copy)

obv.	1	2 UDU GAL	2 adult sheep
	2	E₂ ᵈ*da-gan* / *u*₂ ᵈNIN. / ḪUR.SAG	(to) temples of Dagan and Ninḫursag.
	3	(*vacat*)	
rev.	4	E₃.A	Expenditure (from the office of)
	5	⌜*zi-za*⌝-*nim*	Zizanum.
	6	[n] UD ITI / [ᵈ]⌜NIN⌝-KI.TUL₈	Day [n], month x.

No. 12: TH02-289. Size: 5.2 × 6.1 × 2.4 cm (figs. 10: hand-copy, 11: photograph)

obv.	1	1 GU₄ 4 UDU GABAₓ?	1 ox 4 sheep GABAₓ
	2	2 *tak₂-mi₃-sa₃-an*	2 *takmīsu*-(sheep)
	3	KA₂ ᵈ*da-gan*	(for) the Gate of Dagan,
	4	1 *tak₂-mi₃-sum₂* / E₂ *il₃-tin*	1 *takmīsu*-(sheep) (for) the temple of the Goddess,
	5	3 *tak₂-mi₃-su₂*	3 *takmīsu*-(sheep)
	6	*ma-ḫir* ᵈINANA	in front of Inana,
l.e.	7	2 UDU E₂ *il₃*- / *a-ba₄*	2 sheep (for) the temple of Ilaba,
rev.	8	⌜1 UDU GABAₓ? ᵍⁱˢ⌝KIRI₆ / ⌜LUGAL⌝	1 sheep GABAₓ (for) the "garden of the king,"
	9	1 UDU ᵈ*en*-⌜*lil₂*⌝	1 sheep (for) Enlil,
	10	1(or 10ʔ) UDU ⌜*da-ad*⌝-[NIM?]	1(or 10) sheep …,
	11	1 1/2 *sa₂-sa₂*-⌜*lum sa₂* GU₄⌝	1 ½ 1 ½ loin/back of ox
	12	E₂.GAL	(for) the palace.
	13	⌜E₃.A⌝	Expenditure (from)
	14	[E₂ MUḪALDIM]	[the kitchen].
	15	⌜10 UD ITI *li*⌝-*li₂*- / *a-tin*	Day 10, month ix.

Bibliography

Ahmed Mahmud, N.
1989   "The Ur III tablets from Ishan Mizyad," *ASJ* 11, 330–352.
Archi, A.
1987   "Les titres de EN et LUGAL à Ebla et des cadeaux pour le roi de Kish," *MARI* 5, 37–52.
1993   "Divinités sémitiques et divinités de substrat: le cas d'Išhara et d'Ištar à Ebla," *MARI* 7, 71–78.
1990   "Imar au IIIᵉ millénaire d'après les archives d'Ebla," *MARI* 6, 21–38.
2017   "The Two Calendars of Ebla," *Or.* 86, 181–201.
Barjamovic, G. and M. T. Larsen
2008   "An Old Assyrian Incantation Against the Evil Eye," *AoF* 35, 144–155.
Bonechi, M.
1992   *I nomi geografici dei testi di Ebla*, RGTC 12/1, Wiesbaden.
1996   "On the III and II Millennium Month Names from **qsy*, 'to be cold'," *NABU* 1996/93.

Butterlin, P.

2007 "Mari, les Šakkanakku et la crise de la fin du troisième Millénaire," in: C. Kuzugluoglu and C. Marro (eds.), *Sociétés humaines et changement climatique à la fin du troisième millénaire: une crise a-t-elle eu lieu en Haute Mésopotamie?: actes du colloque de Lyon, 5–8 décembre 2005*, Istanbul and Paris, 227–247.

Cavigneaux, A.

2014 "Nouveaux textes de Mari Ville II (campagnes 1998 à 2007)," in: P. Butterlin et al. (eds.), *Mari, ni Est, ni Ouest*, Syria Supp. 2, Beyrouth, 291–340.

2019 "Nouveaux cas d'ordalie à Mari," in: P. Abrahami and L. Battini (eds.), *Ina ᵈmarri u qan ṭuppi, Par la bêche et le stylet! Cultures et sociétés syro-mésopotamienne: Mélanges offerts à Olivier Rouault*, Archeopress Ancient Near Eastern Archaeology 5, Oxford, 21–35.

Cavigneaux, A. and L. Colonna d'Istria

2009 "Les découvertes épigraphiques des fouilles récentes de Mari. État des recherches en janvier 2009," *Studia Orontica* 6, Damas, 51–68.

Charpin, D.

1987 "Tablettes présargoniques de Mari," *MARI* 5, 65–127.

1993 "Le début de l'année dans le calendrier sémitique du IIIe millénaire," *NABU* 1993/56.

1994 "Une campagne de Yahdun-Lîm en Haute-Mésopotamie," in: Charpin and Durand 1994, 177–200.

2008 "Mari au IIIe millénaire d'après les sources écrites," in: *Supplément dictionnaire de la Bible*, Tell Hariri/Mari: textes, Paris, coll. 221–233.

2012 "Mari à l'école d'Ešnunna: écriture, langue, formulaires," in: C. Mittermayer and S. Ecklin (eds.), *mu-ni u₄ ul-li₂-a-aš ĝa₂-ĝa₂-de₃: Altorientalische Studien zu Ehren von Pascal Attinger*, OBO 256, Fribourg and Göttingen, 119–138.

Charpin, D. and J.-M. Durand (eds.)

1994 *Florilegium marianum* 2: *Recueil d'études à la mémoire de Maurice Birot,* Mémoires de NABU 3, Paris.

1997 *Florilegium marianum* 3: *Recueil d'études à la mémoire de Marie-Thérèse Barrelet*, Mémoires de NABU 4, Paris.

2002 *Florilegium marianum* 6: *Recueil d'études à la mémoire d'André Parrot,* Mémoires de NABU 7, Paris.

Charpin, D. and N. Ziegler

2003 *Florilegium marianum* 5: *Mari et le Proche-Orient à l'époque amorrite*, Mémoire de NABU 6, Paris.

Cohen, M.

2015 *Festivals and Calendars of the Ancient Near East*, Bethesda.

Colonna d'Istria, L.

2011 "ARM XIX: la séquence SI.LA₂ 2 = *si-la₂-min* (NP) et quelques relectures de noms propres," *NABU* 2011/77.

2013 "Addendum *à NABU* 2011/77," *NABU* 2013/74.

2014 "Wool Economy in the Royal Archive of Mari during the Šakkanakku Period," in: C. Breniquet and C. Michel (eds.), *Wool Economy in the Ancient Near East and Aegean*, Oxford and Philadelphia, 169–201.

2015   "La notation des fractions dans la documentation de l'époque des derniers *šakkanakkū* de Mari," *Akkadica* 136, 103–125.

Colonna d'Istria, L. and H. Criaud

2014   "Résultats archéologiques et nouvelles données épigraphiques: le chantier Palais Sud 2 (2006–2008)," in: P. Butterlin et al. (eds.), *Mari ni Est, ni Ouest, Actes du colloque "Mari, ni Est ni Ouest" tenu les 20–22 octobre 2010 à Damas, Syrie*, Syria Supp. 2, 355–406.

Dossin, G.

1967   "Un 'Panthéon' d'Ur III à Mari," *RA* 61, 97–104.

Durand, J.-M.

1982   "Sumérien et Akkadien en pays amorrite, I. Un document juridique archaïque de Mari," *MARI* 1, 79–89.

1983   *Textes administratifs des salles 134 et 160 du palais de Mari*, ARMT 21, Paris.

1984   "Trois études sur Mari," *MARI* 3, 127–180.

1985   "La situation historique des Šakkanakku: nouvelle approche," *MARI* 4, 147–172.

1998   *Documents épistolaires du palais de Mari*, vol. 2, LAPO 17, Paris.

2001   "Une alliance matrimoniale entre un marchand de Kanesh et un marchand mariote," in: W. H. van Soldt et al. (eds.), *Veenhof Anniversary Volume: Studies Presented to Klaas R. Veenhof on the Occasion of His Sixty-Fifth Birthday*, PIHANS 89, Leiden, 119–132.

2003   "La conscience du temps et sa commémoration en Mésopotamie l'exemple de la documentation mariote," *Akkadica* 124, 1–11.

2008   "La religion amorrite en Syrie à l'époque des archives de Mari," in: G. Del Olmo Lete (ed.), *Mythologie et religion des Sémites Occidentaux*, Vol. 1: *Ebla, Mari*, OLA 162, Leuven, 163–716.

2009   "*qâtum ba-i-tum*," *NABU* 2009/46.

2012   "Réflexions sur un fantôme linguistique," in: C. Mittermayer and S. Ecklin (eds.), *mu-ni u₄ ul-li₂-a-aš ĝa₂-ĝa₂-de₃: Altorientalische Studien zu Ehren von Pascal Attinger*, OBO 256, Fribourg and Göttingen, 165–192.

Durand, J.-M. and L. Marti

2003   "Chronique du Moyen-Euphrate 2: Relecture de documents d'Ekalte, Emar et Tuttul," *RA* 97, 141–180.

2004   "Chronique du Moyen-Euphrate 3: Les documents du Tell Biʿa," *RA* 98, 121–150.

Edzard, D. O.

1967   "Pantheon und Kult in Mari," in: J.-R. Kupper (ed.), *XVᵉ Rencontre assyriologique internationale: La Civilisation de Mari: Colloque international tenu à l'Université de Liège du 4 au 8 juillet*, Liège, 51–71.

Gelb, I. J.

1992   "Mari and the Kish Civilization," in: G. D. Young (ed.), *Mari in Restrospect, Fifty Years of Mari and Mari Studies*, Winona Lake, 121–202.

Gelb, I. J. and B. Kienast

1990   *Die altakkadischen Königsinschriften des dritten Jahrtausends v. Chr.*, FAOS 7, Wiesbaden.

Gentili, P.

2002   "The 'Strange(r)' Month Names of Tell Muhammad and the Diyāla Calendars," *Egitto e Vicino Oriente* 25, 203–230.

Greengus, S.

1987   "The Akkadian Calendar at Sippar," *JAOS* 107, 209–229.

2001   "New Evidence on the Old Babylonian Calendar and Real Estate Documents from Sippar," *JAOS* 121, 257–267.

Jacquet, A.

2002   "lugal-meš et *malikum*: Nouvel examen du *kispum* à Mari," in: Charpin and Durand 1997, 51–68.

2007   *Le culte et son calendrier à Mari au XVIIIe siècle avant notre ère*, Thèse de doctorat, Paris, Université Paris 1 Panthéon-Sorbonne.

2008   "Calendrier et culte à Mari," in: J. Briend et al. (eds.), *Supplément au Dictionnaire de la Bible* Fascicules 77–78: *Taršiš – Tell Hariri*, Paris, 405–424.

2011   *Florilegium marianum* 12: *Textes relatifs aux dépenses pour le culte*, Mémoires de NABU 13, Paris.

Krebernik, M.

2001   *Tall Biᶜia/Tuttul – 2: Die altoreintalischen Schriftfunde,* WVDOG 100, Saarbrücken.

2002   "Corrigenda zu M. Krebernik, Tall Biᶜa/Tuttul – II. Die altorientalischen Textfunde (= WVDOG 100)," *NABU* 2002/34.

2003   "Lexikalisches aus Tuttul," in: P. Marrassini (ed.), *Semitic and Assyriological Studies, Presented to Pelio Fronzaroli by Pupils and Colleagues*, Saarbrücken, 301–319.

Kryszat, G.

2006   "Altassyrische Miszellen 2 – Zur Göttin Ištar-ZA.AT," *AfO* 51, 247–248.

Kupper, J.-R.

1973   "Le calendrier de Mari," in: M. A. Beek et al. (eds.), *Symbolae biblicae et Mesopotamicae: Francisco Mario Theodoro de Liagre Böhl dedicatae*, Leiden, 266–270.

1984   "Notes relatives à la chronologie et à la ménologie d'après ARM XXII," *MARI* 3, 181–184.

Lecompte, C.

forthcoming (to be published in 2021) "La vie religieuse à Mari lors de la phase de la Ville II d'après la documentation textuelle," in P. Butterlin (ed.), *Eblouir les dieux*, 115–162.

Lewy, H.

1965   "Ištar-ṣâd and the Bow Star," in: H. G. Güterbock and T. Jacobsen (eds.), *Studies in Honor of Benno Landsberger on His Seventy-fifth Birthday, April 21, 1965*, AS 16, 273–282.

Limet, H.

1975   "Observations sur la grammaire des anciennes tablettes de Mari," *Syria* 52, 37–52.

1976   *Textes administratifs de l'époque des Šakkanakku*, ARMT 19, Paris.

MacGinnis, J.

2014   *A City from the Dawn of History: Erbil in the Cuneiform Sources*, Oxford.

Marchesi, G. and N. Marchetti

2011   *Royal Statuary of Early Dynastic Mesopotamia*, MesCiv. 14, Winona Lake.

Margueron, J.-Cl.

2004   *Mari, Métropole de l'Euphrate, au IIIe et au début du IIe millénaire av. J.-C.*, Paris.

Parrot, A.
1940   "Les fouilles de Mari. Sixième campagne (automne 1938)," *Syria* 21, 1–22.
1967   *Mission archéologique de Mari* 3: *Les temples d'Ishtarat et de Nini-Zaza*, BAH 86, Paris.

Podany, A. H.
2002   *The Land of Hana: Kings, Chronology, and Scribal Tradition*. Bethesda.

Pons N.
1999   "Les principales formes de poterie mariote de l'époque des Shakkanakku à la chute de la ville sous Zimri-Lim. Rapports avec la Babylonie," *Akkadica* 114–115, 1–57.

Postgate, N.
1976   "Inscriptions from Tell Al-Wilayah," *Sumer* 32, 77–100.

Powell, M. A.
1974   "Graphic Criteria for Dating in the Old Babylonian Period," *Or.* 43, 398–403.

Rouault, O.
1996   "Terqa et l'époque des Šakkanakku," in: Ö. Tunca and D. Deheselle (eds.), *Tablettes et images aux pays de Sumer et Akkad*, *Mélanges offerts à Monsieur H. Limet*, Liège, 105–109.
2011   *Terqa Final Reports* No. 2: *Les textes des saisons 5 à 9*, BiMes. 29, Malibu.

Shibata, D.
2010   "Continuity of Local Tradition in the Middle Habur Region in the 2nd Millennium B.C.: The Local Calendar of Ṭābetu in the Middle Assyrian Period," H. Kühne (ed.) *Dūr-Katlimmu 2008 and Beyond*, StCh. 1, 217–239.

Skaist, A.
1994   *The Old Babylonian Loan Contract: Its History and Geography*, Jerusalem.

Steinkeller, P.
1981   "Studies in the Third Millennium Paleography, I: Signs TIL and BAD," *ZA* 71, 19–28.
1984   "The Eblaite Proposition *qidimay* 'Before,'" *OrAnt.* 23, 33–37.

Veenhof, K. R.
2000   "Old Assyrian Chronology," *Akkadica* 119–120, 137–150.

Weidner, E. F.
1935–36 "Aus den Tagen eines assyrischen Schattenkönigs, III. Die neuen Urkunden des Wirtschaftarchivs," *AfO* 10, 32–48.

Westenholz, A.,
1978   "Some Notes on the Orthography and Grammar of the Recently Published Texts from Mari," *BiOr.* 35, 160–169.

Figures

Fig. 1: TH02-928 Mission archéologique de Mari. Photo © Viviane Siefert (Unige).

Fig. 2: TH01-788 Mission archéologique de
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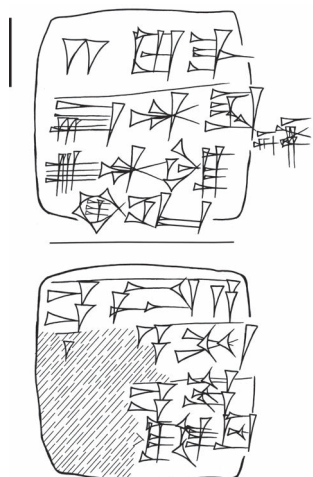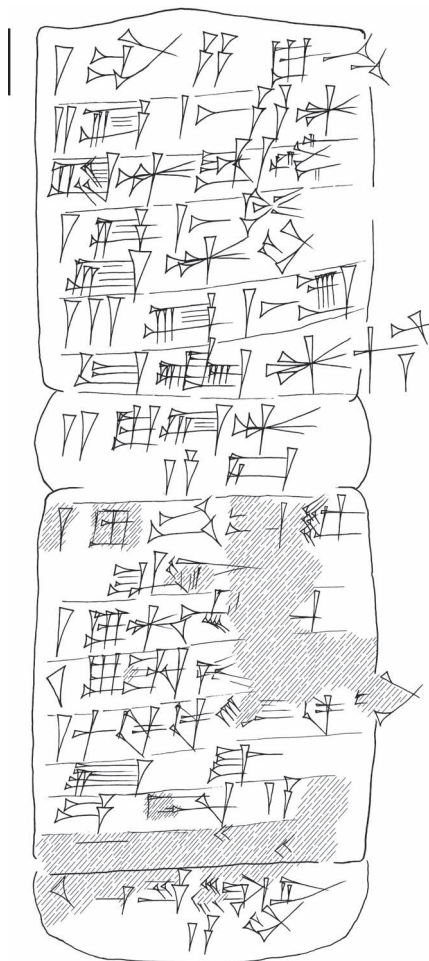
Fig. 9: Hand-copy of TH02-91 (LCI)

Fig. 10: Hand-copy of TH02-289 (LCI)

Fig. 11: TH02-289 Mission archéologique de Mari. Photo © Viviane Siefert (Unige).