

Elementary education at Nippur. The lists of trees and wooden objects

Veldhuis, Nicolaas Christiaan

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version

Publisher's PDF, also known as Version of record

Publication date:

1997

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Veldhuis, N. C. (1997). Elementary education at Nippur. The lists of trees and wooden objects Groningen: s.n.

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Elementary Education At Nippur

RIJKSUNIVERSITEIT GRONINGEN

Elementary Education at Nippur.
The Lists of Trees and Wooden Objects

Proefschrift

ter verkrijging van het doctoraat in de
Letteren
aan de Rijksuniversiteit Groningen
op gezag van de
Rector Magnificus, dr. F. van der Woude,
in het openbaar te verdedigen op
donderdag 25 september 1997
des namiddags te 1.15 uur

door

Nicolaas Christiaan Veldhuis

geboren op 3 september 1960

te Bergum, gemeente Tietjerksteradeel

Promotores: Prof. dr. H.J.W. Drijvers
Prof. dr. P. Michalowski
Co-promotor: Dr. H.L.J. Vanstiphout

Table of Contents

Preface	ix
1 Introduction	1
1.1 History of Research	2
1.1.1 Lexical Lists as Ancient Dictionaries	2
1.1.2 Lexical Lists as Evidence for Cultural History	4
1.2 Research Questions	8
1.3 Structure of the Present Study	10
2 Old Babylonian Thematic Lists in their Educational Context	12
2.1 Third Millennium Predecessors	12
2.1.1 Archaic Lexical Lists	12
2.1.2 Later Third Millennium Sources	14
2.1.3 Ebla	15
2.1.4 The Third Dynasty of Ur	16
2.2 Old Babylonian Lexical Findings	18
2.2.1 Early Old Babylonian Period	19
2.2.2 Middle Old Babylonian Period	21
2.2.3 Late Old Babylonian Period	22
2.3 The Old Babylonian School	24
2.3.1 School Life: the Picture in Literary Texts	24
2.3.2 Archaeology and the Organization of the School	26
2.3.3 Educational Tools: The Typology of Lexical Exercise Tablets	28
2.3.3.1 Type I: Prisms and Large Tablets	29
2.3.3.2 Type II: Teacher-Student Exercises	32
2.3.3.3 Type III: Single Column Tablets	37
2.3.3.4 Type IV: Lentils	38
2.4 The Nippur Curriculum	40
2.4.1 Phase 1: Lists, Models, and Proverbs	41
2.4.1.1 Basics: Sign Elements, Syllable Alphabet, TU-TA-TI, and Name Lists	41
2.4.1.2 Lexical Lists: UR ₅ -ra	46
2.4.1.3 Advanced Lists	54
2.4.1.4 Model Texts and Proverbs	60
2.4.1.5 Summary of Phase 1	63
2.4.2 Phase 2: Literature	64
2.5 The Transmission of UR ₅ -ra to the First Millennium	67
2.5.1 The Middle Babylonian Period	67
2.5.1.1 The Middle Babylonian Peripheral Tradition.	67
2.5.1.2 The Structure of Middle Babylonian Peripheral UR ₅ -ra	68
2.5.2 First Millennium Standardized UR ₅ -ra= <i>hubullu</i>	71
2.5.2.1 Early Canonical Texts	71
2.5.2.2 First Millennium UR ₅ -ra	75

2.5.3	The Transmission of the Curriculum	75
2.6	Some Conclusions	80
3	The Organization of the Nippur List of Trees and Wooden Objects	84
3.1	The Main Sections of the Nippur Giš List	84
3.2	The Organization of a Section: Two Examples	90
3.2.1	Boats and Wagons	91
3.2.2	Agricultural Tools, Maces, and Boards (442-514)	95
3.2.2.1	Agricultural tools	95
3.2.2.2	Maces	98
3.2.2.3	Boards	100
3.2.3	The Organization of Sections in Other Parts of Ur ₅ -ra	101
3.3	The Role of Akkadian	102
3.3.1	Akkadian Loan Words in Ur ₅ -ra	103
3.3.2	Multiple Translations of the Same Entry	107
3.4	Graphemic Principles	111
3.5	Relations to Other Lexical Lists and Literary Texts	113
3.5.1	Correspondences with Other Parts of Old Babylonian Ur ₅ -ra.	114
3.5.2	Kagal and Diri	117
3.5.3	Paradigmatic Sets	123
3.5.4	Relations between Lexical and Literary Texts	126
3.6	The Place of Ur ₅ -ra in the Stream of Tradition	129
4	Old Babylonian Lexical Lists and the Science of Writing	137
4.1	Listenwissenschaft?	137
4.2	A Science of Writing	139
4.3	The Social Uses of the Science of Writing	142
5	Edition of the Giš Lists	147
5.1	Editing the Nippur Giš List: Methodological Considerations	147
5.1.1	The Concept Standard Text	148
5.1.2	The Digital Edition	149
5.2	Standard Nippur Text	151
5.3	Commentary to the Nippur Text	168
5.4	Score Edition of the Nippur Giš List	191
5.5	Non-Standard Nippur Texts	253
5.6	Non-Nippur Texts	260
5.6.1	The Isin Tradition	260
5.6.2	The Ur Tradition	270
5.6.3	Texts from Uruk	276
5.6.4	Unprovenanced Giš Lists	276
5.7	Catalogue	288
5.7.1	Tablets from Nippur	288
5.7.1.1	Prisms	288
5.7.1.2	Type I Tablets	288
5.7.1.3	Type II Tablets	290
5.7.1.4	Type III Tablets	321
5.7.1.5	Type IV Tablets (Lentils)	321

5.7.1.6	Type Unidentified	325
5.7.1.7	Nippur Tablets not Used	328
5.7.2	Tablets from Isin	330
5.7.3	Tablets from Ur	331
5.7.4	Tablets from Uruk	332
5.7.5	Tablets of Unknown Provenance	333
5.7.6	Tablets Excluded from the Edition	336
5.7.7	Addenda	337
Appendixes		339
Appendix 1	The Catalogue of Nippur Lexical Texts: Description	339
Appendix 2	Concordances: Museum Number - Siglum	343
	Previous Publication - Siglum	353
Bibliography		356
Plates		387
Dutch Summary		399

Preface

This dissertation is the result of a four-year project at the Department of Near Eastern Languages and Cultures of the University of Groningen. With this project the department partook in the research program 'Pre-Modern Encyclopedia' of the Centre for Classical Oriental Medieval and Renaissance Studies of the same university. The initiative for the project was taken by Dr H.L.J. Vanstiphout, who acted as my main advisor. He thus brought me back into Assyriology, and introduced me to an area of the field of which I was completely ignorant. I would never have dreamt of studying texts as boring as lexical lists. I soon learned that boring texts only exist by virtue of boring readers. I am very grateful to Dr Vanstiphout for pushing me in this direction, and for his unfailing enthusiasm and critical support of my work.

Prof. Piotr Michalowski, my second advisor, followed the progress of my work at some distance, but with no less interest. His hints and remarks have been more important than can be acknowledged in a single paragraph. At some of the crucial junctures in the research process he pushed me so gently in one direction that I almost convinced myself that I had invented it all on my own.

Prof. dr H.J.W. Drijvers acted as my promotor. Over the years he has actively supported my research. He carefully read a version of the manuscript, adding a number of important remarks.

I was able to visit several foreign tablet collections thanks to financial support from the Netherlands Organization for Scientific Research (NWO) and the Faculty of Arts of the University of Groningen. To both organizations I would like to express my sincere thanks. Prof. Åke Sjöberg, then curator of the Babylonian Collection of the University Museum (University of Pennsylvania, Philadelphia) allowed me free access to the tablet collections under his care. On two occasions (February 1994 and August-December 1995) I benefitted from the hospitality and helpfulness of Prof. Sjöberg and his staff. Dr Steve Tinney prepared an extract from the computerized catalogue of the Philadelphia collection for me and shared with me his vast knowledge of Sumerian and cuneiform. His Index to the Secondary Literature proved to be of immense value. The late Dr Hermann Behrens gave me copies of the computer files in which he had entered numerous lexical and literary compositions. These files have been of enormous value in the process of writing this study. Prof. Erle Leichty helped me out with a number of practical matters, and was always ready to answer my questions. The informed reader cannot fail to see how important my visits to Philadelphia have been for the final results of my research. The sheer joy of working for a period of time in the pleasurable chaos of the tablet room is difficult to express in a few words. They were some of the most agreeable and inspiring months of the past few years.

Prof. J.A. Brinkman allowed me to use and publish the relevant texts from the collections of the Oriental Institute in Chicago. Prof. Miguel Civil discussed an early version of Chapter 2 with me, and shared with me his broad insights into the lexical traditions of Mesopotamia. Moreover, he allowed me to use his HyperText edition of *Diri*. Without this edition some parts of this study simply could not have been written.

My thanks are further due to Prof. W.W. Hallo for giving me permission to publish the relevant tablets in the Yale Babylonian Collection. I gratefully accepted his hospitality and stayed for one week in his house, which was a wonderful experience. Dr Ulla Kasten and Dr Paul-Alain Beaulieu helped me to use the resources and facilities of the Yale Babylonian Collection.

Prof. E.K. Gazda, curator of the Kelsey Museum of Archaeology (Ann Arbor), gave me per-

mission to publish an important lexical prism (KM 89542). Prof. Piotr Michalowski kindly relinquished his own publication rights.

Frau Dr E. Klengel-Brandt, curator at the Vorderasiatisches Museum (Berlin), gave me permission to collate a number of lexical tablets and to publish VAT 6588.

Prof. dr J. Oelsner, curator of the Frau Hilprecht Sammlung in Jena, allowed me to use the relevant tablets in this collection. Moreover, he gave me his handwritten catalogue of lexical tablets in the Hilprecht Sammlung, for which I would like to express my sincere thanks. Dr Andreas Fuchs was ready to assist in a number of practical affairs, and made my stay in Jena a pleasurable one in many different ways.

A three-month Henri Frankfort Fellowship at the Warburg Institute of the University of London allowed me to study Old Babylonian lexical texts at the British Museum in London and to collate a few tablets at the Ashmolean Museum in Oxford. I wish to thank Dr Christopher Walker, Keeper of the Department of Western Asiatic Antiquities, and the Trustees of the British Museum for their permission to publish material from their collections. Dr Eleanor Robson assisted me in the Ashmolean, and shared with me her insights, her enthusiasm, and her good humour.

Prof. dr H. de Roos, director of the Netherlands Institute for the Near East (NINO, Leiden) and Prof. dr K. Veenhof of the Department of Assyriology of the University of Leiden gave me permission to study the lexical tablets in the Liagre-Böhl collection.

Prof. dr C. Wilcke generously sent me his handcopies of the Isin lexical texts, which are to appear in the series *Texts from the Iraq Museum*. These texts proved to be very important, and I am most grateful to Prof. Wilcke for his permission to publish transliterations of some of them.

Dr Wilfred van Soldt shared with me his vast knowledge of the Middle Babylonian lexical tradition from Emar and Ugarit, and allowed me to use some of his articles before they appeared.

Prof. dr M. Stol sent me a slow but steady stream of useful references to important articles and obscure publications. On various occasions he freely gave of his encyclopedic knowledge of the Assyriological literature, which proved to be of immense value.

Geerd Haayer was kind enough to give me a copy of his unpublished edition of the hymn 'Šulgi B', and discussed with me some of the difficult passages in this text.

Dr Bendt Alster allowed me to use the catalogue of tablets in his forthcoming edition of Old Babylonian proverb collections.

Dr Jeremy Black read the manuscript and made a number of helpful remarks. His comments included both corrections of various kinds and questions on matters of principle and method. I hope there will be an opportunity to discuss such matters in more depth in the near future.

Prof. Jerry Cooper read a version of the manuscript and added numerous helpful remarks. Far more than these remarks, it was his enthusiasm and his unfailing interest in what I was doing that put me greatly in his debt.

Dr Hans Harbers of the Faculty of Philosophy of the University of Groningen introduced me to the field of the sociology of education. I am fully aware that I have touched on this fascinating subject only superficially. I can only hope that the results of my analyses are interesting enough to sociologists and historians of education to start a more informed discussion.

I wish to thank Dr Julia Harvey for her painstaking correction of my English. She is, and most probably will remain, the only person who read §5.7 in its entirety. The correction was made possible financially by a grant from the Netherlands Organization for Scientific Research (NWO).

A number of people offered me their friendship, their hospitality, and their enthusiasm. I would like to mention here in particular Dr Herman Bongenaar, Dr David Brown, Ann Guinan, Dr

Beate Pongratz-Leisten, and Dr Walther Sallaberger. Their contributions to this study are difficult to pinpoint, but nonetheless clear to me.

The interdisciplinary environment in which this study was written brought together Ph.D. students with a wide range of interests. It was a pleasure to be a member of this unlikely collection of people working in Canonic law, Syriac historiography, Christian-Arabic apocalypse, late-medieval Dutch comedy, Carolingian book illustration, and many other subjects. I have learned a lot about all these subjects, and about the Humanities in general. Moreover, it was a place to make new friends, and to share the usual ups and downs related to long-term research projects. *Dat was gheselschap goet ende fijn.*

Prof. dr Hans van der Ven of the Department of Empirical Theology of the Catholic University Nijmegen taught me the importance of methodological and conceptual clarity, and showed me the possibilities and limitations of quantification. I hardly dare to hope that this study meets his standards. I am grateful for his teachings and for his sincere interest in my personal wellbeing, even when the pursuit of this wellbeing meant a farewell to Theology.

For Sietsia Padmos, my partner, living with an Assyriologist from time to time meant living alone, sometimes for several months. Supporting me whenever she could, she never allowed me to take the values and customs of academic life for granted. Without ignoring or repudiating my dedication to clay and history, she has always brought me back to the simple necessities of the day. I am, in short, grateful for both her support and her objections, and for keeping me in touch with the poetry of daily life.

Chapter 1 Introduction

By the end of the fourth millennium BC the administrators of Uruk, a city located in the very south of present-day Iraq, invented a new device to record their transactions. They created a system of symbols for numbers, commodities, and professions. These symbols were drawn with a stylus in moistened tablets of clay¹. This system of symbols is called archaic cuneiform and was the earliest form of writing. The Urukians not only created this writing system, but also devised the tools to transmit it to a future generation. These tools consist of lexical lists. In addition to administrative texts the corpus of archaic texts contains lists of trees, domestic animals, fish, birds, professions, vessels, and so on.

The writing system was most probably invented by a Sumerian-speaking group. Sumerian is an agglutinative language, for which no cognate has been identified. Over the course of time cuneiform was adapted to record a variety of other languages. The most important of these was Akkadian, a Semitic language. Akkadian and Sumerian were probably spoken side by side throughout most of the third millennium in Southern Mesopotamia. By the end of this millennium Sumerian ceased to exist as a spoken language². It was retained for scribal and cultic purposes up to the end of the first millennium.

Lexical lists and bilingualism were to become two characteristic features of Mesopotamian written culture in the second and first millennia. Sumerian lexical lists were provided with Akkadian translations in order to preserve the knowledge of the now-dead language. In the second half of the second millennium BC the spread of cuneiform writing over much of the Ancient Near East coincided with the spread of Sumerian-Akkadian lexical lists³. In order to learn how to write, the scribal pupils of these peripheral regions had to master two foreign languages. They learned Akkadian cuneiform for their international correspondence, but the traditional connection between cuneiform and the bilingual lists was so strong that they could not do so without encountering Sumerian. In Mesopotamia proper in the first millennium the gradual rise of Aramaic, and later Greek, for both written and oral communication did not put an end to the transmission of Sumerian-Akkadian lists. At the very end of this history, in the Hellenistic period, Greek transcriptions were sometimes added to indicate the pronunciation of the ancient Sumerian words.

Over the millennia a wide variety of lexical lists had been created. The earliest examples were

¹ An excellent introduction to the archaic writing system and its uses is found in Nissen, Damerow, and Englund 1990. It has been argued by D. Schmandt-Besserat that writing had a forerunner in tokens: small clay objects, impressed with what appear to be numerical signs or other symbols. Michalowski (1993, 1994) has rightly argued that the novelty of archaic writing is its character as a fully fledged system. The inventors may have borrowed a few isolated symbols from their use on tokens; as a system archaic cuneiform was a new invention.

² The exact period in which spoken Sumerian ceased to exist is much debated. For this study the question is immaterial. It is important that it happened well before the Old Babylonian period.

³ A number of these lists are in fact unilingual Sumerian in their written format. It will be argued in subsequent chapters that the Akkadian translations were learned by heart.

thematically arranged. Other lists are arranged by sign form, or by phonemic principles, or they give synonyms in groups of three. The list format was also used to organize other kinds of knowledge, such as grammar paradigms and mathematics.

These lexical lists, in all their variety, have aroused interest on various sides. For lexicographers the value of these texts cannot be overestimated. The bilingual lists in particular (with occasionally a third, or even a fourth language added) are of direct relevance for semantic research. But the lists also drew the attention of students of intellectual history. Bilingual lists were interpreted as the oldest dictionaries; the oldest evidence of lexicographical interest. Grammatical lists have been described as the earliest documents of linguistics. Other scholars used lexical lists as evidence for Sumerian psychology. From an anthropological point of view the Mesopotamian lists were given pride of place in the contrast between oral and literate cultures.

Research into Mesopotamian lexical lists covers a long period of time, a wide variety of texts, and a whole spectrum of interpretative questions. This study will concentrate on Old Babylonian unilingual lists, as exemplified by the lists of trees and wooden objects. In this period (around 1700 BC) lexical lists are generally found on exercise tablets; they were part of the scribal education of the time. The educational function of the list will be a leading perspective of my investigations. In the present chapter I will briefly discuss the history of research (§1.1), the better to define my own approach and the questions I want to ask (§1.2). This will lead to some theoretical and terminological preliminaries. The final section of this chapter provides an overview of the structure of the study (§1.3).

1.1 History of Research

The history of research into Mesopotamian lexical texts may be roughly distinguished into two approaches: the dictionary approach, and the cultural history approach. The dictionary approach treats the ancient lexical texts as sources for our understanding of Sumerian, Akkadian, or the other languages included. The cultural history approach is interested in the uses of the lists, and their intellectual background. The dictionary approach has inspired the publication of editions of the most important lexical series, providing indispensable tools for Assyriological research. These editions have been used extensively by almost every Assyriologist to determine the meaning of individual words or expressions. The cultural history approach ranges from the analysis of the structure of a single lexical composition to the overall characterization of the Sumerian mind through their lexical writings. Some of its most important studies have not escaped controversy. The two approaches are not linked to stages in the history of Assyriology. In fact both have been practised side by side, often by one and the same scholar. In the following I will discuss the most important and most representative studies that have appeared so far.

1.1.1 Lexical Lists as Ancient Dictionaries

By around the middle of the nineteenth century the basics of the Akkadian writing system were

understood. The largest corpus of texts available to scholars was the so-called library of Assurbanipal, found in the ancient city of Nineveh. It was soon realized that another, still undeciphered, language was to be found among the extant tablets. This language proved to be Sumerian⁴. The reconstruction of Sumerian was, and still is, greatly hampered by the absence of any known cognate. The only access was provided by a number of bilingual incantations and other religious texts and by lexical lists. The latter were seen and used as ancient dictionaries, preserving the meaning of the Sumerian words and phrases for whoever was able to read Akkadian. Poebel, who wrote one of the earliest relatively complete and systematic Sumerian grammars (*Grundzüge der Sumerische Grammatik*, 1923) duly acknowledged his dependence upon what he called 'Von den Babyloniern selbst geschaffene Hilfsmittel zum Studium der sumerischen Sprache' (p.7). Having acquired a basic understanding of Sumerian through the lists, the early Sumerologists were able to apply and improve their knowledge of Sumerian with other texts. This development by no means diminished the importance of the lists for Sumerian lexicography. To the present day semantic studies of Sumerian (and, indeed, of Akkadian) invariably cite the evidence from lexical texts as a major source.

The material available in the lists was collected and rearranged for research purposes in A. Deimel's *Šumerisches Lexikon* (1928-1933). Reconstructions of individual lists were published by Meissner, Zimmern, and Landsberger. Matouš (1933) published a collection of lexical tablets in the Berlin Museum. In the introduction he discussed the first millennium version of the thematic lexical series *ur₅-ra = hubullu*. He gave an overview of the series and the *incipits* of its 24 tablets. The Finnish scholars Armas Salonen and Erkki Salonen utilized lexical lists as one of the main sources for their long series of semantic studies, covering such variegated fields as fishing, household utensils, weapons, boats, doors, and many other subjects. In some of these volumes partial reconstructions of lexical lists appeared. It was B. Landsberger who saw the importance of reconstructing all lexical lists in their entirety. In 1937 the first volume of *Materialien zum sumerischen Lexikon (MSL)* appeared. At this moment 16 of a projected 18 volumes are available (volumes 15 and 18 are still unpublished). In a Supplementary Series additional texts and editions are made public. The series has become a monument of Assyriology and an invaluable tool for every researcher.

Today, *MSL* is the main and most important example of the dictionary approach to the lists. The earlier volumes of *MSL* pay little attention to tablet types, regional variation, or context. The editions are mostly compounded from tablets of various origins and types, and it is no easy task to find out what is on an individual tablet. Neo-Babylonian exercise tablets generally combine extracts from lexical compositions and literary texts in a fixed sequence. One searches in vain for such information in the early volumes of *MSL*. Not the tablet, but the text was the main interest. The relevant passage was simply incorporated in the eclectic text, regardless of the context in which it appeared. Without exaggeration, therefore, one can say that *MSL* was designed to provide as many lexical Sumerian-Akkadian equivalences as could be found. The reconstruction of the lexical series was a method, not an aim. From a modern point of view it is easy to criticize this basically a-historical approach. Such criticism, however, is a-historical in itself, since the series was started in another time, with other scholarly needs and questions. In more recent

⁴ The existence of Sumerian as a language independent of Akkadian has long been controversial. The history of this controversy may be found in Weissbach (1898) and Jones (1969). For one of the main protagonists, Joseph Halévy, see Cooper 1991 and 1993a.

volumes of the series the shortcomings of the original format have been recognized. Beginning with volume 12, the editions are preceded by very informative introductions on the history of the composition edited and on the tablets and tablet types on which it is found. It is important when using *MSL* to realize its nature, and to appreciate the strengths and weaknesses of the individual volumes. This is particularly true for research asking questions of cultural history; the kind of questions for which *MSL* was not originally designed.

At the present moment nearly all first millennium lexical texts have been edited in one of the volumes of *MSL*⁵. This is not the case for the unilingual Old Babylonian versions of these same lists. From volume 7 on these versions are systematically included. So far no edition has appeared of the Old Babylonian counterpart to the list of legal phrases *ki-ulutin-bi-še₃ = ana ittišu* (see §2.4.1.3), nor of the 'forerunners' of the list of birds and fish and the list of wild animals. The latter two were to appear in *MSL* 8/3, which never appeared. For the list of trees and wooden objects selected passages were edited in *MSL* 4 and 5, but no systematic reconstruction of the whole composition was attempted.

The earliest lists from Uruk in archaic cuneiform have recently been published in *Archaische Texte aus Uruk*, Volume 3 (Englund and Nissen 1993). The volume is the first in a series of text volumes, intended to cover the whole corpus of archaic cuneiform from Uruk. The lexical lists were given priority, in the expectation that they would prove helpful in the decipherment of contemporary administrative texts. For this reason the volume may be regarded as an example of the dictionary approach. However, the authors provide the reader with all the information needed for an evaluation of the texts from other points of view. There is the necessary information on tablet types, archaeological context, relations with later versions, and the amount of variability found in various compositions. Thus *ATU* 3 marks a new standard in the publication of lexical texts.

1.1.2 Lexical Lists as Evidence for Cultural History

The cultural history approach has always accompanied the use of lexical lists as a dictionary. Within this approach three complexes of questions may be distinguished: the history of the lexical tradition, the uses of lexical texts, and their intellectual background.

1) An early overview of the lexical corpus is found in Meissner's *Babylonien und Assyrien* II (1925). This volume was entirely devoted to Mesopotamian science. This science, according to Meissner, was basically a theology (p.1). All other sciences were subordinate to religious knowledge, including, for instance, cosmology, magic, and mantics. Philology, history, mathematics, and astronomy existed but were not dealt with in a scholarly fashion. Their treatment, according to Meissner, was restricted to areas of practical interest. Against this background he interpreted a wide range of lexical lists as philological tools. Though partly obsolete, his discussion is still well worth reading, not least because of the illustrative quotations from

⁵ The most important exception is Diri, the list of complex signs, which is planned for *MSL* 15. First millennium Akkadian synonym lists (such as *malku* = *šarru*) fall outside the scope of *MSL*.

a wide range of lexical compositions.

More recent histories of the lexical tradition have been written by Civil (1975a; 1995) and Cavigneaux (1983). Both of Civil's articles are short but very informative. Cavigneaux's lengthy article in the *Reallexikon der Assyriologie* contains references to all lexical texts known by that time. By its nature this article is more a bibliography than a history in the strict sense of the word.

2) The uses of lexical texts are primarily studied by means of the tablet types on which the texts are found. The details of such a typology can inform us whether a lexical text was written for subsequent storage in a library, or rather as an exercise to be discarded when the work was done. The typology has been studied most extensively for the Old Babylonian period. One of the most important - and almost forgotten - studies is Chiera's introduction to his edition of the Old Babylonian lists of personal names from Nippur in *PBS* 11/1 (1916). Though lists of personal names are not lexical by modern standards, they belong to the same corpus of school texts, and exhibit the same formal features. Chiera's discussion of tablet types, and of various details demonstrating how such tablets were inscribed, is still useful and has not in fact been superseded. The discussion of Old Babylonian tablet types was not taken any further until the seventies. Civil then not only gave each tablet type a formal label, now generally accepted, but also discussed the relative reliability of the various types for a reconstruction of Old Babylonian lexical lists⁶. Falkowitz planned to devote separate studies to the exercise types found in Old Babylonian Nippur. Regrettably, only one such study appeared, discussing the round, lentil-shaped school tablets (Falkowitz 1984). No attempt has been made so far to study the tablet types as a functional system. For other periods tablet typology has received even less attention. Van Soldt (1991 and 1995) dealt with the typology of Middle Babylonian lexical tablets from Ugarit and Emar. He was able to reconstruct the curricular order of the exercises, and to determine the function of each of the tablet types. Kassite school tablets still await systematic treatment (see, however, Civil 1995). Neo-Babylonian school tablets have been discussed briefly by Maul (1991) and by Cavigneaux (1981). A comprehensive account of Neo-Babylonian school texts from Sippar in the British Museum is being prepared by Petra Gesche.

Another way to approach the use of lexical texts is by an analysis of their contents. To some extent this question was treated by Çiğ, Kizilyay, and Landsberger (1959) in their edition of two Old Babylonian lists of signs, labelled TU-TA-TI and Syllable Alphabet B⁷. The authors demonstrated that these texts were meant for beginners. Most treatments of the contents of the Old Babylonian curriculum, however, are not based upon the evidence of extant exercise tablets, but depend on Sjöberg's classic article on the Old Babylonian school (Sjöberg 1975). Sjöberg's most important sources were the so-called Eduba texts. The eduba is the Old Babylonian scribal school. Eduba texts are literary texts which have as their main theme the school and school life. They depict a school where writing, language, mathematics, and music belong to the main subjects.

3) The intellectual background of the lexical tradition may be studied by analyzing the

⁶ These discussions are found in the introductory sections to the Old Babylonian versions in *MSL* 10-14. Civil's tablet typology is now most conveniently summarized in Civil 1995.

⁷ Both compositions will be treated in §2.4.1.1.

organization of the texts. An important early contribution to this line of research was Schuster's article 'Die nach Zeichen geordneten sumerisch-akkadischen Vokabulare' (Schuster 1938). In this contribution Schuster's first concern was the reconstruction of the first millennium sign lists S^a, S^b, and Aa/Ea⁸. As Schuster perceived, these series are somehow related. In sign lists of this period a sign is linked to a Sumerian pronunciation gloss, an Akkadian translation and in some cases a sign-name. In addition to this horizontal organization the lists have a vertical organization in the succession of signs treated. For the vertical organization Schuster identified a number of principles, including sign form, sign value (sequence according to the vowels u-a-i), and meaning. It was only in 1976 that Cavigneaux, in his unpublished dissertation, made the next serious step. His work concentrated on the horizontal aspect of the bilingual sign list Ea. Some entries are rather far removed from our idea of translation or dictionary, and can only be understood from the reconstruction of complicated lines of reasoning.

Grammatical lists have been studied as a source for understanding ancient linguistics (Jacobsen 1974). Jeremy Black studied the system behind verbal and other paradigms in his *Sumerian Grammar in Babylonian Theory* (1984)⁹. For the understanding of these lists the sequential principles are of vital importance. Much of the information is not found in the single entries, but only in their serialization. The Babylonian scribes sometimes invented impossible Babylonian forms, in order to illustrate the system behind the Sumerian verbal paradigm.

Quite another approach to the intellectual background of the lists is von Soden's essay 'Leistung und Grenze sumerischer und babylonischer Wissenschaft', originally published in 1936. The author's intention was to understand the lists as products of the nature of the Babylonian and Sumerian races. He put a great deal of effort into differentiating between Sumerian and Babylonian contributions to the growth and development of the lexical tradition (pp.413-415; and *passim*). The Sumerian component was most importantly 'Ordnungswille', a driving force that the author saw expressed everywhere in Sumerian culture, from political organization to religion. The Babylonian reinterpretation of the lexical tradition was of a much more practical character. The theological concept of 'Ordnung' was unknown to them, and so they misunderstood the deeper significance of the lists. According to von Soden the Babylonians redefined the lists as dictionaries, even though the format was hardly appropriate for this use (see pp.427-432).

Von Soden's essay contains a comprehensive overview of the Mesopotamian lexical tradition. In a time when the reconstruction of the lists had only begun in a piecemeal fashion this was an ambitious undertaking. His theoretical assumptions are clearly inspired by the racist politics of the time which made the definition of the nature of the Sumerian and Babylonian races an important topic. The failure of both to reach a level of scholarship comparable to that of the ancient Greeks and Indians is finally explained by racial differences. Real scholarship belongs to the nature of the Aryan or Indogermanic race (pp.555-557). In this approach von Soden was not alone. Becker (1985) has demonstrated the racist background of the assumed Sumerian-Semitic conflict which figures as a taken-for-granted historical fact in research and terminology down to the present day. In post-World War II publications the topic was divorced from its anti-semitic

⁸ Lists treated briefly by Schuster are S^c, Diri, Izi, and Kagal. All these compositions will be discussed in Chapter 2 of the present study.

⁹ See also Civil 1994a and Reiner 1994.

and racist overtones, but did not lose its significance¹⁰. In later publications von Soden slightly modified his theses, disposing of the original racist elements, but without altering the basic assumptions that justified them. His explanation of the lists as being founded in the Sumerian 'Ordnungswille' was retained, as well as the intention to differentiate between Sumerian and Babylonian contributions¹¹. That his openly racist original thesis was reprinted twice - adjusted with some bibliographical addenda, but otherwise unmodified - is a black page in the history of Assyriology.

Oppenheim forcefully rejects the naive identification of linguistic, ethnic, and racial categories (Oppenheim 1977, p.48). He dismisses the term 'Ordnungswille' as a quasi-mythological concept. To this critique Larsen rightly adds that 'Ordnungswille' is hardly unique to Sumerian thinking, but rather represents a universal human trait (1987, p.210). Oppenheim stresses what he calls the operational element in the history of the lists. The lists do not coerce the contents of what is written or the thinking of the scribes. They provide a format that is ready for use for all kinds of contents (Oppenheim 1977, p.248f.)¹².

Mesopotamian lexical lists play a prominent role in the theories of literacy by the anthropologist J. Goody¹³. The problem with which his argument starts is the Great Dichotomy: anthropologists and philosophers have proposed numerous explanations to account for the differences in cognitive styles between 'primitives' and modern men. The difference was formulated in evolutionary terms (social Darwinism), or as a difference between 'hot' and 'cold' societies (Lévi-Strauss). Goody argued that the introduction of new technologies of communication may at least partially account for changes in modes of thought. Such changes include the invention of writing, the invention of the alphabet, and printing. Writing is not the mere recording of speech. Writing introduces new textual formats, with new requirements. One example is the list. In a list the words or names are decontextualized, and therefore allow for kinds of analysis that do not come to mind as easily in oral situations. The technique of writing provides new possibilities for the organization and retrieval of data. Among the examples Mesopotamian lexical lists play a prominent role. Goody's theory and the criticisms it has provoked will be discussed more fully in §4.2. Unfortunately, Larsen's complaint that in Assyriology Goody's challenge has generally been met with silence, and that literacy in Mesopotamian society is too much taken for granted (Larsen 1987, p.218), has lost none of its relevance.

1.2 Research Questions

Put in the most general terms, the question that this study seeks to answer is: what is a lexical

¹⁰ The idea of a Sumerian-Semitic conflict was recently revived by A. Westenholz (1993). The conflict is one of the main ingredients in Volk's historical-political analysis of Inanna and Šukaletuda (Volk 1995, especially pp.25-40).

¹¹ See von Soden 1960; 1973; and 1985, pp.138-164. For a critique of von Soden's concept 'Listenwissenschaft' see §4.1.

¹² See also Oppenheim 1978, and §4.1 of the present study.

¹³ The most elaborate version of his thesis is found in Goody 1977.

tablet? Most commentators so far have concentrated on reconstructions of lexical compositions, rather than on the clay tablets on which they are preserved. The first step in all research has been the reconstruction of the composition at hand from the bits and pieces kept in museums all over the world. The second step, if a second step was carried out at all, was the interpretation of the composition thus obtained. However, to understand the actual use of the lexical tradition we need to complete the circle and go back to the physical objects upon which this tradition came down to us. We need to understand why and in what context the text was put into writing. The use of lexical compositions is not a matter of mere speculation. We have first-hand evidence in the actual tablets on which contemporaries copied them. These tablets prove to be exercise tablets, used in the scribal school. Our question will lead us, therefore, to the organization and identity of Old Babylonian education. What can the tablets tell us about the Old Babylonian school, about its methods and the subjects taught? What kind of education is represented by the corpus of school tablets? What did the Old Babylonian teacher try to convey when he instructed his pupils to copy a lexical extract? Mesopotamian lexical texts are usually described as Mesopotamian science. Is this description correct, and what does it mean in the context of the scribal school? The answers to such questions are not found by minute investigations of small details alone. Nor are they revealed by merely sketching the broad outlines of the curriculum or the compositions involved. It is only from a combination of both approaches that a picture emerges which may profitably be interpreted by means of models developed in the social sciences.

I have selected as the focus of my research the Old Babylonian list of trees and wooden objects from Nippur. The concentration on this particular list is inspired by two considerations. In the first place the Old Babylonian period represents a new beginning in the history of the lexical tradition. There is a clear break in the lexical tradition between the end of the third and the beginning of the second millennium. The new tradition that was created has an unbroken transmission until the end of cuneiform civilization. It has been customary in Assyriological publications to label the Old Babylonian versions as 'forerunners' of their first millennium counterparts¹⁴. In the Old Babylonian period thematic lists are always unilingual Sumerian. Implicitly this format is conceived of as an imperfect preliminary stage of the impressive first millennium Sumerian-Babylonian dictionary. The form and function of the Old Babylonian text has, therefore, only occasionally been the object of serious reflection. Due to this perspective, Old Babylonian texts have been edited in *MSL* according to the tablet division in their first millennium counterparts. Thus the edition of the late list of domestic animals is followed by the edition of the corresponding Old Babylonian list (*MSL* 8/1). This obscures the fact that in Old Babylonian Nippur the list of domestic animals represents only the first section of a text that continued with wild animals and meat cuts (see §2.4.1.2). From an Old Babylonian perspective the first millennium versions appear as late descendants, sometimes as deformations of an original creation of the Old Babylonian scribes. Taking a point of departure in this period promises to provide a fresh look at the history of the lexical tradition. The second reason to concentrate on the Old Babylonian list of trees and wooden objects is that this composition has remained unpublished so far. Making an edition of this list is a direct way of becoming familiar with the corpus and its problems.

¹⁴ For a critical discussion of the term 'forerunner' see Farber 1993. Curiously, the only text type for which he finds the term justified is the Old Babylonian lexical list.

The intention of this study is to combine a variety of approaches and questions, to understand the organization, use, and function of a single lexical composition as an example of the lexical tradition in Mesopotamia. In order to understand the Old Babylonian lists of trees and wooden objects we will broaden our scope to the scribal school. We will locate the list in the scribal curriculum, and define its function among other exercises. At the same time we will narrow our scope to the individual tablets on which the composition is found. The educational unit in the school is not in the first place the lexical composition but the extract tablet. The relation between extract and composition will be one of the main points of interest. Variants found in the individual tablets will have the status of major witnesses.

This approach has not been attempted before, and poses a number of new or relatively new methodological problems. In the first place the focus on the tablet rather than on the reconstructed text seems to be contradicted by the effort put into the reconstruction of the list of trees and wooden objects in Chapter 5. In fact, such a reconstruction is inevitable. Unlike most Medieval or classical Greek and Roman compositions, we never have a single manuscript which may be regarded as the 'best' manuscript by whatever criterion, and which can be used as the main text. Most of our manuscripts were inscribed with no more than an extract of 2, 10, or 150 lines. Moreover, all or nearly all of them are broken; a small fragment is usually all that remains. It is a matter of practical necessity to reconstruct a composite text from the shattered fragments. This is often the only way that fragmented or half-erased tablets become legible. The methodological focus on the tablet rather than on the reconstructed text must not be taken to imply that each tablet has to be studied as an isolated piece of evidence. Furthermore, the reconstructed text has an important function as a frame of reference. An extract is always an extract from something, and implicitly refers to the entire composition from which it is taken. In our discussion of the organization of the list of trees and wooden objects the point of departure is the composite text. However, wherever variants are encountered the evidence is traced back to the individual tablets. For this approach the edition has to comply with specific requirements. It must be possible to examine the reconstructed text as easily as the individual tablets. The methodological questions concerned and the editorial techniques used are discussed in more detail in the introduction to the edition in Chapter 5.

The second methodological problem is inherent to the matter of the representativeness or non-representativeness of the list of trees and wooden objects. In analyzing the organization of this list, do we learn anything about other Old Babylonian lexical compositions? The organization of the list is uncovered by analyzing sequences, and by identifying the principles that govern such sequences. If, however, the principles identified turn out to be specific for this single list, their existence as principles may well be doubted. They may be due to sheer chance. As a matter of fact this possibility can never be completely excluded. The problem of representativeness cannot be definitely solved. It may be accounted for, however, by referring to other lexical compositions whenever relevant. It turns out that the list of trees and wooden objects is representative in some aspects, but not in all. It differs significantly on a number of points from other contemporary lexical texts. Both the unique and the common features will be discussed, so as to obtain a differentiated picture of the Old Babylonian lexical corpus.

The third methodological problem may be summarized under the heading 'knowledge and literacy'. Our evidence for Mesopotamian society and culture is restricted to those material objects which have survived the centuries. Clay tablets with writing happen to be among such

objects in great numbers. It would be a great mistake, however, to extrapolate from these inscribed objects directly to Mesopotamian thinking or mentality. Writing is a technique that may be put to different uses. Cultures vary enormously in these uses. In Mesopotamian culture the uses of literacy vary over time and place. The totality of what is put into writing is not equivalent to the totality of the knowledge available at a given point in time. It will be necessary to analyze the reason why something was written down to understand what the relation is between a text and the culture that produced this text. To understand the intellectual background of lexical lists we need to understand the uses of literacy in the period under consideration, and how these uses apply to lexical tablets. The written corpus has a context in an intellectual environment which is in all probability much wider in content and method, and may be considerably more variegated. The term oral tradition is hardly suitable to refer to this wider circle because it not only includes compositions transmitted orally, but also ways of reasoning and interacting intellectually, which are institutionalized in the sense that they obey standardized patterns. Precisely because such matters leave little or no trace in the written documents, there is little hope of being able to reconstruct the wider intellectual environment of the lexical lists to any degree of completeness. The awareness of the limited nature of our corpus may sharpen our eyes for whatever traces the texts yield of this 'unwritten' intellectual context.

These methodological issues will be taken up again in the appropriate chapters. The relation between reconstructed text and individual tablet may be reduced in the main to a technical problem, which may be solved by technical means. The other two points, however, touch upon matters of a more principled nature and show some of the fundamental limitations to our knowledge of the past.

1.3 Structure of the Present Study

The argumentative part of this study is divided over three chapters. Chapter 2 deals with the Old Babylonian lexical tradition. The corpus is described principally as an educational corpus. The primary aim is the reconstruction of the sequence in which the scholastic compositions were taught. This reconstruction is based upon the analysis of the co-occurrence of different exercises on the same tablet. This will lead to a new picture of the scribal curriculum. The compilers of the Old Babylonian lists did not start from scratch. The description of the Old Babylonian school and its curriculum is therefore preceded by a short treatment of third millennium lexical lists. The chapter is concluded with a discussion of the transmission of the lexical corpus to later periods.

In Chapter 3 the focus will be narrowed to one lexical composition: the Old Babylonian list of trees and wooden objects from Nippur. We will investigate the organization of this list on different levels of analysis. It will turn out that some of the organizational principles identified in the Old Babylonian text are, at the same time, generative principles, governing the development of passages over time and the production of new items. The comparison of the Nippur text with later versions of the list is, therefore, an essential part of the analysis. Moreover, the relations with other lists and with literary texts are discussed. By doing so, the focus is widened again to investigate the place of the thematic lists in the Stream of Tradition.

In Chapter 4 the results of our investigations are used for a more theoretical evaluation. We will introduce the concept Science of Writing, and defend its plausibility by referring to theories on

the sociology and history of knowledge. By necessity Chapter 4 is the most speculative part of our inquiry. It tries to make sense of the data discovered by comparing them with models developed in other disciplines.

Chapter 5 provides the textual basis for our discussions. It contains an edition of the Old Babylonian lists of trees and wooden objects, with a philological commentary and a tablet catalogue. The Nippur version constitutes the core of this edition. A number of non-Nippur tablets are edited separately. The reconstruction of the Nippur version is based upon more than 350 tablets and fragments mainly from the museums in Philadelphia, Jena, and Chicago, nearly all of which have been examined by autopsy. These fragments allow for an almost complete reconstruction of the roughly 700 lines of the list. As argued above the reconstruction is a modern reconstruction which does not and cannot truly reflect a text that existed in antiquity. It is, therefore, of prime importance to be able to switch from the reconstruction to a single tablet, and *vice versa*. For that reason the edition is also provided in a digitalized version, in the form of a database. In the database the text may be approached in different ways, simply by changing the active index.

Chapter 5 is followed by two appendices. The more important of these is the description of the Catalogue of Nippur Lexical Texts in Appendix 1. This catalogue is the main corpus of data on which the description of the Old Babylonian curriculum is built, and is therefore of prime importance to the argument in Chapter 2. Appendix 1 describes the contents of this database, and gives an impression of its reliability and its relative completeness. Appendix 2 contains two concordances of the sigla used in this study (museum number - siglum and previous publication - siglum). The study concludes with a number of plates with handcopies of some of the cuneiform tablets edited in Chapter 5.

Chapter 2 Old Babylonian Thematic Lists in their Educational Context

Mesopotamian lexical lists are of various kinds. A major distinction may be made between word lists and sign lists. Sign lists treat the (Sumerian) values of signs, and often add an Akkadian translation. Word lists include thematic lists, acrographic lists (ordered by the first or main sign of the word), and synonym lists. The series ur_5 -ra = *hubullu* is the most important thematically arranged word list. It covers a variety of subjects, such as trees, wooden objects, reed and reed objects, metals, animals, stones, plants, clothing, geographical names, and foodstuffs. Strictly speaking ur_5 -ra = *hubullu*, or in short ur_5 -ra, is the name of the post-Old Babylonian version only. Sumerian ur_5 -ra and its Akkadian equivalent *hubullu* denote a kind of loan. It is the *incipit* of a series of business expressions which fill the first two tablets of the late recension. These two tablets were added after the Old Babylonian period. The *incipit* of the Old Babylonian version is ^{gis}taskarin (boxwood). In this study the term 'Old Babylonian ur_5 -ra' will be used as a convenient, though anachronistic, label.

Old Babylonian ur_5 -ra was not created *ex nihilo*. Therefore, we will first pay attention to earlier thematic lexical texts.

2.1 Third Millennium Predecessors

2.1.1 Archaic Lexical Lists

The archaic lexical lists have recently been edited by Englund and Nissen (1993). The corpus mainly consists of small fragments, the majority of which could be attributed to one of several compositions, most of which are known from later third millennium sources. The identified lists include lists of professions (LU A), Fish, Cattle, Vessels, and Wood¹.

There is no way of knowing the degree to which the archaic lexical corpus may be taken as a representative sample. Archaeologically all tablets derive from secondary contexts. The layers in which they were found were disturbed by building activity from a much a later period. The tablets were removed from their original place of storage. What we have, therefore, is not an archive or a library, but the scattered remains of something that can no longer be reconstructed. Some 125 fragments could not be attributed to any composition. It is possible that some of these belong either to one of the known compositions, or to one as yet unrecognized. Other pieces may not belong to any standardized composition but may be incidental lists of words, or perhaps incipient compositions which were later abandoned. An example of this last possibility may be the so-called Swine list. The two tablets subsumed under this heading only share occasional entries and do not represent one common text. Still, both follow more or less the usual format of the archaic lexical texts. Each entry is preceded by the item sign (the sign otherwise used for the numeral 1), and contains a sign that is interpreted as ŠUBUR (swine)².

¹ The lists are given their conventional labels here. For a summary of the contents of these and other archaic lists the reader is referred to the introduction to Englund and Nissen 1993.

² The interpretation of this sign, however, is controversial. Another option is 'servant' (Steinkeller 1996,

Research in the archaic lexical lists is still in its infancy, since the textual basis for such research has only been available in a useful format since 1993. The reconstructions prove that from the outset the archaic lists were standardized. The variants in writing and order of the items are mostly marginal³. More difficult is the matter of the textual status of these lists. So far no fragment may be shown to have contained a single composition in its entirety. All the pieces are exercises which excerpt a larger composition. Probably these larger compositions primarily existed in the memories of those who had learned them by heart, and were, as such, rarely put into writing.

Archaic lexical lists were found together with large numbers of contemporary business documents. The kind of notation that is used in these business documents has a very limited need for verbs - if any. It seems that writing was conceived of as a series of signs, representing either things in the real world, or numbers. This may explain why the archaic lexical lists are lists of nouns. The system of writing in these documents does not reflect the grammar of the language. Rather, it more or less reflects the structure of the bureaucratic operation recorded⁴. From the very beginning words for trees and wooden objects, fish, and birds are graphemically indicated by a special sign, the so-called determinative. Determinatives have no pendant in the language. They establish a direct relationship between graphemics and semantics. For this reason it often makes little difference whether we consider the lexical lists as being organized by thematic or by graphemic principles.

There is no one-to-one relation between the repertory of signs and words in the lists, and the vocabulary used in business documents. The archaic lexical lists contain numerous items which never appear outside this corpus. The list of vessels has a number of compound signs consisting of the sign for vessel (DUG) inscribed with some commodity. The compound sign denotes a vessel intended for, or filled with, that commodity. Some of these signs are attested in business documents but most of them are not. Such signs were labelled theoretical signs by Krispijn (1992, p.14). The term is felicitous because the signs demonstrate to us as well as to the ancient student the theoretical possibilities of the writing system. The list does not merely enumerate existing signs, but demonstrates one element of the system behind the sign inventory. Another case in point is the list of officials called LU A. It is very probable that this text gives a hierarchical inventory of professions and bureaucratic titles. The first entry - NAMEŠDA - is presumably the title of the highest official of archaic Uruk. Most of the signs used in this list are well known and widely used outside the lexical corpus. However, the signs are combined to refer to professions which never or hardly ever appear in administrative texts. In fact there are only a few entries in LU A which are attested elsewhere⁵. Various explanations may be put forward. The hazards of excavation may have yielded an unbalanced picture. A more plausible explanation is

p.212f.).

³ The exception is the Wood list, which is only standardized in its first section.

⁴ For the role of layout in the archaic documents see Green 1981.

⁵ On the archaic LU list see Nissen, Damerow, and Englund 1990, pp.153ff. There the officials that appear in business documents are discussed.

that some professions are more likely to appear in the administrative record than others. The list represents the hierarchy of archaic Uruk; the question of whether the entries listed were likely to occur in business documents was of no relevance to its compiler. If the lists were nothing but reference books for scribes in the administration, then the design and subsequent transmission of signs and entries which never appear in their records would seem to be unmotivated and useless complications. But the lists were more than just that. The apparent reason for the composition of the early lists was to facilitate, explore and expand the new recording technique.

2.1.2 Later Third Millennium Sources

Textual finds from Fāra in Southern Babylonia and Abū Ṣalābīkh in Northern Babylonia show that in around 2600 BC there was a standardized corpus of lexical and literary texts. In essence the lexical corpus is the same as that from archaic Uruk. Some lists are slightly reworked (the list of Animals⁶), others have been copied virtually verbatim (LU A). The god list is an example of a text not attested before. Since the history of this corpus has recently been studied by several authors⁷, I will restrict the discussion to some characteristics of prime importance in the present context.

The most striking feature of the third millennium lexical tradition is its textual stability. Texts copied over several centuries and in different centres in and outside the Mesopotamian heartland hardly changed. Most of the published sources originate in the first half of the period under discussion. It is now becoming increasingly clear that in the period of the Third Dynasty of Ur (2100-2000) the same texts were still in use⁸, at least in Nippur. By that time some of them had a history of about a millennium. The list that is found in most exemplars is the list of professions (LU A). It was devised in the archaic period and was still copied occasionally in Old Babylonian times⁹. Nearly every site where third millennium school texts have been found yielded at least one copy. The social and political changes that affected Mesopotamia during the third millennium must have made this list obsolete at an early period. The text commonly labelled Early Dynastic LU E is a modernized list of professions¹⁰. Here we find well-known titles and professions such as dub-sar (scribe), ensi₂ (governor, or king), and nu-banda₃ (supervisor), not found in LU A. Even though LU E was clearly more up-to-date in its contents, it never replaced LU A, which continued to be copied long after LU E was apparently forgotten.

The uses and the system of writing changed profoundly during the millennium between the

⁶ See Veldhuis 1995.

⁷ Cavigneaux 1983, pp.612-616; Nissen 1981; Michalowski 1987; see further the editions of most important lists by Pettinato in *MEE* 3 (1981) and the introduction to Englund and Nissen 1993.

⁸ See §2.1.4

⁹ See the edition in Arcari 1982, and for the archaic sources Englund and Nissen 1993. Add further the prism fragment *FAOS* 2/1, Tafel 92 F20 (Old Babylonian; Kisurra). Old Babylonian copies with glosses are: *UET* 7, 86; U. 30497 (Civil 1983b, p.1 with n.2); and BM 58680 (unprovenanced).

¹⁰ See *MEE* 3, pp.27-46.; and *MSL* 12, pp.16-21, in particular the introduction p.16.

earliest texts and the start of the second millennium. From a one-purpose system, devised to record administrative transactions it grew into a multi-functional device, used for such different things as royal propaganda, long-distance communication (letters), magic, proof of ownership of land, and poetry. The system of writing underwent profound changes, both in the design and in the uses of the graphemes. All this means, again, that by early in the third millennium the lexical lists must have been out of date. We are, therefore, all the more impressed by the force of the tradition that kept them in use.

The stability of this tradition, however, should not blind us to changes in use. The later third millennium sources are not the products of pupils¹¹. They are almost always written by advanced scribes. In most cases a tablet has the entire text of one lexical list. The archaic lists were apparently created as educational tools. In F_{ra} and Ab_{alabikh} the lists have turned into sources of esteemed knowledge of high antiquity.

2.1.3 Ebla

A special place within the history of lexical lists is occupied by the finds from the ancient town of Ebla (modern Tell Mardikh in Syria). This town adopted the cuneiform system of writing in the twenty-fourth century BC. Together with the writing system the literary and lexical tradition was imported¹². Literacy was transmitted from Kiš, which was the most important centre in Northern Babylonia¹³. The lexical texts found in Ebla basically represent the same tradition as that known from Mesopotamia a few centuries before¹⁴. In some respects, however, this corpus is adapted. There is a large bilingual Sumerian - Semitic¹⁵ list. Well-known lexical compositions were sometimes written in unorthographic spelling¹⁶. In these texts the entries are not given in the common orthography, but provide the pronunciation of the Sumerian words. In the so-called Ebla syllabary we find another innovative use of a traditional composition. This syllabary is a sign list that uses the order of the items in the list of professions LU A as its main organizational principle (Arcari 1983). These novelties reflect an environment where Sumerian had no tradition and where the need for such tools was felt more deeply than in the Sumerian heartland. Whether this environment was Ebla or Northern Babylonia is a question that cannot be settled here.

¹¹ Exercise texts from this period, mostly exercise business documents, are treated by Foster 1982.

¹² See Michalowski 1987 and Archi 1992.

¹³ There are indications that Mari also played a part in this process. See Archi 1992, pp.22-23.

¹⁴ The Ebla lexical corpus was published by Pettinato in *MEE* 3 and 4.

¹⁵ The Semitic language attested in Ebla is now regarded by most writers as an early form of Akkadian or a closely related language. See Michalowski 1987; Huehnergard 1996, p.259f. with note 38; and Krebernik 1996.

¹⁶ Civil 1982; Krispijn 1982; Krecher 1983.

2.1.4 The Third Dynasty of Ur

The third millennium ends with the Third Dynasty of Ur (Ur III). This dynasty (ca. 2100-2000), which united all of Southern Mesopotamia under its rule, has left us tens of thousands of administrative tablets. To the most important king of this dynasty, Šulgi, a large number of organizational and religious reforms are attributed. These reforms affected the organization of the army, the system of taxes, administrative procedures, and the deification of the king. Moreover, Šulgi is said to have reformed the writing system and the scribal school¹⁷. It is often assumed that the new lexical and literary corpus which emerges all of a sudden in the Old Babylonian period goes back to the literary creativity of the Ur III period, and to the reforms claimed by Šulgi¹⁸. The evidence, however, requires a more balanced picture.

The core of the Old Babylonian literary corpus was created in the Ur III period. This can be argued first of all from its contents. There are numerous royal hymns in praise of Ur III kings. Moreover, the epic stories glorifying the ancient kings of Uruk, Gilgameš, Enmerkar, and Lugalbanda, were ideologically important to the kings of the Ur III dynasty who had adopted these kings as their ancestors. The Ur III roots of the literary tradition have been confirmed by the finding of a number of fragments of contemporary manuscripts. The Ur III literary corpus cannot possibly be identical to the Old Babylonian corpus. A number of compositions were added - such as the royal hymns for early Old Babylonian kings. Other compositions may have been abandoned or reworked. In detail the relation between the two corpora is largely unknown. In those cases where we can actually compare an Ur III fragment with the Old Babylonian version a highly differentiated picture arises¹⁹. The Ur III manuscripts of the 'Curse of Agade' differ in spelling to their later counterparts, but essentially bear the same text. The same relation is found in the Temple Hymns, but the Ur III 'Lugalbanda' fragment exhibits a text that differs in more important ways from the known Old Babylonian recension²⁰.

For the lexical corpus an entirely different picture emerges. Ur III lexical texts hardly bear any similarity to Old Babylonian school texts. A number of lentil-shaped tablets from Nippur, previously treated as Old Babylonian exercise texts, were dated by Zettler to the Ur III period on archaeological grounds²¹. Among these only one has a possible relation with an Old Babylonian composition (Proto-Izi II). However, both the archaeological context of this tablet and its attribution to Proto-Izi are uncertain, and therefore inconclusive²². Another group of lentil-shaped tablets was claimed to be Ur III by Weidner (1914)²³. Since these tablets were acquired

¹⁷ For Šulgi's reforms see Steinkeller 1987, pp.16-17.

¹⁸ See e.g. Hallo 1989.

¹⁹ See Michalowski 1981, p.2

²⁰ For the Ur III literary texts see Civil 1973, p.171 n.3; Civil 1985a; Michalowski 1985, p.216-217 and n.3; Alster 1993.

²¹ Zettler 1991.

²² The tablet was found in a fill. See Zettler 1991, p.258, and the catalogue on pp.263-274.

²³ The tablets were recently discussed by Alster (1993). At the time of Weidner's publication, the lentils

on the antiquities market their dating is based exclusively on palaeographic arguments. The elaborate and archaizing style of writing which led Weidner to his conclusion is by no means unusual for Old Babylonian school texts.

Extant Ur III lexical texts reproduce the third millennium tradition. We find the same lists of professions, birds, and fish well known from archaic sources and beyond²⁴. A most interesting exception from Nippur was published by Civil (1973, p.177)²⁵. It was dated by him as pre-Ur III, but the writing suggests an Ur III date (Cavigneaux 1983, p.616). The tablet is oblong in shape, and has 37 lines altogether. The beginning of the obverse, which is badly damaged, exhibits short sections on birds, liquids, and plants. Then follows a relatively long section on earthenware. The passage contains words for vessels (13-20), and ovens (21-22):

13	^{dug} kur-ku-ru ₂	large vessel for oil
14	^{dug} dur ₂ -bur ₃	fermenting vat
15	^{dug} GAR ₃ -me	
16	šika-dal	
17	šika-KAL	
18	šika-KAL	
19	šika-KAL	
20	šika-ugur ₂ -bal	vessel for beer production
21	^{im} durun-na	oven
22	^{im} NE-DU-DU	

belonged to Peiser. After the latter's death, his collection was bought by De Liagre Böhl. Three of the four published lentils have been located in the collection Liagre Böhl, property of the Dutch Institute for Near Eastern Studies (NINO) in Leiden: P.375 = LB 994, P.376 = LB 996, and P.371 = LB 995. The last number was identified by Wim Burgaaff, to whom I express my sincere thanks for his help in the Böhl collection. In the same range of LB numbers there are a few other lentils with area measures, wooden objects, and personal names. The copies by Weidner are excellent. The holes in LB 994 and LB 996, described by Weidner (1914, p.304), are certainly not for placing the tablet on a wall. They are finger grips for stabilizing the lentil in the hand (see for Nippur examples Falkowitz 1984, p.20). LB 995 (P.371) is a forerunner of ur₅-ra 8-9, which follows the Nippur text (*MSL* 7, p.191: 110-111; not used there). The style of all four lentils is the Nippur style, with two model lines copied by a pupil on the same side. The same type, however, also appears in Isin, whereas Nippur lentils occasionally have divergent formats (Falkowitz 1984). LB 994 (P.375) is probably Old Babylonian Proto-Lú 236 and 235 respectively. The variant EN.^dINANNA (for EN.ME.^dINANNA) also appears in Proto-Diri 383. The order of the items on the lentil corresponds to Proto-Diri. However, the lentil can hardly be Diri, since Diri always includes an Akkadian rendering. The other two pieces in Weidner's publication are proverbs (Alster 1993, p.4 nt.10).

²⁴ Lagaš: Birds: *ITT* II/2, 5898 + *ITT* V, 9251 (see Civil and Biggs 1966 and *MEE* 3, p.275). Nippur: LU A: 6N-T476 + 477 (see Civil 1984a, p.8). Additional unpublished 6N-T pieces are mentioned in the footnotes to the introduction to Englund and Nissen 1993. Unprovenanced: List of Names and Professions (Fales and Krispijn 1980). The Nippur name list NBC 11202 = 5N-T75 published by Cohen (1993) was dated by the editor to early Ur III or late Sargonic. This text does not belong to any of the well-known third millennium lists, although there is a duplicate of unknown origin (likewise published in Cohen 1993). Civil and Biggs 1966 (p.8 n.1) mention the Ur III bird list from Nippur A 31267. This number does not appear in the footnotes in Englund and Nissen 1993. The number may be an error for A 31247 = 6N-T681.

²⁵ CBS 7269; collated.

Lines 17-19 correspond to the Old Babylonian list of vessels lines 99-101 (*MSL* 7, p.204), where we find dug-KAL instead of šika-KAL²⁶. From other sources we know that there are three different readings for dug-KAL: dug-urru₂ (Akkadian: *urrupum*); dug-zurzu₂ (Akkadian: *šuršupum*); and dug-silima₂ (Akkadian: *hupšašûm*)²⁷. Most other items are found in the Old Babylonian text as well²⁸. Although the text can hardly be considered a 'forerunner' of the Old Babylonian list of earthenware, it does show that apart from the ancient lexical tradition there were other elements which contributed in one way or another to the composition of the Old Babylonian lists.

2.2 Old Babylonian Lexical Findings.

The lexical finds from the Old Babylonian period differ strikingly from their third millennium counterparts. All existing lists were reworked and expanded to cover such important topics as reed and reed objects, stones, and heavenly bodies. The thematic lists were arranged in the series ur₅-ra = *hubullu*. New types of lists were composed, including lists of simple and complex signs, and elementary lists designed to teach the fundamentals of cuneiform writing. The fixed and stable third millennium lexical tradition was replaced by a variety of fluid local traditions. Textually the relation between the third millennium lexical lists and their Old Babylonian counterparts is still largely unclarified. The animal list which goes back to archaic Uruk has a repetitive character. A set of qualifications is repeated for various types of cattle. This character is partly retained in the cattle section of Old Babylonian ur₅-ra. The Old Babylonian list of birds may be regarded as a reworked version of its third millennium ancestor (Pettinato 1978, p.173; Black and Al-Rawi 1987, p.117). In other lists, such as the metal list, the relation between the third and second millennia traditions is not that clear, or has not been sufficiently investigated. The Old Babylonian corpus was certainly not created from nothing. However, both in general and in detail, there are so many differences from the earlier tradition that we can safely speak of a fresh start.

The lexical tablets we have are unevenly spread over the period and the geographic area that is covered by the label Old Babylonian. We will begin our discussion of the lexical corpus and its

²⁶ For šika instead of dug in Ur III Nippur see Sallaberger 1996, p.17 n.81 and p.33f.

²⁷ In later traditions there is a fourth reading dug-ursub₂ (Akkadian: *uršuppu*). Bilingual evidence is most conveniently collected in *CAD* S sv *šuršuppu*. Old Babylonian Proto-Diri, Old Babylonian, and Middle Babylonian ur₅-ra have three items dug-KAL. For Middle Babylonian ur₅-ra see *MSL* 7, p.115: 21-23 (Alalakh); *Emar* VI/4, p.87: 8'-10'. None of the Ugarit texts has been published so far (see Van Soldt 1995). See now Sallaberger 1996, p.51 and p.102 sv dug-KAL.

²⁸ The items ^{im}durun-na and ^{im}NE-DU-DU were discussed by Civil 1973. The other items are treated by Sallaberger 1996, and can be found in his Sumerian glossary pp.95-109. Line 15 was read by Sallaberger (p.108) dug-ubur-me(?). The entry is listed under the heading dug ubur-imin-bi ('seven-teat vessel'). In Sallaberger's reading the word may be interpreted as a 'vessel with teats'. However, the sign transliterated ubur by Sallaberger remains a problem, indicated by his question mark. According to Sallaberger (personal communication) the sign cannot be GAR₃, but must be an imperfectly written UBUR or perhaps an AMAŠ (ubur_x).

institutional context with a historical overview.

2.2.1 Early Old Babylonian Period

The end of the third millennium was marked by the destruction of the Ur III empire. The period that follows, the Old Babylonian period (2000-1595), is characterized by political fragmentation and instability. In the early Old Babylonian period the city states of Isin and Larsa alternate in their claims to sovereignty over Southern Babylonia (2000-1763). Nippur, in the northern part of this area, continually changed hands. In his thirtieth year (1793) Rim-Sîn of Larsa²⁹ finally defeated Isin. He remained in power for another thirty years. Only a few lexical tablets may with some degree of confidence be dated to the period before 1763. They derive from Larsa³⁰ in the south and Kisurra³¹ in the vicinity of Nippur. Cavigneaux has argued that the so-called Scherbenloch in Uruk, which contained a mixture of school texts, administrative texts and letters, represents a coherent archive, to be dated between Rim-Sîn 32 and 43 (Cavigneaux 1996, pp.1-5). Accordingly the Uruk school texts belong to the end of the early Old Babylonian period³². The lists of stones from Larsa (*BBVOT* 3,1) and Uruk (Cavigneaux 1996, text 170) are closely related to the versions from Isin and Nippur, but differ in the order of the first few sections:

Larsa/Uruk (Early O.B.)	Nippur/Isin (Middle O.B.)
^{na₄} ka-gi-na	^{na₄} ka-gi-na
^{na₄} esi	^{na₄} esi
^{na₄} nu ₁₁ -gal	^{na₄} (giš)-nu ₁₁ -gal
^{na₄} du ₈ -ši-a	
	^{na₄} a ₂ -šuba
^{na₄} algameš(SAL-HUB ₂)	^{na₄} algameš(UD-SAL-HUB ₂)
^{na₄} a ₂ -šuba	
	^{na₄} du ₈ -ši-a

In detail the four versions all differ from each other. In the following table the best preserved versions, Larsa³³, Isin, and Nippur, are compared:

-
- ²⁹ For the political career of Rim-Sîn and his significance see Van de Mieroop 1993.
- ³⁰ School texts are found scattered through Arnaud *BBVOT* 3. They include lists of names, Proto-ki-ulutin-bi-še₃ Syllable Alphabet A (84 rev.), ur₅-ra (stones), mathematical tables, and literary texts.
- ³¹ Kienast, *FAOS* 2. School texts include thematic lists (among them an Old Babylonian ED LU A), a mathematical table, and a literary text.
- ³² The corpus of Uruk lexical texts published by Cavigneaux is most remarkable and deserves a thorough analysis. It contains a number of elementary exercises (including Syllable Alphabet A; see §2.4.1.1) and many advanced lists (Diri and Ugu-mu see §2.4.1.3), but relatively little that falls in between. Similarly, the lentil-shaped tablets (see §2.3.3.4) contain mostly either Syllable Alphabet A or literary extracts, the two ends of the curricular phase in which lentils were used (see §2.4.2).
- ³³ For a comparison between the Larsa and the Uruk versions see Cavigneaux 1996, p.83.

Larsa ³⁴ (early O.B.)	Isin ³⁵ (middle O.B.)	Nippur ³⁶ (middle O.B.)
1. ^{na₄} ka-gi-na	1. ^{na₄} ka-gi-[na]	1. ^{na₄} ka-gi-na
2. ^{na₄} ka-gi-na-ti ¹ -la	2. ^{na₄} ka-gi-na-t[i-l]a	
	3. ^{na₄} ka-gi-na-kal-ga	
	4. ^{na₄} k[a]-gi-na-zalag ₂ -ga	
	5. ^{na₄} k[a]-gi-n[a-	
	6. ^{na₄} [ka-gi-na-d]ib-ba [?]	
3. ^{na₄} kišib-ka-gi-na	7. ^{na₄} [kišib]-ka-gi-na	2. ^{na₄} kišib-ka-gi-na
4. ^{na₄} lagab-ka-gi-na	8. ^{na₄} [lagab]-ka-gi-na	3. ^{na₄} lagab-ka-gi-na
5. ^{na₄} ellag ₂ -ka-gi-na		
6. ^{na₄} esi	9. ^{na₄} esi	4. ^{na₄} esi
7. ^{na₄} nu ₁₁ -gal	10. ^{na₄} [gi]š-n[u ₁₁]-g[al [?]]	5. ^{na₄} giš-nu ₁₁ -gal
8. ^{na₄} kišib-nu ₁₁ -gal	11. ^{na₄} [kišib-giš-nu ₁₁ -gal]	6. ^{na₄} kišib-giš-nu ₁₁ -gal
9. ^{na₄} lagab-nu ₁₁ -gal	12. ^{na₄} [lagab-giš-nu ₁₁ -gal]	7. ^{na₄} lagab-giš-nu ₁₁ -gal
10. ^{na₄} ellag ₂ -lagab-nu ₁₁ -gal		

The writing ^{na₄}nu₁₁-gal in the Larsa text for ^{na₄}giš-nu₁₁-gal in the other two versions is not a distinctive trait. The same variant appears in two of the Nippur sources used in the reconstruction of the text in *MSL* 10. Compared to the Isin and Nippur versions, the most important difference in this opening section is the addition in the Larsa text of the ellag₂ items (lines 5 and 10)³⁷. Throughout the stone list kišib (seal), lagab (block), and ellag₂ (bead) recur as a stock triad for nearly every kind of stone. If we were to see these versions as stages in historical transmission, we would expect to find such systematic features growing in importance. It is surprising, therefore, to see that the ellag₂ items are omitted by the later texts. The Middle Babylonian Ugarit version (*MSL* 10, p.38) reinserted the items, followed in this by the first millennium recension. The example merely illustrates that a one-way chronological picture of textual transmission will not do. There is no way of deciding whether the differences are due to a

³⁴ Arnaud, *BBVOT* 3,1.

³⁵ IB 1624, unpublished.

³⁶ *MSL* 10, p.54f.

³⁷ The ellag₂ items are missing in the early Old Babylonian Uruk text, which otherwise is very similar to the Larsa version.

diachronic development of the stone list, to the peculiarities of the local tradition in Larsa, or to mere chance.

Among the Kisurra school texts there is a prism (*FAOS* 2/1, 181) which lists stones³⁸, immediately followed by geographical names. This sequence differs from the tradition observed in Nippur and in all post-Old Babylonian versions. There the stones are followed by plants, fish, birds, and clothing, and only then the geographical names. Despite these differences the Kisurra list clearly represents an *ur₅-ra* recension.

From Sippar, in Northern Babylonia, we have an early Old Babylonian list of birds³⁹. Significantly, this list is in Akkadian, whereas Southern Babylonian thematic lists are invariably in Sumerian. The Sippar text bears no resemblance whatsoever to any earlier or later lists of birds. Sumerian was at home in literate circles in the south, but was not so firmly rooted in the north. It is possible that in the early part of the second millennium the northern lexical tradition was relatively independent, with less emphasis on the Sumerian heritage. For the time being, however, the Sippar bird list is an isolated piece, and this interpretation must remain speculative.

2.2.2 Middle Old Babylonian Period

In Babylon, formerly an insignificant city in Northern Babylonia, an Amorite dynasty had come to power. Hammurapi, the most successful king of this dynasty who reigned for over 40 years, defeated Rim-Sîn of Larsa in 1763, moving the centre of political power to the north. This event is taken as the beginning of the middle Old Babylonian period. Hammurapi united Northern and Southern Babylonia under his rule. After his death in 1750 he was succeeded by Samsuiluna. Initially this succession did not cause any major political troubles. From Samsuiluna's ninth year onwards, however, southern cities acknowledged the rule of Rim-Sîn II of Larsa. Only two years later, in 1739, important cities such as Ur and Larsa completely disappear from the record. Apparently a crisis had hit the area. Nippur and Isin in the northern part of Southern Babylonia were affected but survived. In his 29th year (1721) Samsuiluna lost control over Nippur to Iluma-Ilu, king of the Sealand. Shortly afterwards the city was abandoned. Isin had met the same fate a few years earlier⁴⁰. Stone (1977), who describes the Nippur evidence in detail, attributes the crisis to a number of social, economic, and political factors. Armstrong and Brandt (1994), arguing from archaeological data, demonstrate that the de-urbanisation of the area is better explained by an interruption in the water supply.

The great mass of the extant Old Babylonian lexical tablets derive from Nippur. This city never had any political power. It was both a religious centre⁴¹ and a centre of learning. Its school was

³⁸ The stones section is edited in *MSL* 10, p.62.

³⁹ Black and Al-Rawi 1987.

⁴⁰ See the summaries of the excavation results in Hrouda 1977, pp.147-148; and Hrouda 1981, pp.199-201. The latest dated tablet is Samsuiluna 26.

⁴¹ For Nippur in the Old Babylonian period see Stone 1987 and Robertson 1981, pp.47-51.

regarded as the most important school⁴². The first excavation campaigns in Nippur took place in the nineteenth century. To present standards the reports of these excavations are very poor. They do not allow us to reconstruct a stratigraphy, or to associate tablets with architectural remains. Since Nippur school tablets are undated, the only method to assign dates to tablets is palaeography. For this corpus, however, palaeography is notoriously unreliable. Differences between early, middle, and late Old Babylonian sign forms are often slight, and such differences that do exist may be obliterated by teachers using archaic sign forms, or by the inexperienced hands of schoolboys. After World War II archaeologists returned to Nippur. The school texts that were found in these campaigns could be related to the crisis of Samsuiluna's eleventh year in 1739 BC (Stone 1987, p.36; Civil *MSL* 14, pp.7-8). The tablets found in earlier campaigns are similar enough to justify the assumption that they are from roughly the same period. Texts from Isin are contemporaneous. One of the lexical tablets from Isin is dated Samsuiluna 12⁴³. School tablets from Ur, Quiet Street 7, may be slightly earlier (see Charpin 1986, p.433). The lexical tradition of Ur differed considerably from the one in Nippur. *UET* 7, 92 lists leather objects, birds, fish, plants, and clothing. All these subjects are treated in Nippur *ur₅-ra* as well, but are never found together on a single tablet (see §2.4.4.2. for Nippur *ur₅-ra*).

2.2.3 Late Old Babylonian Period

The period following the abandonment of the south will be referred to as late Old Babylonian. In this period textual finds are restricted to a narrow band stretching from Dilbat in the south to the Diyala in the north, with the city of Babylon in the centre (see Gasche 1989, Plan 8). Towns in the southern part of the country, including Nippur and Isin, only reappear in the late Kassite period, around 1350 BC.

In the late Old Babylonian period the lexical tradition was kept alive in northern centres. Texts are known to have come from Babylon⁴⁴, Tell Harmal⁴⁵, Sippar⁴⁶, Sippar-Amnānum⁴⁷, Meturan⁴⁸, Kiš⁴⁹, and some other places⁵⁰. Unfortunately, texts from these sites are either few or

⁴² Van Dijk 1989.

⁴³ IB 1547. See Wilcke 1987, p.84 and p.103.

⁴⁴ *LTBA* I, 80; *MSL* 10, pp.117-119 text B.

⁴⁵ IM 51144, partly published in *MSL* 5-7; and a number of lentils in *TIM* 10/1.

⁴⁶ See Scheil *SFS*, Chapitre III; *CT* 16, 11-14.

⁴⁷ See Tanret 1982; Gasche 1989, pp.19-20 and pp.40-41. A photograph of one tablet is reproduced in De Meyer, Gasche, and Tanret 1984.

⁴⁸ Mentioned in Cavigneaux and Al-Rawi 1993, p.91.

⁴⁹ Listed by De Genouillac in *PRAK* II in the catalogue of Série A. Only a few of these pieces were published. Other Kiš texts were (re-)published in *MSL* SS 1.

⁵⁰ Al-Fouadi 1976: a Proto ki-ulutin-bi-še₃ text from Dhibāṭī, near Baghdad.

unpublished. From the evidence we have, the lexical traditions of Northern and Southern Babylonia seem to have been rather different. The Tell Harmal text IM 51144 was partially published in bits and pieces at various places in *MSL*. It shows an *ur₅-ra* redaction much shorter than comparable southern texts, and in a different arrangement. It has the sequence trees and wooden objects, reed, containers, birds. This is the same order of topics as found in Nippur, but with many omissions between the containers and the birds. The unpublished lexical tablets from Metur_n belong to the same tradition⁵¹. The Oriental Institute in Chicago houses two lexical cylinders from the Diyala region, probably from Ishchali⁵². The first (A 7895) has col. I rivers; col. II snakes; col. III domestic animals; col. IV ?; col. V-X foodstuffs. The second (A 7896) has col. I-III plants, in col. III followed by wild animals; col. IV-VI domestic animals; col. VII hides⁵³. The two cylinders closely resemble each other in outward appearance, but they differ somewhat in the order of the sections. Perhaps this tradition did not recognize a standard sequence of topics. The order of both cylinders differs considerably from the Nippur tradition (see §2.4.1.2). The subjects treated, however, are shared by the two traditions.

The destruction of southern cities during the reign of Samsuiluna brought about a mixture of northern and southern traditions in the late Old Babylonian period. Finkelstein demonstrated the existence of a group of refugees from the southern city of Uruk in late Old Babylonian Kiš in the north. Among them was a group of priests who had brought with them the cult of important Urukean deities⁵⁴. It is possible to find similar displacements in the lexical tradition. The list of wooden objects MLC 1454+1455 (= *BRM* 4, 29+30)⁵⁵ is dated Samsuiluna 28. Unfortunately the tablet is unprovenanced, but the year name proves that it must derive from a northern site. The text bears some striking resemblances to a text from Ur in the south⁵⁶. The unprovenanced tablet is probably an example of a text written or dictated by a southern scribe after his flight to Northern Babylonia.

2.3 The Old Babylonian School

Old Babylonian lexical tablets were used as teaching instruments in the scribal school or *eduba*⁵⁷.

⁵¹ Personal communication by A. Cavigneaux.

⁵² The cylinders, together with a third exemplar, belong to the 'Frankfort Collection'. Many of the Old Babylonian tablets from this collection can be shown on prosopographic grounds to derive from Ishchali. See Neugebauer and Sachs 1945, p.24 n. 87 and 88; Greengus 1979, p.2 n.7; Ellis 1986, p.761 n.13.

⁵³ A 7895 was partly published in *MSL* 11, p.147 and p.160f. (forerunners 12 and 17). See also Civil *apud* Hallo 1982, p.88 n.33.

⁵⁴ See Charpin 1986, pp.403-415, with references to earlier studies on the subject.

⁵⁵ Edited in §5.6.2 as NP I-03.

⁵⁶ The text in question is edited in §5.6.2 as Ur I-01.

⁵⁷ The Sumerian *é-dub-ba-a* is literally 'tablet house'.

A description of this eduba, its curriculum and teaching methods is necessary to place the lexical texts in their proper context. Evidence for the school may be found in literary compositions, in archaeological data, and in the exercise tablets themselves.

2.3.1 School life: The Picture in Literary Texts

The classic study of the Old Babylonian eduba is Sjöberg 1975. His description is mainly based on a variety of Old Babylonian literary texts. Most important among these is a group of compositions in which the life of a schoolboy is evoked in dialogues of a usually ungracious and no doubt satirical kind⁵⁸. These texts are commonly called eduba compositions. Further evidence is found in a number of royal hymns which extol the extraordinary achievements and righteousness of the king. One of the recurrent themes in these hymns is the description and glorification of the scholarly and literary accomplishments of the king and his special concern for the eduba. The most famous of these is commonly called Šulgi B⁵⁹. The beginning of this hymn has a biographical arrangement. After mentioning the glorious destiny bestowed upon him at the time of his birth, Šulgi goes on to describe his childhood (lines 13-20):

When I was young I learned at school
the scribal art on the tablets of Sumer and Akkad.
Among the highborn no one could write like me.
Where people go for instruction in the scribal art
there I mastered completely subtraction, addition, calculating, and accounting.
The fair Nanibgal Nisaba⁶⁰
provided me lavishly with knowledge and understanding.
I am a meticulous scribe who does not miss a thing!

Throughout the hymn Šulgi boasts about his knowledge and understanding of various disciplines. He is perfectly at home in divination (131-153) as well as in music⁶¹ (154-174). Later in the text Šulgi claims to have founded scribal schools in Ur and Nippur, where the hymns glorifying his extraordinary wisdom must be recited for ever.

The eduba themes are found in a less elaborate way in several hymns; among them Lipit-Eštar B (Vanstiphout 1978 and 1979), Išmedagan V (Ludwig 1990, Chapter 8), and Enlil-bani A (Kapp

⁵⁸ Summaries of the data found there have often been studied. In addition to Sjöberg 1975, see Charpin 1986, pp.420-423; Waetzoldt 1989; Volk 1996. A number of Eduba compositions are now available in German translation by Römer in Römer and von Soden 1990, pp.68-102 with references to earlier literature.

⁵⁹ Geerd Haayer generously allowed me to use his unpublished edition and translation of this hymn, on which the following is based. I would like to thank him here for his permission, and for the valuable insights he shared with me during our discussion of the text.

⁶⁰ The goddess of writing and the patroness of the eduba.

⁶¹ On this passage see Krispijn 1990.

1955)⁶². The attention paid to matters of schooling and writing in these hymns served to depict the rulers as learned scholars. The same compositions were used as exercises in the scribal schools, so that there is a degree of self-reference involved. The scribal themes were of interest to the very people who were responsible for the transmission of the texts.

The literary texts were not devised to transmit the true organization of an Old Babylonian school. Civil (1980) has discussed a number of factors which prohibit the easy identification of the literal meaning of a text with historical reality. The eduba dialogues may depict an ideal school, rather than an actual school. An example of misinterpretation is the passage in *Schooldays* (29-41)⁶³, where various school employees play their part in the story. There is an overseer of the courtyard (31), a keeper of silence (35), a teacher of Sumerian (40), and so on, all in all ten different functionaries. Each of these ten finds some reason to punish the poor pupil, the hero of the story. One might be tempted to find here a complete list of the eduba personnel, if it were not that all other evidence points to extremely small schools, where this short-tempered staff would easily outnumber the pupils. A more plausible explanation, therefore, is that all designations refer to one and the same person, the last in the list: the teacher or ummia.

The word ummia is used in Sumerian in a more general sense as 'craftsman' or 'expert'. It suggests that the work of a scribal teacher was regarded as parallel to that of the carpenter with his trainee. An advanced pupil was called šeš-gal, or 'big brother.' He assisted the teacher with his younger classmates. This person is not only known from the eduba texts but also from some proverbs. A pupil is called either dumu-eduba (son of the tablet house) or dub-sar-tur (junior scribe). The latter is found in colophons, the former in literary texts.

2.3.2 Archaeology and the Organization of the School

Another source of information on Old Babylonian schools is archaeology. Typically, large groups of Old Babylonian exercise texts are found in domestic areas. By far the largest number of school tablets in Nippur section TA was found in one house (house F)⁶⁴. The rooms in this house are rather small; it does not distinguish itself architecturally from other houses in the area. Among the inventory of this school was a large vessel filled with pots, perhaps to be used for keeping the clay wet. In an adjacent room lots of unformed clay was recovered. Remains in Isin⁶⁵ and Sippar-Amn_num (Tell ed-D_r)⁶⁶ show a basin in connection with school tablets. The basin in Tell ed-D_r was filled with refined clay and a number of exercise tablets. It was used

⁶² Kapp's edition was based on the single exemplar known then (*OECT* 1, 10-12). Since then, a number of duplicates have been identified. The published pieces are listed in Wilcke 1976, p.84. See also Falkowitz 1984: 3N-T745.

⁶³ See Kramer 1949, and the new translation by Römer in Römer and von Soden 1990, pp.68-77.

⁶⁴ Stone 1987, p.37. But see the important reviews by Charpin (1989 and 1990) and Van Driel (1990).

⁶⁵ Isin Nordost-Abschnitt III, südlicher Teil, Raum 4 (see Haussperger 1987, p.32 with Plan 10). This room and the adjacent one yielded most of the Isin school texts.

⁶⁶ Tanret 1982; Gasche 1989, pp.19-20, pp.40-41, and Pl. 9.

both for the storage and recycling of clay. The modern observer cannot help imagining an eduba as a formal, and relatively large, institution, where several generations of pupils were instructed. The question is whether this picture is based upon any reality. The school houses identified at these three sites do not seem suitable for an academy of any size. The excavation reports of Isin and Nippur show that large non-domestic buildings such as temples did not yield Old Babylonian exercise texts. Arguing from different kinds of evidence Waetzoldt (1989, p.39) concludes that a single class may have had no more than two to four pupils.

Recently, Charpin and Diakonov have discussed the organizational framework of school and teacher. Charpin (1986, p.485f.) argues that the only scribal school in Ur that can be identified with some certainty, N^o7 Quiet Street, was a private school where a priest named Ku-Ningal primarily taught his own sons. This picture differs considerably from the traditional view that holds that the Old Babylonian eduba was an official institution, replaced only in later times by private education at home (Sjöberg 1975). The context of school texts found in Nippur⁶⁷, Mari⁶⁸ and Sippar-Amnānum⁶⁹ basically confirms Charpin's conclusions. Arguing from the same body of evidence Diakonov (1990)⁷⁰ comes to radically different conclusions. According to this author scribal education was centrally organized by the state. This centre was Nippur. For Diakonov there are two reasons to come to this conclusion. Firstly, writing was of vital importance to the state, and it is difficult to imagine a state leaving a matter of such importance to private initiative. In the second place the uniformity of the schooling system points, according to Diakonov (1990, p.128), to interference from the central government. An unorganized kind of family education would lead to a wide variety of curricula. Diakonov further emphasizes that the relation between education and clergy, as it is found in Ur, Mari, and Sippar-Amnānum, is not an essential one. The cult did not depend on written texts. Literacy was of prime importance to the administration. In a period of relatively weak state control, as the Old Babylonian period was, most of the administration was done by temple personnel. From these ranks the teachers were recruited, but this does not change the eduba into a temple school.

The school curriculum indeed shows very little that would suit a clerical education. Moreover, such an education would more probably be located within a temple, as was the case in Neo-Babylonian times⁷¹. Diakonov's arguments that the school was state organized are less convincing. A centralized state of any extent existed only for a relatively short period of time during the reign of Hammurapi. The uniformity of the school texts and the school curriculum is a relative one. By any standards the third millennium lexical texts are much more uniform, without any central organization guaranteeing their faithful transmission. The kind of variation that is found between local Old Babylonian traditions is comparable to what is known for oral traditions

⁶⁷ For Nippur see Stone 1987, and Charpin 1990, pp.1-8.

⁶⁸ Mari school texts are unpublished, except for the god list in Lambert 1985 (see Oelsner 1989 and Waetzoldt 1990), and some mathematical exercises published by Soubeyran (1984) and Charpin (1993).

⁶⁹ See Tanret 1982 and Gasche 1989, p.20

⁷⁰ I would like to express my sincere thanks to Gerame Wouters, who translated for me the relevant passages from the Russian.

⁷¹ See the Neo-Babylonian exercises from the Nabû temple in Cavigneaux 1981.

such as ballads and counting-out rhymes (Rubin 1995; see §3.6). The stability of such genres is explained by their mnemo-technical qualities, rather than by state control. The rules of the genre can be shown to be helpful in memorizing and stabilizing a song or rhyme. Rubin demonstrated that the kind of variation that is found in oral genres usually leaves the basic character of the piece transmitted untouched. The performer who is familiar with the genre may change a song considerably, but will typically do so within the confines of the rules of the genre, and without basically altering its portent. This kind of transmission may account for widely differing local traditions, which are still basically recognizable as 'the same'. This is a description appropriate to the lexical traditions of the Old Babylonian period. There is no reason to explain the relative uniformity of Old Babylonian education by state control. Furthermore, the strict division between private and public is a fairly recent one. The archives of officials tend to mix what we would call private and professional affairs⁷². A private school, therefore, may still have a semi-official character. The eduba was no doubt an institution. An institution, in the sociological sense of the word, is not so much an official organization, located in a building, but a pattern of social behaviour that follows conventional rules, and is provided with moral authority⁷³. Through the concept institution we can think of an eduba as a private enterprise, without expecting every teacher to invent his own private curriculum. Roman education of upper-class children depended for a considerable degree on the private enterprise of former slaves (Bonner 1977), without departing from traditional lines.

Diakonov (1990, p.128f.) further argues that the eduba had open access. Admittance was not restricted to members of clerical families. This is shown, according to this author, by two kinds of evidence. First, the teacher was not paid by state or temple, but by the parents of the pupil. Payment by the parents is attested in the literary text called *Schooldays*⁷⁴. Payment by state or temple, according to Diakonov, would have left traces in official documents, which is not the case. Second, a few girls attended school. Both points are presented by the author as indications of a certain freedom of choice, and a non-mechanistic procedure for admission. One must admit, however, that this freedom of choice must have been restricted to the happy few. Charpin (1986) demonstrated the hereditary character of priestly professions which implied literacy. Even though literacy seems to have been relatively widespread in the Old Babylonian period, the picture of an ummia who with the assistance of a šeš-gal tries to keep a crowd of pupils under control (Diakonov 1990, 130f.) is almost certainly exaggerated. The evidence for female scribes and pupils, moreover, is restricted to northern areas, in Mari⁷⁵, Sippar⁷⁶, Me-Turan, and Tell

⁷² Zettler (1992, p.209), described the relation of the Ur-me-me family with the Inanna temple of Ur III Nippur as follows: 'The family treated the temple as if it were, in effect, its private preserve.' See also Zettler 1991, p.261, and Van Driel 1994, p.192.

⁷³ Thus we can speak about language or gift-giving as institutions. Berger and Berger 1972, Chapter 4.

⁷⁴ See also *AbB* 2, 81.

⁷⁵ See Durand 1987, p.85 and Dalley 1984, p.110. References courtesy M. Stol.

⁷⁶ See Harris 1975, p.196f. Probably from Sippar are a lexical text (P-Aa *MSL* 9, p.148f. = *MSL* 14, p.p.135f.) and a literary text (*VAS* 10, 207) written by a female scribe. References courtesy M. Stol. See also Durand: *Documents Cunéiformes I*, 495 (ur₅-ra clothing section, dated to Samsuiluna; colophon: šu munus-dub-sar; provenance unknown). F. Al-Rawi informs me (personal communication) that exercises by female scribes have also been found in Tell Haddad and Tell Harmal.

Harmal⁷⁷.

2.3.3. Educational Tools: The Typology of Lexical Exercise Tablets

Old Babylonian lexical texts are inscribed on several characteristic tablet types. These tablet types can tell us much about the way lexical texts were actually used in class. The labels used for the types are basically those proposed by Civil in *MSL* 12, p.27f⁷⁸. The following discussion of this typology is based upon the Nippur evidence, where the sources flow most abundantly. However, the typology seems to work for most Old Babylonian centres.

2.3.3.1 Type I: Prisms and Large Tablets

Type I texts contain either a complete lexical composition, or a considerable part of such a text. A type I text has several hundred lines; the total may amount to more than 800. From the material point of view, type I texts may be found in two forms: prisms and large tablets.

⁷⁷ The relevant texts from Me-Turan and Tell Harmal are unpublished. Personal communications by F. Al-Rawi and J. Black.

⁷⁸ A much earlier description of the main types may already be found in Chiera's introduction to *PBS* 11/1 (1916). This is still the most extensive and informative discussion of the formal characteristics of Nippur school tablets.

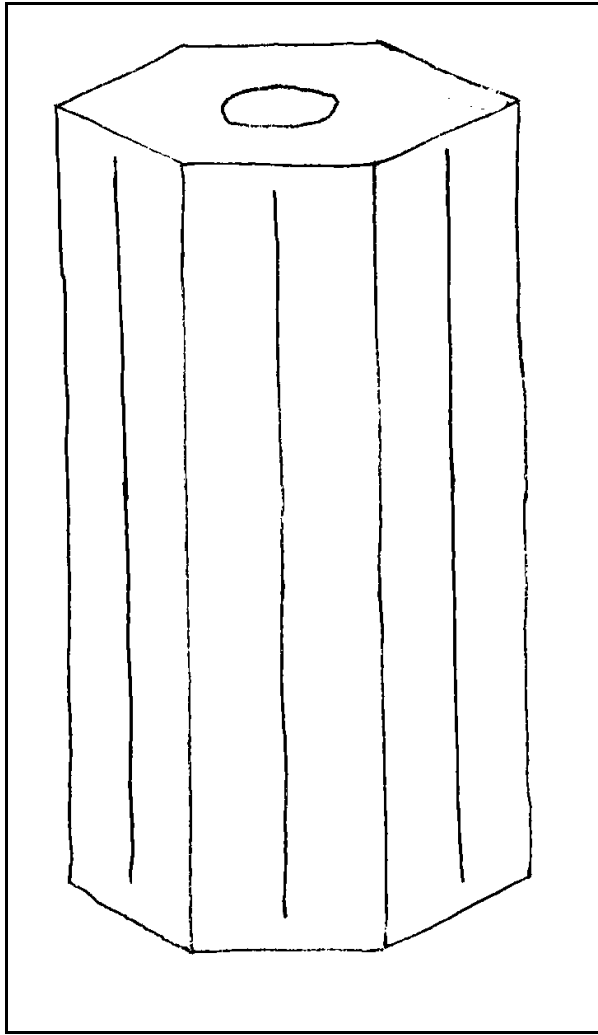


Fig 2.1 Six-sided prism.

Prisms are large clay objects, commonly with four or six faces on which a text is inscribed. They are found for nearly all major lexical texts. Syllable Alphabet B, the first list to be copied in the Nippur curriculum, is, as far as I know, not attested on prisms, but the Hilprecht Sammlung in Jena houses a cylinder fragment that contains part of the text⁷⁹. Some of the smallest Nippur prisms contain the elementary exercise TU-TA-TI. The Hilprecht collection has two examples⁸⁰. Both are six-sided, with only one column per side, and relatively small writing. Each side measures somewhat more than 3 cm. The colophon of one of them (HS 1801) gives a total of 208 lines, which amounts to an average number of about 34.5 lines per side. Each line takes approximately 0.35cm, bringing the total height of the complete prism to about 12 cm (maximum preserved height is 8 cm). The prisms known for the major lexical series are much larger, and commonly have two to four columns per side. A six-sided prism, again from the Jena collection, contains a thematic list with the sections stones, plants, fish, birds, and clothing⁸¹. It has 2 columns per side, each side measuring about 5 cm, and must have contained well over 600 lines⁸². Four-sided exemplars mostly have three, or even four

⁷⁹ HS 1849 was identified by Oelsner. In a letter dated August 3 1995 he communicated the following information: the piece preserves the bottom parts of two columns, which contain the lines 100-116 and 128-145. An exceptional piece is A 30286 (Nippur). This is a small square prism, with two columns per side, each of about ten lines. The fourth side is inscribed upside down, starting again with line 1 of the composition.

⁸⁰ HS 1801 and HS 1625. For a more detailed discussion of these prisms see the section on TU-TA-TI in §2.4.1.1.

⁸¹ HS 1659 + HS 1751 + HS 1760 + HS 1813 + HS 1864; joins by Oelsner.

⁸² The computation of the number of lines on this prism is rather crude. The Nippur version of the list of stones (*MSL* 10, pp.53-61) has just over 200 lines. The Jena prism follows the standard text as edited in *MSL* closely. These 200 lines take up four columns or two faces of the prism. The line ^{na}i-igi-muš (line 96 in the composite text) on face A col. II corresponds in relative height with ^{na}i-skilla-ab-ba (line 143) on face B col. I. This confirms the estimate of about 50 lines per column, or 100 lines per side. Other preserved parts of this prism cannot be used for this kind of computation, either because the text has not been edited (section fish and birds) or is not standardized (section plants). The section plants has a version that differs from all versions published in *MSL* 10, 119ff.

columns per side⁸³. All prisms show a hole, pierced from bottom to top, apparently for turning the object mounted on a stick. Prisms usually cover an entire composition⁸⁴.

Type I tablets typically have five or six columns per side, and are often written in minute script. Some lexical texts may be divided over two or more tablets. In such cases each tablet ends with a catch-line referring to the first line of the next section. The last tablet ends with the conventional invocation of Nisaba, the goddess of writing: ^dnisaba-za₃-mi₂: 'Nisaba be praised!'. Large tablets are more common than prisms. Among the Nippur lexical texts I have now counted 67 prisms or prism fragments as against 209 type I tablets⁸⁵. Type I tablets are known for all main lexical series.

Type I texts, both prisms and large tablets, may have a colophon. This colophon generally contains the name of the scribe, and sometimes the number of lines. Occasionally, the colophon includes a date, but no examples from Nippur have been found so far⁸⁶.

Discussing the quality of the sources of a Nippur sign list, Civil (*MSL* 14, p.7) argues that none of them would qualify as a standard reference copy⁸⁷. He maintains that all available copies are student's exercises. Teachers simply did not need a written copy since they knew the text by heart. Type I tablets may have as many deviations from the standard text as extract tablets, even

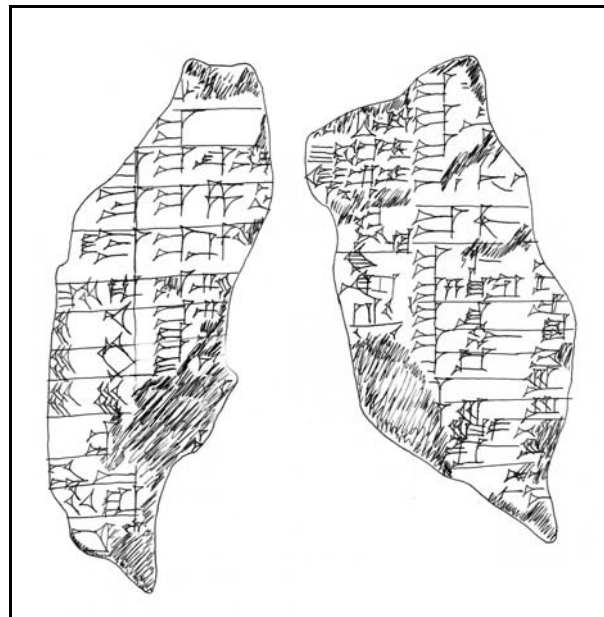


Fig. 2.2 N 5589. Fragment of a type I tablet (obverse and reverse) with a list of trees and wooden objects; 5x3cm.

⁸³ Examples are HS 1699, ur₅-ra animals and meat cuts: three columns per side; and HS 1765 + HS 1930 + HS 2699 (joins Oelsner), ur₅-ra wild animals: four columns per side.

⁸⁴ I am not sure whether this holds true for the numerous prisms and prism fragments listed for Proto-Izi I and II. Some of them may have contained only one of the two tablets. The Jena prism HS 1802 contained the complete composition (Proto-Izi I and II).

⁸⁵ In both categories there are probably joining pieces. On the other hand, there must be additional ones, particularly in Baghdad and Istanbul. The figures, therefore, should not be taken in an absolute sense, but rather give an indication of the numerical proportions of the two types.

⁸⁶ Isin: IB 1547 (ur₅-ra: giš edited as Is I-02 in §5.6.1): Samsuiluna 12 (see Wilcke 1987, p.84 and p.103). Unprovenanced examples are *BRM* IV 29 + 30 (ur₅-ra: giš; edited as NP I-03 in §5.6.2): Samsuiluna 28; Durand, *Documents Cuneiformes de la IVeme Section I*, Plate 123 no. 495 (ur₅-ra: lists of clothing, written by a munus-dub-sar): Samsuiluna; year name broken.

⁸⁷ See now the proto-Aa prism from Tell Hammām published by Van Soldt 1995a. According to Van Soldt (p.286 n.45) the mistakes show that the prism was written by a student. The lines on the upper side (see p.285) may be part of the colophon.

though the quality of writing is usually superior to other school texts. As far as literary texts are concerned, a six-column tablet which contains the complete text of the 'Curse of Agade' has been shown to be textually greatly inferior to extract tablets of the same composition (Cooper 1983, p.46). Similarly, Klein demonstrated that for the hymn Šulgi A the prisms are not necessarily better than other sources (Klein 1981, p.170)⁸⁸. In some Type I tablets the colophon explicitly indicates that the tablet was written by a *dub-sar-tur* or scribal apprentice⁸⁹. Regrettably, no such example from Nippur is known to me. The occasional utilization of unused space on prisms and type I tablets for something entirely different betrays their exercise character⁹⁰.

Prisms must have been fairly difficult to produce and inscribe. It is not clear to me why objects of such a prestigious design were used for exercises. They may have been produced for special occasions, for instance as a kind of examination, which would also account for their relative rarity. Prisms and type I tablets were inscribed by advanced students. This may be concluded from the writing, which is usually careful. This is even true of those prisms which contain elementary exercises, such as TU-TA-TI (see above)⁹¹.

2.3.3.2 Type II: Teacher-Student Exercises

Type II tablets are of medium size. Common measurements are approximately 13x8x3.5cm. The most characteristic feature of these tablets is that obverse and reverse carry different exercises, both in a well-defined format. On the left side of the obverse the teacher has written an extract from some school text. The extract is usually written in large and elaborate script. It may be as long as 30 lines, but 8-15 lines is a more regular length. In most cases the lines do not fill the available column space. The last entry is followed by a double horizontal line and the rest of the

⁸⁸ In Nippur the prism format was used for a restricted group of literary texts. Examples are known for the 'Curse of Agade', royal hymns, literary letters, and Eduba dialogues, for instance, but not for the Enmerkar stories. A complete inventory of Nippur prisms and the texts inscribed on them might further elucidate the function of these objects.

⁸⁹ Isin: the God list IB 1542+ (see Wilcke 1987, p.93 and Tafel 40): $\dot{\text{I}}^2\text{-lu-ni} / \text{dub-sar-tu[r]} / {}^d[\text{Ad}]\text{ad}^2$. Ur: UET 7, 114 a small type I tablet with a metrological list: $\text{ti-la} {}^d\text{nisaba} / {}^d\text{ha-ia} / {}^d\text{en-ki} / \text{šu é-a-šar-i-lí} / \text{dub-sar-tu-ra} / \text{in-sar}^1$.

⁹⁰ Four Nippur examples are known to me. HS 1617 is a type I tablet, with a list of stones, plants, and fish, followed by the catch-line for the section birds (see §2.4.1.2). The last column is partly filled with month names. PBS 11/3, 70 (CBS 7836) is a prism with name list C, followed by the conventional subscript ${}^d\text{nisaba za}_3\text{-mi}_2$ and then by a list of month names. Ni 10524 is a prism with name list B 'Second Part'. It is partly edited by Çiğ and Kizilyay 1965, p.43f. and p.46f. According to the editors 'another topic' is treated after the subscript, but which topic is not stated (p.47: n.11). A 30145 (3N-T105) is a prism fragment which contains the end of the list of geographical names. The last column is filled with numerals (MSL 11, p.96: B2). An example of unknown provenance is the bilingual Nig₂-ga prism YBC 13524 (see MSL 13, p.92).

⁹¹ A few prisms written in a beginners hand are known. For A 30286 (Syllable Alphabet B) see above note 79. Another example is published by Waetzoldt 1986a, p.5 no. 3 (probably Old Babylonian Uruk): sign list.

column is left empty. To the right there is space for one to three more columns⁹². Here the teacher's example was copied by a pupil. Few examples survive where the pupil's copy or copies are still extant. The regular procedure was that the pupil's side was erased, so that he could re-copy his teacher's model. This process could be repeated several times. As a result the right side of the obverse of a type II tablet is usually blank, and much thinner than the left side. Such tablets are rather weak and are nearly always broken between the left and the right sides. In other cases the tablet has been cut in two on purpose, so as to preserve the model text on the left side.

⁹² To my knowledge Oelsner 1989 was the first to remark that type II tablets may have room for more than one pupil's copy. Scrutiny of Nippur type II tablets that survive more or less complete shows that this was the regular make-up. Even when the obverse is carefully effaced, as is usually the case, traces of column dividers can often be detected. A well-preserved example with two pupil's columns (CBS 6599+ HS 1616 + HS 1844; obverse O.B. Proto-Lu₂; reverse ur₅-ra giš = Ni II-137) will be published in Veldhuis and Oelsner forthcoming. Another published example is Ni 5152 (Çiğ, Kizilyay, and Landsberger 1959, p.51, where obverse and reverse must be exchanged). On this tablet the lines 266-272 of Syllable Alphabet B are repeated in two pupil's columns. Perhaps this layout of the obverse of a type II tablet is reflected in Eduba D, where the pupil says that the teacher gave him an extract to be copied four times in a single day (Civil 1985, p.76 commentary to line 26).

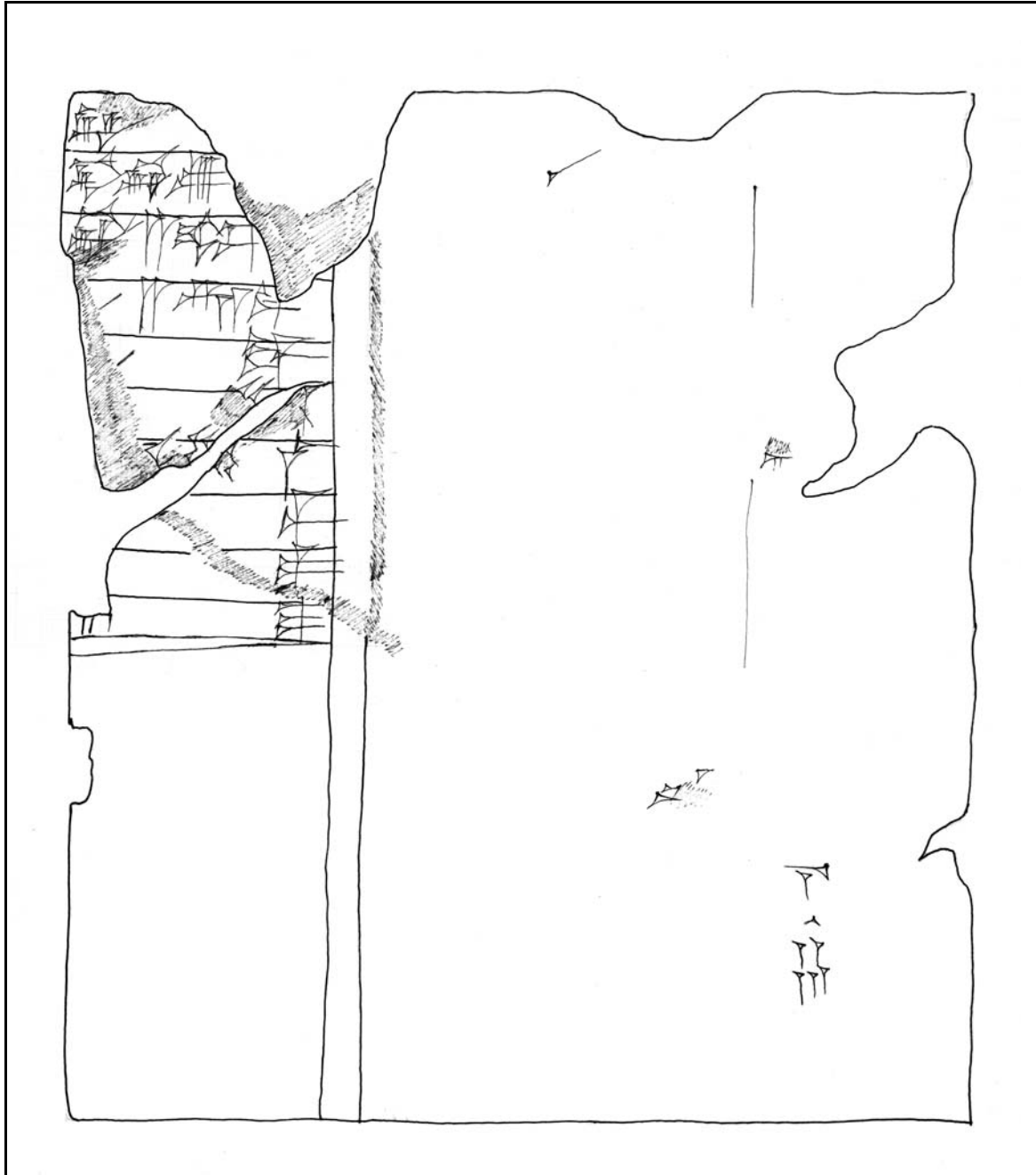


Fig 2.3 HS 1745 (Ni II-173). Type II tablet: obverse. List of vessels.

The reverse of a type II tablet is usually divided into four or five columns and carries a second extract from a school text. The reverse extract is often taken from a different composition than the obverse, but a type II tablet with two extracts from the same list is not exceptional. First, the layout of the reverse was prepared by drawing vertical lines to separate the columns. Then the first column was divided into boxes by adding horizontal lines. Next this column was inscribed. The exercises were not usually written line by line. If there is a constant element, a sign or a word with which each line begins, this element was written first as many times as necessary. Then the column was finished by adding the qualifications to each line. Then the second column

was prepared by drawing the horizontal lines; and so on.

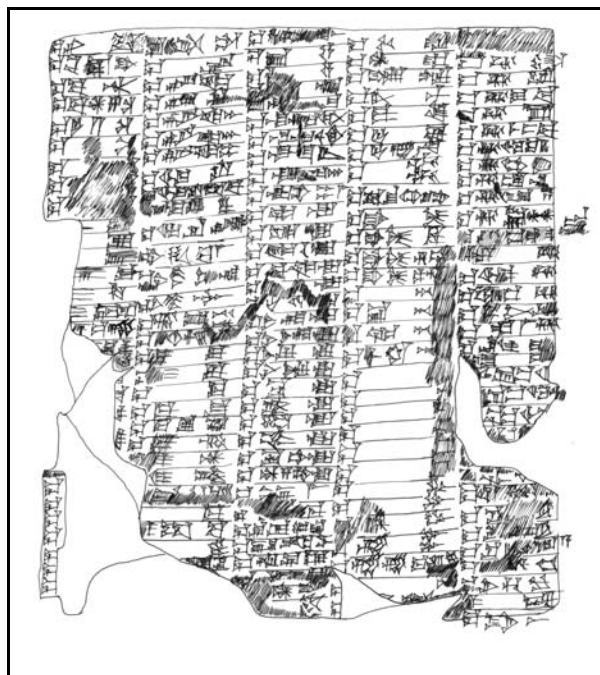


Fig 2.4 HS 1745 (Ni II-173). Type II tablet: reverse. List of wooden objects.

The order of the various stages of inscription may be deduced from some unfinished exemplars. The reverse of UM 29-15-314+ has an extract from the list of trees⁹³. Halfway through the third column the exercise was interrupted. The rest of the third and the whole of the fourth column were left uninscribed. In the uninscribed part of the text an extra vertical line is visible, designed to facilitate the correct placement of the first sign, which in this case is always GIŠ. In the inscribed columns this second vertical line disappears under the writing. The fourth column, which is completely empty, has no horizontal lines. Perhaps this tablet was actually written line by line. The third column is inscribed with about ten lines. These lines are completed. The rest of the column is completely empty except for the vertical lines. Apparently this pupil did not begin by repeating GIŠ first. Another unfinished tablet

is CBS 4866 (*SLT* 128)⁹⁴, which has the beginning of the list of trees. The last column ends with a number of lines inscribed only with the determinative GIŠ. In some cases the pupil who had filled his column with constant elements ran into trouble, because a long item unexpectedly proved to fill two lines⁹⁵. A published example is CBS 8298 (*SLT* 137)⁹⁶. The reverse of this tablet has an exercise listing types of chairs. The last two lines read:

giš gu-za-giš mes	chair of mēsu wood
giš gu-za-ma ₂ -gan ^{ki}	Magan chair

From context and parallel texts it is clear that the two lines are intended to be one, reading giš gu-za-giš mes-ma₂-gan-na^{ki}: chair of Magan mēsu wood (line 193 in the composite text). In this case the word giš gu-za was first repeated a number of times before the qualifications were added.

The writing on the reverse is usually smaller, less elaborate, and more cursive than the teacher's example on the obverse. The exercise may be about 60 to more than 150 lines long. The reverse

⁹³ Ni II-140.

⁹⁴ Ni II-001.

⁹⁵ See Chiera 1916, pp.20-21.

⁹⁶ Ni II-156.

of HS 1745+⁹⁷ is an example of a relatively long exercise. It has five columns, each of over 30 lines, and has an extract from the list of wooden objects. HS 1629+⁹⁸, on the other hand, had no more than about 65 lines with names of trees. The text is divided over four columns, written in largish script. As a rule the columns on the reverse run, as they should, from right to left. In a significant number of cases the columns run from left to right. This is usually the case for the elementary exercise Syllable Alphabet B⁹⁹. There are, however, numerous other examples as well. One of them is CBS 14158¹⁰⁰, which carries proverbs on its obverse, and a list of birds and fish on the reverse. Left-to-right reverses are found throughout the corpus of lexical school texts, but appear more frequently for elementary exercises, and gradually disappear in the course of the school career¹⁰¹. Writing from right to left is more difficult for a right-handed scribe, which explains this distribution. Other deviations from the common format are rare. A cuneiform tablet should be turned along the horizontal axis. The rare cases where a type II tablet has been turned along the vertical axis may be attributed to carelessness. An example is CBS 6407 with a list of trees on both sides¹⁰². In a few cases the teacher's example is inscribed on the right half of the obverse¹⁰³.

The reverse exercise of a type II tablet was generally a repetition of a school text previously studied. That this was the case may be concluded from an analysis of obverse/reverse correlations. Nippur type II tablets carrying an extract from a thematic list on the obverse often carry an elementary exercise on the reverse. Advanced exercises such as proverbs or model contracts on the obverse often go with a thematic list on the reverse. This corresponds to a rough curricular order: elementary exercises - thematic lists - advanced exercises. In §2.4 we will demonstrate this obverse/reverse correlation in more detail, and put it to use for a reconstruction of the eduba curriculum. Most instructive are those examples where obverse and reverse partly duplicate each other. In such cases the obverse extract coincides with the end of the reverse extract. CBS 11322 has a list of trees on both sides¹⁰⁴. The obverse has lines 48-58 and 63 of the composite text. The reverse has the beginning of the tree list, starting with line 1: ^{giš}taskarin, and continues to line 57. After line 57, in the last column, two lines are broken (supposedly 58 and 63), and then lines 1-6 are repeated. A similar example is CBS 14156¹⁰⁵. This tablet has trees on

⁹⁷ Ni II-173.

⁹⁸ Ni II-162.

⁹⁹ See Çiğ, Kizilyay, and Landsberger 1959, p.8.

¹⁰⁰ Gordon 1968, plate 54 = *SLT* 69.

¹⁰¹ At present this claim cannot be substantiated with statistical evidence. It appears as a strong impression from my first-hand experience with Nippur lexical tablets.

¹⁰² Ni II-058. The obverse of this tablet is copied in *SLT* 140. Another example is *PBS* 11/3, no.46. See Chiera 1916, p.43f.

¹⁰³ *PBS* 11/1, 33; *PBS* 11/2, 67 (reverse ^{giš} = Ni II-013); see Chiera 1916, p.41 n.2.

¹⁰⁴ Ni II-110. The obverse is published as *SLT* 141.

¹⁰⁵ Ni II-085.

obverse and reverse, and also starts with ^{giš}taskarin on the reverse. At the point where the obverse exercise ends (line 86) the reverse continues with the list of proper names ^dInanna-teš₂. The latter exercise demonstrably precedes the tree list in the curriculum. The same feature may be observed in two non-Nippur texts. A Mari type II tablet (Lambert 1985) has a god list on both sides. The reverse ends with the 7 line section that was studied on the obverse. Then it continues with a kind of syllabary¹⁰⁶. *BRM* IV, 31 (unprovenanced) has a list of trees on both sides¹⁰⁷. When the reverse extract reached the item with which the obverse ended, the scribe continued with a metrological list.

For the time being these examples may suffice to support the hypothesis that the reverse is used as a repetition of a school text studied at a point earlier in the curriculum. A relatively large proportion of reverse extracts are inscribed with the beginning of the list of trees. This was a section from early in the curriculum and well known, and which could nearly always serve as a reverse assignment.

The great majority of Nippur school tablets belong to type II. Thousands of type II tablets - or fragments of such tablets- have been found. Only a fraction of this material has been published. Outside Nippur, type II tablets are less frequent. An example from Mari has been published by W.G. Lambert¹⁰⁸. Since other Mari lexical texts from the House of Asqudum and the Royal Palace still await publication¹⁰⁹, we have no evidence to decide whether this exercise is typical for Mari or not. Other examples derive from Larsa¹¹⁰, Isin(?)¹¹¹, Uruk¹¹², Kiš¹¹³, Sippar¹¹⁴, Sippar-Amnānum (Tell ed-Dēr)¹¹⁵, Susa¹¹⁶, and from unknown origins¹¹⁷. No examples are

¹⁰⁶ In a note in *N.A.B.U.* Waetzoldt already suggested a similar interpretation of the Mari school tablet, and used a number of Nippur Syllable Alphabet B examples to substantiate his point (Waetzoldt 1990).

¹⁰⁷ NP II-01; edited in §5.6.4.

¹⁰⁸ Lambert 1985; with important remarks by Oelsner 1989 and Waetzoldt 1990. In Lambert's edition obverse and reverse should be inverted.

¹⁰⁹ Durand *apud* Lambert 1985, p.181 n.2.

¹¹⁰ Arnaud *BBVOT* 3,84: Obverse names, reverse Syllable Alphabet A. A possible second example is no. 34 of the same volume: Obverse model contract(?), reverse Proto ki-ulutin-bi-še₃.

¹¹¹ IB 351 ab 'rechteckige Übungstafel' (Edzard and Wilcke 1977, p.87).

¹¹² Cavigneaux 1982: W 20248, 2, 3, 4, 5, and 6. Many additional examples in Cavigneaux 1996, Chapter 6.

¹¹³ For instance *PRAK* I B397 (Pl.28): obverse list of trees (repeated), reverse a list of foodstuffs. See also *MSL* 14, p.111: Ki A 117 and 118. The catalogue of Série A in *PRAK* II contains numerous examples which might belong to the same category.

¹¹⁴ Si 205, and probably Si 500 and Si 504. See Tanret 1989, p.167. His descriptions of the latter two pieces are somewhat confusing. Obverse and reverse are probably to be inverted, so that the columns on the reverse run from right to left. Apparently the obverse is inscribed in these cases on the convex side.

¹¹⁵ A photograph of one example was published in De Meyer, Gasche, and Tanret 1984, p.23.

¹¹⁶ *MDP* 28, 1 and 176. Both have the same syllabary on both sides. The Susa pieces differ in some respects

known to me from Ur. The Uruk texts differ from the typical Nippur type II texts in that some of them carry literary texts on both sides. In general the number of published non-Nippur texts is too low for a fruitful comparison with the Nippur conventions. There may be several reasons why non-Nippur examples are so rare. This type of exercise is meant for recycling. The examples from Sippar-Amnānum were found in and around a basin filled with clay. The basin was used to keep the clay wet. Old tablets were thrown in, and the clay was re-used. In the second place, type II tablets are unattractive. They are usually broken or mutilated, full of erasures and deformed signs. Tellingly, two of the three unprovenanced examples listed in the note above are exceptionally complete. Type II tablets compare unfavourably with the often well-formed lentils (type IV; see below) or with type I tablets and prisms. Type II pieces that escaped recycling in their own time may have been regarded as unfit for commercial purposes, and thus dismissed at illicit excavations. Moreover, those deriving from regular excavations may belong to the unattractive rest portion that remains unpublished. This is certainly the case for tablets from Nippur and Kiš. Numerous type II texts are listed in Genouillac's catalogue of Série A in *PRAK* II (pp.45-58). The series counts 590 numbers, nearly all school tablets. Only a few of them were published in copy. Genouillac actually found them so uninteresting that he apologized for bothering the reader with so lengthy an inventory.

2.3.3.3 Type III: Single Column Tablets

from the Babylonian pieces, but agree in having a teacher/pupil exercise on the obverse, and a longer exercise on the reverse.

¹¹⁷ *BRM* IV, 31 (NP II-01) has a list of trees on the obverse (repeated), and a list of trees on the reverse, followed by metrological list. YBC 11118 (unpublished) has a list of dogs on the obverse (left col.; right col. erased, except for one UR sign.), and sheep on the reverse. The tablet published as no. 79 in Dalley 1979 has a passage from some version of Proto-Lu₂ on the obverse. It parallels a passage from the Nippur text, but is not a duplicate of that version (see *MSL* 12, p53f., 572-584; see also the Isin version in Wilcke 1987, p.100 column 11). The reverse has a metrological table. According to the Edinburgh acquisition records the tablet derives from Sippar. The reliability of this indication cannot be established, but the relative proximity to the Nippur text does not favour it.

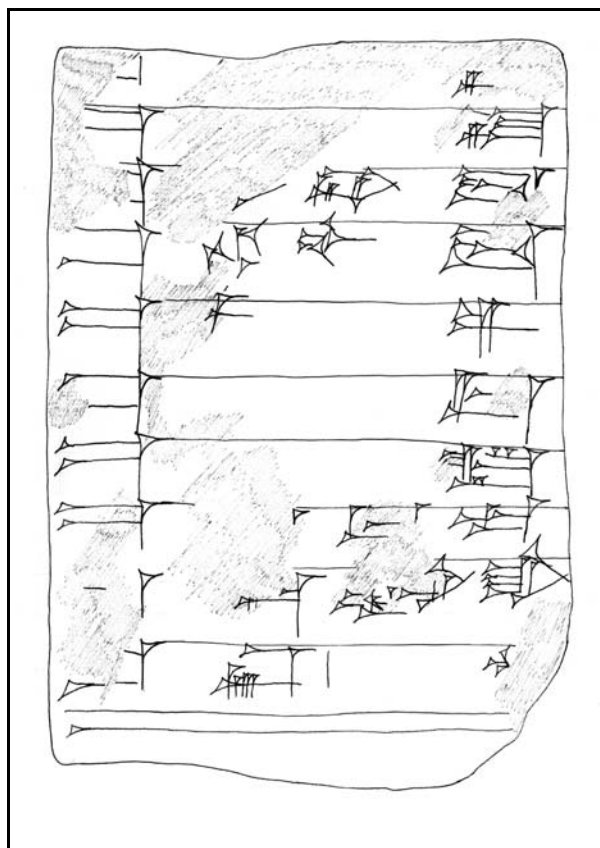


Fig 2.5 UM 29-13-163 (Ni III-03). Type III tablet with a list of wooden objects. 7.5x5.8 cm.

Type III texts are one-column tablets with a single extract from some school text. The length of the extract is between 10 and 15 lines. The same exercise continues from obverse to reverse. Type III tablets are relatively rare. The length of the extract approximately corresponds to the length of a type II obverse extract. The quality of writing clearly points to pupils' copies. These may have been copied from the teacher's example on the obverse of an old type II tablet. As noted above, the model on the left half of a type II tablet was occasionally deliberately cut off for later use. The only tablets which can qualify as being the result of such secondary use are these single column tablets.

2.3.3.4 Type IV: Lentils

Type IV texts are lentil-shaped tablets, typically 6 to 8 centimeters in diameter, with a teacher's example and a pupil's copy. The example is taken from one of the school texts: a lexical list, a mathematical text¹¹⁸, a proverb, or hymn. Lentils were called *im-šu*,

or hand-sized tablet (George 1993, p.70f.; Civil 1985, p.75f.). Mathematical problems are sometimes called *im-šu*. In YBC 4657¹¹⁹, for instance, the total number of problems is indicated as 31 *im-šu ki-la₂*: 31 problems on excavations. Robson (forthcoming) argues that this use of the term *im-šu* is secondary, and is derived from the custom of making calculations on the back of a lentil. Such calculations are found on the unpublished reverses of a number of lentils from Ur with proverbs on the obverse¹²⁰. Other possible examples are *TLB* 1, 134 and 135. No such use of the reverse of lentils is known to me from Nippur.

In his article on Nippur lentils Falkowitz (1984) lists 356 examples¹²¹. In Nippur the most common type is a two-line model text, immediately followed - on the same side - by the pupil's

¹¹⁸ No mathematical lentils were included in Falkowitz 1984. The only Nippur example I know of is Ni 2265. A copy of this tablet by Hilprecht is kept in the University Museum in Philadelphia. I was not able to identify the kind of exercise. See further Civil 1985, p.76 n.13.

¹¹⁹ Neugebauer and Sachs 1945 text G.

¹²⁰ The obverses are published in *UET* 6. Eleanor Robson kindly sent me her unpublished hand copies of the reverse exercises, and explained their contents to me. I would like to thank her here for her generosity.

¹²¹ Additional examples in the Hilprecht Sammlung, Jena are very few, probably no more than three (information based on notes by Oelsner), but there are no doubt more in Istanbul.

copy, with the reverse left empty. Occasionally we have an unfinished lentil, without pupil's copy (e.g. *TIM* X/1 129; Nippur). There are numerous variant types (see Falkowitz 1984, p.20). One Nippur lentil is assimilated to a type II text, in that it has a longer extract in three columns on the reverse (2N-T730 = IM 58046)¹²².

A type common outside Nippur is a three-line inscription on the obverse, repeated by a pupil on the reverse. In Isin both types are found side by side¹²³. A lentil from Tell Asmar in the Diyala has a two-line exercise in Sumerian on the obverse. The reverse contains the same text in syllabic Sumerian, with Akkadian translation (Civil 1975). The type is well known from Susa¹²⁴, but apart from this one example not attested in Mesopotamia proper. The relation with Susian scribal tradition is understandable because the route between Babylonia and Elam went through the Diyala region (see Civil 1976b).

Unlike type II tablets Nippur lentils do not regularly show traces of erasure and rewriting¹²⁵. The pupil's writing varies from bad to excellent (Falkowitz 1984, p.21). In one sense the function of the lentils is sufficiently apparent: the pupil learns a few lines from a school text by copying the teacher's model. But it remains unclear how they fit into the system of school texts, or what the functional difference with the type II obverse exercise is. One possibility is that these were the tablets that were brought home to demonstrate progress at school to the parents. Lentils are found at almost every Old Babylonian site, but their use may have differed locally. This is demonstrated by the utilization of the reverse for calculations, which is attested in Ur but not in Nippur.

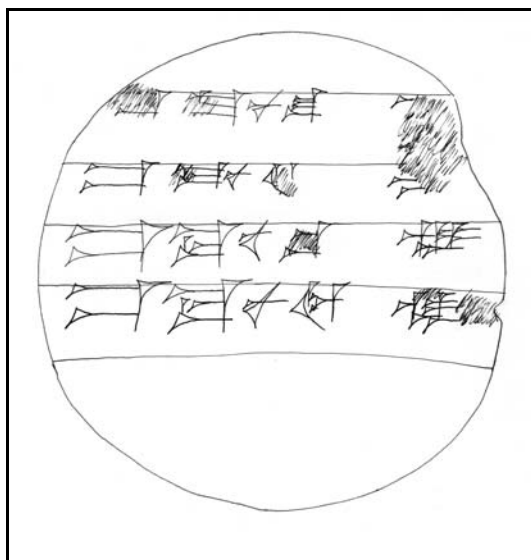


Fig. 2.6 UM 55-21-043 (2N-T207) = Ni IV-08. Type IV tablet (lentil). List of trees.

Lentils are frequently found complete or nearly complete, they often bear beautiful and clear writing, and they are nearly always well shaped. For this reason lentils are the most common

¹²² See Falkowitz 1984, p.41 with n.23, and *TIM* X/1, p.9. The obverse is copied as *TIM* X/1, 130. The text is edited as Ni IV-12 in §5.5.

¹²³ IB 1663 and 1664 have two lines, repeated on the obverse. IB 1701 has three lines, repeated on the reverse. These lentils were published by Krebern timer 1992, p.110.

¹²⁴ See *MDP* 18 and 27; M. Lambert 1975; Tanret 1986.

¹²⁵ Faivre maintains that lentils were regularly remoulded after being inscribed, and that they sometimes still show traces of earlier use (Faivre 1995, p.60). This is not evident from the Nippur material. Faivre's claim that lentils are more common than type II tablets is clearly incorrect for Nippur, though it is true, for instance, for Isin. This difference between the two cities is not necessarily correlated to local differences in the use of exercise types. Type II tablets were usually recycled. Their absence may merely indicate that the Isin school came to an end in a more orderly way.

type of exercises in collections acquired on the market. Lentils are not only attractive for dealers; as they are more photogenic than type II tablets lentils invariably figure as the prime example of school texts in popular literature.

2.4 The Nippur Curriculum

Thematic lexical lists have their place among other school texts in the Nippur scribal curriculum. Waetzoldt (1989) has argued for the existence of levels of scribal training. Not every scribe, so he maintains, would necessarily go through all levels. The existence of two clearly distinguished stages of education may be demonstrated in the extant practice tablets. Nippur exercise compositions may be divided into two major groups. The first group includes lexical lists, model contracts and proverbs. The second group contains literary texts. The distinction in subject matter coincides with a distinction in tablet types used. The first phase is characterized by the use of the tablet types II, III¹²⁶, and IV. These types do not generally appear in the second phase. Type II tablets and lentils (type IV) are the two formats that have a model text by a teacher. Type III tablets do not have a teacher's example, but were probably copied from an old type II model. Literary exercises regularly have no teacher's model. In the second phase the student was required to copy in a more autonomous way, concomitant with the more advanced stage of his education. The lexical exercises, the model contracts and proverbs represent an earlier stage in the learning process, where the student was still closely supervised.

Perhaps we may see a reflection of the first phase of the curriculum in the literary composition *Eduba D* (Civil 1985). In this text a student boasts about his achievements at school. The exercises he refers to all belong to the first phase, including an elementary sign list, a name list, a thematic list, mathematical and metrological tables, model contracts, and proverbs. It seems that the student depicted here is describing the abilities obtained at primary school.

A further reason to postulate these two phases is comparative evidence. To take just one example, primary education in classical Rome, as described by Stanley Bonner (1977), follows very much the same pattern. The writing of single letters is followed by the writing of syllables. Next came the writing of personal names, followed by nouns and proverbs¹²⁷. Last but not least the pupils were made familiar with mathematics. Study of literature belonged to secondary education.

¹²⁶ Literary extracts are often found on one-column tablets, which somewhat resemble the type III tablets described in §2.3.3.3. These literary extract tablets are usually longer than lexical type III texts, and may carry a text of between 30 and 60 lines. In practice, the types can hardly be confused.

¹²⁷ See now Cribiore 1996, especially Chapters 3 and 4. The importance of this book lies in a reversal of priorities in the study of ancient education. Older studies, such as Marrou (1948) and Bonner (1977), describe the school from the evidence in literary texts from Plato to St. Augustine, and use extant school exercises as mere illustrations. Cribiore takes her point of departure in the exercises, such as are found on papyrus, ostraca and writing boards, and refers to literary texts to complete the picture. This approach reveals a number of important parallels with Mesopotamian evidence. Cribiore further emphasizes the importance of the distinction between learning how to read and learning how to write (in particular Chapter 10). This distinction has so far been neglected in studies of Mesopotamian education (including my own), but may be fruitful for further investigations. Unfortunately Cribiore's book came too late for a thorough evaluation of its results.

Type II tablets provide the opportunity to analyze the order in which compositions were taught in phase 1. As discussed in §2.3.3.2 the obverse of these tablets has a 'teacher-student' exercise, that is, a model by the teacher on the left-hand side, to be copied by a student on the right-hand side. The reverse has a repetition of material treated earlier. With a sufficient number of type II tablets we can reconstruct the order of the first part of the curriculum, the part in which *ur₅-ra* was used. The main tool for this analysis is the Catalogue of Nippur Lexical Texts. This catalogue is a database in which data from published and unpublished lexical texts of all kinds have been collected. The catalogue is by no means complete¹²⁸, but includes a large proportion of the Nippur type II exercises in the collections of Philadelphia, Jena, and Chicago. The database and its contents are described in Appendix I.

In the reconstruction of the curriculum we have to keep in mind that we only have what was put into writing. Musical exercises, to take an obvious example, fall outside our scope since they leave no traces in the archaeological record¹²⁹. Furthermore, doing a lexical exercise consisted only partly of copying a text on clay. As we will argue more fully in Chapter 3, such exercises were accompanied by oral explanations. These explanations form an essential part of the exercise, but are lost to us.

2.4.1 Phase 1: Lists, Models, and Proverbs

2.4.1.1 Basics: Sign elements, Syllable Alphabet, TU-TA-TI, and Name Lists

The first things an apprentice scribe had to learn how to do were making a tablet and holding a stylus. Preparatory writing exercises consisted of repeating one of the basic elements of the cuneiform sign: vertical (DIŠ), horizontal (AŠ), or the oblique wedge (U)¹³⁰. Other exercises repeat all three basic elements: DIŠ-AŠ-U¹³¹. This was followed by repetitions of signs which consist of the simplest stroke combinations, such as A (one large and two small verticals) or BAD (a horizontal and an oblique wedge).

The first real list with which a Nippurian would-be scribe was confronted is Syllable Alphabet B. This is a list of simple signs, in different combinations, and with frequent repetitions¹³². The entries do not seem to have a meaning in any regular sense. The list is basically a drill for mastering the correct sign forms. The interest in syllabographic value or logographic meaning is minimal. Typical sequences are:

¹²⁸ The most important omission is the group of unpublished lexical tablets in Istanbul.

¹²⁹ For music in the *eduba* see Sjöberg 1975 and Kilmer 1992.

¹³⁰ An exercise tablet filled with U signs may be found in Hilprecht 1903, p.57 Abb. 38.

¹³¹ Illustrated in Hilprecht 1903, p.57 Abb. 39. The type is also found in Sippar-Amnānum; see Tanret 1982.

¹³² Syllable Alphabet B was edited by Çiğ, Kizilyay, and Landsberger 1959. See further Michalowski 1983a.

23	ba-ba	61	ma-ma
24	ba-a	62	ma-a
25	ba-ba-a	63	ma-ma-a
26	ba-mu	64	ma-mu
27	ba-ba-mu	65	ma-ma-mu
28	ba-ni	66	ma-ni
29	ba-ni-ni	67	ma-ni-ni
30	ba-ni-mu	68	ma-ni-mu

The entries were interpreted by Landsberger as elements of personal names. As a matter of fact, there are some clear relations with actual name lists. The prime example is lines 121-125, a section which contains meaningful Sumerian entries:

121	igi- ^d en-lil ₂ -še ₃	before Enlil
122	igi-dingir-še ₃	before the god
123	igi-nin-še ₃	before the mistress
124	igi-e ₂ -kur-še ₃	before the Ekur-temple
125	igi-e ₂ -mah-še ₃	before the lofty temple

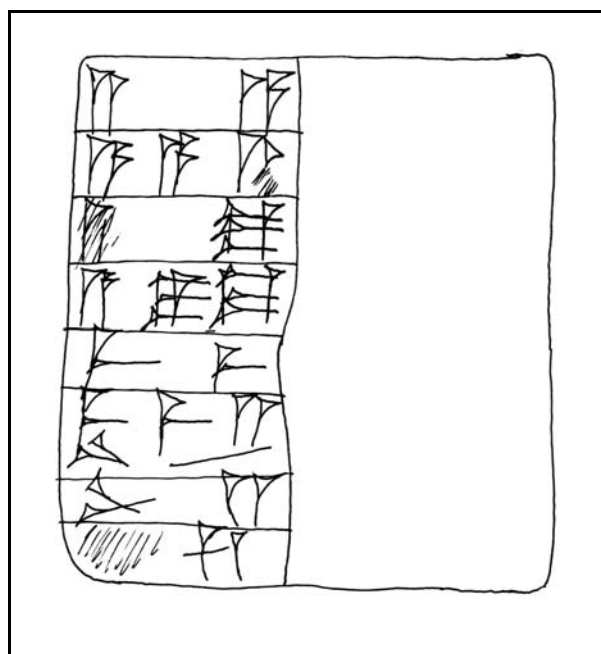


Fig 2.7 N5147 Obverse of a type II tablet with Syllable Alphabet B: easy signs. The reverse has sign elements. 7.5x9 cm.

This section is actually duplicated in one of the name lists (see Landsberger in Çiğ, Kizilyay, and Landsberger 1959, pp.104-105). Landsberger was able to connect a number of items, such as ba-ba-a, ba-za-za, and i₃-li₂ ('my god' in Akkadian) with names or name elements found in business tablets dating before the Old Babylonian period. He assumed that the list had a long history, and that its real nature had already been forgotten by Old Babylonian times. Entries which have no clear relation with a known name were explained as 'Lallnamen', or by errors, crept in as a result of the ignorance of the scribes. Even if many individual lines may be interpreted this way, Landsberger's theory does not account for the overall structure and sequence of the text. The play with syllables, and the clear selection of easy sign forms at the beginning of the list (A, KU, ME, PAP¹³³, BAR, etc), indicate that the first function was

mastering the execution of common signs. This interpretation is consistent with the oversized writing found in most exemplars. Large signs enable the pupil to exercise minutely every detail of the sign. This is not to deny that relations with the onomasticon exist. Such relations, however,

¹³³ Read PAP (or kur₂) in line 8-9, not kur. The PAP is clear on the photograph of Ni 3237 (Çiğ, Kizilyay, and Landsberger 1959, pl. XI) and in numerous unpublished exemplars in Jena and Philadelphia.

are not decisive for the true nature of the text and its use in the curriculum.

Syllable Alphabet B is mentioned in the literary text Eduba D (Civil 1985) and in a proverb (SP 2.48). In both cases it is clear from the context that a very elementary exercise is meant.

Outside Nippur, Syllable Alphabet B is unknown. A related text, commonly called Syllable Alphabet A, has been found almost everywhere else¹³⁴. The oldest datable exemplars (early Old Babylonian) were found in Susa (Tanret 1986). In detail Syllable Alphabet A is quite different from the Nippur version, but it has the same basic function. Curiously, the textual history of Syllable Alphabet A is much more complicated and interesting. Whereas Syllable Alphabet B disappeared with the Nippur eduba, Syllable Alphabet A survived and is attested in Middle Babylonian and first millennium sources. Most astonishingly, variants are relatively rare. From the Old Babylonian period onwards it is occasionally provided with one, or even two Akkadian columns. These multi-column versions are called 'Syllable Vocabulary A'. Some of the Akkadian items represent real translations of the entries, understood as Sumerian words. Usually the association is rather fanciful¹³⁵. It is probably the relative 'emptiness' with respect to semantics that made the list susceptible to this kind of playful or mystical association. An ineluctable parallel is the Hebrew alphabet and its use in Kabbalistic speculation.

The second list of which the pupils in Nippur took cognizance was TU-TA-TI. It consists of sets of three syllables with permutations of the vowel, in the order u-a-i. Curiously, the /e/ is missing. In a number of cases an /e/ syllable is written by the same sign as the /i/ syllable (for instance the sign LI may be used for the syllables /li/ and /le/). This may have led to a kind of generalization that /e/ syllables are not necessary for the basic repertory. In most versions the syllables are first given one by one, and then as a triad. Each entry is preceded by a vertical wedge (here represented by ¶):

¶ tu
¶ ta
¶ ti
¶ tu-ta-ti
¶ nu
¶ na
¶ ni
¶ nu-na-ni

¹³⁴ Old Babylonian examples have been found in Ur, Uruk (Cavigneaux 1996, texts 188-192 and 255-257), Larsa (*BBVOT* 3,84 reverse), Isin, Kiš, Sippar, Tell Harmal (*TIM* 10/1, 144 and 168), Ishchali (Greengus 1979 no. 293), and other places. The main bibliography may be found in Landsberger 1933; Çiğ, Kizilyay, and Landsberger 1959, p.98 n.4; Tanret 1986, p.144; Cavigneaux 1983, p.619. Isin texts are unpublished: IB 441 (see Tanret 1986, p.144); IB 1562 (see Wilcke 1987, p.104; the piece contains the beginnings of 100-109). The Kiš texts are also unpublished, but numerous exemplars may be identified from the catalogue of Série A in *PRAK* II. Two Nippur pieces are known: CBS 14150 and UM 29-15-460. These two do not represent elementary exercises. See the discussion in §3.6.

¹³⁵ Landsberger 1933; Nougayrol 1965; Sollberger 1965; *Emar* 6/4, pp.194-198; Edzard and Wilcke 1977, p.86; Beaulieu 1995. In some exemplars Syllable Vocabulary A is associated with a creation myth (Edzard and Wilcke 1977, p.86 with previous literature).

At present three different versions of TU-TA-TI have been identified in Nippur¹³⁶. The great majority of exemplars follow 'version a'. This version can be reconstructed in its entirety and numbers 116 lines, followed by the traditional subscript ^dnisaba za₃-mi₂: 'Praise to Nisaba'. The other two versions are known only from a few duplicates each. Further, there are some exemplars which cannot be attributed to any of these versions. In a few TU-TA-TI texts Akkadian words and phrases are included in the following style¹³⁷:

¶ a
 ¶ na
 ¶ ša
 ¶ ši
 ¶ im
 ¶ a-na ša-ši-im 'to him/her'

The distribution of TU-TA-TI in the Old Babylonian period is remarkable. In Nippur the exercise is not found among the 3N-T school texts, even though other elementary texts such as Syllable Alphabet B and name lists are abundantly represented. One could speculate that the text was used by some teachers, and omitted by others. Outside Nippur TU-TA-TI is rare. Two pieces are known from Uruk (Cavigneaux 1982, p.29 nos.10 and 11), two other tablets derive from unknown sites (*TIM* 9, 85 and *RA* 9, p.80)¹³⁸. Otherwise TU-TA-TI is only attested in Middle Babylonian Amarna and Ugarit¹³⁹. This paucity of evidence outside Nippur may be partly due to chance. In Northern Babylonia a related exercise is attested¹⁴⁰.

TU-TA-TI seems at first sight to be directed at learning how to write Akkadian. This impression is caused by the emphasis on syllabic values and the Akkadian words in some exemplars. However, at least one of the syllable sets in standard TU-TA-TI can only be explained from typically Sumerian sign values: gu₁₀-ga₂-gi₆ (version a: 61-64). Other sets, necessary for Akkadian, are missing, especially the emphatics. Syllable Alphabet B, on the other hand, was called the 'Sumerian Primer' by Chiera¹⁴¹. This text does contain a number of good Sumerian forms, such as i₃-ba ('he gave'). However, entries which are simply not Sumerian abound. The Sumerian look

¹³⁶ 'Exemplar a' was edited by Çiğ, Kizilyay, and Landsberger (1959). New duplicates in the University Museum in Philadelphia provide the last few lines. The edition of 'exemplar b' in the same volume is erroneous. The text begins in the same way as version a (tu-ta-ti; nu-na-ni). Some new duplicates have been identified. The third version is found on a Louvre tablet (Thureau-Dangin 1912, p.80; unprovenanced) and on a few unpublished Nippur prisms and tablets.

¹³⁷ The example is from the six-sided prism fragment HS 1801, side 6, lines 6'-11'. For other examples see Çiğ, Kizilyay, and Landsberger 1959, p.65; and §2.5.3 of the present study.

¹³⁸ The Kish text A 371 (Genouillac *PRAK* II, p.54) may be another example, but the description is not entirely clear.

¹³⁹ Curiously the exercise seems to be absent in Emar.

¹⁴⁰ Tanret 1989. The relation between this list and TU-TA-TI is discussed in §2.5.3.

¹⁴¹ See the catalogues in Chiera 1916.

of Syllable Alphabet B is more apparent than real. It is merely based upon the absence of specifically Akkadian characteristics. In the form as we know them Syllable Alphabet B and TU-TA-TI are not defined by either Akkadian or Sumerian. The former is primarily directed at sign forms, the latter at syllabic values. They are used to teach cuneiform, relatively independent of language.

The next element of basic scribal training consisted of lists of personal names. Various lists have been identified: Akkadian names, Sumerian names, and a list that orders names in groups of three. At present three or four lists are distinguished (see Çiğ and Kizilyay 1965 and Cavigneaux 1983, p.618f.). It is possible that these name lists occupied different places in the curriculum. Until all the lists of personal names have been reconstructed in an adequate way, it is difficult to judge. Provisionally, the lists of personal names will be treated here as a single category. Syllable Alphabet B was probably followed by one list of personal names. The list of Akkadian names (commonly called list C) perhaps followed TU-TA-TI. Occasionally, name lists may have been treated at a later stage in the curriculum.

Lists of names fulfilled different functions. The list of Akkadian names contains numerous Akkadian words and verbal phrases, in some way continuing the kind of training found in TU-TA-TI. The list is repetitive, giving the same set of words in combination with various divine names to produce personal names. For this reason, apart from training and memorizing the names, the list may also have functioned as training in elementary literacy in Akkadian. If there was a category of scribes who were trained exclusively in Akkadian writing, the lists of Sumerian and foreign names would be of prime importance. Without understanding Sumerian such scribes had to be able to write Sumerian names correctly, and also names in other languages such as Amorite. Without these skills, even simple documents might well pose insurmountable problems. The existence of such semi-literate scribes cannot be proven, but cannot be excluded either.

The curricular order of the elementary exercises may be demonstrated by analyzing the contents of type II tablets. The following table comprises the type II texts presently included in the catalogue. Tablets which are either broken or unidentified on one side are excluded. For the other tablets five categories are distinguished for both obverse and reverse:

- 1 Sign Elements
- 2 Syllable Alphabet B
- 3 TU-TA-TI
- 4 Name lists
- 5 All other exercises

REVERSE by OBERVERSE

		OBERVERSE				Row
Count		SA B	TuTaTi	PN	Other	
		2.00	3.00	4.00	5.00	Total
REVERSE						
	1.00	6				6
Sign Elements						.8
	2.00	104	5	27	14	150
SA B						18.8
	3.00		2	18	28	48
TuTaTi						6.0
	4.00	1	1	48	66	116
PN						14.6
	5.00			3	474	477
Other						59.8
Column		111	8	96	582	797
Total		13.9	1.0	12.0	73.0	100.0

A number of conclusions may be drawn from this table. First, the Sign Elements exercise is found occasionally on type II tablets. In all six cases it appears on the reverse, with Syllable Alphabet B on the obverse¹⁴². The Sign Elements otherwise appear on tablets that fall outside the common typology; usually large and rather flat tablets without a teacher's model. Excluding the Sign Elements, the upper-right half of the above table is better filled than the lower-left half. There are, for instance, 27 type II tablets with names on the obverse and Syllable Alphabet B on the reverse, and only one tablet with an inverse distribution. This indicates that Syllable Alphabet B precedes the names in the curriculum. Similarly, there are 5 tablets with TU-TA-TI on the obverse and Syllable Alphabet B on the reverse, but none the other way round. The exceptions, located in the bottom-left half of the table, are few and invariably due to the lists of names. In general, the analysis confirms the order Sign Elements - Syllable Alphabet B - TU-TA-TI - Name lists - Other exercises.

2.4.1.2 Lexical Lists: Ur₅-ra

The curriculum continued with ur₅-ra, the thematic lists of objects. Old Babylonian tablets with an ur₅-ra exercise are always unilingual Sumerian in format. It is assumed with good reason that the correct pronunciation of each Sumerian word and its Akkadian translation were provided

¹⁴² In all examples found so far the obverse has the first few lines of Syllable Alphabet B.

orally by the teacher. The pupil is only starting his course in Sumerian. Without a translation the Sumerian words would make no sense to him. In one of the eduba dialogues (Eduba D), a lexical text which has come down to us in unilingual copies only is referred to by its bilingual incipit¹⁴³ $lu_2 = \check{s}$. This list does not belong to ur₅-ra, it is a list of terms referring to human beings (see §2.4.1.3), but it proves that a unilingual written format for an essentially bilingual text is conceivable in this period. Similarly, the sign list Proto-Ea (see §2.4.1.3) is found in two formats: a format with, and one without glosses¹⁴⁴. The format without glosses is used by relatively advanced pupils. In the absence of glosses the text makes little sense, so we must assume that the pupils who used this format had learned the glosses by heart.

In the case of ur₅-ra, the existence of Akkadian translations provided orally is further indicated by a few sections in the list, whose organization can only be explained with the help of these translations (see §3.3). Sumerian pronunciation and Akkadian translation were probably learned by heart by the pupils. The ur₅-ra we have is therefore only part of the ur₅-ra as it was used in class. We will come back to this point and several of its implications in subsequent chapters.

Nippur ur₅-ra was divided into six divisions. In the following table the contents of each division are presented, as well as the approximate correspondence to the tablet division in the first millennium series.

Division	Contents	Corresponding tablets in late ur ₅ -ra
1	trees and wooden objects	3-7
2	reed and reed objects; vessels and clay; hides and leather objects; metals and metal objects	8-12
3	domestic animals; wild animals; meat cuts.	13-15
4	stones and plants; fish and birds; clothing.	16-19
5	geographical names and terms; stars.	20-22
6	foodstuffs	23-24

This division is first of all indicated by subscripts. Nippur school compositions generally end with a za₃-mi₂ ('praise!') subscript¹⁴⁵. In lexical texts it has the form ^dnisaba za₃-mi₂¹⁴⁶. This

¹⁴³ See Civil 1985, p.74 (commentary to line 14).

¹⁴⁴ See Civil in *MSL* 14, p.4. Similarly for Proto-Diri.

¹⁴⁵ In Assyriological literature these subscripts are generally referred to as 'Doxologies' (see in general Wilcke 1975, pp.246-248). I prefer the more neutral term subscript.

subscript is only found at the end of the divisions indicated above. The phrase is not only found on large tablets and prisms, but also on Type II tablets which happen to contain the end of a division. The phrase, therefore, constitutes an inherent part of the text.

Prisms commonly contain a complete division. The following ur₅-ra prisms and prism fragments are known to me:

Division	Museum no.	Publication	Edition
1	CBS 12486 N 5260 N 6766 + N 6960 3N-T905,211 A 30187 (3N-T259) IM 58599 (3N-T655)	<i>SLFN</i> 73 ¹⁴⁷	Ni P-04 Ni P-03 Ni P-01 Ni P-02 Ni P-06 Ni P-05
2	CBS 7844 + HS 1796 + HS 1869 (+) CBS 7855 ¹⁴⁸ 3N-T649 HS 1686	<i>SLT</i> 191 + HS pieces (+) <i>SLT</i> 89	<i>MSL</i> 7, p.178 V7; p.211 V25; p.229 V1 <i>MSL</i> 7, p.211: V24
3	UM 29-13-260 ¹⁴⁹ HS 1765 ¹⁵⁰ HS 1799		<i>MSL</i> 9, p.41: V3
4	UM 55-21-407 (3N-T911p) HS 1659 + 1760 + 1761 + 1813+ 1864 ¹⁵¹		<i>MSL</i> 10, p.120: I
5	CBS 7827 (+?) Ni 2340 CBS 11034 UM 29-16-206 + N 6249 A 30145 (3N-T105) HS 1789	<i>SLT</i> 212 + unpubl. <i>SLT</i> 213	<i>MSL</i> 11, p.93: C and p.95: J1 <i>MSL</i> 11, p.93: H <i>MSL</i> 11, p.93: G <i>MSL</i> 11, p.96: B2
6	CBS 11082	<i>SLT</i> 15	<i>MSL</i> 11, p.110: B

¹⁴⁶ Nisaba is the goddess of writing.

¹⁴⁷ The piece was not described as a prism fragment in *SLFN*.

¹⁴⁸ The identification of the HS pieces as belonging to the same prism as the CBS fragments was made by Oelsner.

¹⁴⁹ Small fragment, may be a type I tablet.

¹⁵⁰ The section wild animals has an independent recension.

¹⁵¹ All joins Oelsner.

Some of the listed pieces are rather small, and do not allow conclusions about the length of the text the entire prism once contained. The pieces which do allow conclusions always had one of the six divisions in its entirety. None of the pieces contains parts of more than one division. A nice example is N 6766+. This is a small fragment of a six-sided prism with a list of trees and wooden objects. It is included in the edition in §5.4 as Ni P-01. The legible lines on the best preserved side contain lines 614-622 in column 1 and 688-696 in column 2. This is very close to the end of division 1; the last line in the composite text is numbered 707. This side, therefore, is side 6, and the next side must be side 1. Only some traces of this side remain, but enough to identify the beginnings of lines 37-39 of the composite text. The fragment, therefore, derives from a prism that once had division 1 in its entirety.

Entire divisions are not only found on prisms but also on some type I tablets. An example is UM 55-21-314+ which contained division 1¹⁵². Sometimes a division is split into two or three parts, the parts connected by catch-lines. In all cases the text is broken up at a meaningful point. Thus CBS 13935 (*SLT* 179) has a list of stones, the beginning of division 4, with a catch-line to the section plants. HS 1617 also has the beginning of division 4. It includes the sections stones, plants, and fish, followed by the catch-line to the section birds: u₅^{mušen}¹⁵³. Interestingly, the last column of this tablet is not used. Apparently the scribe foresaw that this column would not suffice to complete the next section, the list of birds, and he preferred to break off at a meaningful place. Instead the last column is partly inscribed with a list of month names¹⁵⁴. Two tablets are known which have the second half of division 2, beginning with the hides (CBS 6522 = *SLT* 201¹⁵⁵ and CBS 10067 = *SLT* 41¹⁵⁶). This is interesting because the same break-up is known from Old Babylonian Isin and Middle Babylonian Ugarit and Emar¹⁵⁷. In Nippur this break-up was not standardized. CBS 13867 is a fragment of a relatively small Type I tablet which had only the section reed and reed objects. N 5625 (*MSL* 7, p.210: V8) begins with the section hides and ends with the section copper, followed by a catch-line to the section bronze. The latter piece shows that division 2 could be distributed over at least three type I tablets.

The only natural point for a break-up of division 1 is between the trees and the wooden objects. There are two tablets which probably had the list of trees only¹⁵⁸. This is a very uneven

¹⁵² Edited below as Ni I-05.

¹⁵³ None of the tablets published so far has the beginning of the Nippur bird list. The end of the fish list and the beginning of the bird list (u₅^{mušen}) are extant on the prism HS 1659+.

¹⁵⁴ All 13 lines of the list are preserved. It is placed in the middle of the column, the rest of the space being anepigraphic. The month list ends with iti še-kin-kud; iti diri-bi. The list may be taken as an extract from Proto-ki-ulutin-bi-še₃, but since the list is so very self-contained, it probably does not make much sense to do so. For other examples of blank-space fillers see §2.3.3.1.

¹⁵⁵ See *MSL* 7, p.230: V5.

¹⁵⁶ Only the obverse was published in *SLT*. See *MSL* 7, p.212 V31 and p.230: V12.

¹⁵⁷ Isin: IB 1546+1622a (reed, reed objects, vessels); IB 1612b (hides, etc.); see Wilcke 1987, p.103f. For Ugarit and Emar see Van Soldt 1995 and §2.5.1.2.

¹⁵⁸ N 4983 (Ni I-03) and N 5881 (Ni I-09).

distribution since the trees occupy lines 1-141 whereas the wooden objects cover over 550 lines. Instead the text was commonly divided between the section wagons and the section doors. The second half begins at line 374. There are two type I tablets which have the first half of division 1: CBS 6068 (= *SLT* 170) and N 1361+; both end with the catch-line to the section doors. CBS 5931+ has the text from the section doors to the end, followed by the subscript ^dnisaba za₃-mi₂¹⁵⁹. The same break-up is attested in Isin¹⁶⁰ and in the Middle Babylonian versions from the Western periphery (see §2.5.1.2).

The conventions used for prisms and type I tablets are also found in other lexical series. An example is Proto-Izi, a more advanced lexical exercise (see §2.4.1.3). Type I tablets either have the whole text of Izi, or one half, but the praise to Nisaba is only found at the very end. Type I tablets which contain the first half of Izi have a catch-line to part 2 (*MSL* 13, p.7). Accordingly, one division of ur₅-ra was treated on the same level as the lexical composition Proto-Izi. The six divisions were regarded as more or less independent units. Only one example of an exercise tablet that crosses the borders between two divisions is known to me¹⁶¹. It is a type II tablet with proverbs on the obverse. The reverse has an extract from the last section of division 4 (*MSL* 10, p.144 G), and continues with the beginning of division 5 (*MSL* 11, 93 F)¹⁶². The importance of the division's borders is illustrated by the reverse of the exercise tablet CBS 11342+ (*SLT* 194)¹⁶³. The reverse has an extract from the list of wooden objects. When the junior scribe came to the end of division 1 he wrote the conventional subscript. He did not continue with the beginning of division 2, but started again with the beginning of division 1.

Nippur ur₅-ra as presented above follows the same general order of the topics treated as the first millennium series. This, however, is by no means a matter of course. Other Old Babylonian traditions kept to an entirely different order. The Nippur version was one among many. In §2.2 we discussed lexical texts from Ur, Kisurra, and Tell Harmal which demonstrated divergent arrangements of basically the same topics as those found in Nippur ur₅-ra. By way of example we can compare the order of the topics in the two Diyala region cylinders (Ishchali?[?] see §2.2.3) with the Nippur tradition:

A 7895	Nippur division:
rivers	5
snakes	3
domestic animals	3
?	
foodstuffs	6

¹⁵⁹ Edited as Ni I-01; Ni I-08; and Ni I-10 respectively. Fragments belonging to CBS 5931+ (Ni I-10) are published as *SLT* 132; 159; and 165 (A-E).

¹⁶⁰ IB 1535+ (first half; edited in §5.6.1 as Is I-01) and IB 1512c+ (second half; edited in §5.6.1 as Is I-03). See Wilcke 1987, p.102f.

¹⁶¹ N 5084 = Gordon 1968, Plate 56.

¹⁶² The obverse has a multiplication table and a Proverbs exercise. This rare sub-type is described in §2.4.1.4..

¹⁶³ Ni II-002.

A 7896

plants	4
wild animals	3
domestic animals	3
hides	2

The astonishing fact is not so much that the order of the topics treated differs from the Nippur tradition, but rather that the cylinders differ among themselves. Apparently the idea of a fixed order did not exist in Ishchali.

Type I tablets and prisms yield the units into which Nippur ur₅-ra was divided. There is no example of a catch-line connecting two divisions. Therefore, the order of the divisions cannot be known on the evidence of type I tablets and prisms. The only way to establish the Nippur order is by an analysis of type II tablets. In the following table the exercises are divided over elementary exercises (the exercises discussed in §2.4.1.1), the six ur₅-ra divisions, and other exercises. The last group contains all exercises treated after ur₅-ra.

OBVERSE										
Count	Elementary	Ur ₅ 1	Ur ₅ 2	Ur ₅ 3	Ur ₅ 4	Ur ₅ 5	Ur ₅ 6	Other	Row	
	1.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00	Total	
REVERSE										
1.00	212	47	28	7	12	1	1	12	320	
Elementary									40.2	
5.00	2	20	32	9	21	2	2	32	120	
Ur ₅ 1									15.1	
6.00			3		1			10	14	
Ur ₅ 2									1.8	
7.00				4	2	6	5	35	52	
Ur ₅ 3									6.5	
8.00				2	4	3		5	14	
Ur ₅ 4									1.8	
9.00						4	1	7	12	
Ur ₅ 5									1.5	
10.00							2	7	9	
Ur ₅ 6									1.1	
11.00	1		1	3	1	1	5	244	256	
Other									32.1	
Column	215	67	64	25	41	17	16	352	797	
Total	27.0	8.4	8.0	3.1	5.1	2.1	2.0	44.2	100.0	

The bottom-left part of the table is almost empty, in the upper-right half most slots are filled¹⁶⁴. Most of the exceptions are due to the exercises treated after ur₅-ra. A type II tablet with, for instance, division 2 on the obverse, may have on the reverse division 1, division 2, or an elementary exercise, but not divisions 3-6. The order of the ur₅-ra divisions is confirmed with no more than two exceptions: there are two tablets with division 3 on the obverse, and division 4 on the reverse.

An Old Babylonian catalogue text from the Yale collection (YBC 13617), published by Hallo (1982, p.82), is a rare example of a catalogue text listing lexical compositions¹⁶⁵. The tablet is of unknown provenance. The first column gives a list of abbreviated literary incipits. The second column runs as follows:

Col II

1	DIŠ A	
2	DIŠ AN	
3	^{giš} taskarin	boxwood
4	gi-gašam	a kind of reed
5	udu	sheep
6	^{na} ka-gi-na	hematite
7	ZI?-du ₈ ?	
8	lu ₂ -X	
9	⁺ NE [?] -bi	
10-11	traces	

There can be little doubt that lines 3-8 list the main divisions of Old Babylonian ur₅-ra, followed by an Old Babylonian list of human beings (Lu₂)¹⁶⁶. We may compare the items with the *incipits* of the Nippur divisions.

Yale catalogue:	<i>Incipits</i> of the Nippur Divisions:	
3 ^{giš} taskarin	1 ^{giš} taskarin	boxwood
4 gi-gašam	2 gi-gašam	a kind of reed
5 udu	3 udu-niga	fattened sheep

¹⁶⁴ Actually some slots in this part are empty. This may be due to several factors. Some parts of ur₅-ra have been excerpted on type II tablets more often than other parts. Some parts have been better edited than other parts. This implies that more tablets have been identified. Both factors mean that the probability of finding and identifying a certain combination of obverse and reverse exercises is not evenly spread.

¹⁶⁵ The only other example is *UET* 5, 86 (see Charpin 1986, p.453ff. with previous literature). For catalogue texts see Weitemeyer 1990. The Yale catalogue was omitted from his discussion.

¹⁶⁶ The traces as copied allow for lu₂-šu, which was the title of Proto-Lu₂ (Civil 1985, p.74: commentary at line 14). Another possibility is lu₂-azlag₂(TUG₂), which is the incipit of the Old Babylonian Lu₂ (*MSL* 12, p.151). Line 1 represents an Old Babylonian sign list. Sign lists almost invariably begin with the sign A (see the discussion of Proto-Ea, §2.4.1.3). Line 2 is probably an abbreviation of a name list, for instance the list ^dInanna-teš₂ (see Civil 1985, p.74 commentary at line 13, with references). That it is not a god list may be argued from the initial single vertical (DIŠ). Line 9 might be Proto-Izi, but judging from the copy the reading NE is very uncertain.

6 ^{na}ka-gi-na
7 ZI?-du₈?

4 ^{na}ka-gi-na
5 a-ša₃-du₈
6 a

hematite
cultivated[?] field
water

The catalogue is not from Nippur but the differences from the list of Nippur *incipits* are very small indeed. The most important ones are found at the end. Line 7 is difficult to read and interpret but probably indicates the list of geographical names and terms (division 5 in Nippur). There is no entry in the catalogue corresponding to Nippur division 6 (foodstuffs). Perhaps the geographical names and the foodstuffs are taken together as one division. Such a tradition existed in Old Babylonian Larsa, as exemplified by AO 6447¹⁶⁷. The *incipit* udu for the domestic animals (as against Nippur udu-niga) is known from later versions of the same list.

Division 1 numbers over 700 lines. Division 5 is reconstructed with 431 lines (*MSL* 11, pp.97-109). If we take an average of 550, the series had approximately 3300 lines. These 3300 lines cannot be regarded as one indistinctive string of words. There are differences between sections. The proportions between the various tablet types are not the same for all divisions. The list of geographical names (division 5) has numerous type I tablets and prisms. For the foodstuffs (division 6) only one prism has been identified so far. The beginning of the tree list (division 1) is frequently copied on the reverse of type II tablets. Dozens of examples are known. The last section of division 4 (wool and clothing), on the other hand, is rarely copied on the reverse of a type II tablet. The total number of tablets of all types used in the reconstruction of this passage in *MSL* 10, pp.144-149 is only 14, and a number of lacunae and uncertain reconstructions remain. The textual stability of the Nippur ur₅-ra is uneven as well. Some sections are fairly well standardized, with occasional variants, additions or omissions. Examples are the list of reed objects (beginning of division 2) and the list of stones (beginning of division 4). The list of herbs (SAR), on the other hand, is notorious for showing a different redaction in almost every source¹⁶⁸. The list of birds, part of the same division, is also poorly standardized¹⁶⁹. The list of domestic animals (beginning of division 3) may be found in its entirety on the back of a type II tablet, with the catch-line to the section muš (snake) after a horizontal line¹⁷⁰. For the other sections, catch-lines on a type II tablet are unknown to me.

The differences between various sections of ur₅-ra may be explained by at least two factors. Firstly, some sections of ur₅-ra have a textual history that goes back to third millennium lexical lists, whereas others do not. The relations with these earlier lists are still largely unclarified. Secondly, the distribution of ur₅-ra over types of exercise tablets shows that the custom was not to start with division 1 line 1 and continue to the end of division 6. Generally, the beginning of each division is found more frequently than later parts of the text. An in-depth study of the use of

¹⁶⁷ RA 32, p.168ff.; *MSL* 11, p.129ff.; Van Soldt 1993, p.429.

¹⁶⁸ See the edition in *MSL* 10, p.119ff. The Jena prism HS 1659 + has a version of the section u₂ on face C, col. I, generally corresponding to 'Section A'. Col. II (SAR) has sequences from the sections C, C' and C'', in an order that cannot be reconciled with any of the pieces edited in *MSL*.

¹⁶⁹ Personal communication M. Civil. No edition of this text is available.

¹⁷⁰ Examples are CBS 6463 + N 5763 and CBS 6418 + N 4072 (edited as V19 and V20 respectively in *MSL* 8/1, p.81ff.).

these lists in the eduba will require a thorough investigation of all divisions and their sources, an undertaking that goes beyond the limits and scope of this study, and requires much more preparatory work.

2.4.1.3 Advanced Lists

Ur₅-ra is succeeded by a variety of other compositions: metrological tables, sign lists, so-called acrographic lists, and mathematical tables. A metrological table gives the correct writing for different kinds of measures: surface, capacity, weight. These lists have a standard sequence¹⁷¹. An important sign list is Proto-Ea. Proto-Ea provides for each sign the available Sumerian readings, or pronunciation glosses. Each line is preceded by the single vertical wedge as item indicator. The list begins¹⁷²:

1	𒀭 a ₂	A
2	𒀭 ia	A
3	𒀭 du-ru	A
4	𒀭 e	A
5	𒀭 a	A
6	𒀭	A.A
7	𒀭 sa-ah	HA.A
8	𒀭 am	A.AN
9	𒀭 še-em ₃	A.AN

The sign A was probably considered the most basic or simple sign¹⁷³. The first five lines give different possible readings of this sign in Sumerian. This is followed by some complex signs, combining A with another sign. In principle complex signs are treated in Proto-Diri, to be discussed presently. We must assume that complexes like A.AN were considered as one sign, or that the distinction between simple signs and complex signs is not a very strict one. Different Sumerian values represent either allophones of the same Sumerian word, or different Sumerian words. Thus the first value of the sign A is: a, meaning water, another value is duru₅, meaning wet. Old Babylonian Proto-Ea has no translations into Akkadian¹⁷⁴. Probably, such explanations were added orally by the teacher. In first millennium versions Akkadian translations are an inextricable part of the text.

¹⁷¹ Some examples are found in Neugebauer 1937, Band 1, pp.88-90.

¹⁷² *MSL* 14, p.30. A detailed description of Proto-Ea by Civil is found in *MSL* 14, p.3ff.

¹⁷³ Sign lists usually begin with A, and use the single vertical wedge (DIŠ) as item indicator. Examples are S^a (late Old Babylonian examples attested in Tell ed-Dēr, Tanret 1982), the Uruk sign list (Cavigneaux 1982: W20248, 3; Waetzoldt 1986a, pp.5-7), the Susa sign list (*MDP* 27, 1; 4; and 175-177), and a sign list from Isin (IB 1621). All these lists may in fact be related somehow to Proto-Ea (see *MSL* 14, p.167).

¹⁷⁴ A bilingual version of Proto-Ea with a number of Akkadian translations for each of the Sumerian values is known as Proto-Aa. This list was occasionally used at a more advanced stage of the curriculum. See *MSL* 14, pp.85-86.

Advanced students regularly omitted the glosses and only wrote the Sumerian column. The glosses and Akkadian translations were no doubt learned by heart. Edzard (1982) and Michalowski (1983a) both comment on the organization of the series, which is based on pedagogical considerations. One of the main ordering principles is the 'Gestalt' (Michalowski 1983a, p.152) of the signs listed. The composition has frequently been grouped by modern scholars with the elementary exercises TU-TA-TI and Syllable Alphabet B¹⁷⁵. The analysis of obverse-reverse correlations of the relevant type II tablets reveals another order. Ea was commonly introduced after ur₅-ra, though a few exceptions exist.

Proto-Ea was followed by a thematic list, Proto-Lu₂. This is a list of titles and professions, kinship terms, and other designations for human beings. It includes a number of entries which do not refer to human beings, but are attracted by graphic or thematic similarity. Thus the section on singers includes a section on songs. The section farmers is followed by a section for furrows. The word for furrow has several spellings. Some of these spellings include the sign APIN which is identical with the sign for engar: farmer¹⁷⁶. Proto-Lu₂ begins with the relative personal pronoun lu₂¹⁷⁷. The list then continues with high members of the court hierarchy:

1	lu ₂	who
2	lugal	king
3	nam-dumu-na	status of crown prince
4	sukkal	a court official
5	sukkal-mah	chief court official
6	sukkal-ša ₃ -e ₂ -a	overseer of the palace
7	sukkal-i ₃ -du ₈	overseer of the doorkeepers

Proto-Lu₂ was followed by Proto-Izi. This composition belongs to the acrographic lists. Acrographic lists are ordered by the first or main sign of each entry. Civil has demonstrated that the organization of Proto-Izi also depends on semantic, graphic, and phonetic association¹⁷⁸. In general, words already treated in ur₅-ra are omitted. Some sources of Proto-Izi add pronunciation glosses and/or Akkadian translations to selected items but most tablets record the Sumerian word only. The list begins as follows¹⁷⁹:

¹⁷⁵ The reconstruction of the initial exercises as TU-TA-TI - Syllable Alphabet B - Proto Ea was originally proposed by Landsberger in Çiğ, Kizilyay, and Landsberger 1959, p.97 and then followed by most authors (e.g. Sjöberg 1975, p.162; Hallo 1989, p.237).

¹⁷⁶ This description of Proto-Lu₂ depends on Civil's introduction to the text in *MSL* 12, p.25, where a more thorough discussion may be found. See also Civil 1994, p.173.

¹⁷⁷ The word lu₂ usually means man, but is also used as relative personal pronoun. From later bilingual parallels it appears that it is listed here in the latter sense.

¹⁷⁸ Proto-Izi has been described by Civil in *MSL* 13, pp.7-10.

¹⁷⁹ *MSL* 13, p.41f.

1	izi	fire
2	ne	kiln
3	NE	ember
4	NE	flame
5	de ₃	ashes
6	izi-gar	furnace
7	i-bi ₂	smoke
8	ne-mur	glowing ashes
9	sag-izi	torch
10	sag-zi	
11	u ₃ -dub ₂	charcoal
12	ganzer ₂	flame
13	ga-an-ze ₂ -er	
14	an-bar ₇	heat of the day
15	an-bar ₇ -gan ₂	midday

Most items in this opening section contain the sign NE read *izi*, *ne*, *de₃*, *bi₂*, or *bar₇*, or as a part of the complex sign *ganzer₂* (NE.SI.A). Lines 14 and 15 use the reading *bar₇*, but at the same time introduce a new section, with lines beginning with the sign AN. Lines 10 and 13, which do not contain a NE sign, are spelling variants of 9 and 12 respectively. Line 11, *u₃-dub₂*: charcoal may have been attracted by the semantic similarity with the rest of the section. Moreover, this word has an alternative spelling NE.SI.A, which is a homograph of the next line, *ganzer₂*.

In addition to Proto-Izi, the group of acrographic exercises includes Proto-Kagal and Nigga. These three lists were probably treated during the same curricular phase. The series are best attested in Nippur, but for all of them there is some evidence for their existence elsewhere. Proto-Izi, for instance, is now known from Ur, Isin, Sippar, and unknown places¹⁸⁰. Old Babylonian bilingual versions of Proto-Izi and the other acrographic lists exist but they are rare.

Proto-Diri is a very important sign list. In Diri, complex signs composed of two or more basic signs are listed. These complexes are accompanied by their Sumerian reading and one or more Akkadian translations. The list is ordered by various criteria. There is a section with reduplicated signs, listing such combinations as TAK₄.TAK₄; TUR.TUR; and LAGAB.LAGAB. Other sections are ordered by first sign, such as IGI and GIŠ. There is a passage with personal pronouns. The following example is taken from the unpublished edition by M. Civil¹⁸¹. The first column gives the Sumerian pronunciation gloss. It is followed by the sign complex (in capitals) and by one or more Akkadian translations (in italics).

¹⁸⁰ See *MSL* 13, p.9 and Wilcke 1987, p.101f.

¹⁸¹ I would like to thank Prof. Civil here for his generous permission to use his hypertext version of Diri.

30	mu-mu-un	KA×LI.KA×LI	<i>rigmum</i>	screaming
31			<i>šiptum</i>	incantation
32			<i>wāšipum</i>	exorcist
33	[d]a-da-ag	UD.UD	<i>ellum</i>	pure, clean
34			<i>ebbum</i>	pure, clean
35			<i>namrum</i>	shining
36	hu-hu-ud	UD.UD	<i>ellum</i>	pure, clean
37			<i>ebbum</i>	pure, clean
38			<i>namrum</i>	shining

Among the Old Babylonian school texts, Proto-Diri is one of the few compositions which is regularly copied in bilingual format. The pronunciation glosses in the first column are often omitted. In the post-Old Babylonian tradition, however, the glosses are an essential part of the text.

Approximately at this stage of the curriculum mathematical tables were introduced. They contain either multiplication tables or tables of reciprocals. In content they are rather different from the exercises treated above. They deal with numbers rather than with words or signs and they display a degree of systematics and predictability not found in the lexical series. In format, however, they are similar to bilingual lists. In a bilingual list each entry expresses a relation between two words. In a multiplication table a line represents a relation between two numbers. One type of mathematical list looks like this:

1	6
2	12
3	18
4	24
5	30
6	36
(etc.)	

The multiples included are 1-20; 30; 40; and 50¹⁸².

In many cases we find mathematical tables on both sides of a Type II tablet. Another common combination is proverbs or model contracts on the obverse, and a mathematical table on the reverse.

In the following table the evidence of the type II tablets for the compositions discussed in this section is summarized. The category 'Elem/Urra' contains the elementary exercises discussed in §2.4.1.1 and the ur₅-ra divisions (§2.4.1.2). 'Other' combines the Model Contracts and Proverbs (to be discussed in §2.4.1.4). The table shows the position of the exercises relative to each other.

¹⁸² See Chapter 2 in Neugebauer and Sachs 1945 for a comprehensive description of mathematical tables and their typology.

REVERSE by OBVERSE

OBVERSE											
	Elem	Metrolog	P-Ea	P-Lu	P-Izi	P-Kagal	Nigga	P-Diri	Math	tab	Other
REV	Urra	1.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00	19.00
											Row
											Total
REV	+	-----	+	-----	+	-----	+	-----	+	-----	+
Elem	433	10	37	20	4	7	2	1	2	25	541
Urra											67.9
	+	-----	+	-----	+	-----	+	-----	+	-----	+
	4	6	12	5	4	5		2		20	58
Metr											7.3
	+	-----	+	-----	+	-----	+	-----	+	-----	+
	5	4	31	8	2		3	6		13	72
P-Ea											9.0
	+	-----	+	-----	+	-----	+	-----	+	-----	+
			3	1	2	2				4	12
P-Lu											1.5
	+	-----	+	-----	+	-----	+	-----	+	-----	+
		2	3	2	4	2	1			14	28
P-Iz											3.5
	+	-----	+	-----	+	-----	+	-----	+	-----	+
			1			2			1	1	5
P-Ka											.6
	+	-----	+	-----	+	-----	+	-----	+	-----	+
		2			1		1	1		14	19
Nigg											2.4
	+	-----	+	-----	+	-----	+	-----	+	-----	+
								1		1	2
P-Di											.3
	+	-----	+	-----	+	-----	+	-----	+	-----	+
	2		1				1	1	17	17	39
Math											4.9
	+	-----	+	-----	+	-----	+	-----	+	-----	+
	1	2				1		1	2	14	21
Othe											2.6
	+	-----	+	-----	+	-----	+	-----	+	-----	+
Col	445	26	88	36	17	19	8	13	22	123	797
Tot	55.8	3.3	11.0	4.5	2.1	2.4	1.0	1.6	2.8	15.4	100.0

The table demonstrates that the curricular sequence for the advanced exercises is less strict than it was for the divisions of ur₅-ra. The upper-right half of the table is better filled than the lower-left half, but exceptions are not unusual. There are twelve examples with Proto-Ea on the obverse and a metrological table on the reverse, suggesting that the tables were introduced before Proto-Ea. Nevertheless, there are still 4 examples where we find the opposite distribution. On the basis of this evidence, the relative location of a number of exercises cannot be decided. We know that the regular sequence was Proto-Lu₂ > Proto-Izi, because there is a Proto-Lu₂ source with a catch-line to Izi. This order is confirmed by the existence of extracts in which the two series are

combined (*MSL* 12, p.27). From Ugarit we have a catch-line connecting Proto-Izi with Proto-Diri (see Van Soldt 1995). From Old Babylonian Isin there is a prism fragment of Proto-Kagal with a catch-line to Nigga (IB 813, unpublished; see Wilcke 1987, p.93). These catch-lines may well reflect the order of the compositions in Nippur. It is not contradicted by the evidence from type II tablets.

The first two exercises in the table, metrological tables and Proto-Ea, are occasionally found on the reverse of an early exercise (elementary exercise or ur_5 -ra). On closer examination it appears that in 8 of the 9 cases the obverse exercise is from the second half of ur_5 -ra (divisions 3-6). Again, this shows that there was not one linear curricular order strictly applied, but rather a general sequence where different compositions occupy approximately the same place. Apparent exceptions, such as Metrological tables or Ea being introduced before the last tablets of ur_5 -ra, are therefore regular in the sense that the exercises involved are adjacent in the curriculum. A single irregular example has a list of personal names on the obverse and Proto-Ea on the reverse¹⁸³.

A number of thematic lexical lists are found less frequently. These include a list of body parts (ugu - mu)¹⁸⁴, a list of legal phrases, the Nippur God list, a bilingual list of professions (lu_2 - $azlag_2$ = *ašlāku*; also called Old Babylonian Lu_2), and a list of diseases¹⁸⁵. The list of legal phrases is an early version of the first millennium compendium ki - $ulutin$ - bi - $še_3$ = *ana ittišu* (*MSL* 1). A few pieces of the beginning of the Old Babylonian version were published by Roth (1979, pp.291-301)¹⁸⁶. The list contains words and phrases relevant for writing contracts. Since very little has been published from this series, a small passage is quoted here¹⁸⁷:

018	in-sum	he gave
019	in-na-an-sum	he gave to him
020	in-na-an-sum-me-eš	they gave to him
021	in-dab ₅	he took
022	in-na-an-dab ₅	he took for him
023	[in-na-an-dab ₅ -eš]	[they took for him]
024	in-la ₂	he paid
025	in-na-an-la ₂	he paid him
026	in-na-an-la ₂ -me-eš	they paid him

The passage shows that Proto- ki - $ulutin$ - bi - $še_3$ contains among other things short grammatical paradigms. A strange feature of this section is the plural ending -me-eš, which is used for

¹⁸³ UM 55-21-396 (3N-T911c); *MSL* 14, p.28: Ks.

¹⁸⁴ A bilingual ugu - mu exercise from Uruk is published in Cavigneaux 1996, text 179.

¹⁸⁵ The Nippur God list is unedited. The list of diseases and ugu - mu are edited in *MSL* 9. The bilingual list of professions is edited in *MSL* 12, p.151ff.

¹⁸⁶ In Eduba D there is an indirect reference to this composition. See Civil 1985, p.77 commentary to line 36.

¹⁸⁷ Sources are partly published in Roth 1979. Additional sources for this passage: N 5938 + N 5975 (+) N 6151 (probably a type I tablet) and N 5858.

Sumerograms in Akkadian texts but not in Sumerian¹⁸⁸. In addition to these verbal forms the composition treats the terminology for interest, prices, etc. It is possible that the 'Laws about Rented Oxen' (Roth 1980) also belong to the same composition.

2.4.1.4 Model Texts and Proverbs

In the curriculum the lists were followed by exercises in the writing of Sumerian contracts and business documents. Model contracts follow the common patterns of Sumerian contract types, omitting the list of witnesses and the date. Occasionally, witnesses and date are indicated as: its witnesses, its year, its month¹⁸⁹. Such exercises are referred to in one of the eduba texts (Eduba D, Civil 1985, p.77f.). This was the first serious encounter with Sumerian sentences. The model contracts were arranged in collections. Extracts from these collections are found on type II tablets, and additionally on type I tablets and prisms. So far no model contracts on type III tablets or lentils are known to me. Since the edition of all model contracts announced by Lieberman has never appeared, model contracts have remained little known¹⁹⁰. The example edited below is found on the obverse of CBS 6098. It contains two model contracts concerning the sale of a house. Little is left of the teacher's example, but the pupil's text is largely preserved. The reverse has a long extract from the list of trees and wooden objects¹⁹¹. The first four lines are missing. They are restored from *PBS* 12/1, 23 which parallels the first contract¹⁹². Other gaps in the text may be reconstructed from our knowledge of the formulary for house-sale contracts¹⁹³.

¹⁸⁸ See Waetzoldt 1989 and his commentary on the lentil *TIM* X/1, 8 (p.42). This lentil, like many lentils in *TIM* X/1, has an extract from some version of Proto-ki-ulutin-bi-še₃ or ur₅-ra I-II. In the Old Babylonian period, Proto-ki-ulutin-bi-še₃ and 'forerunner of ur₅-ra I-II' are not two different compositions but rather geographically determined variants of the same text. See §2.5.3.

¹⁸⁹ See Roth 1979, pp.101-102 and Civil 1975b, pp.129-130. An example of this expression is found on the reverse of CBS 6750 lines 4-5: lu₂-ki-[inim-ma-bi] ; iti-bi mu-[bi].

¹⁹⁰ Some idea of the content of model contracts may be gained from the examples in Roth 1995, pp.46-54. This text of unknown provenance is a mixture of ki-ulutin-bi-še₃, model texts and related material. Another example of unknown provenance was edited in Roth 1979, p.109f. Published model contracts from Nippur include Civil 1975b, p.129 no.14 (11 NT 32); *PBS* 8/1, 101 and 102; *PBS* 8/2, 173; *PBS* 12/1, 21, 22, and 33; *PBS* 13, 39; *SLFN* Plate 73-76;s *SLT* 148; *STVC* 86. A collection of model contracts from Isin was published by Wilcke 1987, pp.102-108 (with various unpublished examples). *BBVOT* 3, 34 is probably a Larsa example (reverse Proto-ki-ulutin-bi-še₃). Lieberman discussed some aspects of the model contracts in several articles (most importantly Lieberman 1992).

¹⁹¹ Ni II-053.

¹⁹² Other parallels are CBS 6527; CBS 13934 obv. column I; N 4073 column II; N 5334. All parallels have variants in names and numbers.

¹⁹³ The text exhibits a number of mistakes. *PBS* 12/1, 23 line 1 has du₃-a instead of e₂-du₃-a. CBS 6098 has errors in the personal names: Amar-ZU instead of Amar-abzu in line 2' and Dingir-da-nu-a instead of Dingir-da-nu-me-a in line 4'. The name Lugal-ezen in line 2' has been restored from *PBS* 12/1, 23.

01	⁺ ½ ⁺ sar du ₃ -a	A built-up <house> plot of ⁺ ½ ⁺ sar
02	[a]l-bal ^{giš} keš ₂ -da	with a second floor and a wooden roof;
03	^{giš} ig ^{giš} sag-kul gub-ba	the door and the bar are there
04	ki e ₃ -bi ša ₃ sila-dagal-la-še ₃	its exit is on the broad street,
1'	[d]a e ₂ lugal-a-[	next to the house of Lugal-a-[
2'	⁺ e ₂ ⁺ amar-ZU dumu lu[gal-ezen]	the house of Amarabzu son of Lu[gal-ezen]
		from Amarabzu
3'	⁺ ki ⁺ amar-abzu-t[a]	Dingirdanumea
4'	^l dingir-da-nu-a-[ke ₄]	bought;
5'	in-ši-in-sa ₁₀	its full price
6'	šam ₂ til-la-bi-še ₃	2/3 mine silver he paid him.
7'	⁺ ma-na kug-babbar in-na-la ₂	In the future Amarabzu
8'	ud-kur ₂ -še ₃ amar-abzu	and his heirs, as many as there will be
9'	ù ibila-a-ni a-na me-a-bi	will not raise a claim to this house;
10'	⁺ e ₂ ⁺ -bi-še ₃ gu ₃ nu-ga ₂ -ga ₂ -a	thus he swore in the name of the king.
11'	mu-lu[gal]-bi in-pad ₃	A built-up house plot of ⁺ ½ ⁺ sar
12'	⁺ ½ ⁺ sar e ₂ -du ₃ -a	at the main street to the Abulmah
13'	sila-dagal abul-mah-a-kam	next to the house of Uršubula,
14'	da e ₂ ur- ^d šu-bu-la	the house of Ilakšuqir
15'	e ₂ i-la-ak-šu-qir	from Ilakšuqir
16'	ki i-la-ak-šu-qir-ta	Nurilišu
17'	^l nu-ur ₂ -i ₃ -li ₂ -šu-ke ₄	bought.
18'	in-ši-in-ša ₁₀	Its full price
19'	šam ₂ til-la-bi-še ₃	2/3 mana and 5 shekels silver
20'	2/3 ma-na 5 gin ₂ kug-babbar	he paid him.
21'	in-na-an-la ₂	In the future Ilakšuqir
22'	ud-kur ₂ -še ₃ i-la-ak-šu-qir	and his heirs, as many as there will be
23'	u ₃ ibila-a-ni a-na me-a-bi	will not raise a claim to this house;
24'	e ₂ -bi-še ₃ gu ₃ nu-ga ₂ -ga ₂ -a	thus he swore in the name of the king.
25'	mu-lugal-bi in-pad ₃	A built-up house plot of 2 sar.
26'	2 sar ⁺ e ₂ -du ₃ -a ⁺	

A few points in this text are worth noting. The contracts are ordered by the size of the plot that is sold. Line 26' is the last line on the tablet, but the first line of the next contract. It is the catch-line to the next paragraph. The name Dingirdanumea, the buyer in the first contract, is also found in a model contract concerning a loan of grain¹⁹⁴. The main street which leads to the Abulmah (lofty gate) is probably one of the most important streets in Nippur¹⁹⁵. These are features which may have been used to enhance the interest of the pupils and to catch their attention.

¹⁹⁴ CBS 6542. The reverse has a list of trees and is included in Chapter 5 as Ni II-067. The name further appears in the short story 'The Slave and the Scoundrel' (Roth 1983, p.276, 17). For names with nu-me-a preceded by a divine name see Stol 1979, p.181; Roth 1983, p.278; and Stol 1991, p.198 (references courtesy M. Stol).

¹⁹⁵ The same street appears in a comic story, located in Nippur, edited by George 1993. In this text the Sumerian name of the street is misunderstood, which is part of its comic effect. The text is post-Old Babylonian.

The last subject in the first phase of scribal education was Proverbs. Most proverbs are short sayings, commonly arranged in thematically organized collections. Some of the animal proverbs are expanded into short stories, not unlike Aesop's fables. In modern studies some 27 collections of proverbs have been identified. Not all of these are attested on type II tablets. The only collections found so far as reverse exercises are 1 and 2¹⁹⁶. Obverse extracts may contain proverbs from collections 1 or 2, or from one of a few other collections (among them 5, 6, and 8). The collections are rather different in character. Some are standardized. They can be found in numerous duplicates, or in extract tablets. Other collections appear to be ad hoc compilations. An example is Proverb collection 4. This collection is found on only one tablet. Some of the proverbs contained therein have duplicates in other collections (see Gordon 1957).

In the following table the evidence of the type II tablets with model contracts and proverbs is summarized. Mathematical tables are added to the table because they are the last exercises of the preceding group. Earlier exercises are grouped together under the label El(ementary)/Urra/Advan(ced).

REVERSE by OBVERSE

		OBVERSE				
REVERSE	Count					
		El/Urra/	Math tab	Model-c	Proverbs	
		Advan	le			Row
		1.00	18.00	19.00	20.00	Total
		-----	-----	-----	-----	
	1.00	642	3	48	44	737
El/Urra/Advan						92.5
		-----	-----	-----	-----	
	18.00	5	17	3	14	39
Math table						4.9
		-----	-----	-----	-----	
	19.00	3		6	6	15
Model-c						1.9
		-----	-----	-----	-----	
	20.00	2	2		2	6
Proverbs						.8
		-----	-----	-----	-----	
	Column	652	22	57	66	797
	Total	81.8	2.8	7.2	8.3	100.0

A combination of mathematical tables and proverbs or model contracts is further found on a special tablet type, only attested for this group. These are type II tablets with three columns on the obverse. The first column is a mathematical table. The second column has the teacher's

¹⁹⁶ Gordon 1968 is an edition of the collections 1 and 2. Since that time a number of publications, particularly by Gordon, Falkowitz, and Alster, have expanded our knowledge of this genre. Alster is preparing a new edition of all proverb collections.

example of the model contract or proverb collection. The third column has the same text in a pupil's hand. The reverses of these tablets have an extract from ur₅-ra. Curiously, the columns on the reverse run from left to right¹⁹⁷.

With the proverb collections the first phase of the education ended and evolved into the second phase: literary texts. The proverbs are couched in a literary language and include short stories. Some of the collections, indeed, are never found on tablets typical of the first stage: types II and IV. The proverb collections straddle both phases.

2.4.1.5 Summary of Phase 1

To summarize the results of our discussion of this first phase at the eduba, we have distinguished four groups of exercises. The clusters coincide with those used in our discussion above: 1 elementary exercises (Sign elements; Syllable Alphabet B, TU-TA-TI and lists of names); 2 ur₅-ra; 3 advanced lists (including the metrological and mathematical lists); and 4 Model Contracts and Proverbs. Tablets containing little-used lists such as ugu-mu, Proto-ki-ulutin-bi-še₃, and Proto-Aa (a bilingual version of Proto-Ea) are not included. At this level of analysis the obverse-reverse correlations in type II tablets exhibit a very regular pattern:

REVERSE by OBTVERSE

REVERSE	Count	OBTVERSE				Row Total
		Elementary	Ur ₅ -ra	Advanced	Model/Prov	
		1.00	2.00	3.00	4.00	
		1.00	2.00	3.00	4.00	
		1.00	2.00	3.00	4.00	
Elementary	1.00	212	96	10	2	320
						40.2
Ur ₅ -ra	2.00	2	123	73	23	221
						27.7
Advanced	3.00	1	10	140	84	235
						29.5
Model/Prov	4.00		1	6	14	21
						2.6
Column		215	230	229	123	797
Total		27.0	28.9	28.7	15.4	100.0

¹⁹⁷

A number of examples with proverbs are published in Gordon 1968: CBS 14159+ (Plate 51); CBS 14158+ (Plate 53f); N 5084 (Plate 56). Examples with model contracts are CBS 6098 (obverse edited above; reverse ur₅-ra trees and wooden objects, included in Chapter 5 as Ni II-053) and N 3956 (rev. broken).

The upper-right half of the table is much better filled than the lower-left half. More than 60% of the tablets have an exercise from the same group on both obverse and reverse¹⁹⁸. In theory an elementary exercise (group 1) on the reverse may go with any other exercise on the obverse. But the obverse exercises in this category are not evenly spread. The more advanced an obverse exercise is, the less likely that it will be combined with an elementary exercise on the reverse. There are 212 cases of a group 1 exercise combined with an elementary exercise. There are only two cases where a model contract or a proverb collection on the obverse goes with an elementary exercise on the reverse. The numbers in the top row decrease from left to right. In curricular terms: the practice is to repeat on the reverse of a type II tablet an exercise that has been introduced not too long before.

2.4.2 Phase 2: Literature

In the second phase of their scribal education the pupils copied literary compositions. These texts vary from short hymns of no more than 60 lines, to complex and lengthy epics, such as 'Enmerkar and the Lord of Aratta' (Cohen 1973), which numbers over 600 lines¹⁹⁹. Literary compositions differ in their complexity with respect to vocabulary, syntax, or rhetoric. This may correlate with the educational goals of their inclusion in the curriculum. Very little work has been done so far on investigating the implications of this corpus as a didactic corpus²⁰⁰.

The incipits of a number of literary compositions have been found on so-called catalogue tablets. Civil (1975a, p.145 n.36.) has argued that some of the catalogue texts follow the curricular order in which the compositions were treated. His thesis has found support in a tablet from Isin, where several literary texts are copied onto one relatively small tablet (Wilcke 1987, pp.85-89). The order of the compositions follows the order of the catalogues²⁰¹.

Tablet formats typical for the literary phase of the eduba are the oblong single-column tablet, and the two-column tablet, with two columns on each side²⁰². Oblong single-column extracts contain

¹⁹⁸ These are found in upper-left to lower-right diagonal. The diagonal includes 489 tablets, which is 61% of the total of 797 tablets.

¹⁹⁹ On the length of Sumerian literary works see Vanstiphout 1986.

²⁰⁰ An important exception is Vanstiphout's studies on Lipit-Eštar B, which proved to be a beginners' exercise (Vanstiphout 1978 and 1979). Vanstiphout's thesis finds additional support in the fact that several lentils from Uruk, recently published by Cavigenaux (1996) carry an extract from this hymn (204+²⁰⁵; 206; and 223). Marcel Sigrist generously allowed me to utilize his copies of lentils kept in the Andrew University Museum. One of these again proved to belong to Lipit-Eštar B (to be published as *AUCT* 5, 235).

²⁰¹ A strange feature of this text is that it simply apocopates lines which are too long to fit a column. Obviously, it is used as a mnemonic device. Such texts were also known in Nippur; see Civil 1985a, pp.37-45.

²⁰² On the typology of literary tablets see Civil 1994, p.12.

about 30 lines of some literary composition, but may be considerably shorter, or longer²⁰³. In the case of shorter compositions (up to ± 200 lines), a two-column tablet generally contains the whole composition. Larger compositions may be divided over the appropriate number of two-column tablets. For some compositions the partitions may have been standardized, but this is certainly not always the case²⁰⁴. A longer composition could be inscribed in its entirety on a multi-column tablet. Occasionally a number of shorter compositions were combined on a large tablet, or on a prism²⁰⁵.

A thorough discussion of tablet typology in literary compositions goes far beyond the confines of this study, and is premature until we possess reliable editions of the complete corpus of Sumerian literary texts. Moreover, those editions that are available do not always provide adequate information on the physical aspects of the sources. The examples above may suffice to demonstrate the differences in this respect with the corpus of texts used in the first phase. Lentils and type II texts are not usually employed for literary compositions. A few exceptions exist. There are some type II tablets with a hymn or another literary composition on the obverse and a list on the reverse²⁰⁶. Similarly there are lentils with literary extracts²⁰⁷. In all cases these belong to the earliest literary texts studied in the eduba (see Civil 1975a).

Two literary compositions occur more than once on the obverse of a type II tablet: the hymn Lipit-Eštar B, and the short story Enlil and Namzitarra. A few other texts occur only once, or are not identified.

Lipit-Eštar B²⁰⁸

CBS 6668	rev. <i>PBS</i> 11/3, 64: list of names.
CBS 6943	rev. broken; may not be type II.
N 4960	rev. Nig ₂ -ga (<i>MSL</i> 13, p.95: L2).
N 5824+N 5828	rev. unidentified.

Enlil and Namzitarra²⁰⁹

CBS 7917+N 4784	rev. list of domestic animals (gud and amar)
N 5149	rev. Nig ₂ -ga (<i>MSL</i> 13, p.94: Q1)

²⁰³ See, for instance, Gilgameš and Huwawa A, where one-column texts vary between 15 and 66+ lines (Edzard 1990, p.172).

²⁰⁴ Vanstiphout 1986. The two-column tablets demonstrably contain different partitions in the case of the 'Curse of Agade' (Cooper 1983, see p.45 and the catalogue of sources).

²⁰⁵ The prism fragments Ni 4092 + Ni 4243 (*ISCT* 2, 84 + *SLTN* 114) combine Eduba A (Schooldays) and Eduba C (Ugula and Scribe). Similarly, three eduba dialogues were collected on one tablet now in the Hilprecht collection in Jena (see Wilcke 1976, p.36ff.).

²⁰⁶ See Vanstiphout 1979; Civil 1975a, p.145; Tinney 1995.

²⁰⁷ For literary lentils see Falkowitz 1984.

²⁰⁸ See Vanstiphout 1978 and 1979, and Tinney 1995, p.11 n.23.

²⁰⁹ Civil 1977.

N 5909	rev. fragmentary and unidentified; may not be type II.
Fable of the Crane and the Raven ²¹⁰	
CBS 6559+	rev. Ugu-mu (<i>MSL</i> 9, p.51: S1)
Emesal lament me-e i-li ga-am ₃ -dug ₄	
CBS 4828	rev. domestic animals (<i>MSL</i> 8/1, p.82: V31)
Akkadian Sargon letter ²¹¹	
CBS 15217	rev. Proto-Lu ₂ (<i>MSL</i> 12, p.32: D3)
Unidentified ²¹²	
CBS 14233	rev. mathematical (<i>PBS</i> 13, 22)
N 3884	rev. metrological
N 4867	rev. Proto-Izi (<i>MSL</i> 13, p.14: W)
N 4951	rev. metrological
In a few other cases a literary text is found on the reverse. Three tablets have been found so far, each with a different composition:	
Lipit-Eštar A	
CBS 10988	Obv. Proto-Aa (<i>PBS</i> 5, 110; <i>MSL</i> 14, p.87: J)
Song of the Hoe	
CBS 9856	Obv. Proto-Aa (<i>MSL</i> 14, p.87: C)
Schooldays	
UM 29-13-591 ²¹³	Obv. unidentified

The literary Type II tablets testify to an intermediate stage in the curriculum between the lexical and the literary phases. In two of the three cases where a literary text is found on the reverse the obverse exercise is Proto-Aa, a bilingual list closely related to Proto-Ea. This exercise belongs to the most advanced of the lexical corpus. The exceptions show that the relation of lexical lists and proverbs to special tablet types is not natural or based upon practical or textual reasons. It was

²¹⁰ See Gragg 1973.

²¹¹ This is the only Akkadian composition on a Nippur type II tablet that has come to my knowledge. The (fictitious) letter is published by Joan Goodnick-Westenholz (1997).

²¹² The obverse of HS 1607 (*MSL* 14, p.29: Lf) has a model contract.

²¹³ According to the UM catalogue there is an indirect join with UM 29-15-362, but this piece could not be located.

perfectly possible to use lentils and type II tablets for literary compositions; the Nippur teachers chose not to do so.

2.5 The Transmission of Ur₅-ra to the First Millennium

2.5.1 The Middle Babylonian Period

The Old Babylonian period ended with the Hittite raid on Babylon in 1595. The Hittites did not establish a permanent rule in the region. Instead, Kassite kings came to reign in Babylonia. The Kassite period marks the beginning of a standardization process that went on for several centuries, and eventually affected almost all of the genres that belong to the stream of tradition. Around the fourteenth century Akkadian was used all over the ancient Near East as an international language. The Mesopotamian lexical and literary tradition was exported to western areas, to be used in the education of local scribes.

Middle Babylonian lexical texts therefore belong to two historically and geographically distinguished traditions: the Kassite tradition in Babylonia proper and the western peripheral tradition. Western lexical texts are closely related to Old Babylonian traditions. The majority of texts derive from Ugarit and Emar in Syria, and from Hattuša in present-day Turkey²¹⁴. Kassite lexical texts carry some early version of the tradition known from first millennium sources. Therefore we will treat this group with the late version in §2.5.2.

2.5.1.1 The Middle Babylonian Peripheral tradition.

Various students have explored the possible ways in which cuneiform writing and the Mesopotamian school texts may have spread to foreign parts. Van Soldt has demonstrated that writing in Ugarit coincides with Hittite rule (1991, p.522). The Ugaritic lexical texts may, therefore, derive from the Hattuša tradition. The political background of the spread of literacy to Emar is comparable to the situation in Ugarit. The origin of the Hittite tradition is disputed. Generally, Hittite literacy is assumed to be mediated by Hurrians (Van Soldt 1991, p.522; see Beckman 1983; p.98 n.8 and 9). Beckman (1983), basing himself on palaeographical and grammatical evidence, makes a distinction between those traditional Mesopotamian texts that were imported directly, and those which came through Hurrian mediation. He concludes that the

²¹⁴ The bibliography for Middle Babylonian peripheral lexical texts may be found in Cavigneaux 1983, p.617. To be added are: Ugarit: André-Salvini 1991; Arnaud, 1982; Veldhuis 1996; Emar: Arnaud *Emar*: VI/4 (editions; see the important review by Civil 1989); Watanabe 1987; Van Soldt 1993 (Emar?); Boghazköy: *KBo* 26, 1-57; and *KBo* 36, 1-8. Hazor: Tadmor 1977. Haft-Tepe: Herrero and Glassner 1996, nos. 270-287. Various Middle Babylonian texts (mostly grammatical exercises) are published and/or edited in *MSL* SS1. Van Soldt 1991, Appendix C is devoted to the peripheral MB lexical texts, in particular those from Ugarit. An overview of all (published and unpublished) Ugaritic school texts (lexical and non-lexical) is found in Van Soldt 1995.

lexical tradition of Hattuša showed no Hurrian imprint and was thus imported directly from Babylonia. He further demonstrates that in the Middle Babylonian period there was direct contact between the Hittite capital and Babylonia, and that at least one Babylonian teacher was working in Hattuša. However, according to Beckman the lexical traditions from Ugarit and Emar are 'Hurrian-derived' (Beckman 1983, p.103). They are used to make the foreign tradition intelligible. Apart from the Ugarit S^a vocabularies with a column in Hurrian evidence for this claim is lacking²¹⁵.

The most important innovation of Middle Babylonian ur₅-ra is the development of the two-dimensional format. The unilingual Old Babylonian texts were, at least in their written form, one-dimensional collections of Sumerian words strung together in long lists. Most of the Middle Babylonian texts still adhere to this format, but in a sizable proportion a second or even a third explanatory column is added. In Emar and Ugarit ur₅-ra is found on two different tablet types²¹⁶: large multi-column tablets, containing a complete lexical text, and one-column extracts. The large tablets are mostly unilingual (Sumerian), but sometimes bilingual (Sumerian - Akkadian). In a very few cases multi-lingual versions occur (Sumerian - Babylonian and a local language). The one-column extracts are usually divided into three sub-columns: 1: Sumerian, 2: pronunciation glosses, and 3: Akkadian. The extracts contain about 30 lines of text.

Interestingly, the development parallels the development in Ebla, more than a millennium before. In both cases Sumerian lexical lists were exported to regions where the language had no roots. In both cases, in addition to the traditional unilingual texts, new formats were developed to adjust to local needs. At both sites we thus find translations and pronunciation aids²¹⁷.

In Ugarit the unilingual format of lexical lists was still standard. In his reconstruction of the educational practice at Ugarit, Van Soldt (1991, p.752; 1995) has demonstrated that the extract tablets belong to an earlier stage of scribal training. The more experienced scribe did not need to write out the translation or pronunciation columns. The unilingual texts, according to Van Soldt, give the most professional impression.

2.5.1.2 The Structure of Middle Babylonian Peripheral Ur₅-ra

The Middle Babylonian peripheral version of ur₅-ra is divided over 15 tablets. The order of these tablets has been established by Van Soldt²¹⁸. The first two are devoted to phrases used in

²¹⁵ For these vocabularies see Huehnergard 1987, Part I. The Akkadian syllabary used in bilinguals has many of the peculiarities which, as demonstrated by Van Soldt (1989), are related to Hurrian orthography. This, however, is part of the general conventions for writing Akkadian and does not prove the Hurrian origin of the lexical tradition.

²¹⁶ See Van Soldt 1995.

²¹⁷ Similarly, lentils from Old Babylonian Susa are often provided with pronunciation glosses and Akkadian translations.

²¹⁸ For the Ugarit version see Van Soldt 1995 Appendix I; and 1991 Appendix C. There is a possibility that one of the tablets was divided into two, giving a total of 16 tablets (Van Soldt 1995, Appendix I at Harra-Hubullu 13). The same division probably existed in Emar, though in the higher tablet numbers the

business documents²¹⁹. The subject is alien to the ur₅-ra style. In Nippur a comparable exercise, ki-ulutin-bi-še₃, was not connected with ur₅-ra. The problem of the origin of these two tablets, their connections with ki-ulutin-bi-še₃ on the one hand and with ur₅-ra on the other, will be treated separately (§2.5.3) because of its relevance for the history of the scribal curriculum.

Tablet No. Ugarit	Contents	O.B. Nippur	Late ur ₅ -ra
1	Business terminology	not included	1
2	Business terminology		2
3	Trees and wooden objects	1	3-5a
4	Wooden objects		5b-7
5	Reeds and reed objects	2	8-9
6	Vessels		10
7	Leather and leather objects; metal and metal objects		11-12
8	Domestic animals	3	13
9	Wild animals; meat cuts		14-15
10	Stones and plants	4	16-17
11	Fish and birds; clothing.		18-19
12	Geographical names and terms	5	20-21a
13	Geographical names and terms; stars		21b-22
14	Foodstuffs	6	23
15	Foodstuffs		24

The order of the subjects is clearly related to the version of Old Babylonian Nippur. Each of the

evidence is not always sufficient to decide. Arnaud's presentation of the texts in *Emar* VI/4 is most confusing. The transliteration of one tablet is sometimes divided over several publication numbers. Thus Msk 731030 is found under the numbers 543 ('HAR-ra-hubullu III'), 544 ('HAR-ra-hubullu IV'), 545 ('HAR-ra-hubullu V-VII'), 737 ('Une incantation annexe'), and 604.7.2 (Colophon). Arnaud's arrangement suggests that there are three giš tablets in Emar, whereas there are only two (see Civil 1989). Similarly, the Emar forerunner of ur₅-ra 15 (N^o 552) does not exist. The section UZU and the section wild animals (N^o 551) belong to the same tablet.

²¹⁹ For Middle Babylonian forerunners of ur₅-ra I-II see Krecher 1969, p.137f (Ugarit); Van Soldt 1991 Appendix C (Ugarit; see the table on p.751, demonstrating the place of these tablets in the ur₅-ra series); *Emar* VI/4 541 and 542; and Tadmor 1977 (Hazor).

Nippur divisions is divided over two or three tablets, and two tablets are added in front. In no case does an Ugarit tablet cross the border of a Nippur division. Tablets 3-7 of the Ugarit version follow the subdivisions known from Nippur and Isin (see §2.4.1.2).

Exactly how the Middle Babylonian tradition is related to the Old Babylonian one is a question which can hardly be settled at this moment in time, since the majority of lexical texts from Ugarit are still unpublished. We can get an idea of the problems involved from three examples derived from the geographical list, the wood list, and the list of stones and plants (Ugarit tablets 12, 4, and 10, respectively).

1) Van Soldt (1993, p.441) has demonstrated that the Middle Babylonian peripheral forerunner of *ur₅-ra 20-21a* (geographical names; tablet 12 in the scheme above) is close to the Old Babylonian text edited in *MSL XI*, p.129ff. According to its first editor this text was found in Larsa (Jean 1935, p.161). The Ugarit text by no means duplicates the Larsa version but the general order of the sections is virtually the same, and differs considerably from the Old Babylonian Nippur version. The Middle Babylonian version has the complete list of Old Babylonian kings who gave their names to cities, dikes, and canals²²⁰. Van Soldt concluded that the version exported must have been post-Old Babylonian.

2) In Middle Babylonian sources the subject 'trees and wooden objects' is divided over two tablets (tablets 3 and 4 in the table above). Tablet 4 is known from various Middle Babylonian sources: Ugarit²²¹, Emar²²² and an extract from Nuzi²²³. All texts seem to derive from the same tradition.

We may take as an example the passage beginning with *giš₅apin*: plough. In Emar the order of the sections is:

		Nippur
<i>giš₅apin</i>	plough	442-467
<i>giš₅(nig₂)-gan₂-ur₃</i>	harrow	468-473
<i>giš₅al</i>	hoe	477-482
<i>giš₅u₃-šub</i>	brick-mould	483-486
<i>giš₅kak-sum-ba-la₂</i>	stick for uprooting onions	487-490
<i>giš₅zi-ri-kum</i>	irrigation device	491-493
<i>giš₅dur₂</i>	bottom board	508-514
<i>giš₅ba-ri₂-ga, etc.</i>	measuring vessels	515-526
<i>giš₅sa</i>	hunting net	527-535
<i>giš₅har-mušen-na</i>	trap	536-540

²²⁰ See also Civil 1994, pp.112-114.

²²¹ Published and unpublished sources may be found in Van Soldt 1995; see Veldhuis 1996.

²²² See Arnaud *Emar VI/4* no. 545, with the review by Civil (1989).

²²³ Published by Lacheman 1939: no.7 (SMN 2559). This text has aroused much discussion; see most recently Civil 1987.

On the one hand there is a close relation between the versions from Emar and Nippur in this part of the text. There is only one place where the Nippur tradition has a major difference. The section ^{giš}tukul (mace) in Nippur immediately precedes the 'bottom boards' (^{giš}dur₂), a passage which is found considerably later in the Emar text (see §3.1). On the other hand this Emar passage differs significantly from the late version. Corresponding sections in first millennium ur₅-ra are found dispersed over tablets 5, 6, and 7A.

3) The Middle Babylonian list of stones and plants edited in *MSL* 10, p.37ff. and p.107ff. (tablet 10 in the scheme above) is reconstructed from duplicating sources from Ugarit and Alalakh. The Emar text is based on the same tradition. There is one late Old Babylonian list of plants from Babylon which is clearly related (*MSL* 10, p.117ff, source B). The first 12 preserved lines (lines 6a-6l) display an independent order, but then the text follows the peripheral version closely²²⁴. The section stones does not have a clear predecessor. All Old Babylonian lists of stones are somehow related (see §2.2.1), but there is no one text which is undoubtedly the sole ancestor of the Middle Babylonian version.

In conclusion, the three examples show that the inheritance of the Old Babylonian lexical tradition is a complex matter. The geographical lists from Larsa (example 1) can only have influenced the Middle Babylonian versions indirectly. Larsa had ceased to exist as a scribal centre several centuries before (see §2.2). We must assume that refugees from the south brought this, or a closely related tradition, to Northern Babylonia. The Emar list of wooden objects (example 2) shares its global organization with the Nippur version. Again, no direct influence may be assumed because Nippur had been abandoned at the end of the eighteenth century. Babylon (example 3) is a plausible centre for the export of school compositions to the west, particularly because of the well-attested relations between Babylon and Hattuša (Beckman 1983). Extant lexical texts from Babylon, however, are so few that there is no way of proceeding beyond conjecture.

2.5.2 First Millennium Standardized Ur₅-ra = *hubullu*

The first millennium so-called canonical series treats the same topics as the Middle Babylonian peripheral versions discussed in §2.5.1 in the same order. It is divided over 24 tablets²²⁵. Late ur₅-ra differs significantly from earlier versions in two respects. First of all, after the turn of the millennium the bilingual format of ur₅-ra is normative for all tablet types. In the second place, from the Middle Assyrian to the late Hellenistic period, and from Uruk to Sultantepe, ur₅-ra = *hubullu* basically shows the same text, with the same division over tablets.

2.5.2.1 Early Canonical Texts

²²⁴ No copy is available and it is not possible to estimate the length of the missing portions of the text.

²²⁵ For this division, and the contents of each tablet, see Cavigneaux 1983, p.627.

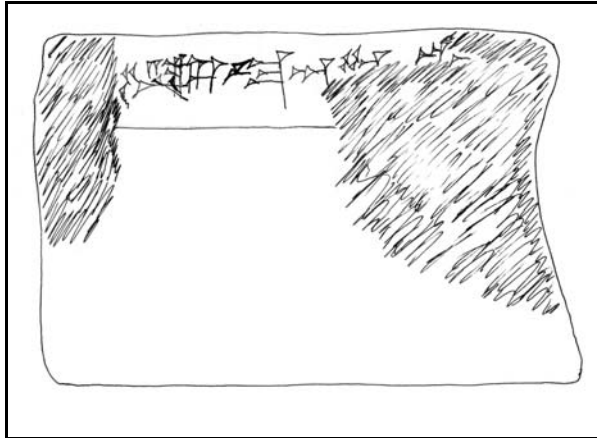


Fig 2.8 UM 29-16-383. Middle Babylonian exercise tablet: literary extract.

The earliest dated sources for this tradition are Middle Assyrian, from the so-called library of Tiglath-Pileser I (1100 BC)²²⁶. A number of Middle Babylonian, i.e. Kassite, sources, especially from Nippur, may be one or two centuries earlier²²⁷. A tablet type used for lexical exercises in the Kassite period has on one side a short literary citation, and on the other side a lexical excerpt of five to ten lines. The tablet is oblong in shape. The literary text is written parallel to the longer side; on the other side the lines run parallel to the shorter side²²⁸. In some cases only one side of the tablet has been inscribed. Two examples

carry a line from the 'Marriage of Sud' and were published by Civil (1983a). The lexical extracts found on these tablets are unilingual and follow a version very close to the canonical first millennium text. Few examples have been published. *SLT* 143 (CBS 6405) is inscribed on one side only. It has a short passage from the list of trees (ur₅-ra 3: 205-209; *MSL* 5, p.109f.) without the Akkadian translation. The main variant as compared to the version edited in *MSL* is ^{gis}mes-dub (*SLT* 143) as against ^{gis}mes-dub-ra-an. An unpublished example is UM 29-13-771 (Nippur)²²⁹. On one side it has two lines in Akkadian. The composition is unknown but might be taken from an incantation, a text type known to be used in school texts in the Neo-Babylonian period.

- | | | |
|---|---|----------------------------|
| 1 | <i>li-ib-bi u₃</i> [| My heart and [|
| 2 | <i>u-e₄-bi-ka ma-⁺ri⁺-</i> [| I will drown you, son of [|

The other side has an extract from ur₅-ra 1: 100-104²³⁰

- | | | |
|---|-----------------|---------------|
| 1 | [ibi]la | heir |
| 2 | dumu-gaba | infant |
| 3 | dumu-munus-gaba | female infant |
| 4 | dumu | child |

²²⁶ Weidner 1952 and Pedersén 1985, pp.31-42..

²²⁷ See Civil in *MSL* 14, p.156 on the Middle Babylonian Ea sources.

²²⁸ See Civil 1995, p.2308: Type V. In *MSL* SS1 the same type is labelled MB II (see p.89). All examples but one known to me are from Nippur. The exception is unprovenanced (NBC 7834; unpublished). Perhaps *VS* 24, 75 belongs to this type (Babylon: Sargon legend; see Goodnick-Westenholz 1997, pp.52-55 and 382).

²²⁹ I would like to thank Leo Sassmannshausen for collating this text and related ones in the University Museum, Philadelphia.

²³⁰ See *MSL* 5, p.16.

A further example is UM 29-16-383 (Nippur). This text has a one-line quotation from a Sumerian literary text: [giš[?]-b]ur₂-mah-ga₂ bar ba-an-ku₄-[]. 'He entered my lofty giš-bur₂²³¹ from outside[?]'. The line has not been identified. The other side has ur₅-ra 3: 85-91²³². Line 90 is omitted, and 87-88 are inverted:

1(=85) giš ₅ numun-u ₃ -suh ₅	seed of the fir
2(=86) giš ₅ an-na-u ₃ -suh ₅	? of the fir ²³³
3(=88) giš ₅ pa-u ₃ -suh ₅	idem
4(=87) giš ₅ še-u ₃ -suh ₅	idem
5(=89) giš ₅ pa-u ₃ -suh ₅	twig of a fir
6(=91) giš ₅ bir-GAM-ŠIM-u ₃ -suh ₅	?

In the standardized version line 91 reads giš₅bir-GAM-ma-u₃-suh₅. It is followed by the item giš₅sim-gig. It is possible that the ŠIM in line 6 of our tablet is an insertion from the next line. This would prove that, unlike Old Babylonian practice, this exercise was copied or dictated from a master text. Otherwise the confusion is difficult to explain. The use of a master text in this period is probable because the list is much more standardized than it was in the Old Babylonian period. Before further conclusions may be drawn, however, we will need more examples of errors like this one²³⁴.

A variant of this type of exercise tablet is lentil-shaped. Physically they are similar to the Old Babylonian type IV, but textually they are equivalent to the type described above²³⁵.

Another Kassite-period type is a large oblong tablet with a list that continues from the obverse to

²³¹ For giš-bur₂ as an architectural element or an ornament of a door see Michalowski 1989, p.102 and Charpin 1986, p.290f.

²³² See *MSL* 5, p.100.

²³³ In the bilingual text this and next two lines are translated *šippatu*, the meaning of which is unknown in this context.

²³⁴ There is a variant in the same line in an Assur text: giš₅BIR-GAM-ŠIM-ŠE-u₃-suh₅, according to *MSL*. This is very probably an error as well. Old Babylonian sources have giš₅bir-GAM-la-e with many variants but never with ŠIM. Still, the existence of the Assur variant makes the interpretation of the Kassite exercise less certain.

²³⁵ Two examples, both from Nippur, are known to me. The first is 2N-T75 = IM 57836, published in Falkowitz 1984, p.37 among Old Babylonian lentils. That the piece is rather Kassite may be demonstrated by two features. First, the lexical portion of the text (types of doors) follows the canonical version of ur₅-ra 5: 235-239 (*MSL* 6, p.24) in a unilingual fashion. Second, the row of numerical signs for '9' below the literary excerpt on the other side is typical for Middle Babylonian lentils. In most cases these lentils contain exercise business documents (private communication by Leo Sassmannshausen, who is preparing an edition of several Kassite lentils from Nippur). Line 3 of the obverse of 2N-T75 is to be read: *šal-mi-iš li-t[a-la-ak²]*; probably Gilgameš IX iv 42. The second example is UM 29-15-848 (Literary quotation unidentified; lexical extract is ur₅-ra 3: giš₅hašhur items).



Fig 2.9 UM 29-16-383: Middle Babylonian exercise tablet.

the reverse. A few examples have been published, including *SLT* 241 (ur₅-ra 2) and *PBS* 12/1, 17 (ur₅-ra 4), both from Nippur. Both are unilingual Sumerian. What the copy in *PBS* 12/1 does not show is that the tablet has been deliberately cut in two. What is preserved is the left half of a two-column tablet. The column divider, a double vertical line, is still visible, and a few useless traces of the right column remain. The right column probably contained Akkadian translations²³⁶. The list includes over eighty items from the list of furniture. It is a short version of canonical ur₅-ra 4: 59-173²³⁷. A number of items are omitted, others are put in a slightly different order. The most important variation is the displacement of the section ^{giš}na₅ (stool). All in all the Kassite tradition may be defined as an early version of the canonical text.

in the reconstruction of the list of reed and reed objects ur₅-ra = *hubullu* 8 (HS 1928 + HS 1929²³⁸; *MSL* 7, p.4 source J). Two unilingual examples of unknown origin are known to me. Very probably Kassite in date is NBC 10915, which has the Sumerian text of ur₅-ra 6. The tablet measures no more than 3x6cm, carrying about 240 lines of text. CBS 1862 is from the Khabaza collection and may therefore be from Sippar²³⁹. What remains is somewhat less than the left half of a large tablet which contained the Sumerian text of ur₅-ra 1 and 2. The colophon reads:

giš 42 taskarin	boxwood 42
al-til	finished
[m]u-šid-bi	[N] lines
traces	

The number 42 refers to the number of lines in the last column. It is inserted in the catch-line to ur₅-ra 3.

2.5.2.2 First Millennium ur₅-ra

²³⁶ A similar example is CBS 4599 = *PBS* 12/1, 16: ur₅-ra 2 (see *MSL* 5, p.49).

²³⁷ See *MSL* 5, pp.154-166.

²³⁸ Prof. J. Oelsner has made some additional joins since the text was used for *MSL*.

²³⁹ For the Khabaza collection and its relation with Sippar see Michalowski 1981a, p.386.

First millennium lexical texts may be divided into school texts and library texts. School texts are known primarily from the Neo- or Late Babylonian periods. Library texts are known from a variety of sites in both Assyria and Babylonia. The canonical version of *ur₅-ra* was used over a time span of about a millennium, and in a large geographical area. Now that we possess editions of all tablets - though for some tablets the available evidence is rather fragmentary - the next step will be to study local differentiations, tablet types, changes in archaeological and curricular context, and so on in more detail. Since these matters are peripheral to this study, I will confine myself here to a few remarks on the process of standardization.

Most lexical texts from Nippur are standardized at least to some degree. The standardization of the first millennium is of quite another kind. This process was not restricted to *ur₅-ra* = *hubullu*, or even lexical texts, but affected almost every genre. In addition to official editions (*iškaru*) there were texts called *ahû*, extraneous. Further, we find references to *ša pī ummāni*: the oral tradition of experts²⁴⁰. These distinctions, whatever their exact meaning and dynamics might have been, reflect a scholarly need for a reliable and generally accepted body of knowledge. This same need is visible in colophons, guaranteeing that the copy is a faithful one, and indicating the provenance of the original. The standardization in this period is a much more conscious and more literate process than it was in Old Babylonian times. Lexical lists were no longer adapted to linguistic or other developments. After some time a number of the Akkadian translations in *ur₅-ra* became obsolete. The solution was not to replace these words by current ones but to create three-column texts, in which the Sumerian was translated twice: first into the obsolete Akkadian word, and then into a better understood synonym²⁴¹. The living Old Babylonian traditions turned into monuments of learning.

2.5.3 The Transmission of the Curriculum

Even though *ur₅-ra* changed considerably in character over the centuries, it still functioned as an exercise in Neo-Babylonian schools. Not all school texts survived after the Old Babylonian period. Some compositions were abandoned, others were transmitted but ceased to be used in the curriculum. In this section the transmission of the scribal curriculum will be studied by means of the history of three compositions known from the Nippur Eduba: TU-TA-TI, Proto-ki-ulutin-bi-še₃, and Proto-Ea.

TU-TA-TI is almost exclusively attested in Old Babylonian Nippur (see §2.4.1.1). At least one of the TU-TA-TI versions included a number of Akkadian words. The six-sided prism fragment HS 1801 has regular TU-TA-TI items on side A. Side F reads as follows:

01' [] gi₄²⁴²

²⁴⁰ See Rochberg-Halton 1984; Lieberman 1990; and Civil in *MSL* 14, pp.168-169.

²⁴¹ This commentary is called *mur-gud*. See Cavigneaux 1983, p.628.

²⁴² Perhaps the line is to be reconstructed [¶ *la te*]-gi₄, as in HS 1625 side E line 9'. For this text see below.

02'	[] lu	
03'	[] mu	
04'	¶ ur	
05'	¶ <i>lu-ur</i> (error for <i>lu-mu-ur</i>)	Let me see
06'	a ²⁴³	
07'	¶ na	
08'	¶ ša	
09'	¶ ši	
10'	¶ im	
11'	¶ <i>a-na ša-ši-im</i>	To him/her
12'	¶ a	
13'	¶ na	
14'	¶ ka	
15'	¶ ši	
16'	¶ im	
17'	¶ <i>a-na ka-ši-im</i>	To you
18'	¶ <i>e-ri-ba-am</i>	He is great
19'	¶ <i>e-ri-a-am</i>	He helped me
20'	¶ <i>i-din-nam</i>	He gave me
21'	¶ <i>i-qi₂-ša-am</i>	He bestowed on me
22'	^d nisaba za ₃ -mi ₂	Nisaba be praised!

(followed by a colophon).

After line 17' the scribe saw that he would not be able to finish his text in the space available and he stopped analyzing each word in graphemes. HS 1801 is not an isolated aberration. Another six-sided TU-TA-TI prism, HS 1625, duplicates the last few lines of HS 1801²⁴⁴. It preserves another portion of this version of TU-TA-TI on its side E which has the expressions²⁴⁵:

1'-4'	¶ <i>ap-pu-tum</i>	Please
5'-8'	¶ <i>la te-gi₄</i>	Do not be careless

The prism fragment Ni 3180a has a similar text (Çiğ, Kizilyay, and Landsberger 1959, p.65). In column I it preserves a series of words which all appear in the onomasticon:

2-5	¶ <i>ba-aš-ti</i>	My pride
-----	-------------------	----------

²⁴³ Line 6' was inserted after line 7' had been written. It does not have the single vertical wedge which regularly indicates the individual items in TU-TA-TI.

²⁴⁴ Legible are the words *i-di[n-nam]* and *i-qi₂-ša-am* (both analyzed in graphemes) and the subscript ^dnisaba-za₃-mi₂.

²⁴⁵ The lines 1'-3' have the syllables ap; pu; and tum. The text is presented here in an abbreviated way. Additional examples of Nippur TU-TA-TI texts with Akkadian expressions are UM 29-13-179 + UM 29-13-518, a type I tablet including regular TU-TA-TI items and the expression *um-ma a-na-ku* (reverse III 1'-7') and CBS 7860, a square prism fragment, including the expressions *um-ma-[]* and *tu-kul₂-ti* (side A 1'-5') and unidentified words on side B.

6-9	𐎶𐎵 <i>ba-la-i₃</i>	My life
10-13	𐎶𐎵 <i>la-ma-si₂</i>	My Lamassu (protective spirit)
14-17	𐎶𐎵 <i>um-ma-ti</i>	My tribe?

The first three are known as a standard set in the list of Akkadian names in *PBS* 11/2, where they are combined with various divine names. The same prism, however, also has an entry which has nothing to do with personal names (column II 2-9):

𐎶𐎵 <i>ta-aš-ba šu-up-še-ha</i>	Sit and rest
--------------------------------	--------------

The relation with the onomasticon is, therefore, not central to the idea behind the text. The type II tablet CBS 5870 (*PBS* 11/2, 65) is related:

01	𐎶𐎵 <i>i</i> -[
02	𐎶𐎵 <i>i</i> -[<i>di</i>]n	He gave
03	𐎶𐎵 <i>i-din-nam</i>	He gave me
04	𐎶𐎵 <i>i-qi₂-ša-am</i>	He bestowed
05	𐎶𐎵 <i>i-ri-ba-am</i>	He is great
06	𐎶𐎵 <i>e-ri-a-am</i>	He helped
07	𐎶𐎵 <i>i-tu-r[a-am]</i>	He came back

The association of exercises in Akkadian words with TU-TA-TI is also found in *TIM* 9, 85, a text most probably from Tell Harmal²⁴⁶. The first column of this tablet has a TU-TA-TI version. The other columns (2-7) contain Akkadian words, ordered by first sign. The sections preserved are i-, a-, na-, nu-, ma-, li-, and mu-. Each section has dozens of entries.

The first few lines of column 2 are almost identical to the beginning of a list edited from Sippar texts by Tanret (1989)²⁴⁷. Two Tell Harmal lentils have the opening lines of the same text.

Sippar (Tanret 1989) ²⁴⁸		Tell Harmal (A = <i>TIM</i> 9, 85; B = lentils ²⁴⁹)			
		A	B		
1	𐎶𐎵 <i>i</i>		1	𐎶𐎵 <i>i</i>	
2	𐎶𐎵 <i>ia</i>	ii1	2	𐎶𐎵 <i>ia</i>	
3	𐎶𐎵 <i>i-din</i>	ii2	3	𐎶𐎵 <i>i-din</i>	He gave
4	𐎶𐎵 <i>i-din-nam</i>	ii3		𐎶𐎵 <i>i-din-nam</i>	He gave me

²⁴⁶ See Ellis 1987, p.246 n. 54.

²⁴⁷ I do not understand why Si 503 and 510 (both *SFS* p.40) were not included by Tanret. Si 510, 1 (𐎶𐎵 *na-aw-ra-am*) parallels *TIM* 9, 85 IV 19. The other items (beginning with KUR) are anomalous, since no logograms are used otherwise. Scheil's edition, however, is unreliable, as Tanret has shown. Si 503 is completely similar in style to the other Sippar pieces, except for the repetition of the same item in 1-2. Line 4 (I *ma-gir*) probably parallels *TIM* 9, 85 V 12'.

²⁴⁸ The initial vertical wedge in each line is not indicated by Tanret, but see the original editions in Scheil *SFS*.

²⁴⁹ *TIM* 10/1, 136 and 142.

		ii4	𒀭 <i>i-bil₂</i> [?]	He reigns [?]
5	𒀭 <i>i-bi</i>	ii5	𒀭 <i>i-bi</i>	He called
6	𒀭 <i>i-pi₂-iq</i>	ii6	𒀭 <i>i-pi-iq</i>	Embrace of ...

As far as it is preserved, the Sippar list mainly consists of Akkadian words, most of which are well known from the Old Babylonian onomasticon. It is not as systematically arranged as *TIM* 9, 85, but the two texts have many items in common. Most of the words attested in Nippur TU-TA-TI recur here²⁵⁰. This is particularly true for those words which regularly appear in names and not, for instance, for expressions such as *ana kâšim*, or *lā teggi*. All these lists are of little interest in themselves. Their significance lies in the relations between Nippur TU-TA-TI, the Tell Harmal text and the Sippar list of Akkadian words. The lists have too much in common to be explained by chance. All have the tendency to group lines which share the same first sign. The list of Akkadian words appears to be a northern counterpart of TU-TA-TI.

Interesting for our present purposes is the relation with the so-called acrographic exercises of the Neo-Babylonian period. These exercises have nothing to do with the Old Babylonian acrographic lists such as Proto-Izi²⁵¹. They consist of strings of Akkadian words, primarily verbal forms, ordered by first sign²⁵². A characteristic of these lists is that a word is often repeated in an alternative spelling. A Consonant-Vowel-Consonant sign is broken up into a Consonant-Vowel and a Vowel-Consonant sign: *a-lam-mad*; *a-lam-ma-ad* (I learn)²⁵³. These lists are not standardized, they seem to have been improvised in class. The exercise belongs to an elementary stage of the education. It appears that over the course of time the southern variant, TU-TA-TI, was abandoned, whereas the northern variant, the list of Akkadian words, was transformed into its typical Neo-Babylonian format.

This pattern of transmission is not restricted to this one exercise. Another elementary exercise well known from Neo-Babylonian sources is the sign list S^a. The name S^a is an abbreviation for Syllabary A. The text has nothing to do with Syllable Alphabet A²⁵⁴. S^a is in origin a northern text. It is attested in late Old Babylonian Sippar-Amnānum (Tanret 1982). S^a may be regarded as a simplified version of Proto-Ea (see Civil in *MSL* 14, pp.165-167). In Nippur Proto-Ea was studied after ur₅-ra, by students with some experience in cuneiform writing. In the north S^a was probably treated as an elementary exercise before ur₅-ra. Again, the northern variant survived and was transmitted to the first millennium as a standard element of scribal education. Unlike TU-TA-TI, Ea was not abandoned. It survived but took on another role. First millennium exercise tablets with Ea are rare²⁵⁵. The text was copied and preserved as a learned reference work.

²⁵⁰ See also the two Uruk exercises edited by Cavigneaux 1996, p.91 (text 202 with parallel).

²⁵¹ See §2.4.1.3.

²⁵² See Cavigneaux 1981, pp.117-123 and Maul 1991, p.859.

²⁵³ The example is taken from Maul 1991, p.859 (= *OECT* 11, 137 col. II).

²⁵⁴ See §2.4.1.1.

²⁵⁵ Eight school tablets are listed in *MSL* 14, p.157; six from Babylon and two from Sippar.

Ki-ulutin-bi-še₃ has a similar history. In the first millennium this list of business terminology and grammatical paradigms is not attested as an exercise. The only sources we have are library copies. In the late version of ur₅-ra, tablets 1 and 2 represent a text that is very close in style and content to ki-ulutin-bi-še₃. These two tablets were added in front of ur₅-ra in the Middle Babylonian period. They belong to the most frequently attested exercises on Neo-Babylonian school tablets. In the first millennium the two cognate compositions are clearly distinguished. The one is transmitted as an elementary exercise, the other as a learned reference work. In the Old Babylonian period, however, the two texts are merely variants of the same. In Nippur Proto-ki-ulutin-bi-še₃ is occasionally used as a relatively advanced exercise that was treated in the phase after ur₅-ra (see §2.4.1.3). From Sippar we have a number of late Old Babylonian tablets which clearly represent a predecessor of first millennium ur₅-ra 1-2²⁵⁶. The existence of a variety of similar traditions is further demonstrated by the lexical text from Dhibāī published by Al-Fouadi (1976). This tablet duplicates neither the Sippar version, nor the Nippur text, but is related to both²⁵⁷.

With the abandonment of the southern cities the scribes brought their knowledge and their traditions to the north. The Neo-Babylonian curriculum, with S^a, ur₅-ra 1-2 and the acrographic lists of Akkadian verbal forms, is related to the late Old Babylonian curriculum as it was known in Sippar. This tradition may well have been influenced by southern refugees; at present there is no way of knowing. The Nippur exercises Ea and ki-ulutin-bi-še₃ were somehow transmitted and developed, even though they were no longer used in education in that form. We do not know who was responsible for this transmission process; we may speculate that it was a group of Nippur refugees who wanted to keep to their own traditions. The standardization process that started in the Kassite period was apparently aimed at preserving as much as possible. This worked out in two ways. Some compositions, such as the main part of ur₅-ra, show a thorough mix of all traditions that had survived into the Kassite period. In other cases the process led to a secondary distinction between two versions of one composition, thus creating two independent texts. This is the case with S^a and Ea, and ur₅-ra 1-2 and ki-ulutin-bi-še₃, respectively. The prestige of Nippur as a centre of Sumerian learning is still tangible in the transmission process. The Nippur variants of both compositions came to be the most prestigious ones. Ur₅-ra 1-2 and S^a became elementary exercises. Ea and ki-ulutin-bi-še₃ were transmitted as reference works.

2.6 Some Conclusions

The aim of this chapter was to provide a context for the Old Babylonian list of trees and wooden objects. The series ur₅-ra was located within the corpus of contemporary scholastic exercises, and allotted its place in the chronologically distinguishable phases of the lexical tradition.

²⁵⁶ *MSL* 5, p.7: Si 207, Si 489, Si 659, Si 699; and two Sippar fragments with unknown numbers. Si 207, Si 489, and Si 659 were briefly inspected from a photograph in the Lieberman collection, now in the University Museum, Philadelphia. Similar texts are found in Meturān (personal letter by A. Cavigneaux).

²⁵⁷ Related texts: *TIM* 10/1, 8; 38; 61; 72; 138 (Tell Harmal lentils); *YOS* 1, 28 (see Roth 1995, pp.42-45); Greengus 1979, no.279 (Ishchali); Arnaud *BBVOT* 3, 34 (Larsa); FLP 1287 (Roth 1995, pp.46-54); AO 7796 (provenance unknown; *RA* 33, pp.87-90); Cavigneaux 1996, texts 181-184 (Uruk). Unpublished: AO 7012; YBC 4745; and MLC 1960, all of unknown provenance.

The main feature that separates the Old Babylonian lexical tradition from both earlier and later ones is its textual flexibility. Each Old Babylonian school used its own version of a common lexical corpus. When studying the Nippur version of the list of trees and wooden objects (Chapter 3), we will see that even the exercises from this one single site exhibit some variation among themselves. The contrast with third millennium lexical sources could not be greater. Archaic lexical compilations, devised at the conception of writing in Uruk, were transmitted virtually unchanged over the centuries. Copies of these texts from third-millennium Fāra and Abū Ṣalābīkh are not elementary exercises by apprentice scribes. They are generally well (even very well) written, and they are not usually extracts but tend to cover a complete composition. The difference in flexibility between the Old Babylonian and earlier lists coincides with a difference in use. The early texts belonged to advanced, academic knowledge, which may explain their extreme conservatism or traditionality. Pupils and teachers were probably well aware that this knowledge was antiquarian, putting the copyist in a line of tradition all the way back to the very beginnings of writing. Elementary teaching in the third millennium is represented by exercise business documents (Foster 1982) rather than by lexical texts.

The flexibility of the lexical corpus is lost again after the Old Babylonian period. The process of canonization transformed a body of school texts into a collection of scholarly tools. Writing itself had undergone profound changes. The lexical tradition of the first millennium has a different place in the cultural system. Lexical lists were still used in exercises but at the same time these lists functioned as learned exegetical handbooks. They reflect the world of scribes to whom writing itself had become a prime source of knowledge²⁵⁸. The need for reliable knowledge explains the textual stability which makes the later tradition so different from Old Babylonian 'forerunners'.

Old Babylonian *ur5-ra* is part of a corpus of educational texts. This corpus is not a random collection of traditional compositions. The scribal curriculum approaches the Sumerian writing system from various angles, each list elaborating one aspect. The lists may be characterized as follows:

Syllable Alphabet B	sign forms
TU-TA-TI	syllabic values
Name lists	name writing
Ur ₅ -ra	vocabulary
Proto-Ea	polyvalency
Acrographic lists	? (perhaps simply remainders)
Proto-Diri	complex signs
Mathematical tables	number writing
Models and Proverbs	sentences

Syllable Alphabet B, TU-TA-TI, and the thematic lists approach the writing system from three basic elements: form, sound, and meaning. From an educational point of view it makes sense to treat names before nouns. Names are nouns of a special type: they are not translated. Akkadian names appear in Akkadian in Sumerian texts and vice versa. Name lists are one dimensional.

²⁵⁸ For a short characterization of first millennium literate circles see Michalowski 1990, in particular p.395.

They are, therefore, less complex than *ur₅-ra*, where the pupils had to learn both how to write and pronounce a Sumerian word, and how to translate it into Akkadian. Mathematical tables are often interpreted as exercises in multiplication and division. However, multiplication may be learned without the use of writing, simply by recitation. For computation it is more useful to know a table by heart than to have it written on a clay tablet. Mathematical tables are primarily exercises in writing. The numerical system is relatively independent of the rest of the writing system. A separate treatment of how to handle the sixty-based numbers is more than justified. The so-called acrographic series (Proto-Izi, Proto-Kagal, and Nigga) do not seem to concentrate on one particular aspect of literacy in Sumerian. Being organized by first sign, they create the opportunity to teach whatever had found no place elsewhere.

Most interesting is the position of Proto-Ea and Proto-Diri in the curriculum. The two lists elaborate two specific aspects of the writing system: polyvalency and complex signs. When pupils started to study Proto-Ea and Proto-Diri they had already encountered numerous examples of polyvalent and complex signs in the lists of names and in *ur₅-ra*. For the modern scholar Ea and Diri are reference works of fundamental importance. They are almost the only entrance available to elementary aspects of the Sumerian writing system. For a pupil of the Nippur eduba things were different. When copying his list of trees and wooden objects he encountered the line *GIŠ.KU* three times. He did not need another specialized list to learn that these signs had to be read ^{giš}taskarin, boxwood, the first time; ^{giš}tukul, mace, the second time; and ^{giš}dur₂, board, only a few lines further on. He had a teacher to tell him. Pronunciation and translation belonged to the oral explanation provided in class. Proto-Ea and Proto-Diri, therefore, do not introduce polyvalency or complex signs to beginning students. They systematize something long familiar from practice and put it on a higher level of abstraction.

The teaching of the writing system cannot be split up into various aspects without producing an overlap. It is not surprising, therefore, that modern dictionaries often give several ancient sources for one and the same lexical entry. The systematic character of the lexical corpus is demonstrated in citations which link one list to another. In §3.5 we will discuss some such links between *ur₅-ra* and Proto-Diri. The standardization of the lexical lists in and after the Kassite period included an increase in and systematization of such cross references.

This overview of the Old Babylonian curriculum raises the question of the goals of education at the eduba. In the absence of contemporary reflective statements we cannot hope to recover specific information about the educational goals pursued by this programme. What we can do, however, is to compare the programme with the skills needed in scribal practice. We will see that a would-be scribe learned both too little and too much. A trained scribe had to be able to produce both Sumerian and Akkadian texts. The majority of letters and lawsuit protocols were written in Akkadian. Written Akkadian is all but neglected in the eduba. Those bilingual lists that do exist call for advanced scribes, such as Proto-Diri or Proto-Aa, or are relatively rare (such as the bilingual versions of the acrographic lists and *ugu-mu*). The exercises Syllable Alphabet B, TU-TA-TI, and the name lists all have their relevance for Akkadian syllabic writing in various ways, but they cannot be interpreted as a systematic introduction to Akkadian writing. TU-TA-TI leaves out important sets of syllables (the emphatics) and introduces other sets which are not relevant for Akkadian at all. Some form of instruction in Akkadian letter-writing did exist. Several letters may be identified as exercises because they duplicate each other but for address

and sender²⁵⁹. However, those excavations that clearly hit an eduba, in Nippur, Ur, and Isin, yielded no more than one or two Akkadian exercise letters²⁶⁰. These texts, in other words, may either belong to another educational tradition, or were used as on-the-job training.

Comparing the training in Sumerian with the skills needed to be a competent scribe shows that the pupils learned far too much. The Sumerian business documents a trained scribe had to produce are relatively simple and straightforward. They mainly consist of a standard set of formulas to be filled in with numbers and names. Moreover, for non-standard formulas the scribe could fall back on Akkadian. The point may be illustrated by two Nippur examples. Stone and Owen 1991 no. 10 is a contract of multiple adoption²⁶¹. The final phrase (21-23) reads: ¹*ip-qu₂-^dda-mu* ad-d[a-ni] u₃ ibila-a-ni a-na-me-a-bi še-ga-ne-ne u₂-pa-am iš-[*mu*-ru]. 'Ipqu-Damu, his father, and all his heirs, have written this tablet in mutual agreement'²⁶². For a reason unknown to me line 23 replaces the formula found in all other comparable texts: 'In mutual agreement they swore in the name of the king' (še-ga-ne-ne-ta mu lugal-bi in-pad₃-eš). In order to formulate the irregular phrase, the scribe switched to Akkadian. Similarly, in another adoption contract, edited as no. 31 of the same volume²⁶³, in order to include direct speech in a document an introductory formula from Akkadian letters is borrowed (*kām iqbi umma šūma*).

For a future scribe of business documents by far the most relevant exercises are Proto-ki-ulutin-bi-še₃, which is comparatively rarely used, and the model contracts. Lists such as ur₃-ra contain many words which a scribe would never need again. Literary Sumerian, exercised in proverbs and literary texts, had no practical application at all. To sum up, I strongly disagree with Alster (1990, p.11) and Waetzoldt (1986, p.41) who emphasize the practical character of the scribal education. The corpus of lexical lists is well structured, providing various approaches, in rising degree of complexity, to the Sumerian writing system. As to its contents, however, it can hardly count as a practical preparation for the scribal profession. Right from the beginning of the history of writing the archaic lexical texts contain much that is superfluous from a purely utilitarian point of view. And this continues to be the case throughout the history of the Mesopotamian lexical tradition.

The teaching of Sumerian in the Nippur eduba was not guided by the list of skills a future scribe had to master. The lack of attention to Akkadian and the overdose of high-brow Sumerian point in another direction. It seems that handing down the Sumerian language and tradition as

²⁵⁹ See for such exercise letters: Kraus 1964; Michalowski 1983. An additional example is found in Greengus 1979, no. 20 (Stol 1996).

²⁶⁰ In addition to the letters discussed by Kraus there are two fictitious Sargon letters. One is from Nippur (unpublished; see §2.4.2) and one from Ur (*UET* 7, 73; the letter is followed by a list of professions; see Sjöberg 1996). Both will be edited by Joan Goodnick-Westenholz in her forthcoming book on Sargon legends. Content and style of the Sargon letters are unlike the more ordinary topics treated in the exercise letters studied by Kraus (see previous note).

²⁶¹ *SAOC* 44, 15

²⁶² See for this text, and the translation 'his father' rather than 'their father', Van de Mieroop 1993a, p.126.

²⁶³ *OECT* 8, 11. Republished in photograph in Stone and Owen 1991, Pls. 50-51.

completely as possible was considered to be all important. A pupil of the scribal school was introduced to the technique of writing, but more importantly he was introduced to the heritage of Sumerian writing and Sumerian poetics.

Chapter 3 The Organization of the Nippur List of Trees and Wooden Objects

In the preceding chapter we characterized the scholastic exercises in use in the Nippur eduba. Now we will focus on one such exercise, the list of trees and wooden objects. This list is the first division of the thematic series *ur₅-ra*. In Sumerian writing trees and wooden objects are introduced by the determinative *GIŠ*¹. Therefore, every entry in this list begins with this sign. For this reason we will often use the short name *giš* list. The divisions of *ur₅-ra* are organized along semantic principles. The wooden objects are not listed haphazardly; there is a section chariots, a section doors, and another section for the plough and its parts. As we will see presently, other principles are active as well. The question that this chapter seeks to answer is: which principles are at work in the organization of the *giš* list, and how do these principles interact?

In the discussion I will occasionally refer to other *ur₅-ra* divisions, in order to test the extent to which the results may be generalized. Due attention will be paid to historical descendants of the *giš* list. Between the middle Old Babylonian period, the period in which the Nippur tablets were written, and the early 'canonical' texts of the Kassite period the lexical texts were subject to all kinds of changes. If the organizational principles identified here had some objective existence, we may expect them to operate on the development of the list.

3.1 The Main Sections of the Nippur *Giš* List

In some divisions of Nippur *ur₅-ra* sections are more easily identifiable than in others. In the list of animals the change to another animal is indicated by a horizontal line. Such lines are absent in the *giš* list. The transition from one animal to another usually coincides with a change of initial sign, or the sign indicating the main word. In the section snakes each line begins with the sign *MUŠ*. It is followed by a section where each line begins with *UR* (dogs and related animals). Throughout *ur₅-ra* a horizontal line indicating a section is employed where such a graphemic criterion is present. The boundaries between the various parts of division 4: stones, plants, fish, birds, and clothing, are generally indicated by such lines. Each of these parts is graphemically distinguished by its own determinative. In the *giš* list, however, every single line begins with the sign *GIŠ*. The division of this list into sections is nowhere indicated in the layout of the ancient texts. The following summary is based upon a semantic interpretation of its contents. In a few cases the boundaries of a section cannot be determined with certainty.

1-141	trees
142-159	miscellaneous wooden objects
160-260	furniture and household utensils
261-320	boats
321-325	stuffs

¹ Determinatives do not belong to the word, they belong to the written system only. Determinatives are transcribed in superscript, for instance ^{gs}apin (plough). If the actual word begins with *giš*- (for instance *giš-nimbar*: date palm), no determinative is used. Even though *giš-nimbar* denotes a tree, you will never find the writing ^{gs}giš-nimbar. In some cases we do not know whether the *GIŠ* is a determinative or constitutes a part of the word.

326-373	chariots and wagons
374-406	doors and locks
407-425	tools for weaving and spinning
426-435a	repetitive items: ^{giš} LAGAB and ^{giš} BU
436-441	balances
442-495	agricultural tools
496-507	maces
508-514	boards
515-526	measuring vessels
527-561	traps and throwing weapons
562-570	axes
571-579	miscellaneous, including wooden wheel parts
580-591	shovels
592-594	'old wood' (three times ^{giš} sumun)
595-596	knob on a saddle
597-620	musical instruments
621-629	racks for vessels
630-633	unclear, includes 'slaughter bench' and 'straw chopper'
634-644	siege engines
645-706	varia; including repetitive items (^{giš} KUR, ^{giš} KAL, ^{giš} NIM) and figurines.
707	subscript: praise be Nisaba

Until the beginning of the section treating doors (^{giš}ig) this sequence of sections agrees with the late version. After the wagons (^{giš}mar-gid₂-da) the first millennium recension continues with agricultural implements (^{giš}apin, etc.). The boundary between wagons and doors in the Old Babylonian version coincides with a physical dividing point: those type I tablets which have only half of the list usually divide the composition exactly there (see §2.4.1.2)². The second half of the Old Babylonian list (374-end) is less organized than the first half. The first half has a roughly hierarchical arrangement. The sections are themselves subdivided into smaller sections. Thus the section vehicles consists of the subsections chariots (^{giš}gigir), and wagons (^{giš}mar-gid₂-da). Between these subsections smaller passages are inserted which treat related words: other types of wagons, whips, etc. (see §3.2). The looser organization of the second half may be exemplified by the treatment of the weapons. There are several sections devoted to different kinds of weapons: maces (^{giš}tukul etc.), throwing/shooting weapons (^{giš}illar and ^{giš}pan), and siege engines (^{giš}gud-si-dili, etc.). They are not brought together under a more abstract heading. One might argue that these different types of weapons, which could be easily brought together as one category in our semantic system, may have seemed to be much further apart to the Old Babylonian scribes. Still, it remains difficult to see how measuring vessels could be inserted between weapon categories if this were a thoroughly systematized list of words.

An anomalous passage in the first half of the list is the section miscellaneous wooden objects, immediately following the trees. The position of this section is unexpected because, as we have

² In Middle Babylonian Western versions (Ugarit, Emar) the list of trees and wooden objects is always divided over two tablets with the same point of demarcation (see §2.5.1.2).

argued above, the first half of the list seems to be well organized. The presence of a varia section immediately after the trees calls for an explanation. My hypothesis is that this section bears witness to the earlier history of the list. To demonstrate this point it is necessary first to discuss the section trees.

The section trees is divided into three subsections:

1-120	trees ³
121-134	pharmacopoeia
135-141	parts of a tree

The pharmacopoeia section is the only part of the tree list that is not ordered by natural family, but by use. Most items appear in the late list of drugs called Uruanna⁴. It contains such items as ^{giš}sušin (licorice) and ^{giš}ši-iq-dum (almond). The latter item is a loan from Akkadian (*šiqdum*). The Sumerian word for almond, written ^{giš}LAM, is found in an earlier part of the list in lines 23-24 of the subsection trees⁵. The Akkadian loan ^{giš}ši-iq-dum in this section was perhaps considered as the specialized word for almond or almond wood in a pharmacological context. The word was not ordered with its natural kind, which proves that putting the pharmacopoeia together was a conscious decision. The pharmacopoeia is followed by words for the parts of a tree, including roots and branches. The two subsections are semantically related since roots and branches are the parts often used in medical prescriptions.

The overall organization of the trees, into natural kinds, pharmacopoeia, and parts of a tree is not unlike the organization of other main sections. The part treating boats, for instance, is divided into the subsections kinds of boats, parts of a boat, and shipping accessories (see the discussion in §3.2). The subsections pharmacopoeia and the parts of a tree are followed by a section that runs as follows in the standardized Nippur version⁶:

		Translation
142	^{giš} as ₄ -lum	yardstick
143	^{giš} SUG-da	(unexplained)
144	^{giš} dib-dib	water clock
145	^{giš} u ₅	(unexplained)
146	^{giš} d ₁ ha-ia ₃	(a scribal tool?)
147	^{giš} dub-dim ₂	tablet mould
148	^{giš} šumun-gi	(very probably a scribal tool)
149	^{giš} ti-bal	sign/signal

³ The trees themselves are further divided over a number of subsections for natural kinds. See Powell 1987 for the first millennium version.

⁴ This list is still unedited. It is known from numerous first millennium sources, including *KADP*, 1-32 and *CTN IV* 192-193.

⁵ For the reading of ^{giš}LAM see the commentary to lines 23-24 in §5.3.

⁶ A number of words from this section (or rather its first millennium counterpart) are discussed by Lieberman 1980, pp.347-351.

150	^{giš} šID-ma	wooden object used for accounting
151	^{giš} tun ₃	case
152	^{giš} ba	a tool (?)
153	^{giš} ba-amar	? for a calf
154	^{giš} ba-še	? for grain
155	^{giš} ba-šab	a tool for cutting
156	^{giš} hub ₂	(unexplained)
157	^{giš} na-ru ₂ -a	stele ⁷ ?
158	^{giš} ešgiri-šu-du ₇	neck stock
159	^{giš} nig ₂ -na-UD	(unexplained)

(Followed by the section furniture, beginning with ^{giš}gu-za: chair).

Most of the items which can be understood are somehow related to the school. The water clock is known from Old Babylonian mathematical problem texts⁸. The yardstick could be used for metrological exercises. It is often found in passages in royal hymns where the achievements of the king in the eduba are praised⁹. The object ^{giš}ḥa-ia₃ is unknown, but ḥa-ia₃ is the spouse of ḥNisaba, the patroness of the eduba. The line ^{giš}u₅ (145) is in some texts replaced by ^{giš}le-u₅ (writing board). This reading is retained in later versions¹⁰. Other Nippur texts, however, replace the same item with ^{giš}GAN (unexplained). The reading ^{giš}le-u₅ may well be an attempt to make more sense out of a section that has little unity in itself. A similar explanation may be used for line 143 (^{giš}SUG-da) which is replaced in two texts by ^{giš}maš-da. This may be equivalent to later ^{giš}maš-dara₃, a loan from the Akkadian *mašaru* = inscription, text (see *MSL* 5, p.151, 3). The tool ^{giš}ba is not known to be of specific use in education. A neck stock (line 158) might possibly have functioned as a punishment, but even then the connection with tablet-making or accounting is more contextual than strictly semantic. Perhaps the interpretation of this section as a collection of words for objects in the eduba turns out to be the right one after all. Nevertheless, the section is still anomalous. None of the other sections, as far as I can tell, is organized by such a local or contextual principle. The confusing number of variants, especially in the first few lines, rather indicates a collection of little used words or varia, which were not all well understood.

It is possible that this 'miscellaneous wooden objects' section originally concluded an independent tree list. We can find early forebears of this hypothetical list in the archaic Wood list¹¹. This list mainly consisted of names of trees, but had in its final and least standardized section a

⁷ The common spelling is ^{na}na-ru₂-a, with the determinative for stone object. ^{giš}Na-ru₂-a is either a wooden stele, or some wooden part of a stele.

⁸ Which does not necessarily imply, however, that a water clock belonged to the standard inventory of a school. The mathematical exercises were meant to be solved by computation, not by experiment.

⁹ For instance in Lipit-Eštar B (Vanstiphout 1978). For other examples see Sjöberg 1975.

¹⁰ Hattuša: *KBo* 26, 5 (+) 6 IV06': ^{giš}li-um; Ugarit: Thureau-Dangin 1931 pl. 46-47: no.3+no.4 IV40: ^{giš}li₂-u₅-[] (see photograph of the tablet in *RSO* V, p.24 figure 6a); Emar: *Emar* 6/2, p.415 Msk 74163b IV 19: ^{giš}li₁-[]. For the first millennium version see *MSL* 5, p.151: 2.

¹¹ See Englund and Nissen 1993, pp.23-25.

number of wooden objects. Between the archaic and the Old Babylonian period the Wood list is known only from a few scattered fragments¹². Somewhere, however, it must have survived since all Old Babylonian versions have retained the opening lines of their most ancient ancestor. In the redaction of the thematic lists in the Old Babylonian period the tree list took on an entirely new character. The short section wooden objects at the end was expanded at great length and given a somewhat systematic organization. Those items from the old section wooden objects that did not find a place in this organization may have been retained as a coda to the tree list.

The second half of the *giš* list (374-end), beginning with the section doors, shows much more diachronic instability and local variation in its overall organization than the first half. The Middle Babylonian Emar version¹³ generally follows the Nippur tradition but has some interesting deviations. The section *giš*tukul (maces) has been moved to a later place in the list. A rough comparison of this part of the list provides the following picture:

Nippur	Emar
agricultural tools	agricultural tools
maces	
boards	boards
measuring vessels	measuring vessels

By consequence in Emar the section agricultural implements is directly followed by boards (such as the bottom board of a basket) and measuring vessels. These objects may be understood as having at least some relation with agriculture. Thus, in a way, the list becomes better organized than it was before, even though the weapons are still distributed over several sections. The late redaction, as edited in *MSL* 6, has a completely different version of the second part of the *giš* list. Some items are moved from the varia sections to a place in the list with semantically related words. For instance the *giš*gisal entries (oar; lines 645-647) are found in the Nippur text after the siege engines. In the late version they are connected with the section boats, after *giš*gi-muš (rudder; *MSL* 5, p.184: 410ff.). Similarly the sections *giš*ligima (shoot; 554-556) and *giš*dih₃ (camel thorn; 676-679) are moved to the section trees (*MSL* 5, p.115: 268-272; and p.136: 476f.). However, the late version is so different from the Nippur tradition that the two are difficult to compare. The semantic organization is stronger in the first millennium version than it was in the Old Babylonian period. The development of the list made for a more coherent organization. This is not to say that the late version is strictly organized along unequivocal principles. Plough and harrow are found in tablet 5, but hoe and shovel in 7A and 7B. Here the late version follows a tradition exemplified in Old Babylonian Ur¹⁴. The Old Babylonian Nippur tradition at least had the hoe with the other agricultural implements. The shovel (*giš*mar), however, had a separate section.

¹² *IAS* 18-20; TM 75.5197 (see Archi 1992, p.9); *SF* 68 and 74; *OSP* I, 8.

¹³ The Ugarit version is probably very similar but only a few fragments have been published so far: *PRU* III, Plate X (RS 13.53; see Veldhuis 1996); and *RSO* 7, no. 49.

¹⁴ In general the order of the sections in ur₅-ra 5-7B is more in agreement with the Old Babylonian version from Ur than with that from Nippur (see §5.6.2).

To what extent is the overall organization of the Nippur list of trees and wooden objects representative for other parts of Old Babylonian *ur₃-ra*? A unique feature of the *giš* list is that a whole division is filled by only one subject. In the other divisions we find reed combined with hides, ceramics, and metals; or stones with fish, birds, and other subjects. The *giš* list is the only one that has one and the same determinative all the way through. The list of reed and reed objects (first part of division 2) is formally comparable in that it first lists kinds of reeds, and then continues with reed objects, organized in a way not unlike the wooden objects. However, only a few kinds of reed were distinguished. Therefore, this section is not much more than a short introduction, quite different from the quasi-independent status of the list of trees. In the list of stones (see *MSL* 10) stone objects are generally listed with the kind of stone they are made from. There are a few sections which consist of two parts: first, varieties of a certain stone, then objects made of that stone. An example is the short section *na₄gug* (carnelian) in *MSL* 10, p.56.

44	<i>na₄gug</i>	carnelian
45	<i>na₄gug-gazi</i>	veined ¹⁵ carnelian
46	<i>na₄gug-me-luh-ha</i>	Meluhha carnelian
47	<i>na₄gug-gid₂-da</i>	long carnelian
48	<i>na₄gug-lugud₂-da</i>	short carnelian
49	<i>na₄gug-bur₃-bur₃-da</i>	perforated carnelian
50	<i>na₄kišib-gug</i>	seal of carnelian
51	<i>na₄lagab-gug</i>	block of carnelian
52	<i>na₄ellag₂-gug</i>	bead of carnelian

(The list continues with *na₄nir₂*).

The objects in 50-52 constitute a set that is listed for almost every kind of stone. Further on there is a special section with single entries (71-102) containing, for instance, *na₄u₃-tu*, the stone of birth-giving, used in the magico-medical treatment of women in labour, and *na₄igi-muš*, the snake-eye stone. For these stones no varieties are listed, nor any objects made of them. The section includes a subsection with colour terms: white stone, black stone, red stone, green stone, and speckled stone¹⁶. The list of stones concludes with a number of objects without specification of the kind of stone. Here are found, for instance, *na₄na-ru₂-a* (stele) and a large number of stone weights, listed in descending order from 1 *gu₂* to 1 grain. The stone list, therefore, is best regarded as organized into sections, each section representing a natural kind. The sections may contain both varieties and objects made from this kind of stone. The exceptions discussed could not be made to fit the scheme. This scheme is rather different from the overall organization of the *giš* list. In the first place the wooden objects are kept separate from the trees. In the second place the kind of wood is almost never indicated for the objects¹⁷.

¹⁵ Gazi (Akkadian *kasû*) is a plant used as a spice, and as an ingredient in brewing beer. Its identification was discussed most recently by Stol (1994a, pp.175-179), who argues for the old identification dodder (*cuscuta*). The appearance of the dodder suggests the interpretation 'veined' in the present context.

¹⁶ For this set of colour terms see §3.5.3.

¹⁷ There are a few exceptions in the section furniture. See lines 189-194 and 198 of the Nippur version.

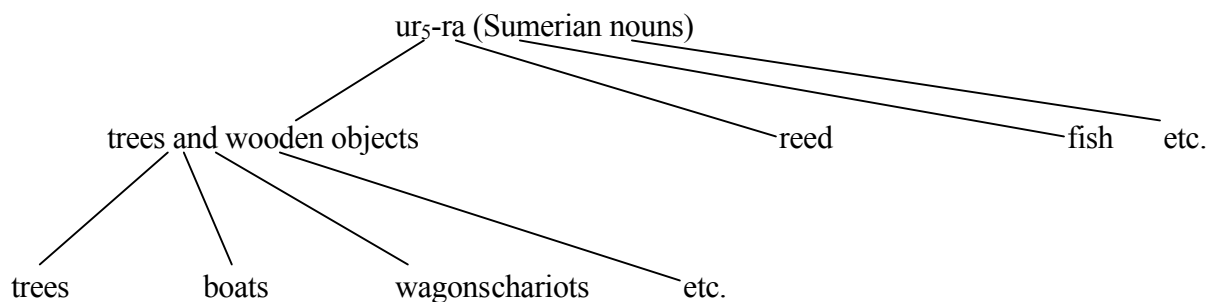
The manner of overall organization, therefore, differs in the various parts of Old Babylonian *ur₅-ra*. This variation is partly due to the nature of the objects listed, and partly to the graphemic organization of the list. The products of trees are listed with the trees since they share the same determinative. The same holds true for stones and stone products. The products of animals and plants, however, do not immediately follow the animals or plants, but are listed with foodstuffs or with clothing. Cows are found in division 3, but milk and milk products in division 6¹⁸:

ga	milk
gara ₂	cream
ga-uz ₃ -da	goat's milk
ga-še _x (SIG ₇)-a ¹⁹	sour milk
ga-ur ₄ -a	milk product?
ga-tak ₄ -a	milk product?
ga-kin-gal ₂ -la	milk product? ²⁰
etc.	

The products of cows and goats are not listed with the respective animals; unlike wooden objects, they do not graphemically show their origin.

3.2 The Organization of a Section: Two Examples

The sections of the *giš* list as discussed in §3.1. may be subdivided into subsections, and such subsections often contain even smaller units. The question that interests us here is that of semantic hierarchy. The division of *ur₅-ra* over tablets is the most general level of the semantic organization of Sumerian nouns. All trees and wooden objects have found their way into the first division. The analysis of the *giš* list demonstrates at least some degree of hierarchical organization. For instance:



¹⁸ There is no fixed order of items in this part of *ur₅-ra*. See Civil in *MSL* 11, p.109. The entries are cited here in the order of source B (*MSL* 11, p.122 section 8).

¹⁹ For the reading and translation of *ga-SIG₇-a* see Englund 1995, pp.418-419, with earlier literature.

²⁰ Akkadian *i-su*. See Civil 1983, pp.237-238; Stol 1994, p.200.

The question is: how deep did the hierarchical organization go, and how consistently has it been applied?

We will discuss two examples. The first covers lines 261-373. This is a long passage, with subdivisions for specific kinds of vehicles. The second is the passage 442-514 which contains the well-organized section agricultural tools, followed by two short sections: maces and boards.

3.2.1 Boats and Wagons

The section furniture and household utensils ends with words for mortar and pestle²¹. Then follows a passage with boats and wagons. This section has 3 main subsections: boats (^{gis}ma₂), chariots (^{gis}gigir), and wagons (^{gis}mar-gid₂-da). Inserted between them we find some smaller sections.

Boat (^{gis} ma)	261-320
construction material	261-264
types of boats	265-296
parts of a boat	297-311
accessories for shipping	312-320
Various words for standard and staff	321-325
Chariot (^{gis} gigir)	326-346
parts of a chariot	326-346
Related words	347-356
^{gis} usan ₃ (whip)	347-350
^{gis} gag-sal ₄ (chariot or wagon)	351-353
^{gis} šid-du ₃ (pole pin?)	354-356
Wagon (^{gis} mar-gid ₂ -da)	357-373
parts of a wagon	357-373

The section boats differs in structure from the sections treating chariots and wagons. It is much more complete, covering a wider field of terms somehow related to boats and shipping. It not only includes entries for types of boats and parts of a boat but also for construction material and accessories. The section has some rather strange anomalies in its organization. Strangest of all is that the ferry (^{gis}ma₂-addir; line 307) is listed among the parts of a boat²². Also unusual is the placement of the geographical types (^{gis}ma₂-ma₂-ri₂: Mari boat; ^{gis}ma₂-dilmun-na: Dilmun boat). They are not placed together (lines 274 and 296 respectively). The Dilmun boat is found at the very end of the list of types, after procession boats.

²¹ For ^{gis}naga₃ and ^{gis}gan-na see Steinkeller 1989, pp.36-38.

²² For the ferry see Selz 1995 with previous literature.

The sections ^{gis}gigir (chariot) and ^{gis}mar-gid₂-da (wagon) do not list any specific types. ^{gis}Gigir and ^{gis}mar-gid₂-da are in themselves two types of wheeled vehicles. The first is used for warfare and ceremonial occasions. The second is intended for the transportation of goods. Still, we would expect geographically distinguished kinds here, or wagons of different capacities such as are found for the boats. The small passages between chariot and wagon are somehow related to both. The ^{gis}usan₃ (whip) may be interpreted as an accessory. The ^{gis}gag-sal₄ is another word for chariot (or a different kind?). The meaning of ^{gis}sid-du₃ is still uncertain²³ but it probably belongs to the same semantic field.

In a truly hierarchically organized vocabulary, the proximity of the sections boats and chariots/wagons could be interpreted as an indication for the existence on a higher level of abstraction of a super-section vehicles. This, however, does not seem to be the case. The short passage standard/staff between boat and chariot has no overt relation with the subject vehicles. This location of the standard/staff passage survived over the centuries. In the late version the sections boats and standard/staff conclude tablet 4, chariot and wagon begin tablet 5. This caesura in the late version again suggests that the abstract idea of vehicles was not recognized in the organization of the list. The proximity of boats to wheeled vehicles in the list is probably due to chance.

The unusual characteristics discussed in the previous paragraphs all disappear in the first millennium version of ur₅-ra. The Dilmun boat is listed with other geographical varieties (*MSL* 5, 174: 281); the ferry (^{gis}ma₂-addir) is found with other kinds of boats (*MSL* 5, 180: 352-353). The subsections on chariots and wagons now both have a passage listing types (*MSL* 6, p.5: 7-14: chariots of various gods; p.12: 74-79: kinds of wagons). One of the effects of the transmission over the centuries appears to be the levelling out of such anomalies.

We will now narrow our focus to see how the subsection chariots is organized in detail²⁴.

326	^{gis} gigir	chariot
327	^{gis} e ₂ -gigir	cabin of the chariot
328	^{gis} e ₂ -usan ₃ -gigir	box for the whip of the chariot
329	^{gis} SUM-KI-A-gigir	(unidentified)
330	^{gis} kun-gigir	rear part of the chariot
331	^{gis} GUL-gigir	(part of) the yoke of the chariot?
332	^{gis} sahar-gi-gigir	'dustguard' of the chariot
333	^{gis} su-din-gigir	part of the pole of the chariot?
334	^{gis} su-lum-mar-gigir	tethering ropes of the chariot
335	^{gis} sag-kul-gigir	side poles [?] of the chariot
336	^{gis} sag-dur ₂ -gigir	seat of a chariot
337	^{gis} gir ₃ -gub-gigir	footboard of the chariot
338	^{gis} mud-gigir	handle of the chariot

²³ See Civil 1968, p.8; and Steinkeller 1990, p.23.

²⁴ For the terminology of the parts of a chariot see Civil 1968, Klein 1989, and the older study by Salonen 1951.

339	^{giš} gag-mud-gigir	peg of the handle of the chariot
340	^{giš} šudul-gigir	yoke of the chariot
341	^{giš} gag-šudul-gigir	peg of the yoke of the chariot
342	^{giš} umbin-gigir	wheel of the chariot
343	^{giš} gag-umbin-gigir	peg of the wheel of the chariot
344	^{giš} si-gigir	horn of the chariot
345	^{giš} gaba-gigir	front guard of the chariot
346	^{giš} gaba-gal ₂ -gigir	front guard of the chariot

The meaning of some of these terms is still uncertain or only understood in a very general sense. Such uncertainties hinder the semantic analysis of this passage. From what is understood, however, there is no clear relation between the structure of a chariot and the sequence of the list. The ^{giš}su-lum-mar, the tethering ropes²⁵ (or some wooden part attached to the tethering ropes?), belong to the front part of the chariot. Other items belonging to the front part are listed further on: ^{giš}gaba-gigir and ^{giš}gaba-gal₂-gigir. The ^{giš}e₂-gigir and the ^{giš}sahar-gi-gigir probably refer to the same superstructure on the chariot. The second item (dustguard) may be the canopy or a special kind of canopy. If an ordering derived from the structure of the chariot is absent (or at least not strong enough to be recognized as such), there is another principle that is clearly at work here. Items sharing the initial sign are paired:

^{giš} e ₂ -gigir	^{giš} su-din-gigir	^{giš} sag-kul-gigir	^{giš} gaba-gigir
^{giš} e ₂ -usan ₃ -gigir	^{giš} su-lum-mar-gigir	^{giš} sag-dur ₂ -gigir	^{giš} gaba-gal ₂ -gigir

There is no evident semantic proximity that explains the pairing of ^{giš}su-din-gigir with ^{giš}su-lum-mar-gigir. The reason for putting them together is that they share the initial sign SU. The ^{giš}su-lum-mar-gigir entry is attested in a variant spelling ^{giš}su-lu-mar-gigir. Well known outside the lexical corpus is the spelling ^{giš}zu₂-lum-mar (see Civil 1968, p.8f.). This spelling, however, would break the graphemic alliteration with ^{giš}su-din-gigir and is conspicuously absent in the extant copies of the ^{giš} list. Similarly, all items which have or can have a peg (gag) are put together (lines 338-343). 'Having a peg' is a semantic principle, though only in a very weak sense. Visually this ordering has a strong effect. The word gag is written with the sign KAK, a simple and easily recognizable sign consisting of two main strokes crossing each other, with one small vertical through the lower stroke. In this sequence every other line begins with a KAK sign, a pattern which can hardly escape the eye. The same pattern is used at other places in the ^{giš} list as well, for instance in the section ^{giš}apin (plough). In some exercises the order of the ^{giš}umbin and the ^{giš}šudul items is inverted. Others move ^{giš}GUL-gigir (331) to appear before ^{giš}gir₃-gub-gigir (337). Both variants are found in CBS 6068 (SLT 170²⁶):

334	rI01'	^{giš} su-l[um-mar-gigir]
335	rI01'	^{giš} KA-[kul-gigir] ²⁷
336	rI03'	^{giš} KA-[dur ₂ -gigir]

²⁵ See Civil 1968, pp.8-9.

²⁶ Ni I-01.

²⁷ In this and the next item KA must be an error for SAG; the two signs have the same general shape.

331	rI04'	^{giš} GU[L-gigir]
337	rI05'	^{giš} gi[r ₃ -gub-gigir]
338	rI06'	^{giš} mud-[gigir]
339	rI07'	^{giš} gag-mud-[gigir]
342	rI08'	^{giš} umbin-[gigir]
343	rI09'	^{giš} gag-um[bin-gigir]
340	rI10'	^{giš} šu[dul-gigir]
341	rI11'	^{giš} gag-[šudul-gigir]
344	rI12'	^{giš} s[i?-gigir]

This variant order does not affect the pattern of putting together all items which have or can have a peg. Such variants as there are in sequence and spelling (in this passage the 'standard text' is only one choice among various possibilities) never violate the patterns described above²⁸.

Items commonly found outside the lists, such as ^{giš}da-gigir (side-board) and ^{giš}ma-gid₂ (pole), are missing²⁹. This passage, therefore, is not an exhaustive description of the parts of a chariot. Nor is it generated by walking around a chariot and listing its parts.

3.2.2 Agricultural Tools, Maces, and Boards (442-514)

The passage 442-514 is divided here into three units of unequal length. The first and largest unit is the section agricultural tools. The other two treat maces and boards. As we will see presently, the boards have a strong relation with the agricultural tools, but the maces are inserted in between in the Nippur text.

3.2.2.1 Agricultural tools

Following a short passage on scales (^{giš}rin₂) the section agricultural tools begins with ^{giš}apin (plough). The section is interesting for the present discussion because its organization is relatively complex.

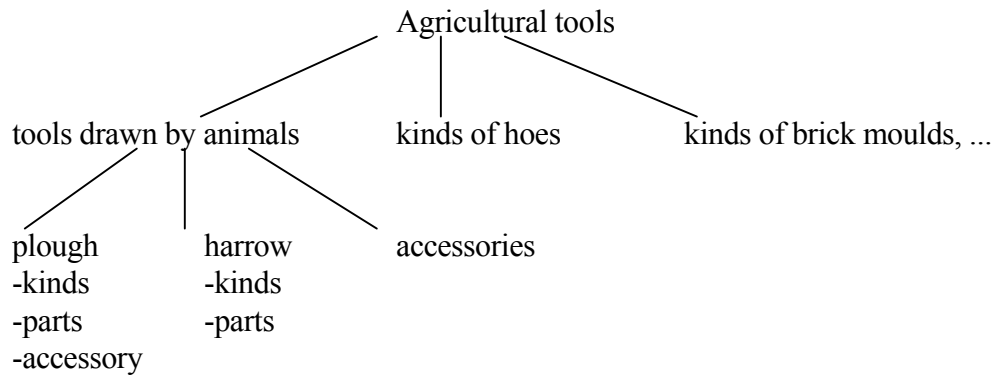
²⁸ There is one exception: in N 2210 + N 6202 + HS 1845 (= Ni II-175) line 328 reads ^{giš}usan₃-gigir instead of ^{giš}e₂-usan₃-gigir. Now the graphemic relation with the item ^{giš}e₂-gigir is lost. This, however, is clearly an error. The item occurs on the obverse of a type II tablet. The teacher's model (N 2210 + N 6202) contains the error, which is faithfully copied by his pupil (HS 1845). The teacher's model contains another error: ^{giš}su-mar-gigir, instead of ^{giš}su-lum-mar-gigir (line 334). This line is not preserved in the pupil's text.

²⁹ References for ^{giš}da and ^{giš}ma-gid₂ are collected in Civil 1968.

Agricultural Tools	442-495
Plough (^{giš} apin)	442-467
kinds of ploughs	442-448
parts of the plough	449-466
accessory	467
Harrow (^{giš} gan ₂ -ur ₃)	468-473
kinds of harrows	468-470
parts of the harrow	471-473
Objects related to draught animals	474-476
(part of) the harness?	474
goads	475-476
Hoe (^{giš} al)	477-482
kinds of hoes	477-482
Brick mould (^{giš} u ₃ -šub)	483-486
kinds of brick moulds	483-486
Stick (^{giš} gag) for uprooting ³⁰	487-490
kinds of sticks	487-490
Irrigation device (^{giš} zi-ri ₂ -qum; etc.)	491-495
irrigation device	491
part of an irrigation device	492
irrigation device	493
parts or accessories	494-495

The organization of the subsection ^{giš}apin (plough) is almost equivalent to the organization of the section boats (^{giš}ma₂), except that the latter includes an introductory passage for construction materials. However, boats appear to be a unit on their own, whereas plough is but the first of a number of subsections under the heading agricultural implements. Moreover, plough and the next subsection harrow belong together in being tools drawn by animals. That this is a relevant feature in the organization is shown by the short passage (474-476) that follows harrow containing words for harness(?) and goad. The hierarchy that organizes the agricultural tools is, therefore, as follows:

³⁰ According to Hruška 1995, p.36 the ^{giš}gag is used for sowing. One of the items here is ^{giš}gag-sum-ba-al-la₂, which rather indicates a use for uprooting onions at the harvest. See Stol 1987, p.65.



The left half of the scheme is more complex and has more depth than the right half. The plough is the most complex and prestigious of the implements listed. This is probably the reason why the agricultural tools begin with ^{giš}apin, and why plough has the longest and most elaborate subsection. There is no inherent reason why, for instance, the tooth of the hoe (^{giš}zu₂-al) should not be listed. It is apparently due to the lower status of the tool. Interestingly, the difference in prestige between the complicated plough and the simple hoe is also used, and subverted, in the literary text 'The Debate between the Hoe and the Plough' (see Vanstiphout 1984). In this text the complexity of the plough is reason to accuse it of conceit as well as clumsiness. Whenever some small part is broken the whole thing is useless, and a bunch of craftsmen is needed to get it back into working order (see also Hruška 1995, pp.32-33). In the final verdict precedence is given to the simpler and humbler of the two: the hoe.

The last subsection of the agricultural implements is the least organized. It lists various words for irrigation machine (dāliya or shādūf³¹) and its parts:

491	^{giš} zi-ri ₂ -qum	irrigation device
492	^{giš} gu ₂ -zi-ri ₂ -qum	'neck' of the irrigation device
493	^{giš} nam-nu-tar-re	irrigation device
494	^{giš} I-LU	irrigation device?
495	^{giš} I-DIB	part of an irrigation device?

The word ^{giš}zi-ri₂-qum is a loan from Akkadian *zuruqqum* or *ziriqqum*. The ^{giš}nam-nu-tar-re (extant in only one manuscript) is found in peripheral Middle Babylonian versions as ^{giš}nam-lú-da-ri-a³², and in late ur₅-ra as ^{giš}nam-tar-(ra) (*MSL* 6, p.65; ur₅-ra 6, 153-154). In the late version ^{giš}nam-tar is rendered *zuruqqum*. The Emar version has *dil tu* (another word for d liya, or a similar device) for ^{giš}nam-lú-da-ri-a. In other lexical lists *dil tu* is the rendering of ^{giš}a₂-la₂ (see *PSD* a-la₂, lexical section), the common Sumerian term for this device. In the Ebla Vocabulary

³¹ The Iraqī word dāliya is probably related to *dilūtu*, one of the Akkadian terms for this machine.

³² Emar version line 264' and 469' (see Civil 1989, p.14). Ugarit version *PRU* III, Plate X: RS 13.53 Rev. II04' (see Veldhuis 1996).

^{giš}a₂-la₂ is translated as šu-ri₂-gum₂, which is again the same word as *zuruqqum/ziriqqum* (Civil 1994, p.69).

Suprisingly, the word ^{giš}a₂-la₂ does not appear in the Old Babylonian lists³³. The items ^{giš}I-LU and ^{giš}I-DIB (494-495) are poorly understood³⁴. The Nippur evidence is not abundant here as there are only two texts. The signs LU and DIB are not always distinguished. In careful writing DIB has two horizontals, LU only one. One of the two Nippur texts (a teacher's model) makes a clear distinction between ^{giš}I-LU and ^{giš}I-DIB, the other does not. The late version (*MSL* 6, p.65:156-158) has:

156	^{giš} a ₂ -la ₂	<i>dilūtum</i>	irrigation machine
157	^{giš} I-LU	MIN	idem
158	^{giš} kun ₄ (I-LU)	<i>askuppu</i>	threshold

The sequence in the late version seems to imply that 'threshold' (^{giš}kun₄ = *askuppu*) is used in Sumerian as a metaphor for an irrigation machine (one can imagine that the water has to cross a 'threshold'). The two Akkadian translations in 157-158, then, are of a different kind. The first (157) resolves the metaphor and gives the common word for irrigation machine in Akkadian; the second (158) retains the metaphor and translates the Sumerian literally. We will see another example of this treatment of metaphors in our discussion of ^{giš}dih₃ (camel thorn) in §3.3.2. The metaphorical explanation, however, cannot account for the distinction between ^{giš}I-LU and ^{giš}I-DIB in one of the Nippur sources³⁵.

Whatever the correct solution turns out to be, this subsection is poorly organized and may already have been poorly understood in ancient times. This is suggested in particular by the subsequent reinterpretations of the word ^{giš}nam-nu-tar-re. Translated literally, this wooden object is called an 'undecided fate'. The Middle Babylonian variant ^{giš}nam-lú-da-ri-a could be interpreted as 'the human-for-ever device'. The late ^{giš}nam-tar is homophonous with the Namtar demon. With the vital importance of water and irrigation for the production of food, the connection between an irrigation device and fate is itself understandable as a source for metaphors. The variants indicate that the metaphor was easily misunderstood. Alternatively, the original item was not a metaphor at all but an attempt to render a foreign word.

The organization of the section agricultural tools is, therefore, not only based upon referential semantics but also on prestige (plough first) and on internal, textual features. The longer and better organized subsections of the agricultural tools are treated first. The most unorganized passage, treating irrigation machines, concludes the section. Not all agricultural tools are

³³ There is an item ^{giš}a₂-la₂ among the musical instruments but not among the irrigation machines.

³⁴ ^{giš}I-LU and ^{giš}I-DIB may both be read ^{giš}kun₄. Common Akkadian renderings are *askuppu* (threshold) and *simmltu* (ladder). The Sumerian ^{giš}kun₄ is treated elsewhere in the ^{giš} list (O.B. Nippur 246-251), where it is to be rendered *simmltu* (ladder), as is demonstrated by the late version (ur₅-ra 4: 225-232; *MSL* 5, p.169f.). Ladder and threshold are represented by the same word in Sumerian, but not in Akkadian.

³⁵ One might entertain the possibility of reading ^{giš}i-lu as a deviant spelling for ^{giš}a₂-la₂. For this word see Civil 1994, p.100 n.9. Known variant spellings are a-la₂ and perhaps u₅-la.

included here. The ^{giš}mar (shovel³⁶) is found in a later part of the list (580-591).

3.2.2.2 Maces

The agricultural implements are followed by several words for mace. This section is treated here particularly for its variants. It is a good example of what may be lost in a score edition. The composite text runs as follows:

496	^{giš} tukul	weapon / mace
497	^{giš} tukul-šu	hand weapon
498	^{giš} tukul-ur ₂ -ra	weapon carried in the belt?
499	^{giš} tukul-kun	weapon with a tail?
500	^{giš} TUKUL-DINGIR	divine weapon
501	^{giš} tukul-gaz	shattering weapon
502	^{giš} sag-tukul	front part of a weapon
503	^{giš} a-ga-tukul	rear end of a weapon
504	^{giš} mi-tum	mace
505	^{giš} mi-tum-sag-50	fifty-headed mace
506	^{giš} utug ₂	mace
507	^{giš} utug ₂ -sag-50	fifty-headed mace
(continues with ^{giš} dur ₂ items)		

This sequence is found in CBS 14143 (= SLT 126³⁷), a teacher's model text. One of the points here is the reading of line 500. The combination of signs ^{GIŠ}-TUKUL-DINGIR may be read ^{giš}middu₂, meaning mace, or ^{giš}tukul-dingir: weapon/mace of a god. Middu₂ is a complex sign that still makes sense when the signs are read separately. ^{giš}Middu₂ is a loan from Akkadian; it may also be written ^{giš}mi-tum, this spelling is found in 504-505. The Akkadian word probably corresponds to the genuinely Sumerian ^{giš}utug₂ (506-507)³⁸. The identity of the two is visible here because both have a fifty-headed variety. The presence of the ^{giš}mi-tum items and the placement of ^{giš}TUKUL-DINGIR between other ^{giš}tukul items suggests that the intention was to read line 500 as ^{giš}tukul-dingir = mace of a god. But another tablet reads:

N 5223³⁹:

496	rII02'	^{giš} tuk[ul]
497	rII03'	^{giš} tukul-šu
498	rII04'	^{giš} tukul-ur ₃ -ra
499	rII05'	^{giš} tukul-kun
501	rII06'	^{giš} tukul-gaz

³⁶ See Civil 1994, p.95.

³⁷ Ni II-127.

³⁸ See Cooper 1978, pp.123-124, 126, and 130; Lambert 1981, p.94ff.; Civil 1985a, p.35f.; Ludwig 1990, p.225. The fifty-headed utug-mace is traditionally associated with the warrior god Ninurta.

³⁹ Ni I-06.

502 rII07' ^{giš}sag-tukul
 503 rII08' ^{giš}a-ga-tukul
 506 rII09' ^{giš}utug₂
 500 rII10' ^{giš}TUKUL-DINGIR
 (continues with ^{giš}dur₂ items).

The line ^{giš}TUKUL-DINGIR follows ^{giš}utug₂ (mace) and the ^{giš}mi-tum items are absent. Here the reading ^{giš}middu₂ seems to be the most appropriate. The fifty-headed varieties are omitted in this tablet. A third text (HS 1745+)⁴⁰ has:

496 rIV19 ^{giš}tukul
 497 rIV20 ^{giš}tukul-šu
 498 rIV21 ^{giš}tukul-ur₃-r[a]
 499 rIV22 ^{giš}tukul-kun
 500 rIV23 ^{giš}TU]KUL-DINGIR
 504 rIV24 [] mi-tum
 505 rIV25 [] m[i-tu]m-s[ag-5]0
 (continues with ^{giš}dur₂ items)

Here the ^{giš}utug₂ items are missing. Probably, ^{giš}TUKUL-DINGIR is intended here to be read ^{giš}middu₂, giving two alternative spellings in sequence (^{giš}middu₂; ^{giš}mi-tum). CBS 6514⁴¹ is badly damaged. The order of the items under discussion, however, is not in doubt:

502 rI03' ^{giš}sag?-tukul?-[
 501a rI04' ^{giš}tukul-ma[h]
 500 rI05' ^{giš}TUKUL-DIN[GIR]
 504 rI06' ^{giš}mi-tum
 505 rI07' ^{giš}mi-tum-sag-50
 rI08' ^{giš}{traces}
 507 rI09' [ut]ug₂-[
 (followed by a break)

What appears from all these variants is, firstly, that ^{giš}mi-tum and ^{giš}utug₂ were considered to be essentially the same thing. The one is the Akkadian loanword, the other the genuine Sumerian designation. Secondly, ^{giš}middu₂ and ^{giš}mi-tum, where both are given, are spelling variants. However, there is nothing to prevent a scribe from reading ^{giš}TUKUL-DINGIR as ^{giš}tukul-dingir: 'divine weapon', as seems to have happened in Ni II-127 (= *SLT* 126), cited as the 'standard text'. This reading found its way to Ugarit (*RSO* VII, p.107: 20), where it is glossed de₄-gi-[ra] (for dingir-ra). As expected, the late version (ur₅-ra 7A) has collected all possibilities (*MSL* 6, 84f.):

9	^{giš} tukul-dingir-ra	MIN (=kaku) ili	divine weapon
10	^{giš} middu ₂ (TUKUL.DINGIR)	MIN ša ilānī	weapon of the gods
11	^{giš} middu (TUKUL.BAD)	MIN ša tāhāzi	combat weapon

⁴⁰ Ni II-173.

⁴¹ Ni II-210.

3.2.2.3 Boards

The section 'maces' is followed by a section ^{giš}dur₂. This word is rendered *kiskirru* in bilingual texts and is understood as a board, or the wooden bottom of something. The peculiarity of this passage is that it almost duplicates the section ^{giš}u₃-šub (brick mould).

483	^{giš} u ₃ -šub	508	^{giš} dur ₂
		509	^{giš} dur ₂ -pisan
484	^{giš} u ₃ -šub-ab-ba	510	^{giš} dur ₂ -ab-ba
485	^{giš} u ₃ -šub-sig ₄	511	^{giš} dur ₂ -sig ₄
486	^{giš} u ₃ -šub-sig ₄ -al-ur ₅ -ra	512	^{giš} dur ₂ -sig ₄ -al-ur ₅ -ra

^{giš}Dur₂-pisan (509) is probably the bottom board of a basket. The words sig₄, and sig₄-al-ur₅-ra mean brick and kiln-fired brick respectively. It appears from mathematical problem texts that the two brick types not only differ in their production process but also in size⁴². Lines 485-486 refer to brick moulds of different sizes. The corresponding boards (511-512) must designate the bottom boards of these brick moulds. Less clear is the ^{giš}u₃-šub-ab-ba, which is translated as *nalbatti apti*, or mould for a window, in the late tradition⁴³. Whatever this mould is, there is a corresponding board listed in line 510. There is no semantic reason why the section ^{giš}tukul ('mace') should be inserted between ^{giš}u₃-šub and ^{giš}dur₂. In the first millennium versions this inconsistency is repaired and the section ^{giš}u₃-šub is immediately followed by ^{giš}dur₂. On the graphemic level the connection between ^{giš}tukul and ^{giš}dur₂ is clear enough: both are written by the same sign (KU). What is demonstrated here is a conflict between two associative principles, and different solutions of that conflict in the different versions of the ^{giš} list.

3.2.3 The Organization of Sections in Other Parts of Ur₅-ra

In other parts of Old Babylonian ur₅-ra some degree of hierarchical organization is not uncommon. The depth of hierarchy such as was found in the section agricultural tools is rare, however. The Nippur list of domestic animals (*MSL* 8/1, pp.83-88) has a transparent structure, listing male animals, female animals, and their young, classified into ovine and bovine species. Interestingly, a large tablet from the Yale collection (YBC 4679) has an alternative organization using the same categories. The Yale tablet, which is almost completely preserved, is of unknown origin. The order of the sections in both lists may be summarized as follows:

⁴² See Neugebauer and Sachs 1945, p.92; and Friberg 1996, p.10.

⁴³ *MSL* 6, p.98: 173; similar for ^{giš}dur₂-ab-ba in line 178. See further Emar 6/4 p.71: 189'; p.73: 270'. In mathematical problem texts (see previous note) we find sig₄-ab₂, which is translated as *arhu*: half-brick (literally: cow-brick). There does not seem to be a relation with ^{giš}u₃-šub-ab-ba. In mur-gud both ^{giš}u₃-šub-ab-ab and ^{giš}dur₂-ab-ba are explained as the *birru* or lattice of the opening of a window (*MSL* 6, p.111: 96-97).

Nippur YBC 4679

1	1	udu	sheep
2	2	u ₈	ewe
3	4	uz ₃	nanny goat
4	6	maš ₂	billy goat
5	3	sil _{a4}	lamb
6	5	^{mi2} ešgar	female kid
7	9	gud	bull
8	7	ab ₂	cow
9	8	amar	calf
10	11	anše	donkey
11	10	eme ₃	female donkey

The sequences are interesting, because both exhibit some kind of system. In the following scheme the plain numbers indicate the ordinal number of the section in the Nippur version, whereas the numbers between brackets refer to the sections in the Yale version.

	Ovine				Bovine	
	Sheep		Goat			
	Male	Female	Male	Female	Male	Female
Grown	1 [1]	2 [2]	4 [6]	3 [4]	7 [9]	8 [7]
Young	5 [3]			6 [5]	9 [8]	

In the Nippur version the grown ovine animals are listed first, followed by their young. Then the bovine animals are listed, again followed by their young. The Yale text has the sequence female - young - male. The only exception is udu (sheep). This is probably due to the fact that udu is the incipit after which this list was named. The Nippur version also has an exception: nanny goat precedes billy goat, whereas in the other categories the male is in first position. The word for the female of the species coincides with the general word for 'goat'. Linguistically speaking, uz₃ is unmarked, maš₂ is marked as male. In Nippur the opposition used for sequencing in this section is not male-female, but unmarked-marked.

In the reconstruction in *MSL* the Old Babylonian list of domestic animals has 269 lines. The section udu (sheep), with 106 lines, is by far the longest. Within the udu section several subsections may be distinguished, so that this list has a fairly deep hierarchy.

In §3.1 we saw that the overall organization of the list of stones differs from the giš list. The giš list has a clear distinction between natural kinds and wooden objects. Among the wooden objects the usual order is: first the object and its types, then its parts. In the list of stones the stone objects are usually listed directly after the varieties of the stone they are made from. On the level of a single section, however, the result is rather similar. In both lists we have first a section main

word + secondary word, and then a section secondary word + main word:

Main word + Secondary word:

	varieties of carnelian:		types of ploughs:
44	^{na₄} gug	442	^{giš} apin
45	^{na₄} gug-gazi	443	^{giš} apin-šu
46	^{na₄} gug-me-luh-ha	444	^{giš} apin-šu-du ₇
47	^{na₄} gug-gid ₂ -da	445	^{giš} apin-šu-nu-du ₇
48	^{na₄} gug-lugud ₂ -da	446	^{giš} apin-tug ₂ -sig ₁₈
49	^{na₄} gug-bur ₃ -bur ₃ -da	447	^{giš} apin-sag-e ₃
		448	^{giš} apin-gud-4-la ₂

Secondary word+Main word:

	objects of carnelian:		parts of a plough:
50	^{na₄} kišib-gug	449	^{giš} sag-apin
51	^{na₄} lagab-gug	450	^{giš} eme-apin
52	^{na₄} ellag ₂ -gug	451	^{giš} ka-šu ₂ -apin
		452	^{giš} šu-sag-apin
		453	^{giš} nig ₂ -kud-apin
			etc.

Similar sections may be found in the list of metals (*MSL* 7, p.231ff). Each of the sections zabar (bronze), ku₃-babbar (silver) and ku₃-sig₁₇ (gold) begin with qualities (written as metal + quality) and continue with objects made of that metal (written object + metal).

3.3 The Role of Akkadian

Unlike the first millennium 'canonical' version, Old Babylonian ur₅-ra is a unilingual list of Sumerian words. However, it is assumed with good reason that in class the Sumerian words were orally translated into Akkadian (see §2.4.1.2). Without translation the Sumerian words would probably make little sense to the beginning pupil. There are various ways in which Akkadian influences the organization of the giš list.

3.3.1 Akkadian Loan Words in Ur₅-ra

Loans from Akkadian, apart from their Akkadian etymology, have two characteristics. In the first place they usually retain the Akkadian nominative ending *-um*. In the second place their spelling, as Akkadian spelling in general, is more liable to variation than that of genuinely Sumerian words. Thus ^{giš}ga-an-nu-um (a wooden rack for vessels) is sometimes spelled ^{giš}ga-nu-um in Nippur (624-627). Other spellings are ^{giš}gan-nu-um (Old Babylonian Sippar; *MSL* 6, p.155) and ^{giš}ka-an-nu-um (*LTBA* I, 78 column ix). The late version has ^{giš}gan-nu (*MSL* 6, p.93f). Similarly, ^{giš}zi-ri₂-qum (an irrigation machine; Nippur 491-492) is spelled in late versions ^{giš}zu-ruq-qum

(*MSL* 6, p.64f.), in accordance with the contemporary form of the word in Akkadian⁴⁴. Or, to take an example from another part of *ur₅-ra*, ^{kuš}hu-lu-lu-um (leather armour; *MSL* 7, p.219: 103) is found as ^{kuš}ul-lu-lu in the late version (*MSL* 7, p.152: 186).

In Old Babylonian *ur₅-ra* we may distinguish between three types of loans from Akkadian: isolated loan words, passages with loan words, and pairs of items where a genuinely Sumerian word is followed by its Akkadian translation or vice versa.

1 Isolated Loan Words

Akkadian words may be encountered in the middle of a sequence of Sumerian entries. An example may be found at the end of the section ^{giš}mar-gid₂-da (wagons)

370	^{giš} u ₄ -sakar-mar-gid ₂ -da	'crescent' (half a wheel) of a wagon
371	^{giš} gag-u ₄ -sakar-mar-gid ₂ -da	peg of the 'crescent' of a wagon
372	^{giš} nam-ha-ru-um-mar-gid ₂ -da	shaft [?] of a wagon
373	^{giš} en ₃ -dur-mar-gid ₂ -da	'umbilical cord' of a wagon

Line 372 is given a more Sumerian look in later versions⁴⁵: ^{giš}nam-hara_x(NUNUZ+AB₂+BI)-mar-gid₂-da = *namharû*. In morphology the item ^{giš}nam-ha-ru-um-mar-gid₂-da follows the rules of Sumerian grammar, rather than those of Akkadian⁴⁶. It is, therefore, treated as a real loan in Sumerian, not as an Akkadian intrusion in the list.

Another example, again in the section ^{giš}mar-gid₂-da, may be found in the Old Babylonian version from Ur (see §5.6: Ur I-01 Col I, 32'):

^{giš}ma-an-za₃-ma[r-gid₂-da]

This line parallels the Nippur line 363: ^{giš}gir₃-gub-mar-gid₂-da. This item is translated *manzāzu* footboard of a wagon in later versions (see *MSL* 6, p.13: 86).

Some loans have a short passage of their own. An example is the section ^{giš}zi-ri₂-qum (irrigation device: 491-492). Their treatment does not differ from that of originally Sumerian words. Akkadian loans are found throughout the *ur₅-ra* versions of all periods, and do not require further comment in themselves.

2 Sets of Loan Words

⁴⁴ The Emar version has the form ^{giš}zi-ri-qu (*Emar* 6/4, p.72:262'f. and p.78: 467'f.). NBC 10915 (Kassite unilingual version of early 'canonical' *ur₅-ra* 6; unpublished) has ^{giš}zi-ri-qum.

⁴⁵ *Ur₅-ra* 5, 88; *MSL* 6, p.13. See the commentary to line 372 in §5.3.

⁴⁶ In Akkadian the genitive construction would require the pre-genitive form ('construct') without case ending (*namhar*).

There are some passages where Akkadian loans are collected. The most important of these is found in the section trees:

- 054 ^{giš}za-ba-lum
- 055 ^{giš}e-la-ma-kum
- 056 ^{giš}gi-ri₂-lum
- 057 ^{giš}gi-rim
- 058 ^{giš}zi-ir-dum
- 059 ^{giš}ur-nu-um
- 060 ^{giš}ti-a-ru-um
- 061 ^{giš}ri₂-a-num₂
- 062 ^{giš}ur-zi-num₂
- 063 ^{giš}mi-ri₂-iš-gar-ra

Most items in this section are recognizable as Akkadian loan words by the nominative ending -um. ^{giš}Gi-rim (line 57) is a genuinely Sumerian word (olive.) One of the Akkadian translations of ^{giš}gi-rim is *girimmu* ('a kind of fruit'), a Sumerian loan in Akkadian. In other words, what we have here is a collection of loans, either Akkadian loans in Sumerian, or Sumerian loans in Akkadian. The passage lists entries which are identical or almost identical in the two languages. Seen from this perspective the passage is even longer, since it is preceded by ^{giš}mes (*mēsu*; 49-51), ^{giš}erin (ceder: *erēnu*; 52), and ^{giš}šu-ur-min₂ (cypress: *šurmēnu*; 53). The section ^{giš}nimbar (date palm) that follows may also belong here (Akkadian *gišimmaru*; 65-104). The only exception is ^{giš}isi₂-mu₂, found between ^{giš}mi-ri₂-iš-gar-ra and ^{giš}nimbar. This item may have been attracted by its Akkadian-like /u/ ending. This section Akkadian loans, as expected, is more than usually prone to orthographic variants. In the late version the section has been considerably extended (see *MSL* 5, pp.111-114: 226-264).

Comparable sections may be found in other parts of ur₅-ra, but I am unaware of any other example of this length. Among the stones, in Nippur division 4, we find (*MSL* 10, p.59f.)⁴⁷:

- 158 ^{na₄}zi-ib-tum (kind of stone)
- 159 ^{na₄}šu-hu-um ?
- 160 ^{na₄}ka-pa-šum shell
- 161 ^{na₄}a-ar-tum kind of shell

The section vessels of Nippur division 2 includes (*MSL* 7, p.200):

- 041 ^{dug}za-hu-um container²⁴⁸
- 042 ^{dug}la-ha-nu-um bottle

⁴⁷ For parallels from the Middle Babylonian Western periphery see *MSL* 10, p.49: 331-335 (Ugarit); and *Emar* 6/4, p.124: 196'-201'.

⁴⁸ See Grégoire, 1970, p.254 (commentary to no. 206, 1), with previous literature. The word often occurs in Ur III texts with the zabar ('bronze') determinative. See now Sallaberger 1996, p.109 sv ^{dug}za-hum with many references.

043 ^{dug}za-ad-ru-um ?⁴⁹

3 Sumerian/Akkadian Item Pairs

The third type of loan entries are those which are found in connection with the genuinely Sumerian equivalent. One example is found in the sequence of Akkadian loans treated above. ^{giš}Gi-rim is followed by ^{giš}zi-ir-dum, both meaning olive. The first is the Sumerian word, the second an Akkadian loan for the same (Akkadian *sirdum*). Another example is found among the weapons:

504	^{giš} mi-tum	mace
505	^{giš} mi-tum-sag-50	fifty-headed mace
506	^{giš} utug ₂	mace
507	^{giš} utug ₂ -sag-50	fifty-headed mace

This section was treated in more detail in §3.2.2.2. There the passage appeared to have a number of variants, showing that ^{giš}mi-tum (mace) is a loan from Akkadian, referring to the same weapon as the Sumerian ^{giš}utug₂.

A third example is the word ^{giš}ebir, which is the equivalent of Akkadian *kannum* (= wooden rack for vessels). The Nippur list runs as follows:

621	^{giš} ebir	rack for vessels
622	^{giš} ebir-a	rack for water jars
623	^{giš} ebir-kaš	rack for beer jars
624	^{giš} ga-an-nu-um	rack for vessels
625	^{giš} ga-an-nu-um-a	rack for water jars
626	^{giš} ga-an-nu-um-ga	rack for milk jars
627	^{giš} ga-an-nu-um-kaš	rack for beer jars

In two exercise tablets (Ni II-033 and Ni II-087) the ^{giš}ga-an-nu-um-ga is omitted, so that the ^{giš}ebir and the ^{giš}ga-an-nu-um passages are exactly equivalent.

In a few instances the Akkadian equivalent of a Sumerian entry is found as a variant. This is the case in the following lines on the reverse of Ni II-095:

rI15	^{giš} [ni]r?-gigir
rI16	^{giš} gag-nir-gigir

The lines represent the entries 340-341, which in the standard text have šudul instead of nir. The Sumerian ^{giš}šudul (yoke) is rendered *nīru* in Akkadian.

⁴⁹ The word appears as ^{im}šID, with reading zadru or zadri in Ea and other lexical lists. See *CAD Z* sv. *zadrû*. The translation proposed by *CAD* (half-tile for a drain) is no more than a guess.

The lentil IM 58046 (= 2N-T730)⁵⁰ has ^{giš}zu-ti-a-nu-um for standard ^{giš}peš7-gal (a tree; line 117)⁵¹ and ^{giš}za-ri3-aš-tum, instead of regular ^{giš}zar-si (another tree; line 123). In both cases the variant represents the Akkadian translation of the Sumerian entry (^š*udānum* and *zaraštum* respectively). The tablet in question, however, is anomalous in several respects. It has the shape of a lentil (type IV). Textually, it has a mixed format. The obverse looks like a regular type IV text, with a two-line model text by the teacher, repeated by the pupil. The reverse, however, has a longer abstract in three columns, ending with the passage exercised on the obverse. This is exactly what we would expect on the reverse of a type II tablet. Another anomalous feature of this tablet is that the text on the reverse is abbreviated. Many items of the standard Nippur text are omitted to an extent not found in any other example. The whole ^{giš}-nimbar section, lines 65-104 in the composite text, is reduced to two entries. Since the tablet cannot be related properly to the main corpus, its evidence is difficult to evaluate.

4 Loans in Late Ur₅-ra

In the late version of ur₅-ra loan words are a very important element in the fabric of the text. A good example comes from the section vine in ur₅-ra 3 (*MSL* 5, p.94)⁵²:

20	^{giš} KIN-geštin	<i>ishunnatum</i>	bunch of grapes
21	^{giš} KA-geštin	MIN	idem
22	^{giš} ka-ra-an-geštin	MIN	idem
23	^{giš} ka-ra-an-geštin	<i>tillatum</i>	young plant?
24	^{giš} til-la-geštin	MIN	idem
25	^{giš} pa-pa-al-geštin	MIN	idem
26	^{giš} pa-pa-al-geštin	<i>papallum</i>	young plant
27	^{giš} pa-pa-al-tur-geštin	MIN [^š <i>ehru</i>]	small young plant

Very probably, ^{giš}KA-geštin (21) is an abbreviation for ^{giš}ka-ra-an-geštin. The Assur texts contain the variants ^{giš}GA-geštin and ^{giš}ga-ra-an-geštin respectively. Such abbreviations are common in late ur₅-ra. Another example is ur₅-ra 4: 449-451; *MSL* 5, p.134:

449	^{giš} gal	^š <i>udānu</i>	(a tree)
450	^{giš} peš-gal	MIN	idem
451	^{giš} u-da-num	MIN	idem

⁵⁰ Edited as Ni IV-12 in §5.5. The obverse was published as *TIM* X/1, 130. The reverse was partly edited by Landsberger in *MSL* 5, p.132f.

⁵¹ See also the Tell Harmal lentil *TIM* X/1, 86 line 2: ^{giš}u-di-a[n[?]-num]. Furthermore, the word is found as a loan from Akkadian in Sumerian economic texts of the Ur III period (see Steinkeller 1991). For the passage in late ur₅-ra (ur₅-ra 4:449-451) see below.

⁵² Text B (Nineveh) and Kish 38. Two other texts used in *MSL* are from Assur (A and M). Their variants are taken into consideration in the discussion below.

From earlier versions it is clear that ^{gis}peš-gal is the full spelling of the Sumerian word. In the ^{gis}geštin passage, the ^{gis}ka-ra-an-geštin item is repeated in the Sumerian column, and used for the transition to *tillatum* items in the Akkadian column⁵³. There may or may not be some use of Sumerian ga-ra-an that justifies the equation with *tillatum*, but its presence is more easily explained by the vertical connection that it provides between the *ishunnatum* and the *tillatum* entries. There are three Sumerian words rendered *tillatum* in the Akkadian column. The first (^{gis}ka-ra-an-geštin), as explained above, is used to make the connection with the preceding section. The next item is the Akkadian word, copied to the Sumerian column (^{gis}til-la-geštin). Only the third is the common Sumerian word: ^{gis}pa-pa-al-geštin⁵⁴. This word is again copied to the Akkadian column to produce a Sumerian loan word in Akkadian: ^{gis}pa-pa-al-geštin = *papallum*. The most plausible reconstruction of the basic linguistic data may be summarized as follows:

^{gis} ka-ra-an-geštin	=	<i>ishunnatum</i>	bunch of grapes
^{gis} pa-pa-al-geštin	=	<i>tillatum</i>	young plant

The other items are constructed by abbreviations, by loans either way, or are invented to provide vertical connections.

3.3.2 Multiple Translations of the Same Entry

The Akkadian loan words in the Sumerian column of Old Babylonian ur₅-ra are an overt influence of Akkadian on the unilingual lexical text. A covert way in which Akkadian interferes with the lists is found in repeated entries. Such entries are of two kinds. An item may be repeated to cover various Sumerian readings of the same sign. This is the case with ^{gis}BU, repeated four times (to be read ^{gis}mudla; ^{gis}madla; ^{gis}malla; and ^{gis}gazinbu). Examples will be treated in §3.5.2. By comparison with other lists, such as sign lists, and later versions of ur₅-ra, it is clear that in other cases repetitions signal different Akkadian translations.

The section ^{gis}NIM runs as follows in the Old Babylonian Nippur version:

676	^{gis} NIM
677	^{gis} NIM
678	^{gis} NIM
679	^{gis} NIM-kur

The passage is found almost at the end of the list, in a section of varia. In Middle Babylonian Emar the lines have a comparable context. The Emar version is very important, because it

⁵³ Text M uses the same technique, but here the Sumerian ^{gis}til-la-geštin does the job: [^{gis}til-l]a-geštin = MIN (*ishunnatum*); ^{gis}til-la-geštin = *tillatum*.

⁵⁴ Note that this word was considered 'ursprachlich' (not Sumerian) by Landsberger (1967a, p.19 n.59). This makes no difference to the present argument since the word entered Akkadian by way of Sumerian. From an Akkadian point of view *papallum* is a loan from Sumerian.

provides glosses to the Sumerian column and Akkadian translations. Here the passage reads⁵⁵:

527'	ti-hi NIM	<i>baltum</i>	camel thorn
528'	[n]i-eš-še NIM	<i>asātu</i> ⁵⁶	chaos, turmoil
529'	[t]i-hi NIM	<i>ašāgu</i>	acacia
530'	[t]i-hi NIM	<i>i₅u hannapširu</i> ?	
531'	[N]IM-kur-ra	<i>balti šadī</i>	mountain camel thorn

The glosses point at a reading ^{giš}dih₃ for most lines. A problem, however, is the gloss ni-eš-še for the second line. Ni-še is the common gloss for ^{giš} in the Emar text. It is possible that this is an assimilated rendering of ^{giš}-nim (compare the Akkadian rendering of ^{giš}-nimbar as *gišimmaru*, where the /n/ is regressively assimilated).

The corresponding passage in late ur₅-ra tablet 3 is now broken⁵⁷. No ^{giš}NIM passage is found in Proto-Diri. In first millennium Diri II 245-249 we find⁵⁸:

te-hi	GIŠ.NIM	<i>baltu</i>	camel thorn
		<i>hištu</i>	?
		<i>sahmaštu</i>	chaos, turmoil
		<i>za'tu</i>	?
		<i>handašpiri</i> (var. <i>handaštu</i>)	?

Comparison of the passages in Emar ur₅-ra and Diri II yields interesting results. *Baltu* (camel thorn) is the usual rendering of ^{giš}dih₃(NIM)⁵⁹. *i₅u hannapširu* is related to the late form *handašpiri*⁶⁰ in Diri II. The variants in Diri II show that the late scholars were not certain about the correct form either. *Asātu* (*ešātu*) means chaos, turmoil. In Diri II we find the synonym *sahmaštu*. In *CAD* it is assumed that both Akkadian words for chaos have lent their names to some kind of shrub (either the same kind or two different kinds). An easier interpretation works the other way round. A Sumerian word for shrub, ^{giš}dih₃, is used metaphorically for chaos or turmoil. The Akkadian translations interpret the metaphor⁶¹. *Ašāgu* (kind of acacia) is generally

⁵⁵ Emar 6/4, p.79.

⁵⁶ A variant text has *ud²-du-tu* in the Akkadian column. The gloss for the Sumerian entry is not preserved. The Akkadian is probably a writing for *eddetu*. *Eddettu* and *ašāgu* (line 529') share the sumerogram ^{giš}U₂-GIR₂, which may have something to do with the confusion here.

⁵⁷ See *MSL* 5, p.136: 476f. The evidence from Emar and the parallel in Diri II suggests that the ^{giš}NIM passage should take up more lines than the two reconstructed in *MSL*.

⁵⁸ Similar equations are found in Aa (see *MSL* 14, p.506).

⁵⁹ For ^{giš}dih₃ see Civil 1987a, p.41.

⁶⁰ *Hištu*, *za'tu*, and *handašpiru* are translated as 'plant of the brier group' in *CAD*. These words hardly appear outside the lexical corpus.

⁶¹ The Akkadian word *baltu* may have been used metaphorically for chaos in a procession omen in *Šumma*

equated with Sumerian ^{giš}U₂-GIR₂ (kiši₁₆) and often associated with *baltu*.

Though some questions remain unanswered as to the interpretation of the Nippur ^{giš}NIM passage, the following points seem to be clear. In all or most lines we have to read ^{giš}dih₃. The repetition of the item is justified by different Akkadian translations. These Akkadian words denote various kinds of prickly shrub. One of the entries may denote thorny bush in Sumerian, but was interpreted metaphorically as turmoil. In the late version of ur₅-ra the passage is transferred to the section trees, where it properly belongs semantically.

Another example of a repeated entry is the item ^{giš}IGI-TUR-TUR (544-546). In the lexical tradition this word has three Akkadian equivalents, all meaning offshoot, sapling, etc.: *ligimû*, *ziqpu*, *niplu*. Because of its relevance for the relation between ur₅-ra and Diri this passage will be treated in more detail in §3.5.2.

Further examples are 426-428: ^{giš}ellag(LAGAB); 592-694: ^{giš}sumun(BAD); 663-665: ^{giš}kur; and 666-668: ^{giš}esi(KAL). All these passages repeat the same Sumerian entry three times. In first millennium ur₅-ra 6 they are collected and expanded into a section entirely devoted to repetitive passages (see *MSL* 6, pp.54-59). The Old Babylonian KUR and KAL(esi) entries may be compared with the Emar version:

Nippur:

663 ^{giš}kur
664 ^{giš}kur
665 ^{giš}kur
666 ^{giš}esi
667 ^{giš}esi
668 ^{giš}esi

(followed by a break; the missing lines may include ^{giš}URI and/or ^{giš}gibil items).

Emar⁶²:

498'	ku-ri-ni-še KUR	<i>kūri</i>	log
499'	ku-ri KUR	<i>ki-it-t[a-</i>	?
500'	ku-ri KUR	<i>kiškirru</i>	kindling wood

503'	e-ša KAL	<i>ešû</i>	ebony
504'	gi-iš-kal-la KAL	<i>martû</i>	stick?
505'	re-eš KAL	<i>nappa₅u</i>	pole or stick? (lexical only)

This Emar passage is followed by similar sections for URI.KI and probably GIBIL.

Repeating passages with different Akkadian translations are known in other parts of Old

lu: 'if the procession boat capsizes into the river, *baltu* will be set'. (Pongratz-Leisten 1994, p.259: 38). Pongratz-Leisten, in her commentary (p.265), rightly argues that the interpretation of *baltu* as a spelling for *baštu* (vital force) is implausible here. A negative apodosis is expected. 'Chaos' would fit this context.

⁶² *Emar* 6/4, p78f. There is no gap between 500' and 503'. On this passage see Civil 1989, pp.13-14.

Babylonian ur₅-ra as well. From the section GI we may cite gi-gur-da (MSL 7, p.183: 27-28) with three different Akkadian translations (all referring to a kind of reed basket) in the late version (MSL 7, p.39: 43-45):

gi gur-da	<i>gurdû</i> (or: <i>gigurdû</i>)
gi gur-da	<i>maššû</i>
gi gur-da	<i>mangarum</i>

In the late version of the list of wild animals in ur₅-ra 14 we find the item uh repeated four times. It is rendered in Akkadian by four different words for louse or parasite (MSL 8/2, p.28: 250-253):

uh	<i>uplu</i>
uh	<i>nābu</i>
uh	<i>kalmatum</i>
uh	<i>puršu'u</i>

The Old Babylonian version contains the same fourfold repetition, though of course without the Akkadian translations⁶³.

In the late version of ur₅-ra repetitions of the same Sumerian item are very common. In §3.3.1 a passage from the section ^{giš}geštin (vine) was treated, where it was shown how a chain of items is constructed by giving either multiple translations to one Sumerian entry, or the same translation to various Sumerian entries, or by transferring the Sumerian to the Akkadian column and vice versa ('loan words'). Such passages are frequent and could be cited from almost every page in MSL. The following example is taken from ur₅-ra 7A (MSL 6, p.87):

34	^{giš} nig ₂ -ur ₂ -gaz	<i>nahpû</i>	a tool
35	^{giš} ur ₂ -gaz	MIN	idem
36	^{giš} ur ₂ -gaz	<i>mēkiku</i>	scratcher or scraper
37	^{giš} ur ₂ -gaz-ku ₆	MIN <i>nūni</i>	idem, for fish
38	^{giš} ur ₂ -gaz-mušen	MIN <i>i₃šūri</i>	idem, for birds
39	^{giš} šu-nir	<i>šurinnu</i>	standard or emblem
40	^{giš} šu-nir	<i>kakku</i>	weapon
41	^{giš} šu-nir	<i>ma₃rahu</i>	standard or emblem
42	^{giš} ru ₃ -a	MIN	idem
43	^{giš} ru ₃ -a	<i>nappa₃u</i>	pole or stick (lexical only)
44	^{giš} mud	MIN	idem
45	^{giš} mud	<i>šulbû</i>	part of a lock? (lexical only)
46	^{giš} mud	<i>uppu</i>	handle

In this passage almost every Sumerian entry has been repeated two or three times. The last ^{giš}šu-

⁶³ The Old Babylonian list of wild animals is unedited. The passage appears in UM 29-16-31 rev. col. IV, 22-25. The same passage may be reconstructed in the traces preserved in the last few lines of SLT 56 rev. col. III. The uh items are preceded by a-za-lu-lu (2x) and nig₂-zi-gal₂-edin-na.

nir item has the same Akkadian rendering as the first ^{giš}ru₃-a item. Similarly, *nappa₅u* is used to connect ^{giš}ru₃-a with ^{giš}mud.

3.4 Graphemic Principles

From our general treatment of the corpus of Old Babylonian lists in §2.4.1 it appeared that texts such as Proto-Ea, Proto-Diri, and the acrographic lists (Proto-Izi, Proto-Kagal, Nigga) are primarily ordered by graphemic principles, whereas ur₅-ra is ordered by semantics. In practice, however, this distinction is far from absolute. Graphemic organization is very important in ur₅-ra as well. This is for the simple reason that in Sumerian writing semantics and graphemics cannot be divorced from each other. One example of this is the determinative, which graphemically indicates a semantic class⁶⁴.

Determinatives are a fundamental aspect of the general organization of ur₅-ra. Ur₅-ra never disrupts the graphemic classification of the determinatives. There is, for instance, no section agricultural objects where objects made of wood, reed, or metal are mixed. The geographical list is subdivided into lists of field names, names of places, names of water courses, etc. Alternative organizational principles are easily conceivable: a list of cities each with its field names and canals would make perfect sense. The organization chosen in ur₅-ra means that the place names, indicated by the determinative KI, appear together. The connection of trees with wooden objects in one list, therefore, is not made by any decision of the compiler of ur₅-ra. It is inherent to the cuneiform writing system.

The interweaving of graphemics and semantics goes further than determinatives only. The thematic organization of the ^{giš} list has a counterpart in the writing system. All items in the section plough contain the sign APIN. The graphemic organization is not usually operative on its own. The sections ^{giš}mar (shovel) and ^{giš}mar-gid₂-da (wagon) share MAR as their initial sign, but they are not adjacent in the list. Occasionally, however, a graphemic principle becomes dominant. One example is found in the section boats, discussed in §3.2.1. There are two subsections ^{giš}MA₂-DU₃ (308-313); the first to be read ^{giš}ma₂-du₃, the second ^{giš}durgul⁶⁵:

- 308 ^{giš}ma₂-du₃
- 309 ^{giš}BAL-ma₂-du₃
- 310 ^{giš}gir₂-ma₂-du₃
- 311 ^{giš}uš₂-ma₂-du₃
- 312 ^{giš}durgul (MA₂-DU₃)
- 313 ^{giš}an-ta-durgul (MA₂-DU₃)

The ^{giš}ma₂-du₃ is a part of a ship; ^{giš}durgul is the mooring pole. Both words belong to the

⁶⁴ For the system of determinatives see the introduction to Chapter 3.

⁶⁵ In Old Babylonian orthography, durgul (mooring pole) may be written MA₂-DU₃ (later always MA₂-MUG). See §5.3, commentary to the lines 308-313.

semantic field of boats, and therefore the treatment of these sections together still has a semantic justification.

An example treated above (§3.2.2.2) is the position of the section ^{giš}tukul (mace). It is placed before ^{giš}dur₂ (board), apparently because tukul and dur₂ are readings of the same sign KU. The position of the section ^{giš}tukul breaks the semantic coherence of the sections ^{giš}u₃-šub (brick mould) and ^{giš}dur₂ (board).

Graphemic principles operate on the placement and arrangement of sections and subsections, as demonstrated above, but also influence the sequencing of entries within a single section. This was demonstrated for the section ^{giš}gigir (chariot) in §3.2.1. Those items that begin with the same sign are put together. Similarly, in the section trees there is a brief passage with words beginning with ŠU:

118 ^{giš}ŠU.KAL
119 ^{giš}šu-dib-ba
120 ^{giš}ŠU.KAL

These trees have not been identified; the odds are that they are put together primarily because of their first sign. In the section ^{giš}apin (plough) we find the following passage:

449	^{giš} sag-apin	'head' of the plough
450	^{giš} eme-apin	ploughshare
451	^{giš} ka-šu ₂ -apin	(part of the plough)
452	^{giš} šu-sag-apin	(part of the seeder funnel?)

The signs SAG, EME, and KA belong to the same sign family, with great similarity in their general appearance.

In later versions of the ^{giš} list graphemic principles may be demonstrated as well. An example is the section Akkadian loans in the list of trees in first millennium ur₅-ra 3. The Akkadian column is for the greater part reconstructed. Where extant it has ŠU, meaning: 'the same' (as in the Sumerian column). A few lines from this section will suffice to illustrate the role of graphemic organization here (*MSL* 5, p.114):

254	^{giš} ur ₂ -nu	[ŠU]
255	^{giš} ur ₂ -zi-nu	[ŠU]
256	^{giš} si-lum	[ŠU]
257	^{giš} si-li-lum	[ŠU]
258	^{giš} ta-a-lum	[ŠU]
259	^{giš} ta-li-lum	[ŠU]

In 254-259 the lines are grouped in three pairs in such a way that the entries of each pair share both the initial and the final sign. Throughout the 'Akkadian loans' section (ur₅-ra 4, 241-264) entries sharing one or more signs are grouped.

In other parts of Old Babylonian ur₅-ra the same interweaving of semantic and graphemic

organization is attested. Putting together all kinds of sheep (division 3) is a semantic principle. The effect is a long series of entries, each beginning with the same sign UDU. Another example is found in the section stones (Nippur division 4)⁶⁶:

146	^{na} ₄ na	pestle
147	^{na} ₄ na-ru ₂ -a	stele
148	^{na} ₄ na-za ₃ -hi-li	mortar (for herbs)
149	^{na} ₄ šu-za ₃ -hi-li	pestle
150	^{na} ₄ na-dub-ba-an	stone plaque?
151	^{na} ₄ na-gu ₂ -bi ₂ -na	small bowl?

The word ^{na}₄na may refer to a kind of stone⁶⁷ but it also means pestle⁶⁸. Some of the entries belong to this semantic field and are derived from the basic word ^{na}₄na. This is not the case, however, for ^{na}₄na-ru₂-a (stele), and probably not for ^{na}₄na-dub-ba-an. In later versions the section is expanded with other words beginning with NA, some of them clearly unrelated to ^{na}₄na = pestle. An example is the entry ^{na}₄na-pa-šum in the Ugarit version (*MSL* 10, p.46, 245). This is a loan word from Akkadian for a kind of stone.

3.5 Relations to Other Lexical Lists and Literary Texts

Each of the Nippur lexical compositions exemplifies and teaches another aspect of Sumerian and the Sumerian writing system (see §2.6). The main focus of ur₅-ra is Sumerian vocabulary, Proto-Ea deals with polyvalent signs, Proto-Diri with complex signs, and so on. In teaching the Sumerian writing system, however, one cannot easily isolate one single feature. The polyvalent or complex signs in Proto-Ea and Proto-Diri can hardly be taught apart from semantics. Therefore the idea of teaching the Sumerian writing system by using various compositions, each focusing on one specific aspect of the whole, necessarily produces overlap. Moreover, within the semantic organization of ur₅-ra not every word will fit neatly into one and only one section of the series. There are passages in the giš list which are duplicated in the list of copper objects, the main difference being the determinative urud instead of giš. Another kind of relation between the lists is found in standard patterns, or paradigmatic sets. The existence of such sets has long been recognized for the colour terms (Landsberger 1967). The colour terms, in a fixed order, are used to qualify all kinds of nouns throughout ur₅-ra. But the same set is also found in other text types, such as literary texts and omen collections.

3.5.1 Correspondences with Other Parts of Old Babylonian Ur₅-ra.

There are a number of objects which appear in ur₅-ra both under 'wooden objects' and in some

⁶⁶ *MSL* 10, p.59.

⁶⁷ The stone is attested in Lugal-e XI. Van Dijk 1983, Vol I p.113: 483.

⁶⁸ See Cohen 1973, p.272.

other division. An example is the whip (*usan₃*). In context this word normally carries the determinative *kuš* for leather objects. In Nippur *ur₅-ra* it appears twice: among the leather objects and in the section chariots and wagons of the list of wooden objects (see §3.2.1 for this section).

Nippur <i>giš</i> :	Nippur <i>kuš</i> (<i>MSL</i> 7, p.219f.) ⁶⁹ :
347 <i>giš</i> ^{usan₃}	111 <i>kuš</i> ^{usan₃}
348 <i>giš</i> ^{usan₃}	112 <i>kuš</i> ^{usan₃-lá}
349 <i>giš</i> ^{eme-usan₃}	113 <i>kuš</i> ^{KA-usan₃}
350 <i>giš</i> ^{ama-usan₃}	114 <i>kuš</i> ^{ama-usan₃}

Though the two passages show some differences they are clearly related. The inclusion of these items in the *giš* list is probably justified by the fact that a whip has a wooden part. The item *giš*^{usan₃} still appears in the Middle Babylonian *ur₅-ra* versions from Emar and Ugarit⁷⁰ but is abandoned in the first millennium text.

A lengthier example is a passage listing kinds of hoes (*lib-bi-da*; *gin₂-sal*) and axes (*aga*), shared by the *giš* list and the list of copper objects (*urud*; Nippur *ur₅-ra* division 2). Some of these instruments are used both as weapons and as agricultural implements⁷¹. In the *giš* list this section is found immediately after a passage treating spear, javelin, bow, and arrow.

Wooden objects:	Copper objects (<i>MSL</i> 7, p.224f.):
562 <i>giš</i> ^{lib-bi-da}	168 <i>urud</i> ^{lib-bi-da}
563 <i>giš</i> ^{ha-bu-da}	169 <i>urud</i> ^{ha-bu₃-da}
564 <i>giš</i> ^{igi-gal₂}	170 <i>urud</i> ^{igi-mar}
565 <i>giš</i> ^{gin₂}	171 <i>urud</i> ^{gin₂}
566 <i>giš</i> ^{gin₂-sal} ⁷²	172 <i>urud</i> ^{gin₂-sal}
567 <i>giš</i> ^{aga}	173 <i>urud</i> ^{aga}
568 <i>giš</i> ^{aga-GIN₂-ma}	174 <i>urud</i> ^{aga-X-ma}
569 <i>giš</i> ^{aga-šilig-ga}	175 <i>urud</i> ^{aga-šilig-ga}
569a <i>giš</i> ^{aga-AŠ-GAR}	176 <i>urud</i> ^{aga-AŠ-GAR}
570 <i>giš</i> ^{aga-e-da?}	
571 <i>giš</i> ^{U₂-e-[}	177 <i>urud</i> ^{U₂-U₂-e-GIM}
572 <i>giš</i> ^{KID-a₂-gar}	
573 <i>giš</i> ^{KID-tukul-mah}	

⁶⁹ Sources in the University Museum were collated (V1: CBS 11392; V12: CBS 14159+; V15: CBS 11335; V 16: UM 29-16-391+; V18: CBS 9868; and V21: CBS 9876). In line 113 EME is expected rather than KA. Only one manuscript has the sign undamaged where it is a clear KA (V12). See *MSL* 7, p.133: 224: *kuš*^{eme-usan₃} = *tamšāru*.

⁷⁰ *Emar* 6/4 p.67: 37'-42'. An Ugarit source is cited in *MSL* 6, p.11 (V1).

⁷¹ See Civil 1994, p.149.

⁷² The reading of this item is uncertain. It appears on only one tablet in an almost illegible line. Another source (a teacher's model on the obverse of a type II tablet) has the variant *giš*^{gin₂-MIN₃}. This variant may indicate a reading *mi₂* for SAL, but that is rather improbable in this context. The reading *giš*^{gin₂-sal} is preferred because this word is well attested for a light kind of hoe (see Civil 1994, p.57 and 70f.).

574	^{giš} KID-dim	178	^{urud} KID-dim
575	^{giš} KID-dim-[	179	^{urud} KID-dim-tur

The similarities between the two passages are even more striking when the variants are taken into account. For ^{urud}ha-bu₃-da (169) there is a variant ^{urud}ha-bu-da. At least one text has ^{giš}igi-mar instead of ^{giš}igi-gal₂ (564)⁷³. The enigmatic lines ^{urud}U₂-U₂-e-gim and ^{giš}aga-e-da[?]; ^{giš}U₂-e-[(571-572) probably represent the same words in both lists. The entry in the copper list has the variants ^{urud}U₂-U₂-TUN₃ and ^{urud}AGA-e-GI[M]. The reconstruction of the lines 571-572 in the ^{giš} list is very uncertain because all sources are damaged at this point.

The duplication of this set of words for axes and hoes in the two lists is probably to be explained in the same way as the ^{giš}usan₃ (whip) section discussed above: the objects have both wooden and copper parts.

In the first millennium version the section under discussion was changed considerably. Notwithstanding these changes the passages in the ^{giš} list and the list of copper objects still duplicate each other. In the ^{giš} list it runs as follows (ur₅-ra 6 227-239; *MSL* 6, p.73)⁷⁴:

227	^{giš} aga	<i>agû</i>	kind of axe
228	^{giš} aga-gin ₂	MIN <i>pāši</i>	kind of axe
229	^{giš} aga-šilig	<i>agašilikkum</i>	kind of axe
230	^{giš} aga-šilig	<i>kalmakru</i>	kind of axe
231	^{giš} gin ₂	<i>pāšu</i>	kind of axe
232	^{giš} tun ₃ (GIN ₂)	<i>quddu</i>	kind of axe
233	^{giš} gin ₂ -sal	<i>ahzu</i>	small hoe
234	^{giš} dalla ₂ (IGI.KAK)	<i>šillu</i>	arrow
235	^{giš} šukur(IGI.KAK)	<i>šukurru</i>	spear
236	^{giš} šukur-gal	<i>šukurgallum</i>	large spear
237	^{giš} ša ₃ -ri ₂ -du	<i>azmarû</i>	lance
238	^{giš} i-mit-tum	<i>imittu</i>	lance
239	^{giš} nig ₂ -gid ₂ -da	<i>ariktum</i>	lance

In ur₅-ra 11 we find the same passage with the determinative for copper object (*MSL* 7, p.143f., 371-383). Compared to the Old Babylonian version the KID items and the items beginning with U₂ are omitted. The word ha-bu₃-da apparently became obsolete and is found nowhere in the first

⁷³ That igi-mar and igi-gal₂ are orthographic variants of the same word is demonstrated by corresponding passages in Middle Babylonian texts from Nuzi (SMN 2559: 2-3; see Civil 1976, p.94) and Emar (*Emar* VI/4 545, 318b'-318c'; see Civil, 1989, p.13); and from late ur₅-ra 6: 27-28 (*MSL* 5, p.152). The syllabic Sumerian of the Nuzi text has i-ki-mar. The Emar text reads ^{giš}igi-kal. The late version has ^{giš}igi-gal₂. The Akkadian column of the Emar text is lost, but Nuzi and the late version agree (*šaddu*). See also *MSL* 6, p.92: 105-106 (same Sumerian items, with alternative translations).

⁷⁴ The text in the Sumerian column was partly reconstructed from the ur₅-ra 11 passage in *MSL* 6. It is confirmed by NBC 10915 rev. col. 3 (unilingual; probably Kassite). Variants in NBC 10915: line 229 ^{giš}aga-si; line 230 missing; line 237 ^{giš}za-ri₂-tum. For the reading of line 237 see the commentary to line 549 in §5.3.

millennium lexical tradition. The lib-bi-da entry was moved to another place in the list (ur₅-ra 7A, 242ff.). The IGI.KAK items (234-236) are inserted. They are not new in themselves. In the Old Babylonian giš list they are found in lines 547-548, just before the section under discussion. Now that the IGI.KAK items are inserted into this passage of the giš list, they are also inserted into the corresponding passage in the copper list⁷⁵.

Duplicating passages are also found between other sections of Old Babylonian ur₅-ra. A good example is the list of hides, when compared to the list of wild animals. The order of the sections in the two lists differs. The list of hides, for instance, has the aurochs (am) and elephant (am-si) immediately after the domestic animals (*MSL* 7, p.213f.). In the animal list the domestic animals are followed by snakes, dogs, gazelle and related animals (maš-da₃; šeg₈; dara₃), and only then the aurochs (am) and elephant (am-si). The individual sections, however, are closely related. By way of example I will present the section ur (large canines and felines):

	Hides (<i>MSL</i> 7, 214f.)	Animals ⁷⁶	
38	kuš ur-mah	ur-mah	lion
39	kuš ur-nig	ur-nig	lioness
40	kuš ur-bar-ra	ur-bar-ra	wolf
41	kuš ur-gi ₇	ur-gi ₇	dog
42	kuš ur-ki	ur-ki	badger?
42a	kuš ur-dib	ur-dib ⁷⁷	lion
43	kuš ur-tur	ur-tur	puppy
44	kuš ur-šub ₅	ur-šub ₅	tiger ⁷⁸
45	kuš ur-šub ₅ -kud-da	ur-šub ₅ -kud-da	?

In first millennium ur₅-ra the idea of duplicating a section in another part of the series was further exploited. In the Old Babylonian Nippur version there is a section ^{giš}bugin (wooden bucket) and another section ^{gi}bugin (reed bucket). The giš passage has only three lines:

252 ^{giš}bugin
253 ^{giš}bugin-tur
254 ^{giš}bugin-ZU-bar-ra

The GI counterpart is much longer. It is badly preserved (*MSL* 7, pp.189-190) but what is left bears little resemblance to the ^{giš}bugin passage. In late ur₅-ra the two sections are almost identical

⁷⁵ The IGI.KAK items are found in the Middle Babylonian versions of the copper list from Emar and Alalakh (*MSL* 7, p.158 and *Emar* VI/4, p.95). ^{urud}Šukur is spelled ^{urud}šu-gur in the Alalakh text (see also šur in *Emar* VI/4, p.74; and below §3.5.2).

⁷⁶ Wild animals are listed in Nippur ur₅-ra Division 3, between domestic animals (edited in *MSL* 8/1, pp.79-88) and meat cuts (edited in *MSL* 9, pp.41-48). No edition of the wild animals exists. A provisional reconstruction was made from *SLT* 37 (now joined to *SLT* 46 + N 5491); *SLT* 52; 56; and 57; and UM 29-16-31 (photograph). *SLT* 45 is probably post-Old Babylonian; it has a variant recension.

⁷⁷ This item is omitted in some sources.

⁷⁸ For the reading šub₅(NUMUN₂) see the references in the lexical section of the CAD lemma *mindinu*.

(*MSL* 5, pp.170-171 and *MSL* 7, pp.46-47).

3.5.2 Kagal and Diri

In addition to ur₅-ra, there are two other Old Babylonian lexical lists with a giš section: Proto-Kagal and Proto-Diri⁷⁹. Proto-Kagal belongs to the acrographic lists (sequenced by first sign). The section giš is the final section of this list⁸⁰. There is no clear relation between the giš list in ur₅-ra and the section in Proto-Kagal in Old Babylonian Nippur. The Proto-Kagal section seems to be intended for words beginning with the GIŠ sign which do not denote trees or wooden objects⁸¹. There are, however, a few wooden objects listed (^{giš}bal, ^{giš}ba-an). Both words are also found in ur₅-ra, but these are isolated agreements which do not imply duplicate sections or similarities in patterns.

The relation between Diri and ur₅-ra is more complicated⁸². Lines 166-234 of Old Babylonian Nippur Diri all begin with GIŠ. A considerable number of these items denote trees and wooden objects⁸³. Such items are usually found in both lists. As an example I will discuss Proto-Diri 214-217, which has the items beginning with GIŠ.ŠU:

gloss:	complex sign:	Akkadian equivalent:
su ₂ -hu-ub	GIŠ.ŠU.DI.EŠ	<i>mēdelum</i>
su ₂ -hu-ub	GIŠ.ŠU.GA	<i>naprakum</i>
gi-ra-ah	GIŠ.ŠU.DIM ₂	<i>suppin itinnim</i>
giš-gi-ri	GIŠ.ŠU.LU ₂	<i>nēmettum ša awīlim</i>

Mēdelum and *naprakum* both mean bolt. The standard Nippur version of the giš list has the item ^{giš}ŠU.DI.EŠ-ig (bolt of the door, line 394). A few tablets include the variants ^{giš}ŠU.DI (394a) and ^{giš}ŠU.GA (394b). The meaning of the next item in the Proto-Diri passage is unclear. The Akkadian rendering *suppin itinnim* seems to point at some tool for a construction worker. In Ur III texts the word ^{giš}ŠU-DIM₂ appears among building materials for the construction of a boat. In that context the item is found in Old Babylonian ur₅-ra (line 261). The item GIŠ.ŠU.LU₂ is attested in the last part of the giš chapter of Nippur ur₅-ra (line 681). It follows ^{giš}rab (stock).

⁷⁹ Both lexical compositions are discussed in §2.4.1.3.

⁸⁰ Proto-Kagal 509-542 (*MSL* 13, p.81f.) and Proto-Kagal Bilingual Section E 44-80 (*MSL* 13, p.87f.).

⁸¹ See the discussion of Proto-Kagal by Civil in *MSL* 13, pp.63-64..

⁸² I was able to study Diri through the HyperText version which M. Civil kindly placed at my disposal. I am happy to be able to express my gratitude for his generosity here.

⁸³ In many cases our understanding of the writing system interprets the graphemic complexes in the GIŠ section of Proto-Diri as consisting of a determinative and a simple sign (for instance: GIŠ.TUG₂ = ^{giš}taskarin), rather than as one complex sign. Apparently, our understanding of the system is not always identical with theirs. Here we will discuss the history of the relations between ur₅-ra and Diri without going into these questions.

Nēmettum is a kind of staff. In conclusion, most of the Proto-Diri items in this passage have a parallel in *ur₅-ra*, but the section is not duplicated as such.

There are, however, two passages where a more substantial agreement between Proto-Diri and the Nippur *giš* list may be detected.

Nippur *ur₅-ra*:

543 ^{giš}igi-gal₂
 544 ^{giš}IGI-TUR-TUR
 545 ^{giš}IGI-TUR-TUR
 546 ^{giš}IGI-TUR-TUR
 547 ^{giš}IGI-NI
 548 ^{giš}IGI-KAK

The items have little in common in meaning. ^{giš}IGI-TUR-TUR is read ^{giš}ligima (see presently) and means shoot or bud. ^{giš}IGI-KAK is read ^{giš}dalla₂ (needle or arrow) or ^{giš}šukur (spear). The section is brought together because of the initial sign (IGI) of the items.

The ^{giš}igi-gal₂ (*ṣaddu* = sign or signal⁸⁴) line has no parallel in Proto-Diri. The IGI-TUR-TUR items are paralleled by three lines in Proto-Diri (150-152):

150	li-gi-ma	GIŠ-IGI-TUR-TUR	<i>ligimûm</i>	shoot
151		GIŠ-IGI-TUR-TUR	<i>ziqqum</i>	shoot
152		GIŠ-IGI-TUR-TUR	<i>niplum</i>	shoot

Even though the entries begin with GIŠ they are found in the IGI section of Proto-Diri (the GIŠ is treated as determinative). The gloss li-gi-ma in line 150 is intended for all three lines. Only the Akkadian translation differs. The Akkadian words *ligimû*, *ziqqu*, and *niplu* mean offshoot, sapling, etc. Since the item is repeated three times both in *ur₅-ra*⁸⁵ and in Proto-Diri we may safely assume that the sections duplicate. The words for sapling are rather misplaced in this part of *ur₅-ra*. We are in the midst of words for nets, traps, and several kinds of weapons. The Nippur version, in fact, is the only version known so far that puts the ^{giš}IGI.TUR.TUR items in this particular place. In Middle Babylonian and later versions of *ur₅-ra* the items are located immediately before the date palms in the section trees (*MSL* 5, pp.114-116)⁸⁶. They there join various other words for offshoot which are also found at that place in the Old Babylonian Nippur version (^{giš}isi₂-mu₂, and in some sources ^{giš}bil₂)⁸⁷.

⁸⁴ For the translation *ṣaddu* in this context see SMN 2559 (Civil 1976, p.94; and Civil 1987, p.187).

⁸⁵ In CBS 4827 rev. (Ni II-033) the item is found only once. This is probably also the case in N 5589 (Ni I-04). Similarly, in Proto-Diri source P1 (UM 55-21-354 = 3N-T601) omits line 151.

⁸⁶ This sequence is also found in the Old Babylonian type II text of unknown origin *BRM* IV, 31 (edited in §5.6.4 as NP II-01).

⁸⁷ In the Isin version ^{giš}isi₂-mu₂ is followed by other words for shoot: ^{giš}u₃-luh, and ^{giš}nunuz, but not ^{giš}ligima (Is I-02 Obv. III19-21; edited in §5.6.1). Isin may have had the ^{giš}ligima items in the same place as the Nippur text but the passage is not preserved.

The ur₅-ra items ^{giš}IGI-NI and ^{giš}IGI-KAK (547-548) are paralleled by Proto-Diri 142-145, again in the IGI section.

142 [-b]u [?]	IGI.KAK	<i>hebburum</i>	stalk
143 [da]-la	IGI.KAK	<i>šillum</i>	arrow
144 šu-ku-ur	IGI.KAK	<i>šukurru</i>	spear
145	IGI.KAK	<i>halwûm</i>	?

The first item is probably identical to *henbur*₂(ŠE.KAK) = *habburu*: shoot or stalk (see *CAD habburu* for references). I am not able to identify the word *halwûm* in the last entry. The two remaining words are *dalla*₂ = *šillum* and *šukur* = *šukurru*. These words are also found in the bilingual Middle Babylonian ur₅-ra version from Emar (*Emar* 6/4, p.74, 322'-325')⁸⁸:

322'	<i>dalla</i> ₂ (IGI-KAK)	<i>šil[lu]</i>
323'	šu-gur	<i>šukurru</i>
324'	šu-gur-gal	<i>šukurgal[lu]</i>

These lines appear in approximately the same context as the corresponding lines in Nippur ur₅-ra. Both passages are found in a section preceding ^{giš}illar = throwing stick⁸⁹. The three lists, Nippur Proto-Diri, Nippur ur₅-ra, and Emar ur₅-ra, differ in the spelling of the Sumerian:

	Proto-Diri	Nippur ur ₅ -ra	Emar ur ₅ -ra
<i>dalla</i> ₂	IGI-KAK	^{giš} IGI-NI	IGI-KAK
šukur	IGI-KAK	^{giš} IGI-KAK	šu-gur

Both ur₅-ra versions graphemically distinguish between *dalla*₂ and šukur. The Emar text uses a syllabic writing of šukur. In Nippur ur₅-ra a secondary differentiation⁹⁰ is introduced. The sign NI is distinguished from KAK by one small vertical only. The spelling IGI-NI for *dalla*₂ is, as far as I know, not attested outside this particular context.

The relation between Nippur ur₅-ra and Proto-Diri in this IGI section is admittedly not very strong. A single section in ur₅-ra (544-548) corresponds to two separate passages in Proto-Diri (142-145 and 150-152), and the spelling of ^{giš}*dalla*₂ differs in the two texts. Still, there is reason

⁸⁸ See Civil 1989, p.13. For a Nuzi parallel see Civil 1976, p.94f.; and Civil 1987, p.187f. See also the Alalakh forerunner of ur₅-ra 11, *MSL* 7, p. 158: 14-16 (determinative urud) and *Emar* 6/4 p.95 247'-249' (urud; version does not agree with Alalakh).

⁸⁹ In general the Emar text follows the order of the Nippur version rather closely.

⁹⁰ There is little reason to suspect an error here since the IGI-NI item is found in a variety of sources, including a teacher's model on the obverse of a type II tablet (UM 55-21-409 = 3N-T91 1r; edited as Ni II-126).

to believe that the two compositions have influenced each other here. Semantically, the ^{giš}ligima(IGI.TUR.TUR) items do not belong in this section of ur₅-ra. They belong with the trees where they are found in all other ur₅-ra versions. The ^{giš}ligima items are associated with ^{giš}dalla₂ and ^{giš}šukur for reasons of spelling. All are written with a complex sign beginning with IGI. The ur₅-ra passage has apparently collected together those relevant items which appear in the IGI section of Diri.

Another passage where we find agreement between Proto-Diri and Nippur ur₅-ra is more complex than the one discussed above. It is the section ^{giš}BU. In Nippur ur₅-ra the passage runs as follows:

429 ^{giš}BU
 430 ^{giš}BU
 431 ^{giš}BU
 432 ^{giš}BU
 433 ^{giš}sahar-BU
 434 ^{giš}-bu⁹¹
 435 ^{giš}-bu-^{gi}ma-an-sim

The passage corresponds to first millennium ur₅-ra 6, lines 81-92 (*MSL* 6, p.58f.)⁹²:

81	^{giš} mu-ud-la ^{BU}	<i>muttû</i>	pole (lexical only)
82	^{giš} ma-ad-la ^{BU}	<i>makkû</i>	pole (lexical only)
83	^{giš} ma-al-la ^{BU}	<i>malallu</i>	a container
84	^{giš} ga-zi-in-bu ^{BU}	<i>gašīšu</i>	pole

85	^{giš} MIN ^{BU}	<i>maššû</i>	basket
86	^{giš} MIN ^{BU}	<i>ma'dû</i>	pole (lexical only)
87	^{giš} MIN ^{BU}	<i>mand[û]</i>	pole (lexical only)
88	^{giš} MIN ^{BU}	<i>nappa[šû]</i>	stick (lexical only)

89	^{giš} ga-zi-in-bu ^{BU}	<i>gazimānu</i>	pole (lexical only)
90	^{giš} giš-šá-áš-ku ^{BU}	<i>giššaškû</i>	pole (lexical only)
91	^{giš} gi-di ^{BU}	<i>alallû</i>	irrigation device
92	^{giš} 𒊕sahar ²⁷ - MIN ^{BU}	<i>argugu</i>	agricultural implement (lexical only)

The glosses mudla, madla, and malla probably represent variants of one and the same Sumerian word. The Akkadian translations create an artificial differentiation. Most of the Akkadian equivalents are, in fact, only preserved in the lexical tradition, and their meaning is established primarily by the lexical contexts in which they appear. Sections comparable to ur₅-ra 6, 80-88 may be found in Emar Diri (*Emar* 6/4, p.37), Diri II (first millennium), and Emar ur₅-ra (*Emar*

⁹¹ For the reading and interpretation of this line and the next see the commentary to 434-435 in §5.3.

⁹² For a variant recension of lines 81-88 see *MSL* 6, p.57f. (lines 80a-80h).

6/4, p.68, 91'-94'⁹³). Notwithstanding many minor variants in reading and translation, the tradition agrees in providing four Sumerian readings for ^{giš}BU (mudla, madla, malla, and gazinbu) and in the approximate ranges of meaning⁹⁴. These four readings are represented by the lines 429-432 in Nippur ur₅-ra.

The line ^{giš}sahar-BU of the Nippur version is related to the lines ur₅-ra 6, 91-92 cited above. The gloss in 91 represents the reading gidim₃ for BU. The line is known from first millennium Diri (Diri II 337): gi-di-im GIŠ.BU *alallû*. In *MSL* 6 line 92 was read ^{giš}gi₄^{MIN(=gi-di)}BU = *argugu*. The reading of this line is based upon one manuscript only (source A, Sippar). The copy by Zimmern shows that the sign read GI₄ is damaged. A new source for ur₅-ra 6 (NBC 10915, unilingual) has:

90 ^{giš}BU
91 ^{giš}sahar-BU

Very probably these lines are related to the lines immediately following the ^{giš}BU section in Emar ur₅-ra (*Emar* 6/4 p.68):

95' gi-TUR *ma-al-lu-u*
96' suhur-gi-TUR *ma-an-ki-gu*

The sign TUR is to be read di₄ to form a syllabic spelling of gidim₃(BU). The SUHUR in line 96' demonstrates the reading sahar for IŠ. *Ma-al-lu-u* and *ma-an-ki-gu* must be garbled spellings of *alallû* and *argugu* respectively⁹⁵. On the basis of these parallels, the reading GI₄ in late ur₅-ra 6 line 92 is very improbable. Zimmern's copy does not allow reading a SAHAR or SUHUR sign with any degree of certainty, though the latter would fit the traces better than the former. The reading sahar, as proposed above, is based upon the new source⁹⁶.

The ^{giš}BU section in Old Babylonian Nippur ur₅-ra still leaves a number of questions unanswered. There can be little doubt, however, that it is paralleled by Proto-Diri 179-184⁹⁷:

⁹³ The gloss ki-ši-mu (line 94') is a variant of gazinbu. Note that KI is used for standard GA in the Akkadian translation: *ki-ši-šu* (= *gašišu*).

⁹⁴ See also the Emesal vocabulary in Veldhuis 1996a, p.233 r102': [m]u-ga-šim-bi = ^{giš}BU, with the z/š shift characteristic for Emesal; and Herrero and Glassner 1996, p.79 no.281 (Haft-Tépé; Middle Babylonian). In the latter text ^{giš}BU is rendered *ši-id-ṛdu²¹-ú* (2x); *ma-la-lu-ú*; *ga-zi-im-bi*; and *ga-ši-šu*. The ŠU under *ga-zi-im-bi* may indicate that this is a gloss rather than a translation (all other words in the Akkadian column have the nominative ending -u), to be rendered *gazimbû* or *gazimānu* (as in ur₅-ra 6: 89).

⁹⁵ Both words have a shift /a/ -> /ma/. The shift /g/ -> /k/, in *mankigu* for *argugu* is often found in the Akkadian of the Emar lexical texts. For instance *ki-ši-šu* for *gašišu* (*Emar* 6/4, p.68: 94').

⁹⁶ A variant version of this passage is found in Herrero and Glassner 1996, p.79, 282 10-11: ^{giš}gi-gi-im *hi-le-pu*; ^{giš}sahar ṛar¹-[gu-gu]. Line 10 parallels Diri II: 242: ^{giš}ki-im GIŠ.BU *hilēpu*. In line 11 SAHAR is apparently not followed by a BU.

⁹⁷ For this passage of Proto-Diri no text with glosses is available.

179	GIŠ.BU	<i>irru</i>	pole
180		<i>matûm</i>	pole
181	GIŠ.BU	<i>maššûm</i>	basket
182	[GIŠ].BU	<i>mahlalum</i>	container
183	[GIŠ.BU]	<i>gašišum</i>	pole
184	[GIŠ.BU]	<i>[alall]ûm</i>	irrigation device
185ff.	broken		

The relation between the Nippur giš list and Proto-Diri, as demonstrated above, is relatively weak when compared to the number of mutual entries and passages in the late versions. The beginning of the giš section in first millennium Diri II is a duplicate of the beginning of the list of trees in ur₅-ra 3. Existing relations are expanded and systematized. The Nippur giš list has a number of sections where the same item is repeated several times. Above we discussed the section ^{giš}BU; other examples were treated in §3.3. In the late version of ur₅-ra, in tablet 6, such sections are collected and augmented with comparable ones (^{giš}GIBIL₂, ^{giš}KUD, etc.).

ur ₅ -ra 6 (<i>MSL</i> 6, pp.54-59)	O.B. Nippur
43-45 ^{giš} ellag(LAGAB)	426-428
46-48 ^{giš} gur ₄ (LAGAB)	663-665 (^{giš} kur)
49-51 ^{giš} kibir(GIBIL ₂)	
52-54 ^{giš} esi(KAL)	666-668
55-57 ^{giš} uri(URI)	[669ff?]
58-60 ^{giš} sumun(BAD)	592-594
61-63 ^{giš} sumun(BAD)	
64-66 ^{giš} haš(KUD)	
67-69 ^{giš} haš(KUD)	
70-72 ^{giš} kud(KUD)	
73-74 ^{giš} kud(KUD)	
75-77 ^{giš} lah(UD)	
78-80 ^{giš} gibil(GIBIL)	
81-88 ^{giš} BU	429-432 (see above)

Nearly all these sections, except for the ^{giš}KUD entries, have their counterparts in Diri (see *MSL* 6, p.54). It is impossible to say which text has been adapted to which. On the one hand, the section ^{giš}gibil is found in Proto-Diri, but not in this form in Old Babylonian ur₅-ra. Here first millennium ur₅-ra is apparently adapted to Diri. On the other hand, Proto-Diri has only one entry ^{giš}ellag(LAGAB) whereas Nippur ur₅-ra agrees with the late tradition in having three lines. In the development of Diri and ur₅-ra the shared entries and passages became more numerous. This development is to be interpreted as an exponent of a more general development towards systematization in the lexical corpus. There is no need to theorize about the direction of the influence.

3.5.3 Paradigmatic Sets

A paradigmatic set is a special kind of relation between texts. The best example of a paradigmatic set in Mesopotamian texts is found in the set of colour terms. Landsberger (1967) showed that these terms recur in the same order in a wide variety of lexical lists, literary texts, and omen compendia. The set is found, for instance, in several places in the Nippur list of domestic animals (*MSL* 8/1, pp.83-88):

sheep:	goat:	bull:	calf:	
udu-babbar	maš ₂ -babbar	gud-babbar	amar-babbar	white
udu-gi ₆	maš ₂ -gi ₆	gud-gi ₆	amar-gi ₆	black
udu-su ₄ -a	maš ₂ -su ₄ -a	gud-su ₄ -a	amar-su ₄ -a	red/brown
udu-sig ₇ -sig ₇		gud-sig ₇ -sig ₇	amar-sig ₇ -sig ₇	yellow/green
udu-gun ₃ -a		gud-gun ₃ -a	amar-gun ₃ -a	speckled

For some reason the colour terms are only listed for the male species. The repetition of the same set of colour terms throughout the list of domestic animals is not surprising. This list is very systematic in nature, using almost the same attributes for various animals⁹⁸. For instance, all female species (ewe, cow, female donkey) are listed with the following set:

u ₃ -tu	having given birth
nu-u ₃ -tu	not having given birth
giš ₃ -zu-zu	having mated
giš ₃ -nu-zu	not having mated

The set of colours is also found in the Nippur list of stones (*MSL* 10, p.57, 80-84). Surprisingly, it is almost absent from the Nippur giš list. There is only one place where a variant recension has the opposition babbar -- gi₆ (white -- black):

006	giš ₁ kin ₂	<i>kiškanû</i> ⁹⁹ tree
006a	giš ₁ kin ₂ -babbar	white <i>kiškanû</i> tree
006b	giš ₁ kin ₂ -gi ₆	black <i>kiškanû</i> tree
007	giš ₁ gi ₆	black tree

There are in the present reconstruction 42 Nippur manuscripts which preserve line 6. Eight of these have the items 6a and 6b. There is no tablet which demonstrably has only 6a or only 6b. Old Babylonian versions from outside Nippur (Isin and texts from unknown places) always have giš₁kin₂-babbar and giš₁kin₂-gi₆. The Ugarit version uses an almost complete set of colours¹⁰⁰:

⁹⁸ This was already the case in the Archaic Cattle list. See Englund and Nissen 1993, p.22; and Veldhuis 1995, p.438f.

⁹⁹ *Kiškanû* is the Akkadian rendering of giš₁kin₂.

¹⁰⁰ Sources: Thureau-Dangin 1931, pl. XLVI-XLVII (no.3 + no.4); Thureau-Dangin 1932, p.235, no.10; Arnaud and Kennedy 1979, pl.VIII/2 (bilingual); and *RSO* V/1, p.281 (photograph of RS 21.005). See also *Emar* 6/4, p. 55, 12-17.

006	^{giš} kin ₂	<i>kiškanû</i> tree
007	^{giš} kin ₂ -babbar	white <i>kiškanû</i> tree
008	^{giš} kin ₂ -gi ₆	black <i>kiškanû</i> tree
009	^{giš} kin ₂ -su ₄	red <i>kiškanû</i> tree
010	^{giš} kin ₂ -gun ₃ -a	speckled <i>kiškanû</i> tree

The only colour term missing from the traditional set in this passage is sig₇-sig₇: green/yellow. In the late version some sources add the ^{giš}kin₂-sig₇-sig₇, apparently to fill the open slot (*MSL* 5, p.92, 6-9b). In this version the set of colours further appears in the section giš-nimbar-u₄-hi-in: date palm carrying fresh/unripe dates. The word u₄-hi-in may refer to unripe dates, or to dates which have not yet been dried.

Ur₅-ra 3, 335-340 (*MSL* 5, p.121)¹⁰¹:

giš-nimbar-MIN(=u ₄ -hi-in)-babbar	<i>pe_šû</i>	date palm carrying white fresh dates
giš-nimbar-MIN-gi ₆	<i>šalmu</i>	date palm carrying black fresh dates
giš-nimbar-MIN-su ₄	<i>sāmu</i>	date palm carrying red fresh dates
giš-nimbar-MIN-gun ₃ -gun ₃ -nu	<i>burrumu</i>	date palm carrying speckled fresh dates
giš-nimbar-MIN-sig ₇ -sig ₇	<i>arqu</i>	date palm carrying green fresh dates
giš-nimbar-MIN-sig ₇ -sig ₇ -ga -al-šeg ₆ -ga ₂	<i>aruq bašil</i>	date palm carrying green fresh ripe dates

This passage is interesting because it shows the generative power of the set. There is little hope of finding date palms carrying *uhinnu* dates in all these colours. The *uhinnu* items are not attested in the Old Babylonian Nippur version, but the last item, line 340, probably corresponds to Nippur line 80: giš-nimbar-sig₇-sig₇-al-šeg₆. It is the adjective sig₇-sig₇ (green) that has triggered the whole set of colour terms.

The colour terms show that paradigmatic sets grow considerably in importance after the Old Babylonian period. Another set that is attested throughout late ur₅-ra is the geographical set¹⁰² Dilmun - Magan - Meluhha: date-palms (ur₅-ra 3, 284-287), tables (ur₅-ra 4, 194-195; without Dilmun), ships (ur₅-ra 4, 281-283), bronze (ur₅-ra 11, 340-343), and carnelian (^{na}gug = *sāmtu*; ur₅-ra 16, 127-128; without Magan). The correspondence between the pertinent passages for date palms and bronze is revealing:

ur₅-ra 3, 284-287 (*MSL* 5, p.117)

ur₅-ra 11, 340-343 (*MSL* 7, p.142)

giš-nimbar-dilmun	<i>tilmunû</i>	^{urud} dilmun	<i>tilmunû</i>
giš-nimbar-dilmun	<i>asnû</i>	^{urud} dilmun	<i>asnû</i>
giš-nimbar-ma ₂ -gan-na	<i>makkanû</i>	^{urud} ma ₂ -gan-na	<i>makkanû</i>
giš-nimbar-me-luh-ha	<i>meluhhû</i>	^{urud} me-luh-ha	<i>meluhhû</i>

¹⁰¹ This passage is also found in Middle Babylonian texts from Ugarit, though without the speckled variant.

¹⁰² Geographical terms in ur₅-ra are discussed by Pettinato 1972.

The Akkadian *asnû* is a well-known word for Dilmun date palm or Dilmun date. The rendering *tilmunû* for giš-nimbar-dilmun is more or less forced by the systematics of ur₅-ra: -dilmun, designating a variety of something, is always translated *tilmunû*. It is worth noting that the Dilmun date palm is the only variety listed here that is actually known outside lexical lists. It is also the only one that is found in the Old Babylonian Nippur version (line 68). The Magan and Meluhha varieties are probably included because the set Dilmun - Magan - Meluhha was triggered by the first item. For copper the situation is the other way around. The translation *asnû* for ^{urud}dilmun is simply wrong. The Akkadian word is not known as a designation for copper. It is copied from the giš-nimbar-dilmun entry. The giš-nimbar section is adapted to the general patterns of Sumerian-Akkadian translation. The copper section is adapted to the giš-nimbar section.

By contrast, in the Old Babylonian Nippur giš list the set Magan - Meluhha is found only a few times:

050	giš mes-ma ₂ -gan-na	Magan mes-tree
051	giš mes-me-luh-ha	Meluhha mes-tree
179	giš gu-za-ma ₂ -gan-na	Magan chair
180	giš gu-za-me-luh-ha	Meluhha chair
181	giš gu-za-ma ₂ -lah ₄	boatman's chair
182	giš gu-za-aratta	Aratta chair
193	giš gu-za-giš mes-ma ₂ -gan.ki	chair made of Magan mes-wood
194	giš gu-za-giš mes-me-[luh-ha]	chair made of Meluhha mes-wood

The mes-trees (lines 50-51) recur in the chairs made of mes-wood (193-194). The Magan chair and the Meluhha chair (179-180) are followed by the boatman's chair (181) and the Aratta chair (another geographical name). The boatman item is attracted by the phonemic similarity between me-luh-ha and ma₂-lah₄. Meluhha appears alone (without a corresponding Magan item) in line 40 of the list: ^{giš}ab-ba-me-luh-ha = Meluhha abba-tree.

Magan and Meluhha are also found together in the Nippur list of geographical names (*MSL* 11, p.104, 253-254). Otherwise, geographical names hardly function as a set in the Old Babylonian Nippur version.

3.5.4 Relations between Lexical and Literary Texts

There are few direct relations between literary texts and the lexical corpus in Old Babylonian Nippur. In a well-known passage in 'Enmerkar and the Lord of Aratta' the lord of Aratta gives Enmerkar three impossible tasks, which, of course, Enmerkar manages to fulfil anyway. One of these involves a dog (or hero?, Sumerian: ur), which is neither black, nor white, nor red, nor green, nor speckled (see most recently Vanstiphout 1995, pp.12-14). It has been noted in commentaries on this passage that the same set of dogs is found in the list of wild animals in ur₅-ra (*MSL* 8/2, p.13f., 89-93). This link, however, is not as clear as it might seem. The ur₅-ra

passage referred to is the first millennium version. The standard Old Babylonian Nippur list of wild animals, which belongs to Nippur ur₅-ra division 3, does not include the coloured dogs. It is possible, however, that they are found in one of the variant recensions of this list¹⁰³. At least one Old Babylonian list of dogs (of unknown provenance) included all the coloured varieties¹⁰⁴. The coloured dogs are not only found in the Enmerkar story. In a first millennium apotropaic ritual for the protection of a house, figurines of dogs in all colours are to be made (Wiggermann 1992, p.15, 191-205). The same set of dogs probably appears in an Old Babylonian Akkadian incantation from Ishchali¹⁰⁵. The coloured dogs may have had an independent existence in folklore. 'Enmerkar and the Lord of Aratta' appears to use many folklore elements (see Vanstiphout 1995). There is no reason, therefore, to assume that the inclusion in ur₅-ra of the coloured dogs is a direct influence from the Enmerkar story or vice versa. The impetus to include the white, black, red, speckled, and green dogs in ur₅-ra may well come from the existence of these dogs at various places in the Stream of Tradition.

More important is a functional relation between literary and lexical texts. Quite a few of the Sumerian literary texts used in the Nippur eduba contain passages that may be regarded as exercises in the vocabulary of one specific semantic field. Miguel Civil has edited a text in which all kinds of plants are enumerated (Civil 1987a) in a list-like formulaic fashion. The hymn 'Išme-Dagan and Enlil's Chariot' (Civil 1968; Klein 1989)¹⁰⁶ is a very important source for the names of parts of the chariot. The praises of Enlil's chariot are sung by mentioning a part and describing it in a poetic metaphor. Several hymns go to considerable lengths in the detailed description of a cultic boat (see Klein 1990, pp.88-96). The composition 'Home of the Fish' mentions all kinds of fish (Civil 1961 and Vanstiphout 1982). Lugal-e has a lengthy section on stones (Van Dijk 1983). By way of example I will treat a short passage from the Nungal hymn¹⁰⁷. In this hymn, a song to 'lady prison', the terminology for doors, locks, and bolts is treated briefly. The text begins with a poetic address to the house (that is, the prison), each line beginning with the invocation 'House, ...' (e₂). Lines 13-24 metaphorically describe various parts of the gate. At line 25 a new passage starts. This is formally indicated by the resumption of the address 'House, ...' (e₂) with which this line begins. Lines 13-24 are all constructed in a similar way: Its (= the prison's) X is a Y that Z. The first half (13-18) describes the (larger) architectural elements of the gate. Lines 19-24 concentrate on the door and its parts.

¹⁰³ The reconstruction of the Old Babylonian list of wild animals, or the 'forerunners' of ur₅-ra 14, was promised for *MSL* 8/3, which never appeared. The Nippur version of the section ur has been edited above, §3.5.1. Variant Nippur recensions of the list of wild animals include: *SLT* 45 (probably post-Old Babylonian) and HS 1765 (square prism). *SLT* 51 does not preserve the ur section but is highly idiosyncratic in the section snakes (muš).

¹⁰⁴ YBC 11118 (unpublished) obverse 9-13. Line 11 reads ur-BU-a. The writing su₁₃(BU) for su₄ is also found in a lexical prism from Kisurra (domestic animals) *FAOS* 2, 215 fr. Š376/e iii10' (uz₃), and Seite B iii27' (ab₂); and in the animal sections of the Diyala region cylinders A 7895 and A 7896, kept in the Oriental Institute, Chicago. For these cylinders see above §2.2.3.

¹⁰⁵ Greengus 1979, no.302; see Farber 1981, p.57.

¹⁰⁶ See also Ludwig 1990, pp.10-11 (Išme-Dagan I).

¹⁰⁷ Edition by Sjöberg (1973); additional texts in Sjöberg (1977). Subsequently identified sources were collected by Attinger (1993, p.51). See further Civil (1993) with previous literature. Sjöberg's sources C (UM 29-16-49) and K (CBS 13931 = *SEM* 51) were joined by the present writer.

- 19 ^{giš}nu-kuš₂-u₃-bi u₁₁-ri₂-in^{mušen} umbin-be₂ nig₂ šu-ti-a
 20 ^{giš}ig-bi hur-sag-gal lu₂-erim₂-ra gal₂ nu-un-ta-tak₄-tak₄
 21 lu₂-zi šu-ba la-ba-ni-in-ku₄-ku₄ gal₂ mu-un-ta-tak₄-tak₄
 22 ^{giš}sag-kul-bi pirig-huš nam-šul-ba gu₂-da la₂-a
 23 ^{giš}suhub₄-bi muš-sag-kal eme-e₃-de₃ e-ne-PAR₃ si-il-si-le-de₃
 24 ^{giš}si-gar-bi muš-ša₃-tur₃ ki-šur₂-ra ni₂-bi ur₃-ur₃-ru-dam

Its pivot is an urin-bird, catching prey with its claws.

Its door is a huge mountain that does not let out the wicked,
 but the righteous - he is not carried in by force - it does let out¹⁰⁸.

Its bar: raging lions, embracing in their power^{?109}.

Its latch?: a sag-kal snake, who sticks out its tongue and hisses^{?110}.

Its bolt: a womb-snake, entering a hole in fear¹¹¹.

The parts of the door described here may be compared to the section doors and locks in Nippur ur₅-ra. This section may be subdivided as follows:

ur ₅ -ra			Nungal
374-393	^{giš} ig	door	20
394	^{giš} suhub ₄	latch?	23
395-397	^{giš} nu-kuš ₂ -u ₃	pivot	19
398-401	^{giš} sag-kul	bar	22
402-404	^{giš} si-gar	bolt	24
405-406	^{giš} mud	handle	-

The word ^{giš}suhub₄ (latch?) is found in some sources of Nippur ur₅-ra as the last item in the section doors (^{giš}suhub₄-ig), but also appears without ig, as an independent item. The sections in ur₅-ra, therefore, correspond fairly closely to the parts of a door described in Nungal. The only part that is not found in the hymn is the ^{giš}mud (handle). The same or similar set of terms is also found in other literary texts, for instance in the 'Lamentation over Sumer and Ur' (see

¹⁰⁸ Gal₂ -- tak₄(-tak₄) = *petū* 'to open'. Context, and the infix -ta-, suggest the possibility that 'to open' is meant in the specific meaning of 'to allow someone to leave'. See Frymer 1977, p.80. The phrase šu-ba la-ba-ni-in-ku₄-ku₄ is interpreted here as 'he is not brought in through its (= the prison's) power'. In other words the lu₂-zi, if he happens to be in the prison, is there of his own free will, and the door allows him to leave.

¹⁰⁹ 'Embracing' (gu₂-da la₂-a) refers to fighting animals (perhaps nam-šul may refer to a fight). Probably, ^{giš}sag-kul is the wooden beam used to close a door. It needs to be a larger element of the door since it can be mentioned separately in house-selling contracts (see also Potts 1990, p.191, who prefers the translation 'bolt'). The same word is used for a pole of a chariot or wagon (^{giš}sag-kul-gigir and ^{giš}sag-kul-mar-gid₂-da; Nippur giš list 335 and 361). The embracing in this line may refer to the beam lying in the wooden structure that secures the beam to the door. For 22-24 see Michalowski 1989, p.102.

¹¹⁰ The meaning of e-ne-PAR₃ si-il(-si-il) is unclear. It is used with a snake as subject. See Heimpel 1968, p.467 (81.4); and p.501 (92.1) for two other examples.

¹¹¹ See Civil 1994, p.78.

Michalowski 1989, pp.62-65, 428-433). One may regard such passages in Nungal and other texts as poetic elaborations of the vocabulary treated in the list. Or, alternatively, the list may be considered as an introduction to the language of the literary texts. Again it is not necessary to decide upon a dependence in either direction. The similarities are due to the educational context and purpose shared by lexical and literary texts.

Pursuing the relations between the literary and lexical corpus along this line would require another book at least. For my present purposes it is enough to have indicated the existence of such relations. One possible line of future research that suggests itself would be to study the literary texts from an educational point of view. The scholastic function of these texts is not exhausted by teaching Sumerian vocabulary, but that may well be one of the aims in treating them.

3.6 The Place of *ur₅-ra* in the Stream of Tradition

Just as it is impossible to describe one phoneme without referring to the phonemic system as a whole at a given stage in the development of a language, so is a composition not only characterized by its internal organization, but also by the place it occupies among other contemporary compositions. Compositions differ in use and in prestige. Use and prestige, moreover, may change over time no less than the inner organization of the composition itself. Further, these two lines of evolution may well be interrelated. To get a clear idea of the character of Nippur *ur₅-ra*, therefore, it must be contrasted to other contemporaneous compositions and to later versions of itself. In preceding sections we have practised this combination of diachronic and synchronic contrast by comparing features of the Nippur *giš* list to other Old Babylonian lexical lists, to contemporaneous literary texts, and to later versions of the composition. In this section I will do the same from a more remote point of view. The question will be: what is the place and function of *ur₅-ra* within the Nippur Stream of Tradition, and how does this place compare to that of first millennium *ur₅-ra*? This will take up the questions treated in the preceding pages on a higher level of abstraction.

The concept 'Stream of Tradition' was introduced by Oppenheim (1977, p.13) to distinguish the learned tradition of the scribes, handed down from one generation to the next, from daily texts such as letters and administrative records. The Nippur Stream of Tradition may be roughly divided into two parts: the lexical tradition and the literary tradition. These two parts correspond to the two stages of scribal education discussed in §2.4. Most of the compositions in both 'currents' are found in numerous duplicates. These are exercise tablets, written by pupils to master the cuneiform script and the Sumerian language, and to achieve the cultural level deemed necessary for a scribe. In addition to the well-attested compositions, there are a number of texts found in only one or a few copies. For the lexical corpus we have at least two examples: Short Ea and Syllable Alphabet A.

'Short Ea'¹¹² is a list of signs indicating the main paragraphs of Proto-Ea. Each group or family of

¹¹² The composition has not been described before. The following sources have been identified (all unpublished): CBS 2336; CBS 10468; CBS 15418; and Ni 137. A handcopy of Ni 137 by Hilprecht is

signs in Proto-Ea is represented by one line¹¹³. As in Proto-Ea each line is introduced by a single vertical. The list begins as follows:

- 01 ¶ A
- 02 ¶ KU
- 03 ¶ ME
- 04 ¶ PAP
- 05 ¶ BAR
- 06 ¶ DU₃
- 07 ¶ NI
- etc.

Short Ea is found on a few characteristically square tablets which do not conform to the common tablet typology (see §2.3.3). These square tablets have three columns on both sides, and seem to cover the whole list. They do not agree, however, in the length of the composition. One of the sources is an exercise on the reverse of a regular type II tablet. The column preserved has the beginning of Short Ea in a very bad hand. The obverse has an extract from the giš list (CBS 15418)¹¹⁴.

Syllable Alphabet A (SA A) is a list of syllable combinations, apparently without meaning, used as an elementary exercise outside Nippur. It is a variant version of the Nippur exercise Syllable Alphabet B (see §2.4.1.1). Two pieces of SA A, clearly not belonging to the same tablet, have been found among the Nippur tablets in Philadelphia¹¹⁵. Both are well written. They were not used as elementary exercises. Further, there is a fragment of a Syllable Vocabulary A from Nippur (*SLT* 243). Each syllable combination of SA A is explained by an Akkadian word, as in a bilingual word list¹¹⁶.

Short Ea and SA A fall outside the common Nippur scribal curriculum, and outside the known tablet typology. Their existence as such, however, does not call for a specific explanation. Short Ea is generated by the (Proto)-Ea family. SA A is a text that must have been known in Nippur, if

kept in Philadelphia. It was intended for a *PBS* volume which was never published,

¹¹³ One could defend the view that Short Ea is the Nippur version of S^a.

¹¹⁴ The obverse is edited as Ni II-220.

¹¹⁵ CBS 14150 and UM 29-15-460. According to Falkowitz (1984, p.19) the lentil CBS 13706 has an extract from SA A, and this was reason for him to doubt the Nippurian origin of the piece. The lines extracted are SA A 1-2: me-me; pap-pap. However, SA B 5-8 reads me-me; me-a; me-me-a; pap-pap. Rather than assigning this piece to SA A, it is more reasonable to assume that either the final A of line 7 was forgotten, or that the exercise has lines 5 and 8 of SA B.

¹¹⁶ The traditional label 'Syllable Vocabulary A' is somewhat misleading. There are four Old Babylonian examples, all from different places. These four tablets share no other similarity than being explanatory works to SA A. They are independent as to the contents of the explanation. In the post-Old Babylonian period a standard Syllable Vocabulary A came into being. See Nougayrol 1965, and *Emar* 6/4, pp.194-198.

only because it was known everywhere. What these compositions show is that the body of lexical texts available to a Nippur scribe or schoolmaster was larger than the well-known set. It demonstrates how much we depend on pupils' exercises for our knowledge of this corpus. What falls outside the standard set is known to us by mere chance.

Within the Nippur Stream of Tradition we may thus distinguish between two groups of lexical compositions. First there are those which are regularly used for writing exercises. This group includes the well-known texts, such as SA B, ur₅-ra, Proto-Ea, and so on. In the second place there are compositions which were used in a different way and have left no traces (or only very few) for us. Compositions of the first group are found in large numbers on tablets of regular types. Compositions of the second group are found in small numbers, and usually on tablets that fall outside the common tablet typology. Some of these texts may be completely unknown to us, having left no traces in the archaeological record.

The probability of this reconstruction is supported by a few lexical compositions which are to be located somewhere between the two groups. The first is the Nippur God list. This text is found in relatively few exemplars, and is not transmitted as such to later periods. Another example is Proto-ki-ulutin-bi-še₃, a list of business terminology (see §2.4.1.3). This list is also found in relatively small numbers, though more than the God list. The prime difference with the God list is that ki-ulutin-bi-še₃ is transmitted to the first century. Both lists are usually found on regular tablet types. These are examples of lists that were occasionally used for writing exercises but did not belong to the standard set. Alternatively, one might explain the relative paucity of Proto-ki-ulutin-bi-še₃ and Nippur God-list tablets by differences between individual teachers. We have seen in our discussion of TU-TA-TI in §2.4.1.1 that there are reasons to believe that such differences existed.

The situation for literary texts is comparable to that for the lexical lists. Little has been done so far towards counting and classifying duplicates of literary texts. There are a number of literary singletons among the Nippur literary compositions. At least three of these have representations elsewhere. The 'Marriage of Martu,' known from a single Nippur exemplar, is found on a literary catalogue text from Ur¹¹⁷. 'Enki and Ninhursag', unique in Nippur, is represented in Ur and at an unknown place (Attinger 1984). The Sumerian Sargon story¹¹⁸ is known from one Nippur exercise, and one piece from Uruk. A short exercise from Babylon (*VS* 24, 75)¹¹⁹ has three lines of a bilingual version of the same or a related story. The piece is late Old Babylonian or early Middle Babylonian, showing that the composition survived, notwithstanding the scarcity of written sources. These three examples show that the body of literary texts available for school exercises was not identical with a standard curriculum. There was a pool of texts which were rarely used for writing exercises but could be used for that purpose if a teacher wished to do so.

¹¹⁷ For the 'Marriage of Martu' see most recently Klein 1993, with previous literature. The catalogue is *UET* 5, 86; see Hallo 1966, p.90.

¹¹⁸ Cooper and Heimpel 1983. The Nippur piece and the Uruk piece do not overlap but there is little doubt that they represent the same story about Sargon and Urzababa. They may, of course, belong to different versions or recensions.

¹¹⁹ The piece was recently studied by Joan Goodnick-Westenholz (1997, pp.52-55 and p.382). The tablet format agrees with the Kassite exercise type discussed in §2.5.2.1.

The argument may be summarized into two related points. First, the corpus of school texts in Nippur was probably larger than the corpus we have. Second, writing an exercise tablet was no more than one possible performance of a lexical or literary composition. Only those texts which were performed that way are known to us. The second point implies that there must have been other types of use. For literary texts this may have included musical or dramatic performance¹²⁰. The most likely alternative use for a lexical text is recitation and rote learning. In fact, some of the compositions well-attested in writing bear witness to such another type of performance. The unilingual ur₅-ra exercises were orally provided with Akkadian translations. In many cases Proto-Ea and Proto-Diri exercises omit the glosses that were no doubt an essential part of the text. These texts, therefore, preserve in writing only part of the text as it was used in class.

We may take this point one step further and argue that the main mode of existence of Old Babylonian ur₅-ra was in the mind, not in writing. Our analysis of the giš list in the preceding sections has shown that variation is not confined to accidental omissions or additions. Such variants could have been regarded as errors, if necessary. The exercises include variant applications of a number of basic rules which govern the list. Writing or dictating a lexical exercise implies creating one particular realization of a composition that existed in memory, rather than making a duplicate of a text fixed in writing. David Rubin (1995), in his study of the cognitive-psychological aspects of memory in the oral transmission of epics, ballads, and counting-out rhymes, argues that oral texts are not stored verbatim in the memory. The memory actively employs the rules and expectations that belong to the genre in a way that resembles so-called schemas or scripts (see Rubin 1995, Chapter 2)¹²¹. An example of a schema is 'going to the dentist'. This involves a sequence of events (making an appointment, reading magazines in the waiting room, etc.) which are taken for granted by anyone who is culturally competent. The oral genres investigated by Rubin employ numerous such schematic features. The story line need not be recalled in detail for every single composition. The schemas provide constraints on what happens and how it happens, and thus help the memory in recalling for example the continuation of a song¹²². The kinds of variants that occur in recall are related to these constraints. From his evaluation of schema theories Rubin derives five predictions for verbal recall (Rubin 1995, p.36):

1. A piece matching a schema will be recalled more accurately in order and in content.
2. Changes will make the recall more like the schema.
3. Schema-based inferences will be drawn about omitted material.
4. Portions of variants that play the same role in a story will tend to be confused and substituted for each other, even if they bear no obvious resemblance.
5. Aspects of pieces that the schema determines are more important will be better recalled.

¹²⁰ For the musical performance of the hymn Lipit-Eštar B (Vanstiphout 1978) see Kilmer and Civil 1986 and Kilmer 1992.

¹²¹ Strictly speaking in Rubin's terminology a script is a specific kind of schema, but the two terms will be used as synonyms here.

¹²² Rubin discusses a number of other constraints, such as the use of rhythm, music, and rhyme, that are less relevant for lexical texts.

We can see such schemas at work in the colour paradigms discussed in §3.5.3. Prediction 2, in particular, explains the gradual growth of the importance of such features in the tradition. The variants in order that we found in the section ^{gis}gigir (chariot; §3.2.1) prove to represent different applications of the same set of rules. In other words: the schema does not decide for one or other variant, and the various sequences are equivalent. Rubin's prediction 3 is very important. It implies that when one or two items are inadvertently forgotten by one teacher, this does not necessarily imply a break in the tradition. As long as such items are somehow related to the rules governing the list, they may be recovered by a pupil without this pupil even being aware of adding something to what he was taught. The theories reviewed by Rubin allow for a 'flexibility that maintains stability' (Rubin 1995, p.37). This is a most appropriate description of what we find empirically in the Old Babylonian lexical tradition. Lexical compositions existed primarily in memory, not only from rote learning but also by acquiring the generic principles behind them. The lexical tablet as written had no extra authority over the text as it was recited or stored in memory. For the great majority of lexical tablets we may say that the main *raison d'être* of the written text was the act of writing itself. Beyond that the tablet was of little use¹²³.

This situation is in sharp contrast with the Stream of Tradition as it is found in the post-Old Babylonian period. Two important changes occurred to the lexical texts themselves. In the Old Babylonian period every city had its own tradition. The lexical traditions of neighbouring cities like Nippur and Isin differed only slightly. Much greater differences are found with those of the far south (Ur) or in Northern Babylonia. In the first millennium the lexical compositions were standardized and we find virtually the same texts all over Mesopotamia through several centuries (see §2.5.2.2). In the second place a number of organizational principles that could already be identified for the Nippur lists are used in a more systematic way. Relations between *ur₅-ra* and *Diri* existed in Old Babylonian Nippur but are more fully exploited in the late period. Repeating an entry to allow for various Akkadian translations is a technique that is greatly expanded in the first millennium, though it was already used in the earlier versions. Other examples have been discussed in the preceding sections. Both changes are related to an underlying change in uses of literacy. In the Stream of Tradition of the first millennium the written text has become authoritative. It is not enough anymore to learn the Akkadian renderings by heart. They must be included in the written text. The bilingual nature of *ur₅-ra* is not new in itself. The novelty is that it is represented in the written format, in the layout, with one column for the Sumerian words and another for the Akkadian translations. The written text must cover every possibility, even implausible ones. In the Old Babylonian period the rules generating items and governing their sequence had some independence. They were still productive, generating variants in almost every duplicate. In the late texts the primacy is not with the rules but with the written text. This is why rules had to be applied in a more systematic way, even to produce unlikely results. The new status of written lexical texts is apparent from the existence of library copies and from quotations in commentary texts. Lexical texts have become authoritative texts, reference to which has the status of an argument.

The Stream of Tradition as it is known from first millennium libraries consisted not only and not primarily of literary and lexical texts. The majority of traditional texts contained omen

¹²³

Exceptions are prisms and perhaps lentils. These tablet types were not regularly recycled. They may have been produced as tokens of the pupil's competence or progress.

collections. These omen collections are important for understanding the lexical compositions of the first millennium. An omen has the format 'if ... then ...'. The 'if' sentence (protasis) describes an ominous phenomenon (an event in a dream, a miscarriage, or the behaviour of an animal). The 'then' sentence (apodosis) gives the interpretation of the meaning of the event described in the protasis. There are several series of omen collections, each specializing in specific kinds of omens. The series *Šumma Ālu* (over 100 tablets) is a collection of terrestrial omens, such as animal behaviour or the flight of the falcon. Astronomical omens were collected in the series *Enūma Anu Enlil*. Other series collected dream omens, physiognomic omens, diagnostic omens (based on the symptoms of a sick person), and so on. An important series is devoted to the interpretation of the entrails of sacrificial sheep, which were slaughtered for this purpose. The omen collections make up a vast corpus¹²⁴. By far the largest group of texts in Assurbanipal's celebrated library belonged to one or other omen series.

Omen collections are organized by systematic variation of protasis and apodosis. The following example is found in tablet 27 of *Šumma Ālu*, devoted to the behaviour of cats:

(CT 39, 48 BM 64295, ll.5-9):

If a white cat is seen in the house of a man, hardship will seize that land.

If a black cat is seen in the house of a man, this land will see prosperity.

If a red cat is seen in the house of a man, this land will be rich.

If a speckled cat is seen in the house of a man, this country will not be all right.

If a green cat is seen in the house of a man, this country will have a good reputation.

Underlying this variation is the same set of colours used at various places in the lexical corpus (see §3.5.3). We may assume that the same mechanism is active. One colour term tended to attract the whole set and produced a number of new items (in a lexical text) or omens (in *Šumma Ālu*). However, there are more fundamental similarities between the two corpora. Mesopotamian culture has no textual modes for abstract reasoning nor, in other terms, any meta-discourse¹²⁵. Abstract notions such as morpheme, polyvalency of graphemes, square, and square root are demonstrated by listing. First millennium lexical lists are to be read in two dimensions. The horizontal dimension is represented by the single item that clarifies the reading of one sign or the translation of one Sumerian word. The vertical dimension clarifies the abstract principles through the sequentiality of the items. This same two-dimensional format is found in the omen collections. The horizontal dimension is the connection of one protasis with one apodosis. The vertical dimension is the collection of omens and the system behind the collection. The set of colours, illustrated above, is a relatively simple example of such a vertical reading. Ann Guinan has shown in various articles how the vertical reading of an omen collection may disclose information that remains hidden when reading individual lines. She demonstrates how moral knowledge, or perhaps one should say common sense, is implied in the first few tablets of *Šumma Ālu*¹²⁶. The message is: inside and outside may not match, the proud and mighty may fall, the humble may rise to power. Similarly, in another article she demonstrates how the sexual

¹²⁴ See Cryer 1994 for an overview of the omen corpus.

¹²⁵ See Michalowski 1994.

¹²⁶ Guinan 1989.

omina in *Šumma Ālu* convey the picture of what it is to be male in ancient Mesopotamia¹²⁷. To be a male in sexual relations means to be in control. Whenever the female takes the initiative, the apodosis is negative. The description of the mechanics and semantics of omen collections, therefore, is not exhausted by the definition of an omen as fortune-telling based on observation. From this perspective one may understand why and how impossible protases are found in omen collections. They may be understood not so much, or not only, in their horizontal aspect (an apodosis connected to a protasis), but in the vertical aspect of patterns which emerge from listing protasis-apodosis connections in their systematic variation. This is not a case of being consistent *ad absurdum*. Rather it is a way of expressing an abstract principle. Omina and lexical entries, therefore, do not exist as single lines or entries. They exist as systematic collections.

The list-like format of omen collections is a formal feature matched by the systematic character of their contents. These two features make omen collections similar to lexical lists. The body of texts in list format and with systematic variation is even larger than the two genres discussed so far. It includes, with the omen collections, all the *šumma* (if ... then...) texts: law codes, medical texts, glass-making texts, and so on¹²⁸. These text types are not all of one kind, each has particular distinctive characteristics. What unites them is their sharing of a feature of form: the list-like format, and a feature of content: the systematic variation. These two features establish the basic characteristics of a knowledge-conveying text, prototypically represented by the lexical list.

First millennium lexical texts therefore belonged to a large body of scholarly texts which existed primarily in a written form. Omen collections, especially on extispicy, already existed in a comparable format in the Old Babylonian period¹²⁹. Unique pieces such as the Old Babylonian *Šumma Ālu* text from Ur (Weisberg 1970) show again that much more was in existence than what is preserved. The shift towards written texts may have affected the extispicy collections first of all. Old Babylonian omen collections, however, do not seem to share background and use with contemporary lexical compositions. They are not attested on exercise tablets. The context of Old Babylonian lexical texts differs radically from the context of their first millennium counterparts.

Between the Old Babylonian period and the first millennium the mode of existence of lexical compositions had shifted towards a written form. The written form had become authoritative and subject to interpretation. The compositions are inscribed on large and beautiful library exemplars, where they are stored for consulting.

The first millennium uses of literacy are more similar to what is familiar to us: texts which are authoritative, fixed in wording, and which are consulted for reference. The contrast with the Old Babylonian period and the similarity with our own notion of writing should not be taken in an

¹²⁷ Guinan 1979 and 1990.

¹²⁸ The ancients had a word for this class of texts: *šummu*. See Michalowski 1984, p.91.

¹²⁹ See Goetze: *YOS* 10, (with a list of previously published texts on p.2f.); Jeyes 1989 (with a list of previously published Old Babylonian extispicy compendia on p.7f.); Köcher and Oppenheim 1958; Pettinato 1966; Weisberg 1970; Rochberg-Halton 1988, p.19; Joannès 1994; Dietrich 1996.

absolute sense. Few texts were fixed in a way comparable to, for instance, the Hebrew bible. Consulting a clay tablet is no doubt more complicated, and thus probably more restricted, than consulting a scroll or codex. The modern dichotomy between knowledge stored in a reference book and knowledge stored in memory is not applicable to first millennium texts, and probably not to any pre-modern text. The contrast between Old Babylonian and first millennium literacy is nonetheless of prime importance. In the Old Babylonian period there was probably no concept of a library. The copying of texts from the Stream of Tradition was not primarily directed at storage, let alone at preservation. Literacy was not, or only marginally, used for cultic purposes (see Michalowski 1993a, pp.159-160). The 'forerunners' of the knowledge-conveying texts of the first millennium are for the greater part school texts, their existence is due to their use in writing exercises.

The *giš* list as edited in this study is not identical to the one known in Old Babylonian Nippur. No edition can simulate the flexibility and the open character of a text stored in memory. Within the body of school compositions *ur₅-ra* was specialized in Sumerian vocabulary, as opposed to other lists which specialized in other aspects of writing. The educational character of the list precluded a strict and rigid application of this specialization. We have demonstrated in this chapter how much of the organization of the *giš* list falls outside the scope of semantics. The Sumerian writing system may be approached from various angles but these approaches cannot be made mutually exclusive. For an educational purpose it is more useful to exploit such overlap than to avoid it. Moreover, the semantic organization of *ur₅-ra* is not based upon a theoretical analysis of Sumerian vocabulary. Such an analysis might have been useful if *ur₅-ra* were a real encyclopedia, designed to understand the language or the world. Even though such wider purposes may not be completely absent, the first purpose was the writing system and no such artificial sequentiality is needed for that. At the same time, the result of all this is not a matter of straightforward utility. The list does not merely exercise the words and signs that a pupil will need most in his later career. *Ur₅-ra* covers much more than that. Education is hardly ever a purely utilitarian business. Education connects the educated with a tradition. The connection with this tradition, no less than the technical requirements of writing, belonged to the necessary qualifications for the bureaucratic jobs of Old Babylonian society¹³⁰.

¹³⁰

For this point see Michalowski 1987a; Høyrup 1995, pp.3-13; and Chapter 4 of the present study.

Chapter 4 Old Babylonian Lexical Lists and the Science of Writing

4.1 Listenwissenschaft?

From early in the history of Assyriology lexical lists have been associated with *Wissenschaft* or science. Von Soden in his article 'Leistung und Grenze sumerischer und babylonischer Wissenschaft' (1936) introduced the term *Listenwissenschaft*. To him this *Listenwissenschaft* exemplified a typically Sumerian psychological trait: *Ordnungswille*. In origin, according to von Soden, the lists had to mirror the order of the world as it was established by the gods. The lists, therefore, had a cosmological background. The Sumerians, thus von Soden, were not able to codify their views in a coherent argument. Scholarship therefore never went beyond the level of the lists. As an example of von Soden's approach we may take his discussion of Sumerian zoology (1936, p.459f.)¹: 'Bei den Sumerern bildet die Zoologie einen der vielen Teile der Listenwissenschaft, d.h. sie begnügten sich damit, die Tiere und - an anderen Stellen - die Körperteilnamen in Listenform aufzuführen.' The organization of the animal kingdom in the lists was based on linguistic principles rather than proper zoological ones. Thus animals sharing the same root elements in their names were put together. Sumerian zoology never questioned this organization: 'Bemerkenswert ist nur, daß die sumerische "Wissenschaft" offenbar über diese primitive Ordnung der Tiere nach äußeren Ähnlichkeiten nie hinausgekommen ist; man begnügte sich eben mit der einmal gegebenen Ordnung und hatte kein Bedürfnis, sie durch ein näheres Studium der Tiere nachzuprüfen und durch ein andere, bessere zu ersetzen.'

Von Soden's essay became an influential classic. The term *Listenwissenschaft* entered modern scholarship as a technical term. Notwithstanding Oppenheim's protests², the idea that at least some of the lists contained an early form of natural science has been widely accepted. Waetzoldt's description of Mesopotamian biology (1988, pp.32-33) still basically follows the same line of reasoning found in von Soden's treatment of zoology.

In view of recent research in folk biology, von Soden's description of the Sumerian achievements in this field have lost much of their plausibility. The categorization of animals into a hierarchical system is a universal phenomenon. Moreover, the features that are deemed significant for the distinctions between kinds and families are not culturally determined. The categorization of the natural world is cross-culturally very similar and nowhere differs significantly from the taxonomies used in Western biology. The pre-disposition to distinguish living kinds from other objects and to categorize living kinds in a meaningful way is nowadays regarded by cognitive scientists as an innate feature of the human mind, not unlike the 'language instinct'³. It is unlikely that Sumerian science will prove to be the exception here. There is, therefore, reason to doubt that lists of animals have anything to do with Sumerian biology or folk-biology.

¹ Resumed in an abbreviated form in von Soden 1985, p.152.

² See below.

³ *The Language Instinct* is the title of an introductory book on language and cognition by Pinker (1994). See pp.421-427 for folk biology. Some relevant discussions of the same topic are found in a volume edited by L.A. Hirschfeld and S.A. Gelman, most importantly Atran 1994 and Boyer 1994.

Another development that necessitates a re-evaluation of von Soden's approach has taken place in the historiography of the sciences. It has been recognized that the concept of science and its division into disciplines cannot be treated as unproblematic⁴. Science and scholarship are themselves historically defined human enterprises, with a specific social function and background. Barton (1994) argues that Roman scholarship included astrology, physiognomy, and medicine on approximately equal footings. An ancient body of knowledge may contain things rather different from our conception of science, and may be put to uses far removed from what seems proper for a scholarly subject in our eyes. The history of science has for a long time been satisfied with tracing the course of modern scientific ideas through the past. Now it is becoming clear that such an approach is very limited. It isolates those ancient ideas which 'fit' from ideas which cannot be related to ours. Moreover, ideas tend to be treated as more or less independent things, separate from the social context in which they functioned. The unreflected application of the modern concept of science necessarily distorts the relations between the data, putting together what was separate, and separating things that belong together⁵. The first part of the *giš* list which enumerates the trees might be subsumed under botany, but what to make of the much longer list of wooden objects? Lists other than *ur₅-ra*, sign lists, or acrographic lists will not even come under consideration. At the same time the concept biology puts into focus a text such as *šammu šikinšu*⁶. *Šammu šikinšu* (The plant, its appearance is ...) is a first-millennium list which describes medicinal plants by comparison. The descriptions end with a prescription in which the plant in question is used⁷:

The plant which looks like the *urnû*-plant, and whose fruit is like that of the black *aš₂-gu*; this plant is called myrrh. It is good against diarrhoea⁸. You must apply it fresh on the anus. Then (the patient) will get well.

The series is to be classified with medical texts and inventories of pharmacopoeia rather than

⁴ Oppenheim (1977, p.248) already pointed out the problems involved in trying to identify something comparable to our idea of natural science in Mesopotamian culture. See also Oppenheim 1978, pp.634-636.

⁵ The problems touched upon here are discussed in more detail in Lloyd 1992, where they are applied to the understanding of ancient Greek science. In Assyriology the point was discussed as early as 1926 by Landsberger in his famous 'Eigenbegrifflichkeit' essay. Ironically, this essay was reprinted in 1965 and 1974 together with von Soden's 'Leistung und Grenze' by the Wissenschaftliche Buchgesellschaft. Unfortunately, referring to Wilhelm von Humboldt, Landsberger located the most fundamental elements of this 'Eigenbegrifflichkeit' in the structure of the language. The thesis that the structure of a language predetermines what may be said and what may be thought in a given culture was to be developed later by Sapir and Whorf, but has not stood the test of time (see Pinker 1994, pp.59-67).

⁶ No edition of *šammu šikinšu* exists. Published tablets and fragments are *KADP* 33-35; *BAM* IV, 327 and 379; Beckman and Foster 1988, p.7 no.4; *STT* I, 93; *SpBTU* III, 106; and *CTN* IV, 195+196. Related texts are *abnu šikinšu* (stones) and *š₂ēru šikinšu* (snakes). See Oppenheim 1978, p.636 with note 9. For the *šikinšu* texts see Reiner 1995, pp.29-31; and p.120ff. with further literature.

⁷ *KADP* 33, 10-11.

⁸ It is assumed that *KU* is to be read *nišhu* here.

with lexical lists⁹. Treating *šammu šikinšu* together with selected thematic lists under the heading biology can only lead to misunderstanding.

4.2 A Science of Writing

In order to understand Old Babylonian *ur₅-ra* on its own terms it is necessary to consider the context in which it was used. The thematic lists are school texts and belong to the same category as all other contemporary lexical lists. We cannot understand *ur₅-ra* separately from the elementary exercises Syllable Alphabet B and TU-TA-TI, or apart from the specialized sign lists Proto-Ea and Proto-Diri, or apart from the other lists. The corpus acquires its unity from its treatment of writing. The lists form a curriculum that is organized to treat various aspects of the writing system one by one (Chapter 2). In addition to semantics, which governs the arrangement of *ur₅-ra* into divisions and sections, graphemic principles are largely responsible for the organization on a lower level, and for the range of variation that is allowed (Chapter 3). Old Babylonian lexical lists do not treat trees, animals, vessels, birds, or whatever. They treat cuneiform writing.

These same lists cover much of the Sumerian language, and one might be tempted to see in them a treatment of the Sumerian language as well. This is true to some extent. Lists such as TU-TA-TI, Syllable Alphabet B, and Proto-Ea are not directly related to language because they treat the design and phonemic values of signs rather than their meaning. In the other lists both Sumerian and Akkadian play an important role. Necessarily so, because the distance between writing and language in the cuneiform system is much smaller than in alphabetic systems. The point is similar to the comparison between ancient lists and modern science. It can hardly be ignored that some of the thematic lists bear some resemblance to our sciences. One might even argue that learning an endless number of names for trees would sharpen the pupils' eyes to the subtle differences between species and kinds. Sumerian language and empirical reality, however, cannot fully account for the basic unity of the Old Babylonian lexical corpus. The interest in language is a derived one, closely related as it is to the writing system. The relation of this corpus with the reality out there, with the referents of the words listed, is at the most a by-product. The Old Babylonian lexical lists may be considered to be a giant encyclopedia, but an encyclopedia of writing. The intellectual effort involved in compiling and transmitting these lists, in analysing and classifying the single entries was directed at the system of writing. To take the most eloquent examples, the list of polyvalent signs Proto-Ea and the list of compound signs Proto-Diri are products of a theoretical approach to the writing system. They isolate two formative aspects of this system (polyvalency and the combination of signs, respectively) and elaborate these principles in a systematic arrangement. This analysis of the cuneiform system in the lists was very much an analysis in its own right, not guided by an interest in direct applicability. It is appropriate, therefore, to say that the Old Babylonian scribes invented a Science of Writing.

How may we understand the achievement of the Old Babylonian schools in creating this

⁹

It is possible that the consistent use of comparison in the description of the plants is a function of their use in a basically homeopathic kind of medicine. Plants which look alike may have been treated as functionally equivalent. This is perhaps reflected in Reiner's (1995, p.30 and p.120) translation of *šikinšu* as 'its nature'.

science? The question acquires further pertinence from the irrelevance of much of the contents of the lists for the actual practice of a scribe. As pointed out in §2.6, for a career as a scribe a pupil of the eduba learned both too much and too little. He learned far too much about Sumerian and he learned hardly anything about writing Akkadian. The lexical lists dealt with a writing system that was used in literary texts. Literary texts were only written in the context of the school. And thus we come full circle. Høyrup has demonstrated that a similar point may be made for mathematical school texts. The Old Babylonian period saw an explosion in mathematical progress. Mathematical problem texts start from daily life situations: a canal to be dug, a ramp to be built, and so on. The problem may often be reduced mathematically to a second-order equation, that is, a quadratic equation with two unknowns¹⁰. Notwithstanding their self-presentation, these problem texts are puzzles with no relevance for daily life whatsoever. Høyrup (1994, p.81f.) discusses the example of the unfinished ramp that is to be used to besiege a city. Among the numbers given are the height already reached and the amount of earth to be used. Among the unknowns is the intended final length of the ramp. This, of course, is nice as a puzzle, but rather difficult to imagine as a real-life problem.

The existence of the Science of Writing might be approached through the theories of literacy advanced by the anthropologist Jack Goody¹¹. Goody is one of the few writers outside Assyriology who have paid attention to the Mesopotamian lexical lists. In an article written in 1963, together with I. Watt, Goody argues that the introduction of alphabetic writing was a decisive factor in the development of abstract and theoretical thinking in classical Greece. In later publications Goody considerably qualified his original thesis and widened his scope to non-alphabetic writing systems. The crucial point of his thesis, however, remained unchanged: the importance of the technology of communication for the development of human cognition. Changes in this technology include the introduction of writing, the transition from non-alphabetic to alphabetic systems, and the introduction of the printing press. Goody denies proposing a mono-causal theory; he claims to be describing a 'trend', not an all-decisive cause. In later studies (Goody 1986 and 1987) he explicitly allows for different uses of writing in different societies. Nevertheless, according to Goody a general pattern may be discerned in all these particularities. The importance of writing for cognitive and intellectual development is due to its decontextualizing effect¹². A message, or a body of knowledge which is put into writing, is abstracted from the immediate context in which it was used or created. Outside this original context it may be re-evaluated. One of the factors contributing to the decontextualizing effects of writing, according to Goody, is layout. Speech has no spatial aspect but writing has. With the introduction of writing existing knowledge may be put into other formats which may have considerable heuristic value. One of the text formats discussed by Goody is the list (Goody 1977, pp.74-111), with due attention to the Mesopotamian lexical texts. The author maintains that in an oral situation there are few occasions which give rise to the recitation of a list. The concept of an oral list, so he argues, is not inconceivable, but a list put into writing has a beginning and an end, and therefore requires definite decisions being taken about what is to be included and what not, and where each specific item is to be placed. The cognitive challenge of a written list is therefore

¹⁰ See Neugebauer 1957, Chapter 2.

¹¹ Goody's theories have found little response in Assyriology so far. See, however, Larsen 1987 and Michalowski 1994.

¹² In the Assyriological context this point has been discussed by Vanstiphout 1995a, p.2187.

not comparable to that of an oral list. Written lists, according to Goody, trigger potentially important questions of classification.

With respect to the Old Babylonian lexical lists one might argue against Goody that we have no evidence that Mesopotamian lexical lists incited closer observation of the objects listed. As von Soden already remarked, Mesopotamians did not ask the classificatory questions which might have led to a Greek kind of biology. We have plenty of evidence, however, that the lists were modified and reinterpreted. Most lists had no fixed text in the Old Babylonian period. In §3.2 we have seen examples of sections where the problem of the exact arrangement of the items was kept open. The exercises containing the section ^{giš}gigir (chariot) show various alternative sequences. Most exercises share approximately the same set of items but there is no one standard sequence. In all cases, however, the solution to the sequencing problem follows one of a few basically graphemic rules. In other words: the lists do trigger important classificatory questions within their own field, the field of the Science of Writing.

However, in the light of the history of the Mesopotamian lexical lists this interpretation of Goody's theory leads to paradoxical results. The flexibility of the lexical lists in the second millennium is the exception. Third millennium and first millennium lists are generally fixed in their wording and in their organization. For first millennium lists one could argue that the process of interpretation went on in the creation of the commentary lists (mur-gud; see §2.5.2.2). In other words, the lists still triggered questions, though apparently not questions of order nor questions of selection. For third millennium lists no such mitigating circumstances can be found. There is no evidence that these lists were functional in creating the questions necessary for an intellectual commitment to the writing system, or to anything else. Moreover, as we have argued in §3.6, the opposition between a written list and an oral list - fundamental to Goody's account - is too rigid to understand the Old Babylonian lexical texts. The tablets with extracts from the list of trees and wooden objects we have are, obviously, written artefacts. But none of these tablets, not even the large type I examples, represent the ^{giš} list as such. The variants found in the section chariots are variants of a modern construct: the standardized text. No such standard existed in ancient times, except on a more abstract level. On this abstract level the rules that govern the organization of the text and that limit its variability are defined. It may be said, therefore, that this abstract text includes all possible variants, or rather that the abstract text contains the rules that generate variants. The generative character of the rules governing the sequentiality of the items justifies our taking later developments of the list such as are found in Emar and in first millennium sources as evidence. The development of the list over time is the diachronic counterpart of the synchronic set of variants¹³. The problem of classification, of inclusion or exclusion, is not a problem that arises from re-evaluating a written document but from transforming a virtual text - stored in and shaped by memory - into a material text. The intellectual commitment to cuneiform writing as it is found in the schools cannot, therefore, be explained by Goody's theory of the cognitive challenge raised by reducing a list to writing. Quite the contrary, the intellectual commitment precedes the lists and explains them.

4.3 The Social Uses of the Science of Writing

¹³ Which is not to deny that the rules themselves changed over time.

Recent critiques of Goody's understanding of writing as a technique with more or less predictable effects on society have been conveniently summarized by Probst (1992). Historical and ethnological research has shown that in different cultures writing is used and perceived differently and has different consequences. Writing is much more than a technique, it is also a social phenomenon affected by socially determined meanings. Probst argues that an understanding of literacy includes understanding the meaning of writing, the symbolic value of the written text, the symbolic value of being able to read and write or not being able to, and the social uses to which this meaning is put. Probst's arguments tally well with recent research into the history of sciences, where the place of the scholar in society and the social uses to which knowledge is put have become the focus of attention¹⁴.

To gain a better understanding of the social meaning of the Science of Writing we may look for general explanatory models regarding the social uses of knowledge and writing and its relation to education. Young (1971) has pointed out that societies invariably recognize a stratification of knowledge. Some kinds of knowledge are seen as intrinsically more worthwhile than others. This stratification is a cultural construct and is subject to historical change. Theology is an example of a field of knowledge that has moved down the hierarchy since the establishment of the medieval universities. The hierarchy of knowledge is an important factor in the arrangement of curricula. According to Young (p.38) higher level knowledge is characterized, among other things, by its unrelatedness. It has no direct application and the higher the status of the knowledge is, the more removed it is from daily practice.

In the Old Babylonian period writing was located high in the hierarchy of knowledge. The scribal system was so complicated that mastery of this system implied a high status. But its complexity was an unnecessary one. As exemplified by Old Assyrian writing - slightly earlier in time than our material - cuneiform writing can make do with about 100 to 200 signs, with almost no polyvalency. The flexibility of the cuneiform system is such that simplifications of this kind may be carried through without modification of the basic principles. Since there is no reason to believe that the scribes in Nippur were less clever than those in Assur or Kaniš, the conclusion is that the Old Babylonian scribes did not want a simpler system. They wanted a more complicated system and so created it. We should not think of this complicated system as a kind of cryptography. There is very little evidence, if any, that there are Old Babylonian texts which deliberately conceal their contents from outsiders. The explanation must be that the Old Babylonian scribes were interested in a complicated writing system because it created a realm of high-status knowledge. Young's account explains why writing, as taught in the eduba, is not conceived of as a practical skill but as a scholarly subject.

In the eduba this complicated writing system is closely connected with a body of Sumerian literary texts, some traditional, some newly created. This literature has no practical value either, though some compositions may have been valued for their ideological utility (see Michalowski 1987a). Among the apparent exceptions is the literary composition known as the 'Farmers Instructions' (Civil 1994), a Sumerian Georgica, which gives instructions for proper farming. The

¹⁴ A summary of recent developments in the historiography of the sciences is found most conveniently in Barton 1994, pp.1-25.

instructions found in the text represent the current farming practice of the time. However, the very fact that it has been composed in literary Sumerian shows that its practical value is not primary. There is nothing in it that could not - with less effort - be transmitted orally. The 'Farmer's Instructions' represent a kind of nostalgia, a reliable indication of the feelings of superiority on the part of the occupants of the eduba over the farmers. This was not their daily world, this was a world they could objectivize and transform into an aesthetic object.

To sum up, the eduba created a field of higher knowledge by first employing a writing system more complicated than necessary, and then creating a curriculum that contained much more than was needed to master this writing system. This must still seem an unwarranted investment in nothing, an irrelevant loss of energy and intellectual power. Cooper (1993) has proposed that Babylonian national identity be understood as a 'textual community'. The term, originally coined to explain some characteristics of medieval sects (Stock 1990), is felicitous, though I would rather restrict this community to the circle of scribes¹⁵. The curriculum of the eduba creates a community of graduates who have read and learned the same body of lists and literary texts, placing themselves in the tradition of Sumerian literature and scholarship. They share a common background and common interests. The teaching of Latin and Greek may have, or have had, a similar effect in modern times. People sharing their knowledge of Greek paradigms, having read the same passages of Homer, share experiences even if they have never met before. And by the same token they can effectively exclude those who do not share this experience. The sense of recognition, of being a group with a group identity (a textual identity, that is), may have been important for the position of the scribes in the administration. The common textual background may have helped the scribes to locate their identity and loyalty with the other scribes and administrators rather than with their own clan or family¹⁶.

The issue may be placed into a wider perspective by referring to the concept 'cultural capital' by Pierre Bourdieu. Cultural capital is used by one social group to distinguish itself from other groups. Bourdieu's analysis of the social function of 'good taste' (one aspect of cultural capital) therefore bears the title *La Distinction* (1979). This distinction is a covert form of power. It regulates the inclusion and exclusion of people in certain circles, not by physical force but by implicit rules of behaviour and taste. The pupils at the eduba learn a skill but also, and more importantly, they acquire cultural capital. They need this capital to legitimize their future place in society. A true scribe is a scribe who fits the social definition of his group. He knows Sumerian, is at home in the lexical texts, and shares his appreciation for the literary corpus with his fellow scribes. As a part of the 'textual community' he possesses, in short, nam-lu₂-ulu₃: 'humanity'¹⁷,

¹⁵ Stock used the concept 'textual community' to describe the identity of a group in some relation to a text. The groups described were 'sects' because they ventured their own interpretations of biblical texts. In Stock's definition a textual community may well contain a majority of analphabets. Similarly one could argue that the textual community in Babylonia was larger than the group of literati, but there is no way of knowing whether or how the non-literati related themselves to the classical texts. Further, it should be stressed that in Stock's view the content of the defining text (or rather the content as it was assimilated by the group) is a major aspect of the social organization of the group. This is not necessarily the case for the Old Babylonian scribes. The important point here is simply that they shared knowledge of a group of texts.

¹⁶ For this point see Michalowski 1987a, especially p.52.

¹⁷ For the translation of nam-lu₂-ulu₃ as humanity see Van Dijk 1953, p.23f.; Limet 1982.

distinction. Sumerian literary texts contain plenty of evidence for this self-esteem of the scribe, and of the social distance created between the scribe and the common man. One example is a well-known Sumerian riddle¹⁸:

A house which has a foundation (strong) like heaven,
a house which is covered with a veil like a tablet box,
a house put on a base like a goose,
one enters it blind,
leaves it seeing.
Solution: the eduba.

The connection between supreme wisdom, writing, and the eduba is found in numerous royal hymns extolling the deeds of kings from the Ur III and the early Old Babylonian periods¹⁹.

It is impossible to do justice here to the complex relations in Bourdieu's analyses between power, capital, taste, social background, art, knowledge, and other elements of private and social life. A few elements may be isolated here. First, one might be inclined to assume that the acquisition of cultural capital at school provides an opportunity for upward social mobility. This may indeed be the case for individuals but Bourdieu's analysis has shown that schooling does not have the effect of levelling out differences between social classes. Even if access to school is not restricted to specific groups in society, social background remains an important determinant in scholastic success. Moreover, and more importantly, social background influences the actual profit that can be taken from scholastic success in the form of career and income (Bourdieu 1979, *passim*). Bourdieu argues that the parvenu who succeeds in climbing the social ladder still bears the birth marks which qualify him as a parvenu, and which effectively distinguish him from the legitimate inhabitants of the social space into which he has intruded. We know little or nothing about the social background of those who attended the eduba, or about the social value of knowledge. There is reason to assume that all societies (or rather: all social groups) have some set of mechanisms to protect the social status quo. At any rate, access to school is impossible without the economic means to allow oneself to be temporarily unproductive²⁰. The more complicated the curriculum is, the more time it will take and the more effective this economic barrier will be. It is more reasonable, therefore, to interpret the school as a barrier against social mobility.

Second, Bourdieu pays attention to the ambivalent position of the autodidact. The autodidact has acquired a certain amount of cultural capital, but not through the legitimate channels. In the main he is not accepted socially as being on an equal footing with those who acquired similar knowledge and skills through proper schooling. We must ask whether all scribes had in fact gone through the full curriculum of the eduba. We have no direct evidence to answer this question. A few considerations are in order. First, higher education is necessarily for the few. All evidence suggests that the Nippur eduba represented higher education. Second, there are a number of

¹⁸ Civil 1987b, pp.19-20.

¹⁹ These passages have been translated in Sjöberg 1975.

²⁰ Schooling, according to Bourdieu, is a conversion of economic into cultural capital. On economic, cultural, and social capital and the means of conversion between them see Bourdieu 1983.

scribal tasks which could well be performed by someone with minimal literacy. An extreme example is the writing of animal tags. Such tags were fastened to the neck of an animal. They contained no more than the name of the shepherd and the word for the animal involved:

1 ewe
Shepherd:
Dadia²¹.

These tags are lumps of clay. They have three holes; apparently they are formed around a knot in a rope. The tag must be inscribed at the moment that it is attached to the rope, probably a rope that is already around the sheep's neck. It is perfectly possible that Dadia was capable of writing

a tag like this himself. It is improbable that he went to a scribal workshop with his ewe to let someone else write it for him.

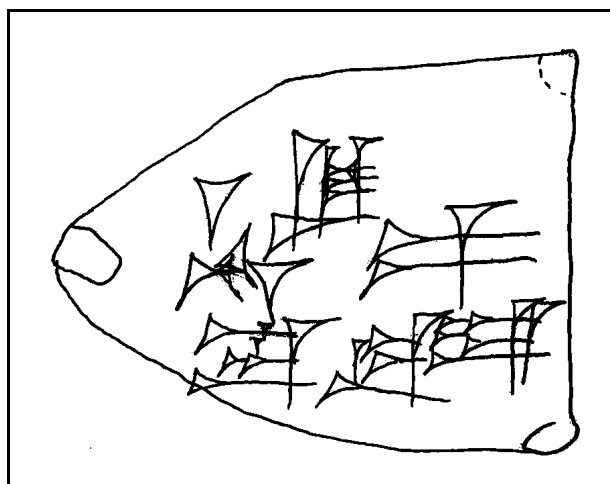


Fig 4.1 Animal Tag. Collection University of Groningen; 2x3cm.

For the Ur III period the existence of different levels of scribal competence has been demonstrated (Steinkeller 1989, pp.6-7). Scribes of lower competence were not in charge of the administration but hired themselves out to private individuals²². The relation between differences in competence and different occupations is likely to have a counterpart in a different trajectory of learning, and a different volume of cultural capital. It is plausible that a similar differentiation existed in the Old Babylonian period. The very fact that at the Nippur eduba the pupils were taught such an

excessive amount of Sumerian may suggest that this was done to create a clear differentiation between properly educated scribes, and scribes who had merely acquired the necessary skills. The Nippur school is described in a school essay as the eduba par excellence (Van Dijk 1989, p.450). This characterization possibly reflects a historical reality in which various local schools were distinguished by prestige and by the cultural capital that could be acquired there. Perhaps it is no accident that Nippur has yielded by far the richest harvest of literary school tablets. Aristocracy, according to Bourdieu, is characterized by a taste for the unnecessary. Put another way, aristocracy transforms the necessities of life such as eating into an art. The eduba

²¹ The tag belongs to the collection of the Institute of Near Eastern Languages and Cultures of the University of Groningen. The shepherd Dadia is known from other tags (e.g. *BRM* 3, 60). Published animal tags are listed in Waetzoldt 1986a. In themselves these objects are rather uninteresting. It is therefore probable that many more examples remain unpublished.

²² Ur III incantations may be classified with the products of lower-level scribes (see Veldhuis 1993). One of the Old Babylonian incantations from Nippur similarly demonstrates a low level of competence in Sumerian (UM 29-15-5). According to its editor the scribe 'ne semble pas être passé par les meilleurs écoles de Nippur' (Cavigneaux 1995, p.94).

transformed the necessary skills of literacy into the art of being versed in literature and in the Science of Writing. What a scribal pupil learned has been characterized by Høyrup (1994, p.66) as virtuosity in writing, implying both a thorough knowledge and distance from necessity. Even more implicit and hidden in the curriculum are the dispositions and values the scribal pupil acquired, in short the 'habitus' necessary for admission to the dominant class.

The treatment of writing as a science was to be of profound influence on the history of Mesopotamian literacy. In the Old Babylonian period it is restricted to the school. In the first millennium more and more of the intellectual specialists entrusted their knowledge to writing. The importance of written texts for all kinds of specialized knowledge increased, and the corpus of traditional texts was set free from the narrow context of scribal education. The Science of Writing similarly broadened its scope. It is not only used to understand writing itself, but also applied to traditional texts in order to unveil a hidden message. The analysis of the names of Marduk in *Enuma Eliš* (Bottéro 1977), the treatment of temple names in *Tintir* (George 1992), and the complex exegetical tools in the late commentary texts (Livingstone 1986) are a few examples of this inheritance. Not only the uses of literacy but also the social place of the scribes had undergone profound changes. One of the factors in the latter change was the fact that cuneiform had to compete with alphabetic Aramaic writing. In short, the transmission of the Science of Writing to the first millennium was accompanied by important shifts in context and application and it therefore acquired an almost entirely new identity.

Chapter 5 Edition of the Giš Lists

This chapter contains the edition of the Old Babylonian giš lists. Included in the edition are tablets from Nippur, Isin, Ur, Uruk, and unknown places. Excluded are tablets from Northern Babylonian centres such as Kiš, Babylon, Tell Harmal, Sippar, and Tell Haddad. What is known of the Northern Babylonian lexical texts indicates a tradition that is very different from the tradition in Nippur and the south. Since many northern texts are either unavailable (Tell Haddad, Tell ed-D_r, most of the school tablets from Kiš) or very poorly documented (Tell Harmal, Sippar) it is impossible as yet to study this tradition in a meaningful way. The northern tradition is of immense importance for the transmission of the Old Babylonian lexical tradition to the Kassite period. The meeting of northern and southern traditions after the abandonment of the south is a promising area of research. It is to be hoped, therefore, that northern texts will soon be available in larger numbers and more reliable editions than has been the case so far.

The Nippur giš list is first edited as a reconstructed eclectic text (§5.2). In this edition the main words are provided with translations. The composite text is meant for easy orientation. It is followed by a brief philological commentary (§5.3). In the second place the Nippur tablets are edited in a score (§5.4), a format that has gained popularity over the last few decades. In the score for each line of the composite text the evidence from the extant tablets is reproduced. This is particularly important for those entries which have many variants, or which are poorly preserved. Moreover, the score allows the reader to reconstruct variants in the line order in individual tablets. A few Nippur tablets which, for one reason or another, could not be adequately represented in the score are edited separately (§5.5). The texts from Ur, Isin, Uruk, and unknown places are added in §5.6. The chapter is closed by a catalogue of the tablets used.

To make full use of the available variants a more flexible tool than a printed edition is needed. For this reason the Nippur standard text, the tablet descriptions, and the line-by-line transcriptions have been included in three separate databases. These databases, rather than the printed score, have been the basis of the present study and they are available for the reader on a floppy disk. The next two sections (§5.1.1 and 5.1.2) contain an explanation of the methodological background of these databases and a short technical description.

5.1 Editing the Nippur Giš List: Methodological Considerations

The present edition of the Nippur giš list includes over 350 tablets. Some of these contain long sequences, others contribute no more than one or two lines. The amount of text on an individual tablet depends on the tablet type and on its state of preservation. Most tablet types, and the most common tablet types, contain extracts. Even if they are completely preserved (which they rarely are) they do not contain more than a part of the composition they represent. Prisms and type I tablets were inscribed with an entire lexical composition, or at least a large part of it. Of these no completely preserved example has been found, and the discovery of such a complete exemplar is unlikely. There is, therefore, no one tablet or one set of tablets that contains the whole giš list, or even approximately so. The concept of a 'best manuscript' is meaningless here. The composition has to be pieced together from all the giš tablets available. Moreover, the tablets contain many variants. These variants not only include minor variations in spelling but also variations in order,

omissions, and additions. Whether an item is 'omitted' in one tablet, or rather 'added' in another, is in many cases an arbitrary decision. Similarly, the adoption of one order as the 'standard' and all others as 'variant' is often a matter of taste rather than anything else. The standard text is a modern construct and does not coincide with any text that existed in antiquity.

5.1.1 The Concept Standard Text

From the extant Nippur *giš* tablets it is clear that there was no one rigidly standardized composition. Moreover, the cases where we may distinguish between variant traditions occurring in more than one tablet are very rare. In most cases a variant in one line is restricted to one tablet, or to a group of tablets which show no cohesion otherwise. This does not mean that the Nippur *giš* tablets show no mutual similarities at all. Quite the contrary, they may be contrasted as a group with, for instance, corresponding texts from Isin or Ur. They do represent one line of the Mesopotamian lexical tradition. The Nippur *giš* list exists, though it does not exist as a composition with one authoritative wording.

A similar problem exists for many medieval compositions. Zumthor (1972, pp.65-75) introduced the concept *mouvance* to describe and explain the variation between the extant manuscripts of the *Chanson de Roland*. If at the time of the production of the manuscript the composition is in motion, the idea of the existence of one primal and authoritative text becomes meaningless. The *Chanson de Roland* is in essence one single composition, but it has materialized differently in different manuscripts. The composition does not coincide with one existing manuscript, nor with the collection of manuscripts, nor with a lost manuscript postulated from an analysis of the variants. The composition which we call *Chanson de Roland* is an abstraction behind or above the manuscripts. The relation manuscript-composition is much like the relation between a genre and its examples. The concept *mouvance* is intended to describe the fluid existence of a composition that has an identity but is not fixed in wording¹.

For our purposes it is necessary to distinguish clearly between the *giš* text as an ancient composition and the modern composite text. The modern text is first of all a tool that is helpful in reading individual tablets and reconstructing broken lines. In the second place it is one possible, sometimes arbitrary, modern representation of an ancient composition, with which it should not be confused. The ancient composition is characterized by *mouvance*, the standard text is a printed edition with fixed line numbers. In content the modern standard text and the ancient composition have much in common, but the nature of the ancient composition and its mode of existence are radically different from anything a printed edition can be.

The ancient composition was not located in one exemplar to be used as a reference copy. It was rather found in the memories of those who learned it by heart: first the teacher and then his pupils. The teacher produced the model texts that the pupils had to copy from his memory. In their turn the pupils produced passages from their memories once they had learned them by heart. There was no one-to-one relation, however, between the text in the memory and the text as

¹ Zumthor's point has been elaborated by a number of scholars in Romance linguistics and literary history. See the summary in Fleischman 1990, particularly pp.25-27.

written. First of all, there are many reasons for assuming that the memory text was bilingual, though the Akkadian renderings were never included in writing. Moreover, both the analysis of the variants and modern research into the operation of the memory² corroborate in showing that the memory text was something more abstract, more powerful and richer, than a mere list of words. In remembering a text or a list of words there is an important role for the rules by which this text or list is organized. The materialization of the composition when it is written down from memory is, therefore, not so much a process of copying something already present in memory, but rather the production of a text following the rules by which it is governed. These rules belong to what defines a genre³. Different applications of the same rules result in different specimens of one type. The technical details of cognitive psychology and genre theory may be put to one side here. What matters is that the standard text as it is edited here is as far as we can go, but still many steps removed from the composition as it existed and functioned in the Nippur eduba.

In conclusion, the composition that we want to study is neither identical with the extant tablets, nor with the reconstructed text. Yet this is no reason for despair. The almost endless number of variants available in the over 350 Nippur tablets gives an invaluable and unique insight into how these texts actually functioned. It is the interplay between the composite text and the individual tablet that gives a much richer picture of the composition and its *mouvance* than any securely fixed text could do. In order to utilize these resources it is necessary to have an edition in which it is easy to switch between the representation of the text on a single tablet and a standard text, representing the giš list as a whole. In printed form it is virtually impossible to adopt two alternative perspectives on the same data. In digital form, however, there is nothing more natural than organizing data in various ways. For this reason the giš lists were originally edited in a set of databases.

5.1.2 The Digital Edition

The edition consists of three separate databases: Tablets, Transliterations, and Reconstructed text. The databases were originally devised in a program called Nisaba, which was written in Clipper 5.1 and runs under DOS. The databases may be imported and browsed in any dBase-related program.

The following fields have been defined:

Description	Field name	Field length
TABLETS:		
Siglum	TEXTID	10
Period	PERIOD	10

² Much of this research has been summarized in Rubin 1995.

³ See Rubin 1995, particularly p.304.

Provenance	PROVENANCE	15
Museum Number	MUS_NO	50
Publication	PUBLIC	100
Edition	EDITION	100
Remarks	REMARKS	(Memo field)

TRANSLITERATION:

Standard Line no.	L_NO	10
Siglum	TEXTID	10
Column/line no.	TEXT_LNO	10
Text	TEXT	254
Remarks	REMARKS	(Memo field)

RECONSTRUCTED TEXT:

Standard Line No.	L_NO	10
Standard Text	STANDARD	254
Remarks	REMARKS	(Memo field)

The program Nisaba was designed specifically for the purposes of the present project. Nisaba is able to show two databases on screen simultaneously. A line from the Standard text may be viewed together with all its occurrences in the tablets. Or one may examine the description of a tablet together with the transliteration of its contents. Moreover, and most importantly, Nisaba can easily switch between a 'tablet-oriented' and a 'standard text-oriented' approach to the transliterations simply by alternating indexes. Unfortunately Nisaba is an experimental program, not suitable for distribution.

5.2 Standard Nippur Text

In the following edition most lines have two numbers. The first number is the line number in the present text. The second number is the corresponding line in the first millennium version of *ur₅-ra*. Thus the number 013 3032 means: line 013 of the Nippur text, which corresponds to line 32 of *ur₅-ra* tablet 3. The relevant tablets of first millennium *ur₅-ra* are edited in *MSL* 5 and 6.

For the orientation of the reader the main words have been translated. Thus the word ^{giš}apin is rendered 'plough', but the various kinds of ploughs and their parts are not translated. In the commentary (§5.3) and in Chapter 3 a number of words are discussed and references to relevant literature are given.

001 3001	giš taskarin	boxwood
002 3002	giš esi	ebony
003 3003	giš nu ₁₁	
004 3004	giš ha-lu-ub ₂	oak
005 3005	giš ša ₃ -kal	
006 3006	giš kin ₂	
006a 3007	giš kin ₂ -babbar	
006b 3008	giš kin ₂ -gi ₆	
007 3011	giš gi ₆	
008 3012	giš geštin	vine
009 3013	giš geštin-kir ₄	
010 3015	giš geštin-ka ₅ -a	
011 3017	giš geštin-gam-ma	
012 3029	giš peš ₃	fig
013 3032	giš hašhur	apple tree
014 3033	giš hašhur-kur-ra	
015 3050	giš še-dug ₃	
016 3049	giš še-nu	
017 3052	giš še-še	
018 3067	giš šinig	tamarisk
019 3072	giš šinig-dili	
020 3068	giš šinig-kur	
021 3053	giš šar _x (NE)-ša ₄ -bid ₃	
022 3054	giš MES-šar _x (NE)-ša ₄ -bid ₃	
023 3061	giš lam	pistachio
024 3062	giš LAM	
025 3074	giš u ₃ -suh ₅	fir
025a 3075	giš u ₃ -suh ₅ -tur	
025b 3079	giš u ₃ -suh ₅ -pa-kud	
025c	giš u ₃ -suh ₅ -a-de ₂ -a	
026 3083	giš še-u ₃ -suh ₅	
027 3088	giš pa-u ₃ -suh ₅	
027a	giš an-u ₃ -suh ₅	
028 3091	giš bir-GAM-la-e	
029 3092	giš šim-gig	

030	3126	giš šennur	
030a	3128	giš šennur-kur-ra	
031	3136	giš lam-gal	
032	3137	giš lam-tur	
033	3133	giš al-la-nu-um	
034	3138	giš ildag ₂	poplar
035	3140	giš ildag ₂ -kur	
036	3141	giš ildag ₂ -bur-ra	
037	3146	giš ildag ₂ -šita ₃ -na	
038	3152	giš kur-ra	
039	3154	giš ab-ba	
040	3155	giš ab-ba-me-luh-ha	
041	3156	giš gi ₆ -par ₄	
042	3158	giš ma-nu	willow
043	3163	giš ma-nu-šu-AG	
044	3164	giš ma-nu-gibil ₂ -AG	
044a	3171	giš ma-nu-kal-la	
045	3186	giš nu-ur ₂ -ma	pomegranate tree
046	3195	giš KID-da	
047	3196	giš KID-da	
048	3199	giš KID-da-zil-la ₂	
049	3200	giš mes	
050	3204	giš mes-ma ₂ -gan-na	
051	3205	giš mes-me-luh-ha	
051a		giš mes-alan	
051b	3211	giš mes-tu	
051c	3206	giš mes-ki-gar-ra	
051d	3216	giš mes-ha-lu-ub ₂ -har-ra-an-na	
051e	3214	giš mes-gi ₆	
052	3217	giš erin	cedar
052a	3222	giš BAD-erin	
052b		giš pa-erin	
052c		giš LU-DUG ₃ -A	
052d		giš A.TU.GAB.SIG.GAR	
053	3225	giš šu-ur ₂ -min ₃	cypress
054	3226	giš za-ba-lum	
055	3227	giš e-la-ma-kum	
056	3229	giš gi-ri ₂ -lum	
057	3231	giš gi-rim	
058	3237	giš zi-ir-dum	
059	3254	giš ur-nu-um	
060	3260	giš ti-a-ru-um	
061	3250	giš ri ₂ -a-num ₂	
062	3255	giš ur-zi-num ₂	
063		giš mi-ri ₂ -iš-gar-ra	
064	3265	giš isi ₂ -mu ₂	shoot
064a	3266	giš gibil	shoot

065	3280	giš nimbar	date palm
066	3289	giš nimbar-tur	
067	3282	giš nimbar-kur-ra	
068	3284	giš nimbar-dilmun-na	
069	3315	giš nimbar-al-dar-ra	
070	3309	giš nimbar-al-kud-da	
071	3310	giš nimbar-al-šab	
072		giš nimbar-gu ₂ -na	
073	3344	giš nimbar-LU ₂ -IM	
074	3294	giš nimbar-libiš-bu-ra	
075	3312	giš nimbar-al-kum-ma ₃	
075a		giš nimbar-kum ₂ -ma	
076		giš nimbar-izi-gu ₇ -a	
077	3304	giš nimbar-uh-gu ₇ -a	
077a	3306	giš nimbar gig-[
078	3301	giš nimbar-al-ug ₅ -ga	
078a	3313	giš nimbar-al-gaz-za	
079	3303	giš nimbar-al-uš ₂ -a	
080		giš nimbar-sig ₇ -sig ₇ -al-šeg ₆	
081	3351	giš ša ₃ -nimbar	
082	3355	giš suhur-nimbar	
083	3293	giš ama-nimbar	
084		giš KU-giš.kiri ₆ -nimbar	
085		giš KU-giš.kiri ₆ -NE-nimbar	
086	3356	giš pa-nimbar	
087	3357	giš pa-kud-nimbar	
088	3359	giš dalla ₂ -nimbar	
089	3398	giš mud-nimbar	
090	3360	giš ze ₂ -na-nimbar	
091	3369	giš zu ₂ -nimbar	
092		giš zu ₂ -gan-na-nimbar	
093	3373	giš zu ₂ -gu-la-nimbar	
094	3380	giš TUG ₂ -nimbar	
095		giš pi-el-la ₂ -nimbar	
096		giš u ₃ -luh-nimbar	
097	3389	giš ga ₂ -li-nimbar	
098	3402	giš an-na-nimbar	
099		giš ki-ta-nimbar	
099a		giš ša ₃ -ta-zu ₂ -lum-ri-ri-ga-nimbar	
100	3407	giš nig ₂ -ki-luh-ha-nimbar	
101		giš nig ₂ -ga ₂ -nimbar	
102	3384	giš peš-nimbar	
103		giš peš-murgu-nimbar	
104		giš peš-banda ₃ -zi-nimbar	
105	3411	giš asal ₂	Euphrates poplar
106	3412	giš asal ₂ -kur	
107		giš asal ₂ -dug ₃	

108	3416	giš NE-asal ₂	
109	3421	giš numun-asal ₂	
110	3422	giš il-ur ₂	
111		giš ad ₂	
112	3439	giš kiši ₁₆	acacia
113	3441	giš kiši ₁₆ -har	
114	3441a	giš kiši ₁₆ -har-kur	
115	3447	giš sa-ma-na ₂	
116	3448	giš sa-ma-zum	
117	3450	giš peš ₇ -kal	
118		giš ŠU.KAL	
119		giš šu-dib-ba	
120		giš ŠU.KAL	
121	3466	giš šušin (MUŠ ₃ -ERIN)	licorice
122	3238	giš ši-iq-dum	
123	3455	giš zar-si	
124		giš mu-TUM-da	
124a		giš zi ₂ -ir-dum	
125	3469	giš gi-zu ₂ -lum-ma	
126	3470	giš BU-zu ₂ -lum-ma	
127	3480	giš dili-bu-um	
128	3482	giš an-ta	
129	3483	giš huš	
130	3486	giš maš	
131	3488	giš maš-gurum	
132	3489	giš guru ₅ -uš	
133		giš sag-EZEN	
134		giš si-sag-EZEN	
135	3493	giš i-ri ₉ -na	root
136	3494	giš a-ri ₉ -na	
137	3498	giš gilim-an-na	
138		giš gilim-ezen	
139	3505	giš u ₃ -luh	branch
140	3515	giš pa	branch
141	3512	giš pa-kud	
141a		giš SUG	
142	4001	giš as ₄ -lum	measuring rod
142a		giš [N]I [?] -gu ₂	
143		giš SUG-da	
144	4006	giš dib-dib	water clock
145		giš u ₅	
145a		giš GAN-[
145b		giš kal-la-bi	
145c		giš []-bi	
145d		giš gu ₇	
146		giš ^d ha-ia ₃	
147	4021	giš dub-dim ₂	tablet mould

148	4022	giš šumun-gi ₄	
149	4024	giš ti-bal	
150	4016	giš ŠID-ma	accounting board
151	4029	giš tun ₃	
152	4036	giš ba	a tool (knife?)
152a	4038	giš ba-KA	
153		giš ba-amar	
154		giš ba-še	
155	4041	giš ba-šab	
155a		giš ba-kal	
155b		giš ba-PA	
156	4053	giš hub ₂	
157	4054	giš na-ru ₂ -a	stele
158	4055	giš ešgiri-šu-du ₇	neckstock
159		giš nig ₂ -na-UD	
160	4069	giš gu-za	chair or throne
161	4070	giš gu-za-sig ₅	
162	4071	giš gu-za-gid ₂ -da	
163	4072	giš gu-za-sir ₃ -da	
163a	4073	giš gu-za-munus-e-ne	
164		giš gu-za-ma ₂ -lah ₅	
165	4097	giš gu-za- ^{giš} kin-ti	
166	4083	giš gu-za-nig ₂ -ba	
167	4084	giš gu-za-nig ₂ -šu	
168	4085	giš gu-za- ^{giš} gigir	
169	4095	giš gu-za-anše	
170	4079	giš gu-za-kaskal	
171		giš gu-za-garza ₂	
172		giš gu-za-nam-lugal-la	
173		giš gu-za-nam-en-na	
174		giš gu-za-nam-nin-a	
175	4094	giš gu-za-ša ₃ -hul ₂ -la-a	
176	4116	giš gu-za-šu-SAR-e-du ₃ -a	
177	4118	giš gu-za-KA-[]-e-du ₃ -a	
178	4096	giš gu-za-ša[h-šum]-ma	
179	4098	giš gu-za-ma ₂ -gan-na	
180	4099	giš gu-za-me-luh-ha	
181	4100	giš gu-za-ma ₂ -lah ₄	
182	4076	giš gu-za-aratta	
183	4081	giš gu-za-nita	
184	4082	giš gu-za-munus	
185		giš gu-za-ukkin-na	
186		giš gu-za-lukur	
186a	4093	giš gu-za-gi[dim?]	
187	4078	giš gu-za-ki-uš ₂	
188		giš gu-za-silim-ma	
189	4110	giš gu-za- ^{giš} taskarin	

190	4111	giš gu-za- ^{giš} esi	
191	4113	giš gu-za- ^{giš} ša ₃ -kal	
192	4113a	giš gu-za- ^{giš} mes	
193	4114	giš gu-za- ^{giš} mes-ma ₂ -gan.ki	
194		giš gu-za- ^{giš} mes-me-[luh-ha]	
195	4103	giš gu-za-gar ₃ -ba	
196	4105	giš gu-za-gar ₃ -ba-ku ₃ -babbar-[-	
197	4107	giš gu-za-gar ₃ -ba-zabar	
198	4108	giš gu-za-gar ₃ -ba- ^{giš} kin ₂ -[-	
199	4123	giš BAD-[gu-za]	
200	4126	[giš sag-gu-za]	
201	4124	[giš di ₅ -gu-za]	
202	4125	[giš i-zi-gu-za]	
203	4121	[giš umbin-gu-za]	
204	4129	giš šu ₂ -a	stool
205	4130	giš šu ₂ -a-du ₁₀ -sa	
206		giš šu ₂ -a-nagar	
207	4134	giš šu ₂ -a-bur-gul	
208	4135	giš šu ₂ -a-tibira	
209	4133	giš šu ₂ -a-kaskal-la	
210	4140	giš šu ₂ -a-nig ₂ -gu-la	
211	4143	giš gir ₃ -gub	footstool
212	4144	giš gir ₃ -gub- ^d lama	
213	4145	giš gir ₃ -gub-zu ₂ -am-si	
214	4146	giš nu ₂	bed
215	4147	giš nu ₂ -AŠ-nu ₂	
216	4148	giš nu ₂ -ki-nu ₂	
217	4149	giš nu ₂ -g[u ₂]-z[i]-g[a]	
220	4157	giš nu ₂ -ša ₃ -tuku	
221	4158	giš nu ₂ -ša ₃ -tuku-sik ₂ -ga-rig ₂ -ak	
222		giš nu ₂ -ur ₄ -ma	
223	4165	giš zag-an-dul ₃ -nu ₂	
224		giš bar-si-nu ₂	
225		giš BAD-[nu ₂]	
226	4166	giš sag-[nu ₂]	
227	4170	giš di ₅ -[nu ₂]	
228	4172	giš i-[zi-nu ₂]	
229	4173	[giš umbin-nu ₂]	
230	4175	giš dilim ₂ -gal	spoon
231	4174	giš dilim ₂	
232		giš dilim ₂ -da	
233	4181	giš ma-al-tum	
234	4188	giš banšur	table
235	4200	giš dilim ₂ -banšur	
236	4203	giš umbin-banšur	
237	4198	giš banšur-zag-gu-la	
238	4199	giš banšur-zag-gar-ra	

239 4204	giš ka-kara ₄ (KAD ₄)	type of table
240 4208	giš ka-kara ₄ -zu ₂ -am-si-si-ga	
241	giš maš-tak-da	
242 4209	giš emerah	bowl
243	giš emerah-GAM-ga	
244	giš emerah-ti	
245 4223	giš muru ₅ -za-nu-um	
246 4225	giš kun ₄	ladder
247 4226	giš kun ₄ -bad ₃ -da	
248	giš kun ₄ -M[E?-]-U-SI?	
250 4231	giš u ₃ -[kun ₄]	
251 4232	giš S[UH-kun ₄]	
252 4233	giš bu[gin (LAGABxA)]	container
253 4235	giš bugin-tur	
254 4238	giš [bugin]-ZU-bar-ra	
255 4242	giš naga ₃	mortar
256 4243	giš naga ₃ -še	
257 4244	giš naga ₃ -še-giš-i ₃	
258	giš naga ₃ -esir-e ₃ -a	
259 4247	giš tukul-naga ₃ -si ₃ -gaz	pestle
260 4248	giš gan-na	pestle
261 4251	giš girah (ŠU-DIM ₂)	building material for a boat
261a	[]-DIM ₂	
262 4252	giš eme-sig	small plank
263 4254	giš mi-ri ₂ -za	board
264 4255	giš mi-ri ₂ -za-zag-gi-a	
265 4262	giš ma ₂	boat
266 4263	giš ma ₂ -gur	
267 4273	giš ma ₂ -sig-ga?	
268	giš ma ₂ -[] x	
269 4265	giš ma ₂ -u ₅	
270	giš ma ₂ -da-la ₂	
271 4274	giš ma ₂ -gur-šu-ku ₆	
272 4275	giš ma ₂ -peš-peš	
273	giš ma ₂ -gur-šu-gi ₄	
273a	giš ma ₂ -X-LAGAB	
274 4277	giš ma ₂ -ma ₂ -ri	
275 4284	giš ma ₂ -su-a	
276 4285	giš ma ₂ -dim-dug ₄ -ga	
277 4287	giš ma ₂ -NE	
278	giš ma ₂ -du ₈	
279 4354	giš ma ₂ -60-gur	
280 4355	giš ma ₂ -50-gur	
281 4356	giš ma ₂ -40-gur	
282 4357	giš ma ₂ -30-gur	
283 4358	giš ma ₂ -20-gur	
283a	giš ma ₂ -15-gur	

284	4359	giš ma ₂ -15-gur	
285	4360	giš ma ₂ -10-gur	
286	4361	giš ma ₂ -5-gur	
287	4264	giš ma ₂ -tur	
288	4293	giš ma ₂ -an-na	
289	4295	giš ma ₂ -aš-te	
290	4299	giš ma ₂ -gur ₈ - ^d nin-lil ₂	
291	4319	giš ma ₂ -gur ₈ - ^d da-mu	
292	4308	giš ma ₂ -kar-nun-ta-e ₃ -a	
293	4304	giš ma ₂ -dara ₃ -abzu	
294	4312	giš ma ₂ -nu-ri	
294a	4313	giš ma ₂ -nu-ri-ban ₃ -da	
294b		giš ma ₂ -UD-nu-ri	
295	4297	giš ma ₂ -gur ₈ -nu-ub ₂ -zu	
296	4281	giš ma ₂ -dilmun-na	
297	4362	giš u ₃ -ma ₂	
298	4380	giš e ₂ -ma ₂	
299	4367	giš si-ma ₂	
300	4373	giš anše-ma ₂	
301	4374	giš dim-ma ₂	
302		giš dib-ma ₂	
303		giš lu ₂ -KA-ma ₂	
304		giš u ₅ -zi-pa-ah-ma ₂	
305	4376	giš egir-ma ₂	
306		giš peš-eš ₃ -ma ₂	
307	4352	giš ma ₂ -addir	
307a		giš ma ₂ -lugal	
308	4391	giš ma ₂ -du ₃	
309		giš bal-ma ₂ -du ₃	
309a		giš zag-ma ₂ -du ₃	
310	4393	giš gir ₂ -ma ₂ -du ₃	
310a		giš peš-ma ₂ -du ₃	
311	4392	giš uš ₂ -ma ₂ -du ₃	
312	4388	giš durgul (MA ₂ -DU ₃)	mooring pole or mast
313	4389	giš an-ta-durgul (MA ₂ -DU ₃)	
314	4417	giš zi-gan	rudder
315	4419	giš dilim ₂ -zi-gan	
316	4420	giš sig-zi-gan	
317	4025	giš an-ti-bal	
318		giš zi-in-hur	
319	4421	giš kak	
320	4422	giš ir	
321	4428	giš ENxKAR ₂	staff
322	4428a	giš gag-ENxKAR ₂	'peg' of a staff
323	4429	giš šibir	staff
324	4430	giš gag-šibir	'peg' of a staff
325	7b146	giš kab-bar	shepherd's crook

326	5006	giš gigir	chariot
327	5015	giš e ₂ -gigir	
328	5016	giš e ₂ -usan ₃ -gigir	
329		giš SUM-KI-A-gigir	
330	5042	giš kun-gigir	
331	5056	giš GUL-gigir	
331a		giš ŠIBIR-en-DU-[
332	5023	giš sahar-gi-gigir	
333	5047	giš su-din-gigir	
334		giš su-lum-mar-gigir	
335	5052	giš sag-kul-gigir	
336	5040	giš sag-dur ₂ -gigir	
337	5034	giš gir ₃ -gub-gigir	
338	5045	giš mud-gigir	
339		giš gag-mud-gigir	
340	5049	giš šudul-gigir	
341	5050	giš gag-šudul-gigir	
342	5054	giš umbin-gigir	
343	5055	giš gag-umbin-gigir	
344	5025	giš si-gigir	
345		giš gaba-gigir	
346	5021	giš gaba-gal ₂ -gigir	
347		giš usan ₃	(grip of the) whip
348		giš usan ₃	
349		giš eme-usan ₃	
350		giš ama-usan ₃	
351	5059	giš gag-sal ₄	type of wagon
352		giš za-ra-gag-sal ₄	
353		giš umbin-gag-sal ₄	
354		giš šid-du ₃ -gar	
355	5068	giš šid-du ₃ -bar	
356	5070	giš šid-du ₃ -a-ša ₃	
357	5073	giš mar-gid ₂ -da	wagon
357a		giš mar-gid ₂ -[da-	
358		giš gu-za-mar-gid ₂ -da	
359		giš za-ra-mar-gid ₂ -da	
360		giš gag-za-ra-mar-gid ₂ -da	
361		giš sag-kul-mar-gid ₂ -da	
362		giš sag-dur ₂ -mar-gid ₂ -da	
363	5085	giš gir ₃ -gub-mar-gid ₂ -da	
364		giš mud-mar-gid ₂ -da	
365		giš gag-mud-mar-gid ₂ -da	
366		giš šudul ₄ -mar-gid ₂ -da	
367		giš gag-šudul ₄ -mar-gid ₂ -da	
368	5092	giš umbin-mar-gid ₂ -da	
369	5095g	giš gag-umbin-mar-gid ₂ -da	
370	5090	giš u ₄ -sakar-mar-gid ₂ -da	

371	5091	giš gag-u ₄ -sakar-mar-gid ₂ -da	
372	5088	giš nam-ha-ru-um-mar-gid ₂ -da	
373	5083	giš en ₃ -dur-mar-gid ₂ -da	
374	5199	giš ig	door
375	5200	giš ig-gal	
376	5233	giš ig-i ₃	
377	5234	giš ig-i ₃ -šeš ₂	
378	5210	giš ig-li	
379	5207	giš ig-dib	
380	5244	giš ig-suh ₄	
380a	5236	giš ig-pa-pah	
381	5218	giš ig-maš-tab-ba	
381a		giš ig-ba-ša ₃ -ga	
382	5251a	giš ig-u ₃ -ma	
383	5206	giš ig-ul-la	
384	5239	giš ig-ze ₂ -na	
385	5237	giš ig-mi-ri ₂ -za	
386	5250	giš ig-ka ₂ -tilla ₂	
387	5247	giš ig-ka ₂ -e ₂ -gal-la	
388	5252	giš suku ₅ -ig	
389	5253	giš u ₃ -ig	
390	5254	giš u ₄ -sakar-ig	
391	5259	giš bar-du ₃ -ig	
392	5255	giš dun ₃ -la ₂ -ig	
393		giš ir-ig	
394	5267	giš suhub ₄ -ig	
394a	5267	giš ŠU-DI	latch
394b	5268	giš šu-ga	
395	5264	giš nu-kuš ₂ -u ₃	pivot
396	5265	giš nu-kuš ₂ -u ₃ -an-na	
397	5266	giš nu-kuš ₂ -u ₃ -ki-ta	
398	5270	giš sag-kul	bar
399	5271	giš sag-kul-nim-ma	
400	5275	giš eš ₂ -sag-kul	
401		giš sag-kul-la ₂ -a	
402	5294	giš si-gar	bolt
403	5295	giš gag-si-gar	
404		giš si-gar-gu ₂ -e ₃ -a	
405	5286	giš mud	handle
406	5287	giš gag-mud	
407		giš šerim(TAG)	heddle of the loom
408	5300	giš TAG-TUG ₂	
409	5307a	giš kur-ra	
410	5308	giš nu-ra	
411	5314	giš il ₂ -il ₂	
412	5312	giš bar-bar	shuttle
413	5317	giš tug ₂ -tug ₂	

414	5319	giš nig ₂ -zu	
415	5318	giš nig ₂ -gi-na	cloth beam
416	5313	giš nig ₂ -menbulug ₂ (BULUG/BULUG)	
417		giš a ₂ -šu-du ₇ -tug ₂ -ga	
418	6012	giš ga-rig ₂	comb
419	6013	giš ga-rig ₂ -sig ₂	
420	6014	giš ga-rig ₂ -sag-du	
421	6015	giš ga-rig ₂ -pa-mušen	
421a	6018	giš ga-rig ₂ -e ₂ -pa-na	
422	6019	giš bal	spindle
423	6030	giš e ₂ -bal	
424	6026	giš sag-bal	
424a		giš BAR?-bal	
425	6028	giš me-te-bal	
426	6043	giš LAGAB	
427	6044	giš LAGAB	
428	6045	giš LAGAB	
429	6081	giš BU	
430	6082	giš BU	
431	6083	giš BU	
432	6084	giš BU	
433	6092	giš sahar-BU	
434	6097	giš bu	handle
435	6098	giš bu- ^{gi} ma-an-sim	
435a		giš bu-ŠID	
436	6108	giš rin ₂	scales
437	6110	giš rin ₂ -lib-lib-bi	
438	6113	giš rin ₂ -1-gun	
439		giš rin ₂ -ma-na	
440	6116	giš e ₂ -rin ₂	
441	6115	giš dilim ₂ -rin ₂	
442	5110	giš apin	plough
443	5116	giš apin-šu	
444	5117	giš apin-šu-du ₇	
445	5118	giš apin-šu-nu-du ₇	
446	5123	giš apin-tug ₂ -sig ₁₈	
447		giš apin-sag-e ₃	
448	5131	giš apin-gud-4-la ₂	
449	5135	giš sag-apin	
450	5137	giš eme-apin	
451	5144	giš ka-šu ₂ -apin	
452	5152	giš šu-sag-apin	
452a	5151	giš igi-gal ₂ -apin	
453	5157	giš nig ₂ -kud-apin	
454	5158	giš nig ₂ -PI-apin	
455	5161	giš sal-la-apin	
456	5162	giš gag-sal-la-apin	

457	5159c	giš nig-apin	
458		giš gag-nig-apin	
459	5166	giš šudul-apin	
460	5167	giš gag-šudul-apin	
460a		giš muš-apin	
460b		giš gag-muš-apin	
461	5139	giš da-apin	
462		giš gan-apin	
463	5141	giš li-apin	
464	5146	giš ninda ₂ -apin	
465		giš a ₂ -gud-apin	
466		giš an-za-am-apin	
467		giš gag-sa-la ₂	peg to attach a rope
468	5173	giš gan ₂ -ur ₃	harrow
469	5174	giš gan ₂ -ur ₃ -sar-ra	
470	5175	giš gan ₂ -ur ₃ -zu ₂ -gal-la	
471		giš sa-gan ₂ -ur ₃	
472	5185	giš u ₅ -gan ₂ -ur ₃	
473	5183	giš sag-gan ₂ -ur ₃	
474	5160	giš da-an-ga	
475	7a148	giš suhur	goad
476	7a149	giš suhur-gud	
477	7a152	giš al	hoe
478	7a155	giš al-zu ₂	
479	7a166	giš al-šub	
480	7a159	giš al-zu ₂ -2	
481	7a160	giš al-zu ₂ -3	
482	7a161	giš al-zu ₂ -4	
483	7a169	giš u ₃ -šub	brick mould
484	7a173	giš u ₃ -šub-ab-ba	
485	7a170	giš u ₃ -šub-sig ₄	
486	7a171	giš u ₃ -šub-sig ₄ -al-ur ₅ -ra	
487	6133	giš gag-du ₆ -ba-al-la ₂	stick for uprooting
488	6134	giš gag-sum-ba-al-la ₂	
489		giš gag-sum-sal-la	
490	6135	giš gag-sum-šir-dili	
491	6150	giš zi-ri ₂ -qum	irrigation device
492		giš gu ₂ -zi-ri ₂ -qum	
493	6153	giš nam-nu-tar-re	
494	6157	giš I-LU	
495	6158	giš I-DIB	
496	7a006	giš tukul	weapon or mace
497	7a014	giš tukul-šu	
498	7a015	giš tukul-ur ₂ -ra	
499	7a024	giš tukul-kun	
500	7a010	giš TUKUL-DINGIR	
501		giš tukul-gaz	

501a	giš tukul-mah	
502 7a028	giš sag-tukul	
503 7a030	giš a-ga-tukul	
504 7a012	giš mi-tum	mace
505	giš mi-tum-sag-50	
506 7a001	giš utug ₂	mace
507	giš utug ₂ -sag-50	
508 7a174	giš dur ₂	bottom board
509 7a200	giš dur ₂ -pisan	
510 7a178	giš dur ₂ -ab-ba	
511 7a175	giš dur ₂ -sig ₄	
512 7a176	giš dur ₂ -sig ₄ -al-ur ₅ -ra	
513 7a204	giš dur ₂ -bi-eš-gar-[ra]	
514 7a205	giš bar-bi-eš-gar-ra	
515 7a226	giš lid ₂ -ga	measuring vat
516 7a218	giš ba-ri ₂ -ga	
517 7a231	giš ba-an	
518 7a235	giš ba-an-5-sila ₃	measuring vat of 5 sila
519	giš nig ₂ -2-sila ₃	
520 7a237	giš 1 sila ₃	
521	giš 1/2 sila ₃	
522 7a239	giš 1/3 sila ₃	
523 7a240	giš 2/3 sila ₃	
524	giš 10 gin ₂	
525	giš 5 gin ₂	
525a	giš 3 gin ₂	
525b	giš 2 gin ₂	
526	giš 1 gin ₂	
527 6160	giš sa	net
528 6164	giš sa-gal	
529	giš sa-sig	
530 6169	giš sa-ur ₃ -ra	
531 6183a	giš sa-giš-gi	
532 6171	[giš sa-šu]-uš-gal	
533 6190	[giš sa]-hir	
534 6175	[giš sa]-du ₃	
535	[giš sa]-NI	
536 6220	giš har-mušen-na	trap for birds
537 6221	giš gidru-har-mušen-na	
538 6222	giš gur ₂ -har-mušen-na	
539	giš ellag ₂ -du	trap
540	giš ellag ₂ -du-tur-ra	
541	giš šul-ka-tar-ra	
541a	giš šul-HAR-tur-ra	
542	giš šu-uš	
543 4027	giš igi-gal ₂	
544 3269	giš ligima(IGI-TUR-TUR)	shoot

545	3270	giš ligima(IGI-TUR-TUR)	
546	3271	giš ligima(IGI-TUR-TUR)	
547	6234	giš IGI-NI	arrow
547a		giš IGI-NI	
548	6235	giš IGI-KAK	spear
549	6237	giš za-am-ru-tum	lance
550	7a039	giš šu-nir	standard
551	6239	giš gid ₂ -da	
551a		giš lugud ₂ -da	
552	7a066	giš illar	javelin
552a		giš illar-šu-lugal	
553	7a069	giš illar-šub-ba	
554	7a077	giš illar-e-ba-an	
554a		giš [illa]r-NUN-dili	
554b		giš illar-DU.šeššig-DU-a	
554c	7a079	giš LAGAB-illar	
555	7a048	giš pan	bow
556	7a049	giš e ₂ -pan	
557	7a052	giš gag-pan	
558		giš gag-si-sa ₂	arrow
559		giš gag-si-eš	
560		giš eš-ad	snare
561	6192	giš sa-ad	
562	7a243	giš lib-bi-da	axe
563		giš ha-bu-da	axe
564	7a105	giš igi-gal ₂	
565	6231	giš gin ₂	
566	6233	giš gin ₂ -sal	
567	6227	giš aga	
568	6228	giš aga-GIN ₂ -ma	
569	6229	giš aga-šilig-ga	
569a		giš aga-AŠ-GAR	
570		giš aga-e-da?	
571		giš U ₂ -e-[
572		giš KID-a ₂ -gar	
573		giš KID-tukul-mah	
574		giš KID-dim	
575		giš KID-dim-[
576		giš [u ₄ -sakar]	half wheel
577		giš gag-[u ₄ -sakar]	
578	7a116	giš ni ₃ -sakar	
579	7a118	giš ni ₃ -sakar-bur ₃ -bur ₃	
580	7b001	giš mar	shovel
581	7b010	giš mar-šu	
582	7b012	giš mar-ninda	
583		giš mar-ninda-sig ₅	
584	7b014	giš mar-nig ₂ -sur-ra	

585	7b026	giš mar-im-ma	
586	7b005	giš mar-še-bad	
587		giš mar-še-du ₃	
588		giš mar-zabar	
589		giš ŠID-mar	
590	7b030	giš eme-mar	
591	7b033	giš kul-mar	
592	6058	giš BAD	
593	6059	giš BAD	
594	6060	giš BAD	
595	7a145	giš dag-si	saddle knob
596	7a147	giš dag-si-e-ba-na	
597	7b039	giš balag	musical instrument
598	7b040	giš balag-di	
599		giš a ₂ -balag	
600	7b062	giš a ₂ -la ₂	
601	7b063	giš al-gar	
602	7b059	giš al-gar-sur ₉	harp
603	7b074	giš sa-bi ₂ -tum	
604	7b077	giš mi-ri ₂ -tum	
605	7b079	giš ur-za-ba ₄ -ba	
606	7b086	giš ur-gu-la	
607	7b055	giš h[ar]-har	
608		giš nig ₂ -har-mu[šen]	
609		giš []-gal ₂ ?	
610	7b044	giš za ₃ -mi ₂	lyre
611		giš kul-za ₃ -mi ₂	
612	7b050	giš dub-za ₃ -mi ₂	
613		giš tigidlu	
614		giš tigidlu-kaskal-la	
615		giš tigidlu-sa-III	
616		giš tigidlu-NIM-ma	
617	7b117	giš gu ₃ -di	
618	7b126	giš du ₃ -a	
619		giš šu-kar ₂	
620		giš šu	
621	7a134	giš ebir	rack for vessels
622		giš ebir-a	
623	7a135	giš ebir-kaš	
624	7a128	giš ga-an-nu-um	rack for vessels
625	7a129	giš ga-an-nu-um-a	
626	7a129	giš ga-an-nu-um-ga	
627	7a129	giš ga-an-nu-um-kaš	
627a		giš DUG-DUG-7-bi	
628	7a139	giš DUG-gub	
629	7a141	giš zabar-gub	
630		giš ma ₂ -gaz	slaughtering bench

631	giš ma ₂ -gaz-bur ₃ -bur ₃	
632 7b037	giš in-nu-šu-gur ₁₀ -a	straw chopper
633	giš pap-hal-la	
634 7a088	giš gud-si-dili	battering engine
635 7a090	giš zu ₂ -gud-si-dili	
636	giš eme-gud-si-dili	
637 7a091	giš murgu-gud-si-dili	
638 7a092	giš gešpu ₂ -gud-si-dili	
639 7a081	giš ze ₂ -na	siege engine
640 7a083	giš ze ₂ -na-mah	
641	giš ur ₂ -TUG ₂	
642	giš ur ₂ -eš ₅	
643	giš ur ₂ -limmu	
644	giš ur ₂ -tal ₂ -la	
645 4410	giš gisal	oar
646 4411	giš gisal-šu	
647 4413	giš gisal-anše	
648	giš kab	shaft (of a knife)?
649	giš kab-gir ₂	
650	giš kab-UR ₄ -LAGAB	
651	giš kab-nig ₂ -kiši ₁₆	
652	giš gišgal	plinth
653 7a142	giš halba ₅	
654	giš tir-ug ₅ -ga	
655	giš pa-gibil-ug ₅ -g[a]	
655a	[g]iš pa-kud-ug ₅ -ga	
656	giš ni[nda ₂]	part of the funnel of a seeder plough
657	giš ninda ₂	
658	giš en-ninda ₂	
662	[giš] gir ₃ -re	
663 6046	giš KUR	
664 6047	giš KUR	
665 6048	giš KUR	
666 6052	giš KAL	
667 6053	giš KAL	
668 6054	giš KAL	
673	giš gi-dub	
674	giš KA-gud	
675	giš LUM-LUM-anše	
676 3476	giš NIM	camel thorn
677	giš NIM	
678	giš NIM	
679 3477	giš NIM-kur	
680 7b141	giš rab	stock
681 7b139	giš šu-lu ₂	
682 7a209	giš kun-UMBIN	
683 7a210	giš nig ₂ -UMB[IN]	

684	giš šagan-la ₂	
685	giš u ₃ -nu-di[b?]	
686	giš [
687	giš im?	
688	giš ur ₂	
689	giš dub-ba?	
690	giš šu	
691 7b230	giš gu ₂	
692	giš an-ti-bal-gu ₇ -a	
693 7a119	giš dur	
694 7a120	giš dur-si	
695 7a121	giš dur-piš-piš	
696 7b152	giš alam	statue
697 7b159	giš az	(figurine of a) bear
698 7b161	giš pirig	
699	giš pirig-tur	
700	giš ur	
701	giš za-na	figurine
702	giš e ₂ -za-na	
703	giš nam-ra	
704 7b304	giš ša-u ₁₈ -ša	a weapon
705 7b307	giš ar-gibil ₂	
706 7b312	giš šu-nigin ₂ -na	total of 'wood'
707	^d nisaba za ₃ -mi ₂	praise be Nisaba

5.3 Commentary to the Nippur Text

021-022 For the reading ^{giš}šar_x(NE)-š_{a4}-bid₃ see Bauer 1992, p.1.

023-024 The first of the two ^{giš}LAM items is to be read ^{giš}lam. This is demonstrated by the variant ^{giš}lam₂ in Ni II-085. The reading of line 24 is more problematic. The two Nippur lines correspond to four ^{giš}LAMxKUR items in late ur₅-ra 3 (lines 61-64). ^{giš}LAMxKUR is there rendered *šiqdu*, *šiqittu*, *lup_nu*, and *lammu* (see *MSL* 5, p.98, restored by *CTN* IV, 214; and the parallel passage in *Diri* II 223-226). All these words refer to varieties of nut-bearing trees, including almond (see Steinkeller and Postgate 1992, pp.58-60). The rendering *lammu* suggests that at least one of the items is to be read ^{giš}lam₇, corresponding to ^{giš}lam in the Nippur version (line 23). A more common reading of LAMxKUR is eš₂₂ (or iš₁₁). For this reading see S^b Voc I, 217 in *MSL* 3, p.115 and Proto-Ea 915 in *MSL* 14, p.63. In *Diri* II 223-226 ^{giš}LAMxKUR is given the same four Akkadian renderings as quoted above from ur₅-ra 3. In all cases the Sumerian is glossed eš (in some sources e-še). It is very probable that line 24 of the Nippur version is likewise to be read ^{giš}eš_x(LAM). The possibilities of a reading lam₇ in ^{giš}LAMxKUR on the one hand and a reading ^{giš}eš_x(LAM) on the other are both confirmed by CBS 14130 (*SLT* 11) (+) 13922. This text is a commentary on the Early Dynastic list of containers. For this type of text see Civil and Biggs 1966. M. Civil generously allowed me to use his unpublished edition. *SLT* 11 Obv. II1-2:

^{giš} e-eš₂ LAM

^{giš} la-am LAMxKUR

According to Civil the gloss e-eš₂, which is distorted in Chiera's copy, is perfectly clear on the original (personal communication). The lines comment on the items DUGxLAM and DUGxLAMxKUR respectively, both apparently containers for or with nuts. Steinkeller and Postgate (1992, pp.58-60) in their discussion of ^{giš}LAM differentiated between ^{giš}eš₂₂, ^{giš}lam, and ^{giš}lug_x(LAM). The reading ^{giš}lug_x(LAM) is found in the Boghazkoy version of *Diri* II:

lu-ug 'GIŠ.LAM' *lu-ku-ú*
 la-am-mu
 ši-iq-du

However, both the Akkadian rendering *luk'u* and the Sumerian value lug_x(LAM) are unique to this text and may well belong to the idiosyncrasies of the western peripheral lexical tradition. Pending independent confirmation the value lug_x is to be rejected.

The evidence leads to the conclusion that there are two names for nut-bearing trees, the one /eš/, the other /lam/. The spelling of both words vacillates between ^{giš}LAM and ^{giš}LAMxKUR. The words ^{giš}eš₂₂ and ^{giš}lam appear side by side in the Ebla Vocabulary (*MEE* 4, p.251, 462-463), though there is only one source in which they are both found.

025c This line is very rare in Nippur sources but appears in the one-line Susa lentil *MDP* 18,43.

028 The reading bir is suggested by the variant ^{giš}bi-GAM-la-e in Ni II-047. The value of GAM remains unknown.

046-048 The reading of KID is most probably kid because of the -da ending. However, the relation with later versions of the list remains unclear. In Ugarit the item is found as ^{giš}sed-du. *LTBA* I, 78, a text that follows the Ugarit/Emar tradition closely, has the sequence ^{giš}su-da; ^{giš}SAR-da; ^{giš}KID-da; ^{giš}KID-da-zil-la₂ (col. II 1-4). In first millennium sources the word is spelled ^{giš}še-du₃-a (see *MSL* 5, p.108) and rendered in Akkadian by various words for twig or shoot. Line 48 ^{giš}KID-da-zil-la₂ (stripped twig) is probably equivalent to *MSL* 5, p.109, 199 ^{giš}še-du₃-a ^{giš}še-du₃-a i₃-la₂ = *ziqpu šitl_ nad_tu*

051a The variant reading ^{giš}mes-il (Ni II-211) instead of ^{giš}mes-alan may indicate a reading ^{giš}mes-al₂(ALAN). Comparable variants are found in lines 110 (^{giš}alan-nu for ^{giš}il-ur₂ in Ni II-208) and 411 (^{giš}ALAN-i[l₂] for ^{giš}il₂-il₂ in Ni II-241).

064a The item ^{giš}gibil (or ^{giš}bil₂) is found in only two Nippur sources. The word is found in the same place in the Ugarit tradition and in the late version (see *MSL* 5, p.114). The item is attracted by a semantic association with ^{giš}isi₂-mu₂. Both are rendered *pir'u* in the late version. One of the Isin texts (Is I-02; edited in §5.6.1) adds two other synonyms: ^{giš}u₃-luh-^{giš}kiri₆ and ^{giš}nunuz-^{giš}kiri₆. Still other sources have inserted the section ^{giš}ligimu(IGI.TUR.TUR) here (e.g. NP II-01; edited in §5.6.4). In the late version all these words are collected in the section before ^{giš}nimbar.

065-104 The section date palm. For the reading ^{giš}nimbar instead of the traditional ^{giš}gišimmar see Civil 1987b, p.28. The terminology of the date palm has been discussed by Landsberger 1967a. The date palm section in the Nippur list contains a number of items that do not recur in later versions and were not included in Landsberger's study. The passage has a considerable degree of variation: items are omitted, other items are added or the order is inverted. There is one variant that recurs in a number of sources. In most Nippur texts we find the order (97-99):

^{giš}ga₂-li-nimbar
^{giš}an-na-nimbar
^{giš}ki-ta-nimbar

There is a semantic association of an-na and ki-ta (high and low). In 4 of the 17 Nippur sources which have the line ^{giš}an-na-nimbar it is placed before 86 ^{giš}pa-nimbar and 87 ^{giš}pa-kud-nimbar (type II tablets 6, 84, 85, and 86).

073 LU₂.IM = *sarru* (for references see *CAD* S sv). The item is written ^{giš}nimbar-lul in first millennium ur₅-ra (*MSL* 5, p.121, 344). In *CAD* the expression is interpreted as 'mock date palm'. For the reading of LU₂.IM see Sjöberg 1973a, p.133.

074 In Old and Middle Babylonian texts libiš is commonly written AB₂.ŠA₃, not AB₂xŠA₃. The item ^{giš}nimbar-ab₂-ri-ih-ra in *Emar* 6/4, p.58, 147' is to be read ^{giš}nimbar-libiš-bu-ra. In Boghazköy the variant ^{giš}nimbar-libiš-bur-ra is found (*KBo* 26, 6 Aiii, 5').

104 The reading banda₃ for TUR follows from the writing ban₃-da in Ni II-147.

110 For the spelling with ALAN instead of IL (Ni II-208) see the commentary to line

51a above.

111-114 In the standardized text a differentiation is made between ^{giš}ad₂(GIR₂) and ^{giš}kiši₁₆(U₂.GIR₂). Both words refer to a kind of shrub (Akkadian *eddetum* and *aš_gum* respectively; see the discussion by Civil 1960, p.67). Of the ^{giš}kiši₁₆ two variants are listed: ^{giš}kiši-har and ^{giš}kiši-har-kur-ra. In a few cases, however, the items have been mixed up so that the section starts with ^{giš}kiši₁₆; ^{giš}ad₂ and then continues with ^{giš}ad₂-har; ^{giš}ad₂-har-kur-ra. Powell (1992, p.102) suggests that ^{giš}GIR₂*gunû* in Old Sumerian texts is to be read ^{giš}kišig_x. The same suggestion is made by Biggs in his discussion of the sign (Biggs 1974, pp.69-70). The late tradition renders ^{giš}U₂.GIR₂ with both *eddettu* and *aš_gu* (see *MSL* 5, p.130f., 432 and 439; Diri II 250-251). In Diri II ^{giš}U₂.GIR₂ = *eddettu* is glossed at-tu, which demonstrates that this is a variant of, or a confusion with ^{giš}ad₂(GIR₂) = *eddettu*. In Old Babylonian sources the reading att u(U₂.GIR₂) is not attested.

The reading har for HAR in the lines 113-114 is suggested by the Emar version which has ^{giš}kiši₁₆-uh-ha and ^{giš}kiši₁₆-uh-ha-kur-ra (*Emar* 6/4, p.59, 191'-192').

117 The reading ^{giš}peš₇(TUR)-kal appears from the comparison with later versions which have ^{giš}peš-kal (*Emar* 6/4, p.59, 196') or ^{giš}peš-gal (*MSL* 5, p.134, 450). The word is rendered *sud_nu* in Akkadian. The lentil Ni IV-12 (see §5.5) has on the reverse an abbreviated version of the Nippur tree list in three columns. In column II 24-26 it reads:

^{giš}sa-ma-na₂ (115)

^{giš}zu-ti-a-nu-um (117)

^{giš}ši-ig-d[um] (122)

The item ^{giš}zu-ti-a-nu-um is the Akkadian rendering of ^{giš}peš₇-kal. The Akkadian word is occasionally found in Sumerian texts from the Ur III period (see Steinkeller 1991). See also *TIM* X/1, 86, a lentil from Tell Harmal: ^{giš}zu-di-a[n[?] -].

123 The item ^{giš}zar-si is rendered *zarraštum* in Akkadian (see *MSL* 5, p.135, 455-457). One source has the spelling ^{giš}zar₃(SUM)-si. SUM is the common sign for the value /zar/ in the third millennium, but is replaced in Old Babylonian by LAGABxSUM (see Steinkeller 1978 and 1979). On the reverse of Ni IV-12 (see §5.5) the item is found as ^{giš}za-rī₃(LAGAB)-aš-tum, an Akkadianized form of the word (for a similar case on this same tablet see the commentary to line 117 above).

127 This word was read *ašbum* in *CAD* A sv. The reading ^{giš}dili-bu-um is confirmed by Middle Babylonian sources which have ^{giš}dal-bu-um (*KBo* 26, 6 Bi 16' and *Emar* 6/4 p.59, 205'. Perhaps the word is identical to ^{giš}tu-lu-bu-um (Gudea) and Akkadian *dulbu* (plane tree). See *CAD* D sv for Sumerian and Akkadian references.

142-159 This section has been discussed in §3.1 of the present study.

144 The generally accepted meaning of ^{giš}dib-dib is water clock or clepsydra. The word is discussed most recently in Al-Rawi and George 1992 (p. 56f. n.15). As far as I know the variants ^{giš}dub-dub and ^{giš}dab₅-dab₅ are not attested elsewhere. Perhaps the word is onomatopoeic, mimicking the sound of dripping water.

147-148 The words ^{giš}dub-dim₂ and ^{giš}sumun-gi₄ are discussed at length by Lieberman 1980, pp.346-351. Both words appear in Old Babylonian LU lists (see the discussion by Lieberman) and in the Ebla Vocabulary. *MEE* 4, p.242, 380: ^{giš}sumun-gi₄ = *ša-ma-gi-lum* (thus the interpretation of this line in *CAD* Š/3 p.266). *MEE* 4, p.245, 403 ^{giš}dub-dim₂ = *ma-ša-dab₆-ti-nu* (with orthographic variants). The Semitic word is related to Akkadian *muštaptinnu* or *multaptinnu*, a potter's device (see Krebernik 1983, p.15f.). This word follows ^{giš}dub-dim₂ - ^{giš}su-me-gi in first millennium ur₅-ra 4 (*MSL* 5, p.152, 21-23). The Ebla evidence makes Lieberman's interpretation of ^{giš}dub-dim₂ ('accounting board') less plausible. The term refers to a wooden object for making tablets.

The relation between ^{giš}sumun-gi₄ and ur₅-ra 6, 4-5 is not clear (*MSL* 6, p.51):

^{giš}su-mu-un-gi *ma-ah-su-ú* (variant ^{giš}su-me-gim)
^{giš}ša₃-mu-un-gi *mu-um-mu* (variants ^{giš}ša₃-mu-un-gim; ^{giš}ša-mu-un-gi)

150 The ^{giš}ŠID-ma is a computing device, an abacus or the like. According to Ludwig it is to be read ^{giš}šudum_x-ma (see Proto-Ea 555). The word often appears in royal hymns in the context of the king's wide learning and intellectual skills. References are collected in Ludwig 1990, pp.179-185.

158 For the reading ešgiri(U.ENxKAR₂) see *MSL* 9, p.169, 55. See also *KBo* 26, 6 Bii 7': ^{giš}gir₃-šu-du₇. In canonical *lú* = *ša* the line ^{giš}šibir-šu-du₇ is found (*MSL* 12, p.135, 198; see also line 193). There the reading šibir is assured by the Akkadian rendering *na-aš₂ ši-bir-ri*. There is, however, no reason to assume that this has any relevance for the reading of the entry in the ^{giš} list.

159 This item is found in various forms in Old Babylonian and Middle Babylonian sources but meaning and reading remain unknown. Old Babylonian: ^{giš}nig₂-na-UD (NP III-06; Ni II-206; and Ni II-278) and ^{giš}nig₂-na-BAD (Ni I-06). Middle Babylonian ^{giš}nig₂-na-MUD (*Emar* 6/4, p.61, 14'); ^{giš}nig₂-na-UD (*KBo* 26, 6 Bii 8'). No bilingual sources are known to me.

160-203 Section ^{giš}gu-za. The reconstruction of this section is in places uncertain. The main source for lines 172-178 is Ni I-05. Most lines can be confirmed in Ni II-053 (which, however, is badly effaced) and in Ni II-202, where the end of each line is preserved. The reconstruction of line 178 (^{giš}gu-za-ša[h-šum]-ma) is based upon the partial signs preserved in Ni U-06, Ni I-05, and Ni II-202. The item is well known from later sources (*MSL* 5, p.157, 96; *Emar* 6/4 p.61, 27'; *LTBA* I, 78 IV25), always preceding ^{giš}ma₂-gan-na and ^{giš}me-luh-ha. The connection with lines 179ff. is based upon the reading of Ni U-06, and is confirmed by the traces in Ni II-202. There is no tablet that preserves the connection between 181 and 182. The assumption that ^{giš}gu-za-aratta follows ^{giš}gu-za-ma₂-lah₄ is based upon the following two considerations. Firstly, in Ni II-053 lines 172-174 are followed by two illegible lines. The traces in the next two lines are almost certainly ^{giš}gu-za-š[u-] and ^{giš}gu-za-K[A-], that is, lines 176-177 (this implies that Ni II-053 had an extra line between 174 and 176). After line 177 there are four lines with traces only, and then a ^{giš}gu-za-L[AM-], most probably to be read ^{giš}gu-za-ara[ttā]. Consequently, the line number of this item should be 182. Secondly, the sequence makes sense. It is a passage of outlandish chairs (Maganna, Meluhha, Aratta), only interrupted by the ^{giš}gu-za-

ma₂-lah₄ apparently attracted by the graphic similarity with ^{giš}gu-za-ma₂-gan-na and the phonemic similarity with ^{giš}gu-za-me-luh-ha. It is assumed, therefore, that no line of the standard text is missing.

The reconstruction of lines 182-193 is based upon Ni II-156 and is sufficiently confirmed by what is preserved in the other sources. Line 193 (^{giš}gu-za-^{giš}mes-ma₂-gan-na) is followed by ^{giš}gu-za-^{giš}mes-me-luh-ha. This line is nowhere completely preserved, but since the item is expected at this place its reconstruction is not in doubt. The first line legible on side B of Ni P-05 has [] me-luh [], with no more than one sign missing at the beginning of the line. It is followed by ^{giš}gu-za-gar₃-ba- items. The only plausible reconstruction is that Ni P-05 had the item ^{giš}gu-za-^{giš}mes-me-luh-ha divided over two lines. Ni P-05 therefore provides the connection between the ^{giš}gu-za-^{giš}mes items and the ^{giš}gu-za-gar₃-ba section. This is confirmed by Ni II-053, which is almost illegible in this passage but clearly shows that the section ^{giš}gu-za-^{giš}[] is followed closely by ^{giš}gu-za-ga[r₃-].

In all versions of the ^{giš} list the section ^{giš}gu-za ends with a passage listing the parts of a chair. Only one line of this section has been partly preserved in a single source: ^{giš}BAD-[gu-za] in Ni II-048. The reconstruction of lines 200-203 is based upon the corresponding passage in the section ^{giš}nu₂ (bed). In most versions of the ^{giš} list the passages 'parts of a chair' and 'parts of a bed' are very similar.

In the Middle Babylonian traditions the section ^{giš}gu-za is followed by a section ^{giš}na₍₅₎ (*Emar* 6/4, p61; and the Middle Babylonian Nippur text *PBS* 12/1, 17). In the first millennium tradition the two sections have been inverted (*MSL* 5, p.154f.). There is only one Old Babylonian tablet of unknown provenance which preserves part of this section (NP IV-16). In Ni II-053 there is no room for a section ^{giš}na or ^{giš}na₅. The same is probably true for Is I-01. It is assumed that in the Old Babylonian Nippur tradition the section ^{giš}su₂-a immediately followed ^{giš}gu-za.

204 The word ^{giš}su₂-a is rendered *littum* (stool) in bilingual versions. The reading of the word is indicated by the earlier spelling ^{giš}su₄-a (see Van de Mieroop 1987, p.152 and Steinkeller 1980, p.97f. n.40). The Emar lexical fragment Msk 74107u (*Emar* 6/4, p.64f. text E) provides a gloss: li-iš-ša :: ^{giš}Š[U₂-A]. It must be assumed that li-iš glosses ^{giš} here (note that at other places in the Emar text ^{giš} is glossed ni-eš) and that ŠU₂-A was read /ša/. The reading of the word is complicated by the fact that later sources often use a ligature or complex sign (^{giš}ŠU₂+DIŠxA in Msk 731030 = *Emar* 6/4, p.62 text A; ^{giš}ŠU₂+A in first millennium texts, see *MSL* 5, p.161). Old Babylonian lexical texts write the two signs separately.

206 The ^{giš}su₂-a-nagar (carpenter's stool) is not known from later sources, which all have the stool of the barber (šu-i) instead (*Emar* 6/4, p.62, 64'; *MSL* 5, p.161, 132; *PBS* 12/1, 17, r11). The Nippur text is here based upon one source only (Ni II-053).

214 For the reading ^{giš}nu₂ (not ^{giš}nu₂) see Steinkeller 1980, p.79 n. 1.

217 The reconstruction of this line is based upon partially preserved signs in Ni I-05. Only the upper part of each sign is visible. The line is paralleled in *PBS* 12/1, 17 r22 (Middle Babylonian Nippur) and in first millennium ur₅-ra 4 (*MSL* 5, p.164, 149). In Emar the sequence

giš-nu₂-zi-ga; giš-nu₂-gu₂-zi-ga (*PBS* 12/1, 17 and *MSL* 5, p.164) has been reinterpreted as giš-nu₂-zi-ga; giš-nu₂-nu-zi-ga, (*Emar* 6/4, p.62, 75'-76') thus conforming to a well-known pattern in lexical texts.

220 The length of the gap in the reconstructed text is estimated on the basis of Ni I-08. After [^{giš}gi]r₃-gu[b-^dlama] (line 212) approximately nine lines are completely lost. The next identifiable line is giš-nu₂-u[r₄-ma]. This line therefore receives the standard line number 222. The line is duplicated by line three in Ni II-052. The first line in Ni II-052 is, therefore, standard line 220, and a gap of two lines (218-219) remains in the reconstruction.

227 The item is rendered *giltû* in Akkadian (see *MSL* 5, p.161, 124 and p.166, 170). It is assumed that the Akkadian is a loan from Sumerian, pointing at the reading giš-di₅ (see Selz 1995a, p.268 and p.271).

228 All that has been preserved of this item is ^{giš}i-[] in Ni I-08. The item may be found in various spellings: ^{giš}i-zi-nu₂; ^{giš}ezen-nu₂ (see *MSL* 5, p.166, 172 and p.160 note to lines 121-128). Emar has ^{giš}i-izi-gu-za (*Emar* 6/4, p.61, 54'; the corresponding item in the giš-nu₂ section is lost). In *KBo* 26, 5 Ci, 24' read probably [^{giš}i]-zi-nu₂. The word has been discussed by Selz 1995a, p.268.

229-230 The reverse of Ni II-082 is very difficult to read. It provides the only connection in the Nippur sources between the sections giš-nu₂ and ^{giš}dilim₂. After ^{giš}sag-n[u₂] (226) Ni II-082 has three unidentified lines, followed by the section ^{giš}dilim₂. The first item of this section therefore has line number 230 in the reconstructed text. This reconstruction implies that one line is entirely missing in the standard text (line 229). Since all other traditions include here an item ^{giš}umbin-nu₂, it is assumed that this item is to be restored in 229.

242-244 The reading *emerah* for ^{giš}UD-SAL-HUB₂ is found in Diri II, 272 and Diri Ugarit II, 168. ^{giš}Emerah is a wooden bowl, see Civil 1989a, p.58 n.40. In the Emar giš list the word is spelled ^{giš}SAL+HUB₂ (*Emar* 6/4, p.62, 99'ff.). For this spelling see Sallaberger 1993, p.238. The items 243-244 are only found in Ni II-082. The writing on this tablet is badly preserved and the reading of the lines is accordingly uncertain. Ni II-056 has only one ^{giš}emerah item.

248 This line is attested only in Ni II-056. No satisfactory reading has been found.

250 Ni II-053 rIV01 has ^{giš}u₃-[]. The last legible line in column three was ^{giš}emerah (242). No more than 5 lines are missing at the end of this column. Since line 248 in the present reconstruction is a line beginning with ^{giš}kun₄, we must assume that Ni II-053 either has left one or two items out (lines 243-244 are left out by Ni II-056), or that the column continued with one or two extra lines on the lower edge. In any case, the line number of this item in the reconstructed text can hardly be higher than 250, and no more than one line is entirely missing.

251 Very little of this line has been preserved. The item ^{giš}SUH-kun₄ is expected here, and the traces do fit a reading S[UH-].

252 There are various writings for the word bugin (bucket, trough), which appears both as ^{giš}bugin and as ^{gi}bugin. The most common spelling is bugin(LAGABxA). In first millennium lexical sources the word is usually spelled bugin₂(LAGABxGAR). The Emar sources (*Emar* 6/4, p.63, 115'ff.) have bugin₄(LAGABxU.A). For other references see *PSD* B sv.

254 The item ^{giš}bugin-ZU-bar-ra is found in only one Nippur source (Ni II-053). In addition it is attested in the Emar version (*Emar* 6/4, p.63, 118'). In first millennium ur₅-ra 4 the item appears as ^{giš}bugin₂-ŠID-bar-ra = *muhhusu* (*MSL* 5, p.170, 238). The corresponding item in ur₅-ra 9 (reed objects) is written ^{gi}bugin₂-KU-bar-ra = *muhhusu* (*MSL* 7, p.46, 217).

255-260 Ni II-219 obverse consistently writes ^{giš}naga₂(KUM); Ni II-053 reverse ^{giš}naga₃(GAZ). Ni II-082 is too damaged to decide. The reading esir-e₃-a (not esir-had₂-du-a) in line 258 appears from the writing esir₂-e₂-a in early Isin administrative texts (see Van de Mieroop 1987, p.138). *Emar* 6/4, p.63, 124' is to be corrected accordingly. ^{giš}Naga_{2/3} means mortar (*CAD esittum* is to be corrected); ^{giš}gan-na is pestle (Steinkeller 1989, pp.36-38).

261-320 Section boats. Nautical terms have been discussed by Klein 1990 and Römer 1993. The ^{giš}gisal or oar is not found in this section of the list but appears among the varia in lines 645-647.

261-261a ^{giš}ŠU.DIM₂ is glossed gi-ra-ah in Proto-Diri 216 and rendered *suppin itinnim* (see also ur₅-ra 4, 251 *MSL* 5, p.172). *Suppinnu* is a tool. The entry is translated as 'house builder's trowel' in *CAD* I/J, p.296. In administrative texts ^{giš}ŠU.DIM₂ is listed with ^{giš}eme-sig and other materials in boat-building texts, see Römer 1993, p.376 with references to earlier literature. The additional line 261a is only attested in Ni P-06 which clearly has two lines ending with []-DIM₂. One of these must be [^{giš}ŠU].DIM₂. The other is probably to be read [^{giš}me-te]-šidim, or [^{giš}me-ta]-šidim as in NP I-02 ii22'. See also *MSL* 5, p.171, 250.

304 This item does not appear in later sources, nor in the literary texts discussed by Klein (1990) and Römer (1993). A word u_{2/3/5}-zi-pa-ah is unknown to me.

308-313 The items ^{giš}ma₂-du₃ (a part of a ship) are followed by ^{giš}durgul (mooring pole, or mast). In later cuneiform durgul is written consistently MA₂.MUK. In Old Babylonian writing the spelling MA₂.DU₃ is equally possible (e.g. Proto-Diri 178; Sjöberg 1993, p.5, 24). The latter writing is used in the Nippur ^{giš} list so that there are two sections ^{giš}MA₂-DU₃. The durgul items are found in a somewhat garbled form in the Emar version (*Emar* 6/4, p.64):

164' ^{giš}dah-gul-ma₂-da
165' ^{giš}an-tag-dah-gul-ma₂

316 The variants ^{giš}sig-zi-gan and ^{giš}UMBIN-zi-gan indicate a sig_x reading for UMBIN. See for this reading the commentary at lines 682-683.

321-325 Lines 321-325 list words for 'staff'. In recent literature the complexes (^{giš})ENxKAR₂ and (^{giš})U.ENxKAR₂ have been read in various ways. Van Dijk (1966, pp.70-73)

argues that the two terms refer to 'insignia regalia'. Where both appear together, according to Van Dijk, they have to be read šibir₂ (staff) and eškiri (nose-rope) respectively. Where /šibir/ appears alone it may be written either way (ENxKAR₂= šibir₂ or U.ENxKAR₂ = šibir). The problem with this solution is that all lexical evidence, Old Babylonian as well as post-Old Babylonian, agrees that the regular spelling for both eškiri and šibir is U.ENxKAR₂. Van Dijk's reading ENxKAR₂ = šibir₂ is based on a single gloss (CT 42, 4, I 17). Later commentators accepted Van Dijk's interpretation of the two terms as regalia, but read enkar (ENxKAR₂) and šibir (U.ENxKAR₂), e.g. Charpin 1986, p.275, 21-22. The word enkar is usually understood as the equivalent of an/en-kar₂ in the Gudea cylinders and translated as 'enkar weapon'. Klein (1976, p.285) rightly comments that the reading enkar is doubtful. It appears in only one source of Proto-Ea (UM 55-21-47; see *MSL* 14, p.48, 417a-b with footnotes). Dr. H.L.J. Vanstiphout kindly collated UM 55-21-47 for me, for which I wish to express my sincere thanks. The ENxKAR₂ passage on this tablet reads as follows (see *MSL* 14, p.48, 417-418):

3'	¶	bu-ru	ENxKAR ₂
4'	¶	geš-ši-ir	ENxKAR ₂
5'		en-kar ₂	ENxKAR ₂
6'	¶	eš-gi-ri	U. 'ENxKAR ₂ '

Line 5' is not introduced by the single vertical (here represented by ¶). The significance of this fact is not clear. In *MSL* 14 it was interpreted to imply that 4' and 5' belong together, representing one line on the tablet. This is implausible because the sign ENxKAR₂ is found in both. The omission of the vertical may be a simple error. I am inclined to explain the en-kar₂ gloss here as a theoretical elaboration, rather than as a genuine sign value. It represents an analysis of the components of the sign in question. The reading of ^{giš}ENxKAR₂ must remain open. The complex is not found in Diri.

The reading ^{giš}šibir for ^{giš}U.ENxKAR₂ in this context may be taken as certain. In the corresponding passage in first millennium ur₃-ra 4 one source has the gloss ši-bir, and the item is rendered in Akkadian as *šibirru* (*MSL* 5, p.185, 429). In Emar the passage reads as follows (*Emar* 6/4, p.64):

184'	^{giš} EN
185'	^{giš} gag-EN
186'	^{giš} gag-KA
187'	^{giš} ka-bar
188'	^{giš} ZU-HUL

Lines 184'-185' correspond to the ^{giš}ENxKAR₂ lines in the Nippur text (321-322). The omission of the inscribed KAR₂ is either an error (ancient or modern), or represents an abbreviated writing. More troublesome is line 186'. It is probably to be read ^{giš}gag-kiri₄, and argues for a reading ^{giš}eškiri (etymologically equivalent to eš₂-kiri₄) for ^{giš}U.ENxKAR₂ in the Nippur version (323-324). In our reading we have favoured the first millennium gloss over the rather unreliable Emar tradition. The Emar entry ^{giš}ka-bar is equivalent to ^{giš}kab-bar (another word for a shepherd's crook) in the Nippur text (line 325). Very probably, ^{giš}ZU-HUL (Emar line 188') is equivalent to ^{giš}ša₃-hul₂ in the Ugarit version (Thureau-Dangin 1931, Pl XLVIII no. 4 reverse ii, 1'; duplicate Thureau-Dangin 1932, p.235 no.10 rev. i 9'). In another part of the Emar ^{giš} list ^{giš}ša₃-hul₂-la is rendered *kaparru* (*Emar* 6/4, p.78, 488'). The same word very probably appears as ^{giš}ša₃-hi-li-a in the following passage in NP P-01 (§5.6.1):

vii37	^{giš} ENxKAR ₂
vii38	^{giš} gag-ENxKAR ₂

vii39	^{giš} šibir
vii40	^{giš} gag-šibir
vii41	^{giš} ša ₃ ¹ -hi-li-a
vii42	^{giš} ka-bar

326-346 Section chariot. The vocabulary of the chariot has been discussed by Civil (1968) and Klein (1989). The passage is discussed in §3.2.1 of the present study.

329 The word ^{giš}SUM.KI.A-gigir (with variant ^{giš}KI.A-gigir) is not known to me outside the Nippur list.

335 Ni II-082, a teacher's model text, has ^{giš}sag-BAL-gigir instead of ^{giš}sag-kul-gigir. BAL has a value kul_x, but this is otherwise restricted to third millennium texts (see Steinkeller 1991). Perhaps the teacher deliberately employed an archaic sign value.

340-341 Ni II-095 has the variant ^{giš}nir-gigir for ^{giš}šudul-gigir. Nir represents the Akkadian translation of šudul (*n₋ru* = yoke).

347-350 The section ^{giš}usan₃ (whip) is not found in first millennium ur₅-ra. It does appear in the Middle Babylonian Western traditions, between the ^{giš}sid items and the section ^{giš}mar-gid₂-da (Ugarit: see *MSL* 6, p.11: V1; Emar: *Emar* 6/4, p.67, 37-42).

351-353 The reading ^{giš}gag-sal₄ for ^{giš}gag-QA is suggested by the variant spellings ^{giš}gag-QA-la₍₂₎ and ^{giš}gag-SI-la₂. See Durand 1979, p.167, and Van de Mieroop 1987, p.143.

354-356 The variant DU₁₀ for GAG demonstrates that GAG should be read du₃. See for this word Civil 1968, p.8 and Steinkeller 1990, p.23.

357a There is no section listing varieties of the ^{giš}mar-gid₂-da, except for this additional line that is found only in Ni P-06. Unfortunately the end of the line is missing. Most probably it is to be read ^{giš}mar-gid₂-da-[su-bir₄^{ki}]. See Is I-01 and NP P-01 (both edited in §5.6.1).

359 The variant DU₃ for za-ra in Ni II-095 may be read zara_x. See Civil 1968, p.8.

366-367 There is no Nippur text which has the common writing ŠU₂-DUN₄ = šudul. This, however, is probably a coincidence. The corresponding item in the section ^{giš}gigir is written šudul in some sources and šudul₄ in others. URšeššig (in Ni I-12) is glossed šu-tu-ul in Proto-Ea 650 (šudul₅).

372 In the late redaction of ur₅-ra this item is found as ^{giš}nam-hara_x-mar-gid₂-da = *nam-ha-ru-u₂* (*MSL* 6, p.13, 88). The prolonged vowel of the Akkadian rendering is a common indicator used for loans from Sumerian. In *CAD* N the word *namharû*, for which the meaning 'shaft of a wagon' was proposed, is therefore distinguished from the genuinely Akkadian *namharu*, which is a kind of vessel. However, in Old Babylonian ur₅-ra the wagon part is spelled

^{giš}nam-ha-ru-um-mar-gid₂-da. This spelling indicates that the word rather derives from Akkadian. Akkadian *namharum* is found in various spellings in third millennium Sumerian texts (^{dug}nam-ha-ru-um; ^{dug}nam-hara₄; ^{dug}ma-(an)-hara₄; see Sallaberger 1996, p.73f. and p.104). It is more likely, therefore, that the vessel and the wagon part are identical, or have at least the same Akkadian etymology. The spelling *nam-ha-ru-u₂* in first millennium ur₅-ra may be artificial, to give the word a Sumerian flavour. What 'vessel of a wagon' means is not clear to me. In the Mari texts edited by Guichard 1994 vessels are found among the equipment of wagons.

373 For the reading en₃-dur (rather than li-dur) see *UET* 7 93, 17: en₃^{en}-dur.

377 LAM in Ni II-083 is an error for SIG-LAM = šeš₂.

378 The entry ^{giš}ig-li is equivalent to ^{giš}ig-li-u₅ in the later tradition (*MSL* 6, p.23, 210). The item means 'door made of a wooden board', which is suitable in the context. It is followed by ^{giš}ig-dib-(ba) and ^{giš}ig-suh₄: a door made of a wooden board and a door made of reed matting respectively. See also at line 463 (^{giš}li-apin).

380a-381a Ni II-137 has a number of variants in the section ^{giš}ig. The tablet includes some unique entries and has deviations in the order of the lines. Line 380a: ^{giš}ig-pa-pah (door of the cella; see Prang 1976, p.25) is written ^{giš}ig-pa-pa-ah in the later tradition. The item ^{giš}ig-ba-ša₃-ga is not understood.

388 The reading suku₅ for SUH appears from the Akkadian rendering *šukû* (door pole) in the late version (*MSL* 6, p.26, 252). It is confirmed by the Emar entry šuk(PAD)-^{giš}ig = *šukû* (*Emar* 6/4, p.71, 219').

394-394b In the Nippur ^{giš} list the word GIŠ.ŠU.DI.EŠ = ^{giš}suhub₄ (latch) is found either as ^{giš}suhub₄ or as ^{giš}suhub₄-ig. Ni II-137 has 394 ^{giš}ŠU.DI-ig; 394a ^{giš}ŠU.DI. ŠU.DI is either an error for suhub₄ or an abbreviated writing. Is I-03 (§5.6.1) has the sequence 394 ^{giš}suhub₄(ŠU.DI.EŠ); 394b ^{giš}ŠU.GA. In Proto-Diri GIŠ.ŠU.GA is found immediately after suhub₄:

214 sú-hu-ub GIŠ.ŠU.DI.EŠ(suhub₄)*me-de-lum*

215 sú-hu-ub GIŠ.ŠU.GA(suhub₅) *na-ap-ra-kum*

GIŠ.ŠU.GA and GIŠ.ŠU.DI.EŠ share the same Sumerian reading gloss but are provided with different Akkadian renderings. The reading suhub₅ for GIŠ.ŠU.GA is not confirmed anywhere else. The late versions of Diri and ur₅-ra agree in reading ^{giš}sahab(ŠU.DIŠ) = *m₂delu* and ^{giš}šu-gi = *napraku* (*MSL* 6, p.28 267-268; Diri II, 268 and 271). The two items seem to correspond to 226' ŠU.<DI>.EŠ; 227' šu-kam₂-ma in the Emar text (*Emar* 6/4 p.71 with Civil 1989, p.12). One could entertain the possibility that suhub/sahab; šu-ga/gi (with the Emar variant šu-kam₂-ma) are historical or orthographical variants of the same word, with alternation /s/ and /š/ and of /h/ and /g/. In a Susa lentil, published by M. Lambert (1975, p.45), the word is spelled ^{giš}ŠU.SI.SA₂-ig and glossed on the reverse za-he₂-ab-ig.

407-408 With line 406 the section doors and locks ends. Lines 407-408 begin the section looms and related wooden objects. Both entries are badly preserved. Enough remains to make plausible the reading ^{giš}TAG; ^{giš}TAG.TUG₂. ^{giš}TAG has a reading ^{giš}serim, and refers to a part of

the loom (*MSL* 14, p.414, 243; see Waetzoldt 1972, p.135). The complex TAG.TUG₂ or TAGxTUG₂ is well known with the determinative for divinities, read ^duttu, the goddess of weaving. In Ni II-232 the item is found as ^{giš}TAG-ŠU-ma. The ŠU is no doubt a malformed TUG₂. The ending -ma suggests that TAG-TUG₂ is to be read šerim_x. TAG-TUG₂ is the spelling for *sis_tum* in Emar (see *Emar* 6/4, p.72 249'-252' with Civil 1989, p.12). In first millennium ur₅-ra TAGxTUG₂ is glossed še-ra (*MSL* 6, p.31, 300).

409 The line ^{giš}kur-ra is found in Emar as ^{giš}kur₄-ra (*Emar* 6/4, p.72, 246'), with the Akkadian rendering *i-si ku-ra*. The Ugarit text cited in *MSL* 6, p.32 note to 307a is therefore to be read ^{giš}ku-ra (not dur₂-ra). The meaning of the word in this context is not clear. See for lexical references *CAD k_ru C*.

410 The word ^{giš}nu-ra is found in other versions of the ^{giš} list as ^{giš}nir-ra (Old Babylonian: Ur I-01 rII40'; *Emar* 6/4, p.72, 247'; *MSL* 6, p.32, 308-311). The line in question in Ni II-137 is difficult to read. A reading ^{giš}nu-ra is excluded but ^{giš}nir-ra seems possible. That Nippur ^{giš}nu-ra is equivalent to ^{giš}nir-ra may be argued from the correspondence with the Middle Babylonian versions:

Nippur	<i>Emar</i> 6/4, p.72, 246'f.	Ugarit (<i>MSL</i> 6, p.32)
409 ^{giš} kur-ra	^{giš} kur ₄ -ra	^{giš} ku-ra
410 ^{giš} nu-ra	^{giš} nir-ra	^{giš} nir-ra

The reading ^{giš}sir₅(NU)-ra is to be rejected. The evidence for a reading sir₅ for the NU sign is circumstantial and has not been confirmed by lexical evidence or glosses (see Jacobsen 1982, p.136).

411-413 The items ^{giš}il₂-il₂, ^{giš}bar-bar, and ^{giš}tug₂-tug₂ are found in Ur III weaving texts and are discussed by Waetzoldt (1972, pp.135-136; the word read ^{giš}ku-ku by Waetzoldt is probably identical with our item ^{giš}tug₂-tug₂). The variant ^{giš}ALAN-i[l₂] (Ni II-241) for ^{giš}il₂-il₂ is to be read ^{giš}al₂-il₂ (see the commentary to line 51a). It may be significant that these three words all consist of a reduplicated stem. Waetzoldt adduced literary evidence to demonstrate that ^{giš}bar-bar is the shuttle. Here the reduplication may be due to the repetitive character of the movements of the shuttle in weaving. A similar explanation may be valid for the other two items.

414-416 The ^{giš}(nig₂)-gi-na is known from Ur III administrative texts and is probably the cloth beam (see Waetzoldt 1972, pp.133-135; Freedman 1977, p.16). The other beam (warp beam) is probably called ^{giš}sag-du. It is remarkable that the latter term is absent from the list. The word is found in the version from Ur (Ur I-01 rII34'). The items ^{giš}nig₂-zu and ^{giš}nig₂-menbulug₂ are not known from the administrative texts. For the value menbulug₂ of the sign BULUG over BULUG see, for instance, Proto-Ea 804 (*MSL* 14, p.61). The item ^{giš}nig₂-menbulug₂ is written ^{giš}me-bulug₂ in the late tradition (*MSL* 6, p.33, 313 with note). It is rendered in Akkadian as *pallukku* (for references see *AHw* sv). Etymology and sign form point at a meaning 'two bulugs' for menbulug₂. Bulug is a needle (Akkadian *pulukku*). The nature of the relation between Akkadian *pallukku* and *pulukku* on the one hand and Sumerian bulug on the other is unclear. In post-Old Babylonian texts the Sumerian word may be written with the BAL sign (*Emar* 6/4, p.68, 68': nig₂-bal; *MSL* 6, p.33, note to 313: Sultantepe text: giš- BAL over BAL). This spelling, however, may have been influenced by the phonological shape of the Akkadian word.

418-425 ^{giš}Ga-rig₂ is comb and ^{giš}bal is spindle. The two additional items 421a and 424a are both found in Ni II-137, a text with numerous deviations. Unfortunately line 421a is unclear. Expected is ^{giš}kul-bal, an item found in various other traditions (*Emar* 6/4, p.68, 78' and *MSL* 6, p.52, 27). The traces do not exclude a reading ^{giš}KU-bal.

426-432 In Ni II-173 the sections ^{giš}LAGAB, ^{giš}BU (426-432) are found as follows:

426 rII18 ^{giš} [LAGAB]
 427 rII19 ^{giš} L[AGAB]
 428 rII20 ^{giš} LA[GAB]
 rII21 ^{giš} LA[GAB]
 rII22 ^{giš} LA[GAB]
 rII23 ^{giš} LA[GAB]
 431 rII24 ^{giš} BU
 432 rII25 ^{giš} BU

There are three extra ^{giš}LAGAB items whereas two of the ^{giš}BU items are missing. It is assumed that the junior scribe lost track of the number of LAGABs and BUs he had to write. For this reason the extra LAGAB items have not been treated as variants in the reconstructed text. They are not included in the score.

426-428 In Nippur Proto-Diri there is one line GIŠ.LAGAB which is rendered *pukkum* (probably a ball) but has no gloss. In first millennium Diri II 295-297 there are three lines, all glossed el-lag, with the Akkadian renderings *pukku*, *mekkû* (driving stick for the ball) and *atartu* (wheel). The passage is duplicated in first millennium Ea (*MSL* 14, p.177, 35-37; see the corresponding passage in Aa *MSL* 14, p.210, 69-74). Other glosses are found in the canonical version of ur₅-ra (*MSL* 6, p.54, 43-45):

^{giš} ^{il-lag} LAGAB *pukku*
^{giš} ^{gi-iš} ^{MIN} LAGAB *mekkû*
^{giš} ^{il-lag} LAGAB *atartu*

Here a distinction is made between ^{giš}ellag = *pukku* and ^{giš}ellag = *mekkû* or *atartu*. This distinction, however, seems to be artificial, the more so since the passage belongs to a section where this same pattern of glosses is found for various entries. In each case one entry has three Akkadian renderings. The first and the third line have the simple gloss, the second line the same gloss preceded by ^{gi-iš}.

The three LAGAB entries in the Nippur ^{giš} list may therefore be read ^{giš}ellag. This interpretation is not confirmed, however, by the Middle Babylonian tradition. The glosses in the Emar version are rather curious. The passage reads (*Emar* 6/4, p.68, 88'-90'):

^{lu-uk-ki-iš} LAGAB *pa-ak-ku*
^{lu-uk-ki-iš} LAGAB *pi-ik-ku*
^{la-ga-me} LAGAB *ha-at-tu u₃* [

If the ^{lu-uk-ki-iš} glosses somehow represent ellag, it seems that we have here another instance of determinative inversion (lug-^{giš} for ^{giš}-lug). See Civil 1989, p.14, commentary to line 498' for a comparable example in the same text. The gloss *la-ga-me* represents the reading lagab. The Akkadian *pi-ik-ku* may be a simple error for *mekkû*. It should be noted, however, that the equation ^{giš}ellag = *mekkû* is restricted to lexical texts and is a priori rather unlikely. It makes little sense to call two closely related objects by the same name.

429-435a The section ^{giš}BU is discussed in §3.5.2.

434-435 The reading ^{giš}bu; ^{giš}bu-^{gi}ma-an-sim is suggested by the unprovenanced text NP P-02, which has ^{giš}bu₁₀(DIM₄); ^{giš}bu₁₀(DIM₄)-^{gi}ma-an-sim. The reading ^{giš}bu₁₀ for ^{GIŠ}.DIM₄ is attested in Diri III 1. Some of the Nippur sources have the variant reading ^{giš}gi-bu; ^{giš}gi-bu-^{gi}ma-an-sim (Ni I-10 and Ni II-173; see also Ur I-01).

The corresponding section in the late version of ur₅-ra 6 has been reconstructed as follows (*MSL* 6, p.59):

97	[^{gi}]š-bu ₁₀	[<i>kip</i>]- <i>pa-tum</i>
98	[^{giš} -b]u ₁₀ -ba-an-du ₈	MIN <i>na-pa-tum</i>
99	^{giš} -gur ₂	<i>kip-pa-tum</i>
100	^{giš} -gur ₂ -ba-an-du ₈	MIN <i>na-pa-tum</i>

Kippatum is a well-known rendering of gur₂, meaning circle. In the present context it probably refers to the wooden brim of a circular object. The Akkadian *na-pa-tum* is not known as a rendering of ba-an-du₈. Comparison with the Old Babylonian parallels demonstrates that the entry is a corruption for ^{giš}bu₁₀-ma-an-sim = *kippat napp_tim*: brim of a sieve. This reconstruction is confirmed by a new source for ur₅-ra 6 and by the Emar version. NBC 10915 is a unilingual text, probably of Kassite date. The relevant passage reads:

97	^{giš} gur ₂
98	^{giš} gur ₂ -ma-an-sim
99	^{giš} bu ₁₀
100	^{giš} bu ₁₀ -ma-an-sim

For the Emar text see *Emar* 6/4, p.68, 100' with Civil 1989 p.14.

435a This line appears in only two sources, one from Nippur (Ni II-022) and one from Ur (Ur I-01). In both cases it replaces line 435. The line reads ^{giš}bu-ŠID in Ni II-022 and ^{giš}gi-bu-ŠID in Ur I-01. This is the same variation as found in lines 434 and 435 (see above). The meaning and reading of ŠID remains unclarified.

436-441 The reading ^{giš}rin₂ is found in Diri III, 20: ^{giš}ri-in ^{GIŠ}.ERIN₂ *gišrinnu* (balance).

437 For the reading lib-bi of LUL-bi see Cavigneaux 1992.

442-495 The ancient agricultural terminology has recently been discussed by Civil (1994) and by Hruška in numerous contributions, now summarized in Hruška 1995. Hruška kindly made available to me his paper delivered at the Berlin Rencontre Assyriologique Internationale (1995) entitled 'Die Arbeitsgeräte in der altsumerischen Landwirtschaft.' It is a pleasure to be able to acknowledge my gratitude here.

444-445 First millennium ur₅-ra 5, 117-118 has ^{giš}apin-šu-du₇ (= *šuklulu*) and ^{giš}apin-nu-šu-du₇ (*l*_ MIN) (also *Emar* 6/4 p.69, 128'f.). The Old Babylonian Nippur texts have the better Sumerian ^{giš}apin-šu-nu-du₇. One Old Babylonian text has ^{giš}apin-nu-šu-du₇. Unfortunately its provenance is unknown (NP I-03; edited in §5.6.2)). The expression šu nu-du₇ also appears in

other Nippur lexical texts (Proto-Izi II and Nigga).

446 The $\text{tug}_2\text{-sig}_{18}(\text{KIN})$ plough (a kind of breaking plough) is discussed by Civil (1994, pp.167-171).

451 The $\text{giš}^{\text{ka-šu}}_2$, according to Civil (1994, p.80), is a part used to attach the seeder funnel to the plough.

452a This item is found in a minority of sources and is nowhere completely preserved. It is found as $\text{igi-kal-MIN}(=\text{apin})$ in *Emar* 6/4, p.70, 151'. It is rendered there *ši-'u*. In the late version $\text{giš}^{\text{igi-gal}}_2\text{-apin}$ is rendered *nabr_tu* (*MSL* 6, p.18, 151).

453 For the $\text{giš}^{\text{nig}}_2\text{-kud}$ see Civil 1994, p.84 (probably a wedge used in the construction of the plough).

457-458 The item $\text{giš}^{\text{nig}}\text{-apin}$ is found in Middle Babylonian versions from Ugarit, Emar, and Nuzi (see Veldhuis 1996) but not in the first millennium recension. It is translated *kalbatum* in the bilingual Emar text. The Akkadian word is found in the *mur-gud* commentary to $\text{ur}_5\text{-ra}$ 11: $\text{kuš}^{\text{nig}} = \text{kalbatum} = \text{kurussu ša } \text{giš}^{\text{apin}}$ (*MSL* 7, p.153, 188). It probably refers to a leather strap, which apparently replaced the wooden part of the plough listed in the earlier recensions.

460ab The entries $\text{giš}^{\text{muš}}\text{-apin}$ and $\text{giš}^{\text{gag}}\text{-muš-apin}$ are found on only one Nippur tablet. They do appear, however, in the recension from Ur (Ur I-01). NP U-01 includes $\text{giš}^{\text{muš}}\text{-apin}$. In the Nippur tablet the items seem to replace $\text{giš}^{\text{šudun}}\text{-apin}$ and $\text{giš}^{\text{gag-šudun}}\text{-apin}$. The word $\text{giš}^{\text{muš}}\text{-apin}$ further appears in the bilingual Emar version (*Emar* 6/4, p.70, 154f.). The Akkadian rendering, *ši-x-* [], is not helpful.

463 $\text{giš}^{\text{Li}}\text{-apin}$ corresponds to $\text{giš}^{\text{li-u}_5}\text{-(um)-apin}$ (board of a plough) in later sources (*Emar* 6/4, p.70, 156'; *MSL* 6, p.17, 141). See also the commentary at line 378 above ($\text{giš}^{\text{ig-li}}$). Note that in all sources of the 'Farmer's Instructions' the word is written $\text{giš}^{\text{li-um}}$ (see Civil 1994, p.214, 45).

468 The $\text{giš}^{\text{gan-ur}}_3$ (harrow) and its parts have been discussed by Civil 1994, p.77f.

474 The word $\text{giš}^{\text{da-an-ga}}$ is also found as $\text{giš}^{\text{dam-ga}}$, but is distinct from giš^{dam} . Both giš^{dam} and $\text{giš}^{\text{da-an-ga}}$ appear in the literary composition 'Lipit Eštar and the Plow' (Civil 1994, p.81 and p.102 note 55).

479 $\text{giš}^{\text{al-šub}}$ is a kind of hoe, in later sources incorrectly written $\text{giš}^{\text{al-u}_3}\text{-šub}$ (see the discussion by Civil 1994, p.149).

483-514 The sections $\text{giš}^{\text{u}_3}\text{-šub}$ (brick mould), giš^{gag} (device for harvesting; stick for uprooting plants), $\text{giš}^{\text{zi-ri}_2}\text{-qum}$, (irrigation device), $\text{giš}^{\text{tukul}}$ (mace), and $\text{giš}^{\text{dur}_2}$ (bottom board) have been discussed in some detail in §3.2.2.1-§3.2.2.3 of the present study.

515 The section 'measuring vessels' begins with ^{giš}lid₂-ga, with the variant ^{giš}lid₂-da (or ^{giš}li₂-da). See for this word Civil 1976c, p.76. In Emar the word is replaced by the entry ^{du-ut-t}DIŠ = *litiktu* (Emar 6/4, p.73, 274'), corresponding to ^{giš}du₈-du₈ in the Ugarit text RS 13.053 (see Veldhuis 1996) and ^{giš}ŠA₃.DIŠ = *litiktu* in the late version (MSL 6, p.103 225). In first millennium texts ^{giš}ŠA₃.DIŠ is glossed lid-da, which may easily be understood as a development from earlier lid₂-ga. The reading du₈-du₈ or du-ut-tu in the Middle Babylonian Western sources remains unexplained.

518 This line parallels BM 76494 rev. line 9: ^{giš}ban₂^{MIN (= ba-an)}-5-sila₃ (George 1992, Plate 14). The new BM text restores ur₅-ra 7, 235 (MSL 6, p.104).

527-535 For the passage ^{giš}sa there are only two sources: Ni II-173, and Ni I-05. The two overlap in line 533: ^{giš}sa-hir. Lines 532-535 are incompletely preserved but may be restored from the ^{giš}sa sections in other lexical sources. The best parallels are found in the Old Babylonian bilingual Lu lists A and C₆ (MSL 12, p.170f. and p.196).

535 The item was read ^{giš}sa-zal in MSL 6, p.66, with reference to the item ^{giš}sa-sal in the first millennium text. This correspondence, however, is unlikely. In MSL 12, p.196, 18 (with parallel in MSL 12, p.171, 438) lú sa-NI is equated with *ša sisintim*, whereas ^{giš}sa-sal is rendered *pasuttum* and *šalhû* (MSL 6, p.68, 176-179 and p.78, 35-36). The reading of NI remains unknown.

539 The reading ellag₂(BIR) in ^{giš}ellag₂-du is now confirmed by the Akkadian rendering in the Emar version: ellag₂-du₃ = *il-la-an-du-u* (Emar 6/4, p.74, 311'; with Civil 1989, p.14).

541-541a The expression šul ka-tar-ra is rendered *etlu muttallu* ('awe inspiring young man'; see Attinger 1993, pp.569-570). A wooden object of this name is otherwise unknown to me. In Ni II-154 there is only one sign between GIŠ and TAR, but the beginning of this sign is unclear, perhaps erased (see the copy in SLT 23 Col 2, 1'). The sign may be a damaged ŠUL. The entry ^{giš}šul-HAR-tur-re (541a) is found in only one Nippur source (Ni I-05).

542 Unclear. The item is spelled ^{giš}šu-uš (Ni I-05) or ^{giš}šu-DU (to be read ^{giš}šu-ša₄?).

543 There are two items ^{giš}igi-gal₂ in the Nippur ^{giš} list (see line 564). In late ur₅-ra we find three different translations on three different tablets of the series.

Ur₅-ra 4, 27-28 (MSL 5, p.152):

^{giš} igi-gal ₂ _s	<i>addu</i>	sign/signal
^{giš} igi-gal ₂ -bad ₃ MIN <i>d_ri</i>		sign on a wall

Ur₅-ra 6, 6 (MSL 6, p.51):

^{giš} igi-gal ₂	<i>ammatum</i>	cubit
-------------------------------------	----------------	-------

Ur₅-ra 7a, 105-106 (MSL 6, p.92):

^{giš} igi-gal ₂	MIN (= <i>mekû</i>) ?
-------------------------------------	------------------------

^{giš} igi-gal ₂ -bad ₃ MIN <i>d_ri</i>

In Middle Babylonian versions the items ^{giš}igi-gal₂ and ^{giš}igi-gal₂-bad₃ are listed among weapons

and rendered *sa-an-tum* (= *saddu*); *sa-am-mi du-ri* (Nuzi and Emar; see Civil 1976 and Civil 1987). The *ur₅-ra 7a* passage is found among siege engines. It may well be that the presence of the ^{giš}igi-gal₂ items in *ur₅-ra 4* is secondary, attracted by the presence of other Sumerian words rendered *saddu* (lines 24-26).

544-548 This passage is treated in some detail in §3.5.2.

549 From Akkadian *zamir_tum*. In the five Nippur tablets where the item is extant there are 4 different spellings: ^{giš}za-mir-tum; ^{giš}za-am-ru-tum; ^{giš}za-mi-ru-tum; and ^{giš}za-am-ri-tum. This item occupies the same place as *za-URU-ša* = *a-za-am-ru* in the Emar ^{giš} list (*Emar* 6/4, p.74, 325'), following ^{giš}dalla₂ and ^{giš}sukur (^{giš}šu-gur in Emar). The late version has ^{giš}ša₃-URU-DU = *azmarû* (*ur₅-ra 6*, 237 in *MSL* 6, p.73), again immediately following ^{giš}dalla₂ and ^{giš}sukur. *Azmarû* is probably the Akkadianized form of ^{giš}za-am-ri-tum, originally a loan from Akkadian to Sumerian. In *MSL* 6 the Sumerian was read ^{giš}ša₃-u₁₉(URU)-ša₄. However, an unpublished unilingual source for *ur₅-ra 6* (probably Kassite) has ^{giš}za-ri₂-tum (NBC 10915). This demonstrates that in *ur₅-ra 6* ^{giš}ša₃-URU-DU is to be read ^{giš}ša₃-ri₂-du = *azmarû*. The Emar version, however, has a final syllable -ša, confirmed by a Nuzi parallel reading *za-e-ri-za* (edited in Civil 1987). The Middle Babylonian sources have confused the item with ^{giš}ša-u₁₈(GIŠGAL)-ša (Nippur ^{giš} list 704). This item appears almost at the end of the Nippur list, and is found in Emar as *za-URU-ša* = *sa-ba-[bu]* in corresponding position (*Emar* 6/4 p.80, 573', with Civil 1989, p.14). The late version has ^{giš}ša₃-u₁₉(URU)-ša₄ = *sappu*, again in the final section of the ^{giš} chapter (*ur₅-ra 7b*, 304; *MSL* 6, p.135). Both in Emar and in the late version the items rendered *azmarû* and *sappu* respectively are spelled with the same graphemes. The material adduced in *MSL* 6, p.135 for a reading ^{giš}ša₃-u₁₉-ša₄ is valid for the items rendered *sappu*. The items rendered *azmarû* are to be read ^{giš}ša₃-ri₂-du and correspond to Old Babylonian ^{giš}za-am-ri-tum (and variants).

551a The item is known from one source only. The preceding item, ^{giš}gid₂-da (Akkadian *ariktu*), is a lance, but literally means 'long one'. The present item means 'short one'. This interpretation is confirmed by the parallel passage in *Emar* 6/4, p.74, 329'-330'. There the item ^{giš}lugud₂-da is rendered *ku-ru-tum* ('short one'; *kur_tum* in standard Babylonian). See also *MSL* 7, p.144, 384: ^{urud}lugud₂-da = *kur_tum*.

552-554c The section ^{giš}illar (javelin; see Römer 1994 with previous literature) has three items recurring in most sources: ^{giš}illar; ^{giš}illar-šub(ba); and ^{giš}illar-e-ba-an (with spelling variants). There are no less than four additional items which appear in one tablet or another. Two of these are found in Ni I-06: [^{giš}illa]r-NUN-dili and [^{giš}illar]-DUšeššig-DU-a. The latter item may be identical to ^{giš}illar-DU-D[U] in Ni II-161, and perhaps to ^{giš}illar-DU = *aliktu* in later sources (*MSL* 6, p.88 67 and *Emar* 6/4, p.74, 332'). The line [^{giš}illa]r-NUN-dili is not understood. The late tradition has a ^{giš}illar-dili and a ^{giš}illar-giš-dili (*MSL* 6, p.89 72-75), but these may not be related to our line.

557-558 The items ^{giš}gag-pan and ^{giš}gag-si-sa₂ are probably synonymous. Both are used as Sumerograms for Akkadian *šilt_hu* (arrow, or the constellation Arrow).

560-561 The item ^{giš}sa-ad (561) appears after the section nets (^{giš}sa) in the Emar version.

Emar 6/4, p.74, 309': sa-ad = *na-as-sa₃-pu*. This line is equivalent to *ur₅-ra* 6, 192: ^{giš}sa-ad = *nassapu*. In *MSL* 6, p.70 the Sumerian was reconstructed as [^{giš}sa-du₃] on the basis of lines 193-195 which list various parts of the sa-du₃. The Sumerian of lines 192-194 may now be restored from the unilingual Kassite tablet NBC 10915:

192 ^{giš}sa-ad
 193 ^{giš}PA-sa-du₃
 194 ^{giš}gur₂-sa-du₃
 195 ^{giš}eš-ad[?] (later text: eš-sa-du₃)

In *CAD* N *nassapu* is translated as 'a net'. However, the position of the Old Babylonian item suggests that ^{giš}sa-ad = *nassapu* is not related to ^{giš}sa. The word ^{giš}eš-sa-du₃ is rendered *nahbalu* (snare) in Akkadian (*MSL* 6, p.70 195; for other references see the lexical section of *CAD* *nahbalu*).

562-575 This section is discussed in some detail in §3.5.1.

576-577 These two entries have not been preserved in any Nippur source. Their reconstruction here, however, is very plausible for three reasons. First, this pair of items appears in the Middle Babylonian sources among the weapons (see the discussion by Civil 1987). It is further found in one Old Babylonian source of unknown provenance (NP P-02 col. IV 10-11'). In the Nippur weapons section this is the only place left. Second, in Ni II-131 only the determinative ^{giš} of the first item has been preserved, and of the second line only ^{giš}gag-[]. After the ^{giš} in the first item there is some blank space. This indicates that the list does not continue with the preceding ^{giš}KID- section, but rather introduces a new word. The reconstruction ^{giš}[u₄-sakar]; ^{giš}gag-[u₄-sakar] fits perfectly and is very apt. Third, the next two items of the standard Nippur text contain the SAR sign. The present reconstruction results in a sequence of four items containing this sign, which is a common compository technique in the lists.

578-579 The same two items, without the ^{giš} determinative, are found in Nigga 145-146 (*MSL* 13, p.100). The reading ^{giš}ni₃-sakar-bur₃-bur₃ is suggested by the corresponding Emar passage (*Emar* 6/4, p.75):

354' IM-sahar-ra *is-ki-il-lu*
 355' IM-sahar-[bir-b]ir-ra MIN *pal*-[]

The Emar and Nippur versions agree in placing these items immediately before the section ^{giš}mar. The sign IM in the Emar text is to be read ni₂. Line 355' in the Emar text is so damaged that even a reading ni₂-sahar-[bur₃-bu]r₃-ra is not excluded. The Akkadian rendering may then be restored *pal*-[*lu-šu*] as in *Emar* 6/4, p.79 519' (with Civil 1989, p.14): nam-gaz-nig₂-bur₃-bur₃-re = *ta-aš-šu pal-lu-šu*. *Pallušu* (*pullušu*) means perforated. The Nuzi version (SMN 2560; Lacheman 1939, p.90) displays the same order of sections in this passage. It includes the lines ^{giš}ni₂-sahar-ra and ^{giš}ni₂-sahar-ra-bur₃-bur₃ (correct accordingly *MSL* 6, p.160 16-17).

The spellings ni₃-sakar and ni₂-sahar are found side by side in late *ur₅-ra* 7a (*MSL* 6, p.92, 116-118):

116 ^{giš}ni₃-sakar *išqarurtu*
 117 ^{giš}ni₂-sahar-ra MIN
 118 ^{giš}ni₂-sahar-ra-bir-bir-ra MIN *purrrurtu*

580-591 For ^{giš}mar = *marru* (shovel) see Civil 1994, p.57. I have no clue for the reading of ŠID in line 589.

592-594 The reading of ^{giš}BAD is very probably ^{giš}sugin. The Emar ^{giš} list has a similar passage (*Emar* 6/4, p. 75, 377'-379'):

^{zu-uk-ki-in}BAD *su-uk-ki-nu*

^{zu-uk-ki-in}BAD *na-ta-pu*

^{zu-uk-ki-in}BAD *is la-[bi-ru]*

This passage is found in the same context as the ^{giš}BAD entries in the Nippur version. The Emar reading of ^{giš}BAD is confirmed by Proto-Diri 170 which has GIŠ.BAD = *sukkinnu* (no reading gloss preserved). In first millennium Diri II the item has grown into a small section:

312 *su-gi-in* GIŠ.BAD *sukkinnu*

313 *nut_pu*

314 *isu lab_ru*

This section virtually duplicates the Emar text quoted above. *Isu lab_ru* means 'old wood'. A similar meaning can be assumed for *nut_pu*, a word only attested in lexical texts (see *CAD* sv). *Sukkinnu* or *sumkinnu* probably means rotten (wood); the same word is also used for cereals (see *CAD* sv *sumkinnu*).

In the first millennium tradition the passage is found in ur₅-ra 6 together with other repetitive items such as ^{giš}ellag(LAGAB) and ^{giš}BU (see §3.5.2 of the present study). Now there are six lines ^{giš}BAD (*MSL* 6, p.56, 58-63):

58 ^{giš}^{su-mun}BAD *suginnu*

59 ^{giš}^{gi-iš MIN}BAD *kilzappu*

60 ^{giš}^{su-mun}BAD *nut_pu*

61 ^{giš}^{su-mun}BAD *bulû*

62 ^{giš}^{gi-iš MIN}BAD *niqru*

63 ^{giš}^{su-mun}BAD *isu lab_ru*

The distinction made here between ^{giš}sumun (lines 58, 60, 61, and 63) and ^{giš}sumun (59 and 62) may well be artificial. The glosses follow a pattern that is carried out over several sections in ur₅-ra 6 (see the commentary to 426-428 above). In each case the gloss for item 1 equals the gloss for item 3. The line between has the same gloss preceded by ^{gi-iš}. Another difference with the passages from Emar and Diri is that BAD is read *sumun* or, in other sources, *sun* but not *sugin*. The readings *sugin* and *sumun* are closely related. They are treated together in Ea II, 83-84 (*MSL* 14, p.250):

su-mu-un BAD *su-um-ki-nu*

su-gi-in BAD *su-um-gi-nu*

A few lines before, the more common rendering *su-mu-un* BAD *lab_ru* is found (Ea II, 79).

Compared to the parallels in Emar and Diri II, three Akkadian renderings are new in ur₅-ra 6. *Bulû* is translated as 'firewood'; 'dry wood' (*CAD* sv). *Niqru* derives from *naq_ru* and is translated 'split wood'. Both words are extremely rare. *Kilzappu* (or *kissappu*) was recently discussed by Steinkeller (1990, p.20). One meaning of the word is 'threshing sledge', and in this sense it is found in the bilingual version of the 'Farmer's Instructions' as the Akkadian rendering of ^{giš}bad. The reading *sumun*, as indicated by ur₅-ra 6, is incorrect, because in the 'Farmer's

Instructions' 97 and 99 the word has a complement -ra₂, with variants -da and du₈ (Steinkeller 1990, p.19; Civil 1994, pp.94f. and 224-225).

The almost complete agreement between Nippur ur₅-ra, the Emar giš list and Diri II demonstrates that we have to read ^{giš}sugin three times. The threshing sledge (*kilzappu*) would have fitted well into the present context of agricultural implements but it is unlikely that it was included here. Its inclusion in late ur₅-ra was due to the fact that it is also written ^{giš}BAD. The pattern of glosses used in this section pushed aside the correct reading ^{giš}bad-(ra₂).

595-596 For ^{giš}dag-si and ^{giš}dag-si-e-ba-na see Civil 1987a, p.47 and Sallaberger 1995, p.20. According to Civil the dag-si is a part of the donkey's harness for hanging leather bags on. Note that the items seem to be out of context here.

597-619 Most of the musical instruments listed here have been treated by Krispijn 1990 and Kilmer 1995.

602 The signs sur₉ and sur₁₀ are described in Borger's *ABZ* as MA₂.KASKAL.SIG₇ and MA₂.SIG₇ respectively. According to Civil the Old Babylonian form of sur_{9/10} is BALAGxUZ₃ (*MSL* 14, p.512 note to line 151; see also *CAD algarsurrû*). The sign transliterated sur₉ is well preserved in Ni II-128 where it is clearly UZ₃.UD. This should be understood as UZ₃.ERIN₂. The partial signs preserved in Ni II-064 and Ni I-04 are compatible with this reading. The line in Ni I-04 clearly ends with ERIN₂. Similar or identical sign forms may be found, for instance, in 'Išme-Dagan V_A' line 14, texts A and B (Ludwig 1990, photographs on plates 4 and 6), and in the 'Curse of Agade' line 35 text Y₂ (Cooper 1983, photograph plate XIV). A particularly clear example of UZ₃.ERIN₂ has been copied in Heimerdinger *SLFN* plate 10: 3N-T901, 44 line 3 ('Curse of Agade' 35; Cooper's text Z₃). The sign ERIN₂ has a /sur/ reading, as demonstrated by Steinkeller 1990a. According to Steinkeller this value was transferred to LAL in the Old Babylonian period. We have to assume, therefore, that UZ₃.ERIN₂ or UZ₃^{sur} is a spelling that belongs to an earlier period. This may explain the proliferation of alternative spellings. Spellings with BALAG are collected in Al-Fouadi 1969, p.131. In some of the references listed by Al-Fouadi UZ₃.BALAG is to be read UZ₃.ERIN₂ (for instance *UET* 6/1 68 obv. 17).

607 This item has been reconstructed from two fragmentary sources. Ni I-04 preserves the end of the line: []-har. Ni II-064 has the beginning of the line; the traces are compatible with a reading ^{giš}h[ar-].

608 In Ni I-04 the line is read [^{giš}nig₂-har-mušen]-na-x. The x is probably a half-erased HAR.

609 In Ni II-064 the line begins with some blank space. The traces preserved are compatible with SA, but too little is preserved for a positive identification. The sign begins with two horizontals and one vertical through the beginning of the lower horizontal. There seems to be no room for another sign in Ni II-064. In Ni I-04 the end of the line is preserved: [-g]al₂. Possibly the item is to be read ^{giš}s[a] in Ni II-064 with the variant [^{giš}sa-g]al₂, or perhaps [^{giš}sa-3-g]al₂ in Ni I-04.

613-616 The *tigidlu* is both a bird and a musical instrument. The word has been treated by Civil 1987c. As a musical instrument in Old Babylonian texts the word is spelled either ^{giš}ŠA₃.TAR or ^{giš}DI.TAR. Both spellings are found in the Nippur lexical tablets (for later spellings see Civil 1987c). To the references collected by Civil may be added Van de Mieroop 1987, p.151 (early Old Babylonian Isin texts; spelling ^{giš}ŠA₃.TAR) and *PRU* 3, Planche X RS 13.53 (Ugarit lexical text, spelling ^{giš}ŠA₃.TAR; see Veldhuis 1996). That the ^{giš}*tigidlu* is a stringed instrument is demonstrated by line 615 of the Nippur list.

619 The word ^{giš}su-kar₂ may be used as a word for tool in general. Here it most probably refers to a musical instrument. The word is found in an almost identical context in Proto-Lu 640a, among musical instruments and musicians.

621-627 The reading ^{giš}ebir for ^{giš}DUG is found in various lexical sources. ^{giš}DUG is glossed e-bi/pi-ir in late ur₅-ra 7a, 131b and 134. The reconstruction in *MSL* 6 is somewhat confusing here. There is one source (source F) which has both line 131b and line 134, but there they follow each other immediately. A unilingual Kassite exercise text from Nippur (UM 29-13-947) has an extract from this passage (for this type of extract see §2.5.2.1). It reads as follows:

- 1 ^{giš}gan-[nu-um-gu-l]a
- 2 ^{giš}gan-n[u-um-gu]-la
- 3 ^{giš}gan-nu-um-a
- 4 ^{giš}gan-nu-um-a
- 5 ^{giš}gan-nu-um-kaš
- 6 ^{giš}gan-nu-um-tur
- 7 ^{giš}gan-nu-um-ki-sig
- 8 ^{giš}ma-at-gan
- 9 ^{giš}ma-at-gan
- 10 ^{giš}e-bi-ir

(end of exercise)

In Diri Ugarit II the word is written GIŠ.A or GIŠ.KAŠ (172-173); in first millennium Diri II GIŠ.A, GIŠ.KAŠ, or GIŠ.GA (292-294).

The word is translated as *kannum* in Akkadian, meaning a rack for storing vessels. Lines 624 to 627 treat the same object. Here the Akkadian loan ^{giš}ga-an-nu-um is used.

627a The item is probably to be read ^{giš}ebir-dug-imin-bi (a rack for seven jars).

630-631 The reading ^{giš}ma₂-gaz-bur₃-bur₃, rather than ^{giš}ma₂-gaz-GAM-GAM (as in *MSL* 6, p.155, 174) is based upon the following lines in the Emar version (*Emar* 6/4, p.79 with Civil 1989, p.14):

- 518' nam-gaz ta-aš-šu :: i-da-nu ša ^{giš}PAN
- 519' nam-gaz-nig₂-bur₃-bur₃-re ta-aš-šu pal-lu-šu

The reading bur₃-bur₃ (Civil) rather than niš (Arnaud) in line 519' must be correct, because of the Akkadian rendering *pallušu* (*pullušu* = perforated). A comparable variation in spelling involving nam- and ma- is found for the vessel ^{dug}nam-hara₄, Old Sumerian ^{dug}ma-hara₄ (see Sallaberger 1996, p.73 with note 285 and p.104). The word ^{giš}ma₂-gaz further appears in SIG₇.ALAN 20, 22-23 where it is rendered MIN (= *mah_su*) *makassi* (*MSL* 16, p.180). This word was interpreted as a slaughtering bench in *CAD*. The Sumerian column reads [^{giš}]ma₂-gaz-min₃-da; [^{giš}]ma₂-gaz-

min₃-du₃-du₃. The passage is preserved in one tablet only (K 11926+; handcopy in *CT* 12, 42). In this case a reading bur₃-bur₃ instead of min₃ is unlikely. The signs on this tablet are clearly separated, and the two winkelhaken of the min₃ are written together (collated). This is probably a transmission error.

632 The ^{giš}in-nu-šu-gur₁₀-ra is a straw chopper. For the reading gur₁₀ for KIN in contexts like these see Civil 1976d, p.186.

634-638 For the ^{giš}gud-si-dili (battering ram) see Steinkeller 1987a and Van de Mieroop 1987, p.140.

638 The item ^{giš}gešpu₂(ŠU.DIM₄)-gud-si-dili is written in first millennium ur₅-ra giš-peš₁₀(KI.A)-gud-si-dili, with variant peš for peš₁₀ (*MSL* 6, p.90, 92). In Emar (*Emar* 6/4, p.77, 430') the same word is written with peš₅. The entry ^{giš}šu-dim-dim in Ni II-064 is probably erratic.

641-644 In the reconstruction the section ^{giš}ur₂ has four items, but in Ni I-10 it certainly had no more than 3. The only item that is found in more than one source is ^{giš}ur₂-tal₂-l[a] (Ni II-139 and Ni I-04). There may be a relation with the items in ur₅-ra 7b 182-185 (*MSL* 6, p.129):

- []-1(AŠ) *naturru*
- []-2 MIN
- []-3 *namsaru*
- []-4 MIN

In *CAD* N the broken lines are reconstructed as [giš na₄]-1 etc. The word ur₂-tal₂-tal₂ is known as a plant name but any relation with the giš item is uncertain (*MSL* 10, p.111 111). For ur₂-tal₂-tal₂ see Klein 1981, p.163f. and Civil 1976a, p.91.

648-651 The section ^{giš}kab is found only in Ni I-10. In Ni U-28 the ^{giš}gisal items are followed by a section ^{giš}gam₃. This word is commonly rendered *šikru* (haft) in the first millennium lexical tradition (see *CAD* *šikru* lexical section), and has a section in late ur₅-ra 7b (*MSL* 6, p.133, 291-297). In the Emar version the ^{giš}gisal entries are followed by a section ^{giš}kin = *šakru* (*Emar* 6/4, p.77 437'-445'; with a parallel from Ugarit in André-Salvini 1991, p.107 no. 49). The passages ^{giš}kin in Emar and ^{giš}gam₃ in Ni U-28 are very similar:

Emar:		Nippur U-28:
kin	<i>ša-ak-ru</i>	^{giš} gam ₃
kin-gir ₂	<i>ša-kar pa-at-ri</i>	^{giš} gam ₃ -gir ₂
kin-gir ₂ -šu-i	MIN <i>gal-la-bi</i>	^{giš} gam ₃ -gir ₂ -šu-i
kin-gir ₂ -muhaldim	MIN <i>nu-ha-at-ti-mi</i>	[-g]ir ₂ -mu[haldim [?]]
(continues with more kin-gir ₂ items)		(break)

From this comparison it appears that ^{giš}kin (Emar) and ^{giš}gam₃ (Ni U-28 and first millennium) are equivalent. The question is whether ^{giš}kab (Ni I-10) is yet another writing for the same word. The section begins ^{giš}kab; ^{giš}kab-gir₂, corresponding to the beginning of the sections quoted above. Then, however, the text in Ni I-10 diverges. The interpretation of the ^{giš}kab section therefore remains uncertain.

662 The estimation of the length of the gap after line 658 is based upon the following

considerations. In Ni U-04 line 591 in column I is found at the same relative height as line 631 in column II. The computed column length in Ni U-04 is therefore 40. Line 627 in column II is at the same height as the first ^{giš}KUR entry in column III. On this evidence the three ^{giš}KUR items would receive the numbers 667-669. On the other hand the column length on the obverse of Ni I-10 may be computed as 37. Since the second NIM item is at the same height as line 634 this would result in the line numbers 670-672 for the three ^{giš}NIM lines. The two computations are incompatible since the section ^{giš}KUR is followed by at least three items and the ^{giš}NIM is preceded by at least three other items. However, the reverse of Ni I-10 is more densely inscribed than the obverse, whereas the second column of Ni U-04 is less crowded than its first column. The present line numbering is based upon a compromise. The resulting reconstruction implies that the second column of Ni U-04 had 36 lines, and that the reverse of Ni I-10 had 43 lines per column.

663-668 This section has been discussed at some length in §3.3.2.

673 For the estimation of the length of the gap after line 668 see at line 662.

676-679 This section has been treated in some detail in §3.3.2.

682-683 The item GIŠ.NIG₂.UMBIN has a reading /nisiki/ in Diri II and is rendered *mumarr_tu* in Akkadian. In line 316 of the Nippur ^{giš} list we find the variants ^{giš}sig-zi-gan and ^{giš}UMBIN-zi-gan (see the commentary at line 316 above). The /sik/ reading for UMBIN is further confirmed by the variant ^{giš}nig₂-sik₂ for ^{giš}nig₂-UMBIN in ur₅-ra 7a, 210 (see *CAD mumarr_tu* lexical section). Similar variation between UMBIN and sig₂ is found in ur₅-ra 7a, 26 (see *MSL* 6, p.86 with footnotes). The item ^{giš}kun-UMBIN is written ^{giš}kun-sik₂ in *Emar* 6/4, p.79, 521' and ^{giš}kun-zi in NP I-03 rII06' (§5.6.2). For other lexical references see *CAD zappu*.

696-702 The animals listed in this section are wooden figurines. This is demonstrated by the inclusion of the more general words ^{giš}alan (statue) and ^{giš}za-na (figurine), and the 'box for a figurine' (^{giš}e₂-za-na).

704 This item has been discussed above at line 549.

705 The reading ^{giš}ar-gibil₂ is confirmed by the Emar parallel ar-ga-bi-nu (*Emar* 6/4, p.80, 574').

5.4 Score Edition of the Nippur Giš List

001 3001	giš taskarin				
Ni II-002	rII04'	giš taskarin	Ni II-070	rI02	giš esi
Ni II-015	rI01	giš [tas]karin	Ni II-096	rI02	giš esi
Ni II-017	rI01	giš tas[karin]	Ni II-110	rI02	giš esi
Ni II-020	rI01	giš taskarin	Ni II-110	rIII17	[] esi
Ni II-023	rI01	giš t[askarin]	Ni II-112	rI02	giš esi
Ni II-025	rI01	giš taskarin	Ni II-116	rI02	giš es[i]
Ni II-027	rI01	[gi]š taskarin	Ni II-124	rI02	giš esi
Ni II-030	rI01	giš taskarin	Ni II-141	rI02	giš e[si]
Ni II-036	rI01	[] taskarin	Ni II-149	rI02	giš esi
Ni II-047	rI02	giš taskarin	Ni II-155	rI02	giš esi
Ni II-050	I01	giš t[askarin]	Ni II-162	rI02	giš e[si]
Ni II-051	rI01	giš taskarin	Ni II-164	rI02	giš es[i]
Ni II-054	rI01	giš t[askarin]	Ni II-165	rI02	giš esi
Ni II-070	rI01	giš taskarin	Ni II-205	rI02	giš esi
Ni II-096	rI01	giš taskarin	Ni II-225	rII04'	giš esi
Ni II-110	rI01	giš tas[karin]	Ni II-229	rI02	giš esi
Ni II-110	rIII16	[] taskarin	Ni II-238	rI02	giš esi
Ni II-112	rI01	giš taskarin	Ni II-248	rI02	[] esi
Ni II-116	rI01	giš [taskari]n	Ni II-265	rI02	giš esi
Ni II-124	rI01	giš taskarin	Ni II-283	rI02	giš esi
Ni II-141	rI01	giš ta[skarin]	Ni II-287	rI02	giš esi
Ni II-149	rI01	giš taskarin	Ni IV-12	rI02	giš esi
Ni II-155	rI01	giš taskarin	Ni U-05	I01'	[e]si
Ni II-162	rI01	giš [
Ni II-164	rI01	g[iš	003 3003	giš nu ₁₁	
Ni II-205	rI01	giš taskarin	Ni II-002	rII06'	giš nu ₁₁
Ni II-225	rII03'	giš taskarin	Ni II-015	rI03	giš nu ₁₁
Ni II-229	rI01	giš taskarin	Ni II-017	rI03	giš n[u ₁₁]
Ni II-238	rI01	giš [	Ni II-020	rI03	giš nu ₁₁
Ni II-248	rI01	[] taskarin	Ni II-023	rI03	giš n[u ₁₁]
Ni II-265	rI01	giš taskarin	Ni II-025	rI03	giš nu ₁₁
Ni II-283	rI01	giš taskarin	Ni II-027	rI03	giš nu ₁₁
Ni II-287	rI01	giš taskarin	Ni II-030	rI03	[gi]š nu ₁₁
Ni IV-12	rI01	[gi]š taskarin	Ni II-036	rI03	giš nu ₁₁
			Ni II-044	rI03	giš nu ₁₁
			Ni II-047	rI03	giš n[u ₁₁]
002 3002	giš esi		Ni II-051	rI03	[n]u ₁₁
Ni II-002	rII05'	giš esi	Ni II-054	rI03	giš nu ₁₁
Ni II-015	rI02	giš esi	Ni II-058	rI03	giš nu ₁₁
Ni II-017	rI02	giš es[i]	Ni II-070	rI03	giš nu ₁₁
Ni II-020	rI02	g[iš] esi	Ni II-085	rI03	giš n[u ₁₁]
Ni II-023	rI02	giš e[si]	Ni II-096	rI03	giš nu ₁₁
Ni II-025	rI02	giš esi	Ni II-110	rI03	giš nu ₁₁
Ni II-027	rI02	giš esi	Ni II-110	rIII18	[] nu ₁₁
Ni II-030	rI02	giš esi	Ni II-112	rI03	giš nu ₁₁
Ni II-036	rI02	giš esi	Ni II-116	rI03	giš nu ₁₁
Ni II-044	rI02	giš esi	Ni II-124	rI03	giš nu ₁₁
Ni II-047	rI01	giš esi	Ni II-140	rI03	giš n[u ₁₁]
Ni II-051	rI02	giš esi	Ni II-141	rI03	giš [
Ni II-054	rI02	giš e[si]	Ni II-149	rI03	giš nu ₁₁
Ni II-058	rI02	giš e[si]	Ni II-155	rI03	giš nu ₁₁

Ni II-162	rI03	giš nu ₁₁	Ni II-205	rI04	giš ha-lu-LU(!)
Ni II-164	rI03	giš nu ₁₁	Ni II-222	rI04	giš h[a-
Ni II-165	rI03	giš nu ₁₁	Ni II-229	rI04	giš ha-lu-ub ₂
Ni II-174	rI03	giš n[u ₁₁]	Ni II-238	rI04	giš [h]a-lu-ub ₂
Ni II-178	rI02'	giš n[u ₁₁]	Ni II-248	rI04	[] ha-lu-ub ₂
Ni II-205	rI03	giš nu ₁₁	Ni II-265	rI04	giš lu-ha-ub ₂ (sic!)
Ni II-225	rII05'	giš n[u ₁₁]	Ni II-271	rI02'	giš ha-lu-[-
Ni II-229	rI03	giš nu ₁₁	Ni II-279	rI01'	giš ha-lu-u[b ₂]
Ni II-238	rI03	giš nu ₁₁	Ni II-283	rI04	giš ha-KU?-ub ₂
Ni II-248	rI03	[] nu ₁₁	Ni II-287	rI04	giš ha-lu-ub ₂
Ni II-265	rI03	giš nu ₁₁	Ni IV-12	rI04	giš ha-lu-ub ₂
Ni II-271	rI01'	giš n[u ₁₁]	Ni U-05	I02'	[h]a-l[u-u]b ₂
Ni II-283	rI03	giš nu ₁₁	Ni U-25	I04	giš ha-lu-ub ₂
Ni II-287	rI03	giš nu ₁₁			
Ni IV-12	rI03	giš nu ₁₁			
Ni U-25	I03	giš n[u ₁₁]			
004 3004		giš ha-lu-ub ₂	005 3005		giš ša ₃ -kal
Ni II-001	rI04	giš h[a-	Ni II-001	rI05	giš ša ₃ -k[al]
Ni II-002	rII07'	giš PEŠ ha-lu-ub ₂	Ni II-002	rII08'	giš ša ₃ -kal
Ni II-013	rI01'	[g]iš [h]a-l[u-	Ni II-013	rI02'	[g]iš ša ₃ -kal
Ni II-015	rI04	giš ha-lu-ub ₂	Ni II-015	rI05	giš ša ₃ -kal
Ni II-017	rI04	giš ha-[-	Ni II-017	rI05	giš [š]a ₃ -ka[l]
Ni II-020	rI04	giš ha-lu-u[b ₂]	Ni II-020	rI05	giš ša ₃ -kal
Ni II-023	rI04	giš ha-l[u-	Ni II-023	rI05	giš ša ₃ -[-
Ni II-025	rI04	giš ha-lu-u[b ₂]	Ni II-025	rI05	giš ša ₃ -k[al]
Ni II-027	rI04	giš ha-lu-ub ₂	Ni II-027	rI05	giš ša ₃ -kal
Ni II-030	rI04	[-l]u-u[b ₂]	Ni II-036	rI05	giš š[a ₃]-kal
Ni II-036	rI04	giš ha-lu-u[b ₂]	Ni II-044	rI05	giš ša ₃ -kal
Ni II-044	rI04	giš ha-lu-ub ₂	Ni II-047	rI05	giš ša ₃ -kal
Ni II-047	rI04	giš ha-lu-u[b ₂]	Ni II-051	rI05	[]-kal
Ni II-050	I04	giš ha-[-	Ni II-054	rI05	giš ša ₃ -kal
Ni II-051	rI04	[-l]u-ub ₂	Ni II-057	I01	giš ša ₃ -kal
Ni II-054	rI04	giš ha-lu-ub ₂	Ni II-058	rI05	giš š[a ₃]-kal
Ni II-058	rI04	giš lu-ub ₂ -ha	Ni II-070	rI05	giš ša ₃ -kal
Ni II-070	rI04	giš ha-lu ₂ -ub ₂	Ni II-074	rI02'	giš ša ₃ -[-
Ni II-085	rI04	giš ha-lu-u[b ₂]	Ni II-085	rI05	giš ša ₃ -ka[l]
Ni II-091	rI03'	giš ha-lu-[-	Ni II-091	rI04'	giš ša ₃ -k[al]
Ni II-096	rI04	giš ha-lu-u[b ₂]	Ni II-096	rI05	giš ša ₃ -kal
Ni II-105	rI04	giš ha-[-	Ni II-105	rI05	giš š[a ₃ -
Ni II-110	rI04	giš ha-lu-ub ₂	Ni II-109	rI01'	[š]a ₃ -ka[l]
Ni II-110	rIII19	[] ha-lu-ub ₂	Ni II-110	rI05	giš ša ₃ -k[al]
Ni II-112	rI04	giš ha-lu-ub ₂	Ni II-110	rIII20	[] ša ₃ -kal
Ni II-116	rI04	giš ha-lu-ub ₂	Ni II-112	rI05	giš ša ₃ -kal
Ni II-124	rI04	giš ha-lu-ub ₂	Ni II-116	rI05	giš ša ₃ -kal
Ni II-140	rI04	giš h[a-	Ni II-124	rI05	giš ša ₃ -kal
Ni II-141	rI04	giš ha-[-	Ni II-140	rI05	giš š[a ₃ -
Ni II-148	rI04	giš ha-[-	Ni II-141	rI05	giš ša ₃ -[-
Ni II-149	rI04	giš ha-lu-ub ₂	Ni II-149	rI05	giš ša ₃ -k[al]
Ni II-155	rI04	giš ha-lu-ub ₂	Ni II-155	rI05	giš ša ₃ -kal
Ni II-162	rI04	giš ha-lu-ub ₂	Ni II-162	rI05	giš ša ₃ -kal
Ni II-164	rI04	giš ha-lu-ub ₂	Ni II-164	rI05	giš ša ₃ -ka[l]
Ni II-165	rI04	giš ha-lu-ub ₂	Ni II-165	rI05	giš ša ₃ -kal
Ni II-174	rI04	giš ha-lu-[-	Ni II-174	rI05	giš š[a ₃ -
Ni II-178	rI03'	giš ha-lu-ub ₂	Ni II-178	rI04'	giš ša ₃ -kal
			Ni II-205	rI05	giš ša ₃ -kal
			Ni II-222	rI05	giš š[a ₃ -
			Ni II-229	rI05	giš ša ₃ -kal

Ni II-238	rI05	giš [š]a ₃ -kal	006a 3007	giš kin ₂ -babbar
Ni II-248	rI05	[š]a ₃ -kal	Ni II-017	rI07 []-babbar
Ni II-265	rI05	giš ša ₃ -kal	Ni II-054	rI07 giš kin ₂ -babbar
Ni II-271	rI03'	giš ša ₃ -kal	Ni II-155	rI07 [gi]š kin ₂ -babbar
Ni II-279	rI02'	giš ša ₃ -k[al]	Ni II-205	rI07 giš kin ₂ -babbar
Ni II-283	rI05	giš ša ₃ -kal	Ni II-238	rI07 [-bab]bar
Ni II-287	rI05	giš ša ₃ -kal	Ni II-271	rI05' giš kin ₂ -babbar
Ni IV-12	rI05	giš ša ₃ -kal	Ni II-279	rI04' giš kin ₂ -babbar
Ni U-05	I03'	[š]a ₃ -kal	Ni U-05	I05' [k]in ₂ -babbar
Ni U-25	I05	giš ša ₃ -kal		
006 3006	giš kin ₂		006b 3008	giš kin ₂ -gi ₆
Ni II-001	rI06	giš kin ₂	Ni II-017	rI08 [-g]i ₆
Ni II-002	rII09'	giš kin ₂	Ni II-054	rI08 giš kin ₂ -gi ₆
Ni II-013	rI03'	[g]iš kin ₂	Ni II-155	rI08 [gi]š kin ₂ -g[i ₆
Ni II-015	rI06	giš kin ₂	Ni II-205	rI08 giš kin ₂ -gi ₆
Ni II-017	rI06	[gi]š k[in ₂]	Ni II-279	rI05' [gi]š kin ₂ -g[i ₆]
Ni II-020	rI06	giš kin ₂	Ni U-05	I06' [k]in ₂ -gi ₆
Ni II-036	rI06	[gi]š kin ₂		
Ni II-044	rI06	giš kin ₂	007 3011	giš gi ₆
Ni II-051	rI06	[k]in ₂	Ni I-08	I02' giš gi ₆
Ni II-054	rI06	giš kin ₂	Ni II-001	rI07 giš gi ₆
Ni II-057	I02	giš kin ₂	Ni II-002	rII10' giš gi ₆
Ni II-058	rI06	giš kin ₂	Ni II-013	rI04' [g]iš gi ₆
Ni II-070	rI06	giš kin ₂	Ni II-015	rI07 giš gi ₆
Ni II-085	rI06	giš [	Ni II-020	rI07 giš gi ₆
Ni II-091	rI05'	giš k[in ₂]	Ni II-021	rI01' [gi]š g[i ₆]
Ni II-109	rI02'	giš k[in ₂]	Ni II-036	rI07 [] gi ₆
Ni II-110	rI06	giš kin ₂	Ni II-044	rI07 giš gi ₆
Ni II-110	rIII21	[] kin ₂	Ni II-054	rI09 giš gi ₆
Ni II-112	rI06	[] kin ₂	Ni II-057	I03 giš gi ₆
Ni II-116	rI06	giš [	Ni II-074	rI04' giš g[i ₆
Ni II-124	rI06	[] kin ₂	Ni II-085	rI07 giš g[i ₆]
Ni II-140	rI06	giš ki[n ₂]	Ni II-091	rI06' giš g[i ₆]
Ni II-141	rI06	giš k[in ₂]	Ni II-096	rI06 giš <še> gi ₆
Ni II-144	rI01'	giš k[in ₂]	Ni II-109	rI03' giš g[i ₆]
Ni II-149	rI06	giš ki[n ₂]	Ni II-110	rI07 giš gi ₆
Ni II-155	rI06	giš kin ₂	Ni II-112	rI07 [] gi ₆
Ni II-162	rI06	giš kin ₂	Ni II-116	rI07 giš gi ₆
Ni II-164	rI06	giš kin ₂	Ni II-140	rI07 giš g[i ₆]
Ni II-165	rI06	giš geštin k[in ₂]	Ni II-141	rI07 giš [
Ni II-178	rI05'	giš kin ₂	Ni II-144	rI02' giš gi ₆
Ni II-205	rI06	giš kin ₂	Ni II-162	rI07 giš gi ₆
Ni II-222	rI06	giš [	Ni II-164	rI07 giš gi ₆
Ni II-229	rI06	giš k[in ₂]	Ni II-165	rI07 giš gi ₆
Ni II-238	rI06	giš [ki]n ₂	Ni II-178	rI06' giš gi ₆
Ni II-248	rI06	[gi]š kin ₂	Ni II-205	rI09 giš g[i ₆]
Ni II-265	rI06	giš kin ₂	Ni II-222	rI07 giš g[i ₆]
Ni II-271	rI04'	giš kin ₂	Ni II-248	rI07 giš gi ₆
Ni II-279	rI03'	giš ki[n ₂]	Ni II-265	rI07 [gi]š gi ₆
Ni II-283	rI06	giš kin ₂	Ni II-283	rI07 giš gi ₆
Ni IV-12	rI06	giš kin ₂	Ni IV-12	rI07 giš gi ₆
Ni U-05	I04'	giš kin ₂	Ni U-05	I07' [] gi ₆
Ni U-25	I06	giš kin ₂	Ni U-25	I07 giš g[i ₆]
			008 3012	giš geštin

Ni I-08	I03'	giš geštin	Ni II-140	rI09	giš geš[tin-
Ni II-001	rI08	giš geštin	Ni II-141	rI09	giš ge[štin-
Ni II-002	rII11'	giš geštin	Ni II-143	rI01'	[gešt]in-k[ir ₄]
Ni II-015	rI08	giš geštin	Ni II-144	rI04'	giš geštin-k[ir ₄]
Ni II-020	rI08	giš gešt[in]	Ni II-148	rI09	giš geštin-[
Ni II-021	rI02'	giš geštin	Ni II-155	rI10	[] geštin-[
Ni II-036	rI08	[ge]štin	Ni II-162	rI09	giš geštin-[
Ni II-044	rI08	giš geštin	Ni II-163	rI09	giš geštin-[
Ni II-054	rI10	giš geštin	Ni II-164	rI09	giš geštin-kir ₄
Ni II-057	I04	giš geš[tin	Ni II-165	rI09	giš geštin-X
Ni II-074	rI05'	giš geš[tin]	Ni II-178	rI08'	giš geštin-[
Ni II-085	rI08	giš geštin	Ni II-222	rI09	giš geštin-
Ni II-091	rI07'	giš gešt[in]	Ni II-248	rI09	giš geštin-kir ₄
Ni II-096	rI07	giš <še> geštin	Ni II-265	rI09	[] geštin-gir ₂
Ni II-109	rI04'	giš geš[tin]	Ni II-283	rI09	giš geš[tin-
Ni II-110	rI08	giš geštin	Ni U-05	I09'	giš geštin-k[ir ₄]
Ni II-116	rI08	giš geštin	Ni U-25	I09	giš geštin-k[ir ₄]
Ni II-140	rI08	giš g[eštin]			
Ni II-141	rI08	giš [	010 3015	giš geštin-ka ₅ -a	
Ni II-144	rI03'	giš geštin	Ni I-08	I05'	giš geštin-ka ₅ -a
Ni II-148	rI08	g[iš gešt]in	Ni II-001	rI10	giš geštin-ku
Ni II-155	rI09	[gi]š g[eštin]	Ni II-002	rII13'	[giš geš]tin-[k]a ₅ -a
Ni II-162	rI08	giš gešt[in]	Ni II-015	rI10	giš geštin-k[a ₅]-a
Ni II-164	rI08	giš geštin	Ni II-020	rI10	giš geštin-k[a ₅ -
Ni II-165	rI08	giš geštin	Ni II-021	rI04'	giš geštin-[k]a ₅ -a
Ni II-178	rI07'	giš geštin	Ni II-036	rI10	[ge]štin-k[a ₅]-a
Ni II-222	rI08	giš ge[štin]	Ni II-037	rI07'	giš geš[tin-
Ni II-248	rI08	giš geštin	Ni II-044	rI10	[gi]š geštin-[k]a ₅ -a
Ni II-265	rI08	[] geštin	Ni II-054	rI12	giš gešt[in-k]a ₅ -[
Ni II-283	rI08	giš geš[tin]	Ni II-055	rI01'	giš geštin-k[a ₅ -
Ni IV-12	rI08	giš geštin	Ni II-058	rI10	giš geštin-k[a ₅]-a
Ni U-05	I08'	[] geštin	Ni II-074	rI07'	giš geštin-[
Ni U-25	I08	giš geštin	Ni II-085	rI10	giš geštin-ka ₅ -a
			Ni II-091	rI09'	[] geštin-k[a ₅ -
009 3013	giš geštin-kir ₄		Ni II-096	rI09	giš geštin-x
Ni I-08	I04'	giš geštin-kir ₄	Ni II-105	rI10	giš g[eštin-
Ni II-001	rI09	giš geštin-ga ₂	Ni II-107	rI01'	giš geštin-k[a ₅ -
Ni II-002	rII12'	giš geštin-gir ₂	Ni II-109	rI06'	giš geštin-ka ₅ -a
Ni II-015	rI09	giš geštin-kir ₄	Ni II-110	rI10	giš geštin-[
Ni II-020	rI09	giš ge[štin]-kir ₄ ?	Ni II-116	rI10	[gi]š geštin-[k]a ₅ -a
Ni II-021	rI03'	giš geš[tin]-kir ₄	Ni II-140	rI10	giš geštin-ka ₅ -[
Ni II-036	rI09	[ge]štin-kir ₄	Ni II-141	rI10	giš ge[štin-
Ni II-037	rI06'	giš geš[tin-	Ni II-143	rI02'	giš geštin-k[a ₅ -
Ni II-044	rI09	[gi]š geštin-kir ₄	Ni II-144	rI05'	giš ge[štin-
Ni II-054	rI11	giš geštin-kir ₄	Ni II-148	rI10	giš geštin-[
Ni II-057	I05	giš geštin-[	Ni II-155	rI11	[geš]tin-[k]a ₅ -a
Ni II-058	rI09	giš geštin-[	Ni II-162	rI10	giš geštin-k[a ₅ -
Ni II-074	rI06'	giš geštin-[	Ni II-163	rI10	giš geštin-[
Ni II-085	rI09	giš geštin-kir ₄	Ni II-164	rI10	giš geštin-ka ₅ -a
Ni II-091	rI08'	[] geštin-k[ir ₄]	Ni II-165	rI10	giš geštin-X
Ni II-096	rI08	giš <še> geštin-[	Ni II-174	rI10	giš ge[štin-
Ni II-105	rI09	giš ge[štin-	Ni II-239	rI01'	[]-a
Ni II-109	rI05'	giš geštin-kir ₄	Ni II-248	rI10	giš geštin-ka ₅
Ni II-110	rI09	giš geštin-[	Ni U-05	I10'	giš geštin-k[a ₅]-a
Ni II-116	rI09	giš geštin-kir ₄	Ni U-25	I10	[gi]š geštin-ka ₅ -a

011	3017	giš geštin-gam-ma		Ni II-116	rI12	[] peš ₃
Ni I-04	I01'	[-m]a		Ni II-140	rI12	giš peš ₃
Ni I-08	I06'	giš geštin-gam-ma		Ni II-141	rI12	giš [
Ni II-001	rI11	giš geštin-gam-ma		Ni II-143	rI04'	giš peš ₃
Ni II-002	rII14'	giš geštin-gam-ma		Ni II-155	rI13	[] peš ₃
Ni II-015	rI11	giš geštin-[		Ni II-162	rI12	giš pe[š ₃]
Ni II-020	rI11	[g]iš gešt[in]-gam-ma		Ni II-164	rI12	giš peš ₃
Ni II-021	rI05'	giš geštin-[		Ni II-165	rI12	giš peš ₃
Ni II-036	rI11	[ge]štin-gam-ma		Ni II-245	I01	[] p[eš ₃]
Ni II-037	rI08'	giš geš[tin-		Ni II-248	rI12	g[iš pe]š ₃
Ni II-044	rI11	[gi]š geštin-gam-ma		Ni IV-12	rI09	giš peš ₃
Ni II-054	rI13	giš geštin-gam-ma		Ni U-05	I12'	giš p[eš ₃]
Ni II-055	rI02	giš geštin-gam-ma		Ni U-24	I01'	[] peš ₃
Ni II-058	rI11	giš geštin-gam-ma				
Ni II-074	rI08'	giš geštin-[		013	3032	giš hašhur
Ni II-085	rI11	giš geštin-gam-ma		Ni I-04	I03'	[] hašhur
Ni II-096	rI10	giš geštin-gam		Ni I-08	I08'	giš hašhur
Ni II-107	rI02'	giš geštin-gam-ma		Ni II-001	rI13	giš hašhur
Ni II-109	rI07'	giš geštin-gam-ma		Ni II-002	rII16'	giš hašhur
Ni II-110	rI11	giš geš[tin-		Ni II-003	rI02'	giš hašhur
Ni II-116	rI11	[ge]štin-gam-ma		Ni II-020	rI13	giš hašhur
Ni II-140	rI11	giš geštin-ma		Ni II-035	rI12	giš haš[hur?
Ni II-141	rI11	giš ge[štin-		Ni II-036	rI13	giš haš[hur]
Ni II-143	rI03'	giš gešti[n-		Ni II-037	rI10'	giš ha[šhur]
Ni II-148	rI11	[] geš[tin-		Ni II-054	rII01	giš [haš]hur
Ni II-155	rI12	[geš]tin-gam-ma		Ni II-055	rI04	giš hašhur
Ni II-162	rI11	giš geštin-gam-m[a]		Ni II-058	rI14	giš hašhur-MA
Ni II-163	rI11	giš gešt[in-		Ni II-065	rI02'	[haš]hur
Ni II-164	rI11	giš geštin-gam-ma		Ni II-085	rI13	giš hašhur
Ni II-165	rI11	giš geštin-[		Ni II-089	rI02'	giš hašhur
Ni II-174	rI11	giš geš[tin-		Ni II-096	rI12	giš hašhur
Ni II-239	rI02'	[]-ma		Ni II-107	rI04'	giš hašhur
Ni II-248	rI11	giš geštin-gam-ma		Ni II-109	rI09'	giš hašhur-[ha]šhur
Ni U-05	I11'	giš geštin-[-m]a		Ni II-110	rI13	giš hašhur
Ni U-25	I11	[gi]š geštin-gam-ma		Ni II-116	rI13	[ha]šhur
				Ni II-140	rI13	giš hašhur
012	3029	giš peš ₃		Ni II-141	rI13	giš [
Ni I-04	I02'	[] peš ₃		Ni II-143	rI05'	giš hašhur
Ni I-08	I07'	giš peš ₃		Ni II-155	rI14	[] hašhur
Ni II-001	rI12	giš peš ₃		Ni II-162	rI13	giš [
Ni II-002	rII15'	giš peš ₃		Ni II-164	rI13	giš hašhur
Ni II-020	rI12	[gi]š peš ₃		Ni II-165	rI13	giš haš[hur]
Ni II-036	rI12	giš peš ₃		Ni II-174	rI13	giš ha[šhur]
Ni II-044	rI12	[p]eš ₃		Ni II-245	I02	[] hašhur
Ni II-054	rI14	giš peš ₃		Ni IV-12	rI10	giš hašhur
Ni II-055	rI03	giš peš ₃		Ni U-24	I02'	giš hašhur
Ni II-058	rI13	giš peš ₃				
Ni II-065	rI01'	[] p[eš ₃]		014	3033	giš hašhur-kur-ra
Ni II-074	rI09'	giš p[eš ₃]		Ni I-04	I04'	[haš]hur-kur-ra
Ni II-085	rI12	giš peš ₃		Ni I-08	I09'	giš hašhur-ku[r]
Ni II-089	rI01'	[pe]š ₃		Ni II-001	rI14	giš hašhur-kur
Ni II-107	rI03'	giš peš ₃		Ni II-002	rII17'	giš hašhur-kur-ra
Ni II-109	rI08'	[gi]š pe[š ₃]		Ni II-003	rI03'	giš hašhur-kur-ra
Ni II-110	rI12	giš p[eš ₃]		Ni II-014	rI01'	[]-kur
				Ni II-017	rII01	[gi]š hašhur-kur-r[a

Ni II-020	rI14	giš hašhur-[]-ra	Ni II-162	rI15	giš še-[
Ni II-035	rI13	giš haš[hur?	Ni II-164	rI15	giš še-dug ₃
Ni II-036	rI14	giš haš[hur]-kur	Ni II-165	rI16	giš še-dug ₃
Ni II-037	rI11'	giš hašhur-k[ur]	Ni II-174	rI15	giš še-[
Ni II-054	rII02	giš hašhur-ku[r]	Ni II-198	rI01'	[] še-dug ₃
Ni II-058	rI15	giš hašhur-kur	Ni II-200	rI01'	giš še-[
Ni II-065	rI03'	[]-kur	Ni II-209	rI01'	giš še-d[ug ₃]
Ni II-085	rI14	giš hašhur-kur	Ni II-245	I05	[gi]š še-dug ₃
Ni II-089	rI03'	giš hašhur-kur	Ni IV-12	rI12	giš še-dug ₃
Ni II-096	rI13	giš hašhur-r[a?]	Ni U-24	I05'	giš [š]e-dug ₃
Ni II-107	rI05'	giš hašhur-kur-r[a]			
Ni II-109	rI10'	giš hašhur-kur-ra	016 3049	giš še-nu	
Ni II-110	rI14	[]-kur-ra	Ni I-04	I05'	[] še-nu
Ni II-116	rI14	[]-k]ur	Ni I-08	I11'	giš še-nu
Ni II-129	rI01'	giš hašhur-kur	Ni II-001	rI16	giš še-nu
Ni II-140	rI14	giš [haš]hur-kur-ra	Ni II-002	rII19'	giš še-nu
Ni II-141	rI14	giš hašhur-[	Ni II-013	rI13'	[š]e-nu
Ni II-143	rI06'	g[iš haš]hur-kur	Ni II-014	rI02'	[] še-nu
Ni II-155	rI15	[haš]hur-kur-ra	Ni II-017	rII03	giš še-nu
Ni II-162	rI14	giš hašhur-[	Ni II-020	rI15	giš še-nu
Ni II-164	rI14	giš hašhur-kur	Ni II-036	rI16	[n]u
Ni II-165	rI14	giš haš[hur-k]ur-r[a]	Ni II-037	rI13'	giš š[e-
Ni II-174	rI14	giš hašhur-[	Ni II-054	rII03	giš še-nu
Ni II-239	rI05'	[] hašhur-[	Ni II-058	rI17	giš še-[
Ni II-245	I03	[] hašhur-kur	Ni II-063	rI01'	giš še-nu
Ni IV-10	1	giš hašhur-kur	Ni II-065	rI05'	giš [
Ni IV-12	rI11	giš hašhur-kur	Ni II-085	rI16	giš še-nu
Ni U-24	I03'	giš []-ra	Ni II-089	rI05'	giš š[e-
015 3050	giš še-dug ₃		Ni II-109	rI12'	giš še-nu
Ni I-04	I06'	[] še-dug ₃	Ni II-110	rI16	giš še-n[u]
Ni I-08	I10'	giš še-dug ₃	Ni II-129	rI02'	giš še-nu
Ni II-001	rI15	giš še-dug ₃	Ni II-140	rI16	giš še-nu
Ni II-002	rII18'	giš še-dug ₃	Ni II-141	rI16	giš še-[
Ni II-003	rI04'	giš še d[ug ₃]	Ni II-143	rI08'	giš še-nu
Ni II-013	rI12'	[]-dug ₃	Ni II-155	rI16	[] še-nu
Ni II-014	rI03'	giš še-du[g ₃]	Ni II-162	rI16	giš še-[
Ni II-017	rII02	giš še-dug ₃	Ni II-164	rI16	giš še-nu
Ni II-020	rI16	giš še-dug ₃	Ni II-165	rI15	giš še-nu
Ni II-036	rI15	giš š[e-du]g ₃	Ni II-174	rI16	giš še-[
Ni II-037	rI12'	giš š[e-	Ni II-198	rI02'	[] še-[
Ni II-039	rI05'	giš še-dug ₃	Ni II-200	rI02'	giš še-[
Ni II-054	rII04	giš [š]e-dug ₃	Ni II-209	rI02'	giš še-nu
Ni II-058	rI16	giš še-dug ₃	Ni II-245	I04	[gi]š še-nu
Ni II-065	rI04'	giš še-[	Ni IV-10	2	giš še-nu
Ni II-085	rI15	giš še-dug ₃	Ni IV-12	rI13	giš še-nu
Ni II-089	rI04'	giš še-d[ug ₃]	Ni U-05	II02'	giš š[e-
Ni II-107	rI06'	[] š[e-	Ni U-24	I04'	giš []-nu
Ni II-109	rI11'	giš še-dug ₃	017 3052	giš še-še	
Ni II-110	rI15	giš še-dug ₃	Ni I-04	I07'	[] še-še
Ni II-129	rI03'	giš še-dug ₃	Ni I-08	I12'	giš še-še
Ni II-140	rI15	giš še-dug ₃	Ni II-001	rI17	giš še-še
Ni II-141	rI15	giš še-[	Ni II-002	rII20'	giš še-še
Ni II-143	rI07'	giš še-dug ₃	Ni II-013	rI14'	giš še-še
Ni II-155	rI17	[] še-dug ₃	Ni II-014	rI04'	giš [š]e-[š]e

Ni II-017	rII04	giš še-še	Ni II-165	rI18	giš ši[ni]g
Ni II-020	rI17	giš še-še	Ni II-174	rI18	giš ši[nig]
Ni II-036	rI17	[š]e	Ni II-198	rI04'	[] š[inig]
Ni II-037	rI14'	giš š[e-	Ni II-209	rI04'	giš šinig
Ni II-054	rII05	giš še-še	Ni II-245	I07	[gi]š šinig
Ni II-058	rII01	[š]e-š[e]	Ni II-282	rI02'	[] šinig
Ni II-063	rI02'	giš še-še	Ni IV-12	rI14	giš šinig
Ni II-065	rI06'	giš še-še	Ni U-05	II04'	giš šinig
Ni II-085	rI17	giš še-še	Ni U-24	I07'	giš šinig?
Ni II-089	rI06'	giš š[e-			
Ni II-109	rI13'	giš še-še	019 3072	giš šinig-dili	
Ni II-110	rI17	giš še-[	Ni I-01	I02'	[giš] šinig-dili
Ni II-129	rI04'	giš še-še	Ni I-04	I09'	[šin]ig-dili
Ni II-140	rI17	giš še-še	Ni I-08	I14'	[ši]nig-dili
Ni II-141	rI17	giš še-[	Ni II-001	rI19	giš šinig-dili
Ni II-143	rI09'	giš še-n[u?]	Ni II-002	rII22'	giš šinig-dili
Ni II-157	rII03'	giš še-[	Ni II-013	rI16'	giš šinig-dili
Ni II-162	rI17	giš še-[	Ni II-014	rI06'	giš šinig-dili
Ni II-164	rI17	giš še-še	Ni II-017	rII06	giš ši[nig]-dili
Ni II-165	rI17	giš še?-[	Ni II-020	rI19	giš šinig-dili
Ni II-174	rI17	giš še-[	Ni II-054	rII07	giš šin[ig-d]ili
Ni II-198	rI03'	[] še-še	Ni II-058	rII03	[g]iš šinig-dili
Ni II-200	rI03'	giš še-[	Ni II-063	rI04'	giš šinig-dili
Ni II-209	rI03'	giš še-še	Ni II-065	rI08'	giš šinig-[
Ni II-245	I06	giš še-še	Ni II-066	rI02'	giš šinig-di[li]
Ni II-282	rI01'	[-š]e	Ni II-085	rI19	giš šinig-dili
Ni U-05	II03'	giš še-š[e]	Ni II-096	rI15	giš šinig-[
Ni U-24	I06'	giš [š]e-še	Ni II-103	rI01'	giš šinig-[
			Ni II-109	rI15'	giš šinig-dili
			Ni II-110	rI19	giš šinig-dili
			Ni II-141	rI19	giš šinig-[
			Ni II-143	rI11'	[gi]š š[inig-
			Ni II-157	rII05'	giš šinig-dili
			Ni II-160	I02	giš šinig-[
			Ni II-162	rI19	giš šinig-[
			Ni II-164	rI19	giš šinig-dili
			Ni II-165	rI19	giš šinig-dili
			Ni II-174	rI19	giš šinig-[
			Ni II-198	rI05'	[] šinig-[
			Ni II-209	rI05'	giš šinig-dili
			Ni II-240	rI01'	giš šinig-dili
			Ni II-245	I08	g[iš šini]g-dili
			Ni II-257	rI01'	giš ši[nig]-dili
			Ni II-282	rI03'	giš šinig-dili
			Ni U-05	II05'	giš šinig-dili
			Ni U-24	I09'	giš šinig-dili
018 3067	giš šinig				
Ni I-01	I01'	[giš ši]nig	020 3068	giš šinig-kur	
Ni I-04	I08'	[] šin[ig]	Ni I-01	I03'	[giš] šinig-kur
Ni I-08	I13'	[] šinig	Ni I-04	I10'	[]-kur-ra
Ni II-001	rI18	giš šinig	Ni I-08	I15'	[šini]g-kur
Ni II-002	rII21'	giš šinig	Ni II-001	rI20	giš šinig-kur-ra
Ni II-013	rI15'	giš šinig	Ni II-002	rII23	giš šinig-kur-ra
Ni II-014	rI05'	giš [ši]nig	Ni II-013	rI17'	giš šinig-AŠ-kur-ra
Ni II-017	rII05	giš ši[nig]	Ni II-014	rI07'	giš šinig-kur
Ni II-020	rI18	giš šinig			
Ni II-030	rII01	[šin]ig			
Ni II-036	rI18	[ši]nig			
Ni II-054	rII06	giš šin[ig]			
Ni II-058	rII02	[g]iš šinig			
Ni II-063	rI03'	giš šinig			
Ni II-065	rI07'	giš šin[ig]			
Ni II-066	rI01'	giš š[inig]			
Ni II-085	rI18	giš šinig			
Ni II-096	rI14	giš ši[nig]			
Ni II-109	rI14'	giš šinig			
Ni II-110	rI18	giš šin[ig]			
Ni II-140	rI18	giš ši[nig]			
Ni II-141	rI18	giš [
Ni II-157	rII04'	giš šinig			
Ni II-162	rI18	giš [
Ni II-164	rI18	giš šinig			

Ni II-020	rI20	giš šinig-kur-ra	Ni II-160	I04	giš šar _x (NE)-ša ₄ -[
Ni II-054	rII08	giš šinig-[	Ni II-164	rI21	giš š[ar _x (NE)-š]a ₄ -bid ₃
Ni II-058	rII04	[g]iš šinig-kur-ra	Ni II-165	rI21	giš šar _x (NE)-[-b]id ₃
Ni II-063	rI05'	giš šinig-kur-ra	Ni II-174	rI21	[g]iš š[ar _x (NE)
Ni II-065	rI09'	[-k]ur	Ni II-198	rI07'	giš šar _x (NE)-ša ₄ -bi[d ₃]
Ni II-066	rI03'	giš šinig-kur-r[a]	Ni II-209	rI07'	giš [š]ar _x (NE)-š[a ₄ -
Ni II-085	rI20	giš šinig-kur-ra	Ni II-235	rI02'	[] šar _x (NE)-ša ₄ -bid ₃
Ni II-096	rI16	giš šinig-k[ur	Ni II-240	rI03'	giš šar _x (NE)-ša ₄ -bid ₃
Ni II-103	rI02'	giš šinig-kur-[	Ni II-245	I10	[š]ar _x (NE)-ša ₄ -bid ₃
Ni II-109	rI16'	giš šinig-kur-ra	Ni II-257	rI03'	giš š[ar _x (NE)-ša ₄ -bid ₃
Ni II-110	rI20	giš šinig-kur-ra	Ni II-271	rII01'	[] š[ar _x (NE)-
Ni II-141	rI20	giš šinig-[	Ni II-282	rI05'	giš šar _x (NE)-ša ₄ -bi[d ₃]
Ni II-143	rI12'	giš šinig-[	Ni IV-09	2	giš šar _x (NE)-ša ₄ -bid ₃
Ni II-157	rII06'	giš šinig-kur-ra	Ni IV-12	rI16	giš šar _x (NE)-ša ₄ -bid ₃
Ni II-160	I03	giš šinig-kur-[	Ni U-05	II07'	giš šar _x (NE)-ša ₄ -bid ₃
Ni II-164	rI20	giš šinig-AŠ-kur	Ni U-18	I02'	[]-ša ₄ -bid ₃
Ni II-165	rI20	giš šinig-kur-ra			
Ni II-174	rI20	giš šinig-[	022 3054	giš MES-šar _x (NE)-ša ₄ -bid ₃	
Ni II-198	rI06'	giš šinig-ku[r]	Ni I-01	I05'	giš MES-šar _x (NE)-ša ₄ -bid ₃
Ni II-209	rI06'	giš šinig-kur-ra	Ni I-08	I17'	[-ša]r _x (NE)-ša ₄ -bid ₃
Ni II-235	rI01'	[] šinig-[	Ni II-001	rI22	giš MES-šar _x (NE)-ša ₄ -bid ₃
Ni II-240	rI02'	giš šinig-kur	Ni II-002	rII25'	giš MES-šar _x (NE)-AL-bid ₃
Ni II-245	I09	[šin]ig-kur-r[a]	Ni II-013	rI19'	giš MES-šar _x (NE)-ša ₄ -TUG ₂
Ni II-257	rI02'	giš šinig-kur-ra	Ni II-014	rI09'	giš MES-[
Ni II-282	rI04'	giš šinig-kur-r[a]	Ni II-020	rII01	[] MES-[]-ša ₄ -bid ₃
Ni IV-09	1	giš šinig-kur-ra	Ni II-051	rII02	giš ME[S]-š[ar _x (NE)]-š[a ₄ -
Ni IV-12	rI15	giš šinig-kur	Ni II-054	rII10	giš MES-NE
Ni U-05	II06'	giš šinig-kur-ra	Ni II-058	rII06	[š]ar _x (NE)-ša ₄ -bid ₃
Ni U-18	I01'	[š]inig-kur-[	Ni II-063	rI07'	giš ME[S]-š[ar _x (NE)-
Ni U-24	I08'	giš šinig-kur	Ni II-085	rI22	giš MES-š[ar _x (NE)-š]a ₄ -[
			Ni II-096	rI18	giš MES-[
021 3053	giš šar _x (NE)-ša ₄ -bid ₃		Ni II-103	rI04'	giš MES-šar _x (NE)-[
Ni I-01	I04'	giš šar _x (NE)-ša ₄ -bid ₃	Ni II-110	rI22	giš ME[S]-šar _x (NE)-ša ₄ -bid ₃
Ni I-04	I11'	[]-š[a ₄ -bi[d ₃]	Ni II-113	rI02'	[M]ES-šar _x (NE)-ša ₄ -bid ₃
Ni I-08	I16'	[š]ar _x (NE)-ša ₄ -bid ₃	Ni II-140	rII02	giš MES-šar _x (NE)-ša ₄ -bid ₃
Ni II-001	rI21	giš šar _x (NE)-ša ₄ -bid ₃	Ni II-148	rII02	giš MES-[š]ar _x (NE)-ša ₄ -
Ni II-002	rII24'	giš šar _x (NE)-AL-bid ₃			bi[d ₃]
Ni II-013	rI18'	giš šar _x (NE)-ša ₄ -TUG ₂	Ni II-157	rII08'	giš ME[S]-š[a ₄ -bid ₃
Ni II-014	rI08'	giš šar _x (NE)-ša ₄ -bi[d ₃]	Ni II-160	I05	giš MES-šar _x (NE)-ša ₄ -[
Ni II-020	rI21	[gi]š šar _x (NE)-[š]a ₄ -bi[d ₃]	Ni II-164	rI22	giš []-šar _x (NE)-ša ₄ -bid ₃
Ni II-051	rII01	giš š[ar _x (NE)-	Ni II-165	rI22	giš MES-š[ar _x (NE)-
Ni II-054	rII09	giš NE	Ni II-198	rI08'	giš M[ES-
Ni II-058	rII05	[š]ar _x (NE)-ša ₄ -bid ₃	Ni II-209	rI08'	giš MES-š[ar _x (NE)-
Ni II-063	rI06'	giš š[ar _x (NE)]-š[a ₄ -	Ni II-216	rI01'	[-š]ar _x (NE)-[
Ni II-065	rI10'	[š]ar _x (NE)-ša ₄-[	Ni II-222	rII01	[] MES-šar _x (NE)-ša ₄ -[
Ni II-085	rI21	giš šar _x (NE)-š[a ₄ -	Ni II-235	rI03'	[gi]š MES-šar _x (NE)-ša ₄ -bid ₃
Ni II-096	rI17	giš š[ar _x (NE)]-š[a ₄]-b[id ₃]	Ni II-240	rI04'	giš MES-šar _x (NE)-ša ₄ -bid ₃
Ni II-103	rI03'	giš šar _x (NE)-ša ₄ -bi[d ₃]	Ni II-245	I11	[-š]ar _x (NE)-ša ₄ -bid ₃
Ni II-110	rI21	giš šar _x (NE)-ša ₄ -bid ₃	Ni II-257	rI04'	giš MES-šar _x (NE)-ša ₄ -[
Ni II-113	rI01'	[š]ar _x (NE)-ša ₄ -bid ₃	Ni II-271	rII02'	[ME]S-šar _x (NE)-ša ₄ -bid ₃
Ni II-140	rII01	giš šar _x (NE)-š[a ₄ -	Ni II-282	rI06'	[M]ES-šar _x (NE)-š[a ₄ -
Ni II-141	rI21	giš š[ar _x (NE)	Ni U-05	II08'	giš MES-šar _x (NE)-ša ₄ -bid ₃
Ni II-143	rI13'	giš šar _x (NE)-š[a ₄ -	Ni U-18	I03'	[-š]ar _x (NE)-ša ₄ -bid ₃
Ni II-148	rII01	giš šar _x (NE)-ša ₄ -bid ₃			
Ni II-157	rII07'	giš šar _x (NE)-ša ₄ -bid ₃	023 3061	giš lam	

Ni I-01	I06'	giš lam	Ni II-238	rII02	[] LAM
Ni I-08	I18'	[] lam	Ni II-240	rI06'	giš LAM
Ni II-001	rI23	giš lam	Ni II-257	rI06'	giš [
Ni II-002	rII26'	giš lam	Ni II-271	rII04'	[] LAM
Ni II-013	rI20'	giš lam	Ni IV-12	rI18	giš LUH?
Ni II-015	rII01	[] lam	Ni U-05	II10'	giš LAM
Ni II-020	rII02	giš la[m]	Ni U-18	I05'	[] LAM
Ni II-054	rII11	giš lam			
Ni II-058	rII07	[] lam	025 3074	giš u ₃ -suh ₅	
Ni II-063	rI08'	giš lam	Ni I-01	I08'	giš u ₃ -suh ₅
Ni II-085	rI23	giš la[m ₂]	Ni I-08	I20'	[]-suh ₅
Ni II-096	rI19	giš lam	Ni II-001	rII02	giš u ₃ -[
Ni II-110	rII01	giš lam	Ni II-002	rII28'	giš u ₃ -suh ₅
Ni II-113	rI03'	[] lam	Ni II-013	rI22'	[g]iš u ₃ -suh ₅
Ni II-140	rII03	giš lam	Ni II-015	rII03	giš u ₃ -suh ₅
Ni II-148	rII03	giš lam	Ni II-020	rII04	giš u ₃ -suh ₅
Ni II-164	rII01	giš lam	Ni II-021	rII01'	[] u ₃ -su[h ₅]
Ni II-165	rI23	giš [	Ni II-054	rII13	giš u ₃ -su[h ₅]
Ni II-178	rII01'	[] lam	Ni II-058	rII09	[] u ₃ -suh ₅
Ni II-209	rI09'	giš l[am]	Ni II-063	rI10'	giš u ₃ -suh ₅
Ni II-216	rI02'	[] lam	Ni II-085	rI25	giš u ₃ -s[uh ₅]
Ni II-222	rII02	giš lam	Ni II-094	rI01'	giš u ₃ -suh ₅
Ni II-235	rI04'	giš lam	Ni II-096	rII01	[]-suh ₅
Ni II-238	rII01	[] lam	Ni II-110	rII03	giš u ₃ -suh ₅
Ni II-240	rI05'	giš lam	Ni II-113	rI05'	[] u ₃ -suh ₅
Ni II-257	rI05'	giš [	Ni II-123	rI04'	giš u ₃ -suh ₅
Ni II-271	rII03'	[] lam	Ni II-124	rII01	[]-suh ₅
Ni IV-12	rI17	giš lam	Ni II-140	rII05	giš u ₃ -su[h ₅]
Ni U-05	II09'	giš lam	Ni II-144	rII01'	giš u ₃ -[
Ni U-18	I04'	[] lam	Ni II-148	rII05	giš [
			Ni II-162	rII02	[]-suh ₅
024 3062	giš LAM		Ni II-164	rII03	giš u ₃ -suh ₅
Ni I-01	I07'	giš LAM	Ni II-165	rI25	[gi]š u ₃ -s[uh ₅]
Ni I-08	I19'	[] LAM	Ni II-174	rII01	[]-su[h ₅]
Ni II-002	rII27'	giš LAM	Ni II-178	rII03'	[]-suh ₅
Ni II-013	rI21'	giš LAM	Ni II-216	rI04'	giš u ₃ -suh ₅
Ni II-015	rII02	g[iš] LAM	Ni II-217	rI03'	giš u ₃ -suh ₅
Ni II-020	rII03	giš LA[M]	Ni II-222	rII04	giš u ₃ -suh ₅
Ni II-054	rII12	giš [L]AM	Ni II-223	rI01'	giš u ₃ -[
Ni II-058	rII08	[] LAM	Ni II-235	rI06'	giš u ₃ -suh ₅
Ni II-063	rI09'	giš LAM	Ni II-238	rII03	[]-suh ₅
Ni II-085	rI24	giš [L]AM	Ni II-240	rI07'	giš u ₃ -suh ₅
Ni II-096	rI20	giš LAM	Ni II-271	rII05'	[] u ₃ -[su]h ₅
Ni II-110	rII02	giš LAM	Ni II-290	rI02'	[] u ₃ -[
Ni II-113	rI04'	[] LAM	Ni IV-12	rI19	giš u ₃ -suh ₅
Ni II-123	rI03'	giš LAM	Ni U-05	II11'	giš u ₃ -su[h ₅]
Ni II-140	rII04	giš LAM	Ni U-14	I01'	[]-su[h ₅]
Ni II-148	rII04	giš LAM	Ni U-18	I06'	[]-suh ₅
Ni II-162	rII01	[] LAM			
Ni II-164	rII02	giš LAM	025a 3075	giš u ₃ -suh ₅ -tur	
Ni II-165	rI24	[g]iš LAM	Ni II-021	rII02'	[] s[uh ₅ -tu[r]
Ni II-178	rII02'	[] LAM	Ni II-054	rII14	[] u ₃ -suh ₅ -tur
Ni II-216	rI03'	[] LAM	Ni II-290	rI04'	giš u ₃ -suh ₅ -t[ur]
Ni II-222	rII03	giš LAM	Ni U-14	I02'	[]-su[h ₅ -tur
Ni II-235	rI05'	giš LAM	Ni U-18	I07'	[]-suh ₅ -tur

025b 3079	giš u ₃ -suh ₅ -pa-kud		Ni II-039	rII02'	giš pa-u ₃ -suh ₅
Ni II-021	rII03' []-suh ₅ -pa-kud		Ni II-063	rII12'	giš pa-u ₃ -[]-suh ₅
Ni U-05	rI01 giš u ₃ -suh ₅ -pa-kud		Ni II-074	rII02'	giš pa-u ₃ -[]-suh ₅
Ni U-14	I03' []-p]a-kud		Ni II-085	rI27	giš pa-u ₃ -[]-suh ₅
Ni U-18	I08' []-suh ₅ -pa-kud		Ni II-094	rI03'	giš pa-u ₃ -suh ₅
			Ni II-096	rII03	[] pa-u ₃ -suh ₅
025c	giš u ₃ -suh ₅ -a-de ₂ -a		Ni II-113	rI07'	[p]a-u ₃ -suh ₅
Ni II-021	rII04' []-suh ₅ -a-de ₂ -a		Ni II-123	rI06'	giš pa-u ₃ -suh ₅
Ni U-05	rI02 giš u ₃ -suh ₅ -[-d]e ₂ -a		Ni II-124	rII03	[]-u ₃ -suh ₅
			Ni II-143	rII02'	giš pa-u ₃ -[]-suh ₅
026 3083	giš še-u ₃ -suh ₅		Ni II-144	rII03'	giš pa-u ₃ -su[h ₅]
Ni I-01	I09' giš še-u ₃ -suh ₅		Ni II-148	rII06	giš pa-u ₃ -suh ₅
Ni I-08	I21' []-suh ₅		Ni II-162	rII04	[]-u ₃ -suh ₅
Ni II-001	rII03 giš še u ₃ -suh ₅		Ni II-164	rII05	giš pa-u ₃ -suh ₅
Ni II-002	rII29' [g]iš še-u ₃ -suh ₅		Ni II-174	rII03	giš []-u ₃ -suh ₅
Ni II-013	rI23' [] še-u ₃ -suh ₅		Ni II-197	rII02'	[]-u ₃ -suh ₅
Ni II-015	rII04 giš še-u ₃ -suh ₅		Ni II-216	rI06'	giš pa-u ₃ -suh ₅
Ni II-020	rII05 giš še-u ₃ -suh ₅		Ni II-222	rII06	giš pa-NU-u ₃ -suh ₅
Ni II-021	rII05' []-u ₃ -suh ₅		Ni II-235	rI08'	[]-u ₃ -[]-suh ₅
Ni II-023	rII01 [g]iš še-[]-suh ₅		Ni II-240	rI09'	giš pa-u ₃ -suh ₅
Ni II-039	rII01' giš še-u ₃ -su[h ₅]		Ni II-290	rI06'	[p]a-u ₃ -[]-suh ₅
Ni II-058	rII10 []-suh ₅		Ni U-05	rI04	giš pa-u ₃ -suh ₅
Ni II-063	rII11' giš še-u ₃ -s[uh ₅]				
Ni II-074	rII01' []-suh ₅		027a	giš an-u ₃ -suh ₅	
Ni II-085	rI26 giš še-u ₃ -[]-suh ₅		Ni II-039	rII03'	giš an-u ₃ -suh ₅
Ni II-094	rI02' giš [š]e-u ₃ -suh ₅		Ni II-096	rII04	[]-nu-suh ₅
Ni II-096	rII02 []-u ₃ -suh ₅		Ni II-290	rI05'	[gi]š an-u ₃ -s[uh ₅]
Ni II-110	rII04 giš še-u ₃ -su[h ₅]		Ni U-05	rI05	giš an-u ₃ -suh ₅
Ni II-113	rI06' [š]e-u ₃ -suh ₅				
Ni II-123	rI05' giš še-u ₃ -suh ₅		028 3091	giš bir-GAM-la-e	
Ni II-124	rII02 [š]e-u ₃ -suh ₅		Ni I-01	I11'	giš bir-GAM-la-e
Ni II-140	rII06 []-u ₃ -suh ₅		Ni II-001	rII05	giš bir-GAM-la-e
Ni II-143	rII01' giš še-u ₃ -suh ₅		Ni II-015	rII05	giš bir-la-GAM-e
Ni II-144	rII02' giš še-u ₃ -[]-suh ₅		Ni II-020	rII06	giš bi[r]-GAM-la-e
Ni II-162	rII03 []-suh ₅		Ni II-023	rII03	[b]ir-GAM-la-e
Ni II-164	rII04 giš še-u ₃ -suh ₅		Ni II-039	rII04'	giš bir-e-la
Ni II-174	rII02 []-suh ₅		Ni II-044	rII06	[]-e
Ni II-178	rII04' []-suh ₅		Ni II-046	rII03'	[b]ir-GAM-e-la
Ni II-197	rII01 []-u ₃ -[]-suh ₅		Ni II-047	rII01	giš bi-GAM-la-e
Ni II-216	rI05' giš še-u ₃ -suh ₅		Ni II-063	rI13'	[]-la-[]-e
Ni II-217	rI04' giš še-u ₃ -suh ₅		Ni II-070	rII03	[]-e
Ni II-222	rII05 giš še-u ₃ -suh ₅		Ni II-074	rII03'	[-l]a-e
Ni II-223	rI02' giš še-[]-suh ₅		Ni II-085	rI28	giš bir-GAM-l[a-
Ni II-235	rI07' [gi]š [š]e-u ₃ -suh ₅		Ni II-094	rI04'	giš bir-GAM-LAGAB-e
Ni II-238	rII04 [š]e-u ₃ -suh ₅		Ni II-096	rII05	[-l]a-e
Ni II-240	rI08' giš še-u ₃ -suh ₅		Ni II-110	rII05	[bi]r-GAM-la-e
Ni IV-12	rI20 giš še-u ₃ -suh ₅		Ni II-124	rII04	[]-la-e
Ni U-05	rI03 giš še-u ₃ -suh ₅		Ni II-140	rII07	giš bi[r]-GAM-[]-e
			Ni II-141	rII01	[]-la-e
027 3088	giš pa-u ₃ -suh ₅		Ni II-143	rII03'	giš [bi]r-GAM-la-[]-e
Ni I-01	I10' giš pa-u ₃ -suh ₅		Ni II-144	rII04'	giš bir-GAM-la?-e
Ni II-001	rII04 giš pa-u ₃ -suh ₅		Ni II-148	rII07	[]-GAM-la-e
Ni II-013	rI24' [] u ₃ -suh ₅		Ni II-162	rII05	[-l]a-e
Ni II-023	rII02 giš pa-u ₃ -suh ₅		Ni II-164	rII06	giš bir-GAM-e
			Ni II-174	rII04	giš [bi]r-GAM-MES-e

Ni II-178	rII05'	[]-la-e	Ni II-116	rII01	giš šennur
Ni II-197	rII03'	[] bir-GAM-la-e	Ni II-121	I03'	giš š[ennur]
Ni II-216	rI07'	giš bir-GAM-la-e	Ni II-140	rII09	giš [šenn]ur
Ni II-222	rII07	giš bir-GAM-LAGAB	Ni II-141	rII03	[šen]nur
Ni II-240	rI10'	giš bir-GAM-la-e	Ni II-143	rII05'	giš šennur
Ni IV-01	1	giš bi[r-GA]M-l[a]-e	Ni II-144	rII06'	[] šennur
Ni U-05	rI06	giš bir-la-e	Ni II-162	rII07	[] šennur
029 3092	giš šim-gig		Ni II-164	rII08	giš {erased sign} šennur
Ni I-01	I12'	giš šim-gig	Ni II-174	rII06	giš šennur
Ni II-001	rII06	giš šim-gig	Ni II-178	rII07'	[] šennur
Ni II-015	rII06	giš šim-gig	Ni II-197	rII05'	[] šennur
Ni II-020	rII07	giš šim-gig	Ni II-216	rI09'	giš šennur
Ni II-023	rII04	[š]im-g[ig]	Ni II-222	rII09	[šen]nur
Ni II-039	rII05'	giš šim-gig	Ni U-05	rI08	[gi]š šennur
Ni II-044	rII07	[-g]ig	030a 3128	giš šennur-kur-ra	
Ni II-046	rII04'	[] šim-gig	Ni U-05	rI09	[šennu]r-kur-ra
Ni II-047	rII02	giš šim-gig	031 3136	giš lam-gal	
Ni II-070	rII04	[-g]ig	Ni I-01	I14'	giš lam-gal
Ni II-085	rI29	giš š[im-	Ni II-001	rII08	giš lam-gal
Ni II-094	rI05'	giš šim-[	Ni II-015	rII08	giš lam-gal
Ni II-110	rII06	giš [š]im-gig	Ni II-020	rII09	giš lam-gal
Ni II-113	rI08'	[š]im-gi[g]	Ni II-046	rII06'	[] lam-gal
Ni II-121	I02'	giš š[im-	Ni II-047	rII04	[] la[m-ga]l
Ni II-140	rII08	giš ši[m-g]ig	Ni II-074	rII05'	[]-gal
Ni II-141	rII02	[]-gig	Ni II-088	rI03'	giš lam-[
Ni II-143	rII04'	[] šim-gig	Ni II-096	rII07	[]-gal
Ni II-144	rII05'	giš ši[m-g]ig	Ni II-110	rII08	[l]am-gal
Ni II-148	rII08	[ši]m-g[ig]	Ni II-111	rI02'	[] lam-gal
Ni II-162	rII06	[]-gig	Ni II-113	rI10'	[gi]š lam-gal
Ni II-164	rII07	giš šim-gig	Ni II-116	rII02	giš lam-gal
Ni II-174	rII05	giš šim-gig	Ni II-121	I04'	giš lam-gal
Ni II-178	rII06'	[ši]m-gig	Ni II-140	rII10	giš [la]m-gal
Ni II-197	rII04'	[š]im-gi[g]	Ni II-141	rII04	[] lam-gal
Ni II-216	rI08'	giš šim-gig	Ni II-143	rII06'	giš lam-gal
Ni II-222	rII08	giš šim-gig	Ni II-144	rII07'	[] lam-gal
Ni IV-01	2	giš šim-[	Ni II-162	rII08	[]-gal
Ni IV-12	rI21	giš šim-gig	Ni II-164	rII09	giš lam-gal
Ni U-05	rI07	giš šim-gig	Ni II-174	rII07	giš lam-gal
030 3126	giš šennur		Ni II-178	rII08'	[] lam-gal
Ni I-01	I13'	giš šennur	Ni II-197	rII06'	[] lam-gal
Ni II-001	rII07	giš šennur	Ni II-201	rI02'	giš lam-g[al?]
Ni II-015	rII07	giš šennur	Ni II-217	rI09'	giš lam-g[al]
Ni II-020	rII08	giš šennur	Ni II-224	rII01'	[] lam-[
Ni II-039	rII06'	giš [šennu]r	Ni II-267	rI02'	giš lam-[
Ni II-044	rII08	[šennu]r	Ni II-290	I02'	[gi]š lam-gal
Ni II-046	rII05'	[] šennur	Ni IV-12	rI23	giš lam-gal
Ni II-047	rII03	giš šennur	Ni U-05	rI10	[l]am-gal
Ni II-070	rII05	[] šennur	032 3137	giš lam-tur	
Ni II-074	rII04'	[] šennur	Ni I-01	I15'	giš lam-tur
Ni II-096	rII06	[] šennur	Ni II-001	rII09	giš lam-tur
Ni II-110	rII07	[g]iš šennur	Ni II-015	rII09	giš lam-tur
Ni II-111	rI01'	[šen]nur	Ni II-020	rII10	giš lam-tu[r]
Ni II-113	rI09'	[] šennur			

Ni II-046	rII07'	[] lam-tur	Ni I-01	I17'	giš ildag ₂
Ni II-047	rII05	[t]ur	Ni II-001	rII11	giš ildag ₂
Ni II-058	rII16	[-r]a	Ni II-013	rII04'	giš il[dag ₂]
Ni II-074	rII06'	[]-tur	Ni II-015	rII11	giš ildag ₂
Ni II-085	rII02	giš lam-tur-ra	Ni II-020	rII12	giš i[ildag ₂]
Ni II-088	rI04'	giš lam-[	Ni II-037	rII01	giš i[l dag ₂]
Ni II-096	rII08	[]-tur	Ni II-058	rII18	[] ildag ₂
Ni II-110	rII09	[]-tur	Ni II-074	rII08'	[il]dag ₂
Ni II-111	rI03'	[] lam-tur	Ni II-085	rII04	giš ildag ₂
Ni II-116	rII03	giš lam-tur	Ni II-088	rI06'	giš il[dag ₂]
Ni II-140	rII11	giš l[am-tu]r	Ni II-089	rII03'	giš ildag ₂
Ni II-141	rII05	giš lam-tur	Ni II-096	rII10	[] ildag ₂
Ni II-143	rII07'	giš lam-t[ur]	Ni II-105	rII03	giš il[dag ₂]
Ni II-162	rII09	[la]m-tur	Ni II-110	rII11	giš ildag ₂
Ni II-164	rII10	giš lam-tur	Ni II-111	rI05'	[] ildag ₂
Ni II-174	rII08	giš lam-tur	Ni II-116	rII05	[gi]š ildag ₂
Ni II-178	rII09'	[] lam-tur	Ni II-141	rII07	giš ildag ₂
Ni II-197	rII07'	[] lam-tur	Ni II-143	rII09'	giš ildag ₂
Ni II-201	rI01'	giš lam-[	Ni II-159	rI02'	giš i[l dag ₂]
Ni II-217	rI10'	giš lam-tu[r]	Ni II-162	rII11	[il]dag ₂
Ni II-224	rII02'	g[iš] lam-tur	Ni II-164	rII12	giš ildag ₂
Ni II-267	rI03'	giš lam-t[ur]	Ni II-174	rII10	giš ildag ₂
Ni II-290	I03'	[gi]š lam-tur	Ni II-197	rII09'	[gi]š ildag ₂
Ni IV-12	rI24	[gi]š lam-tur	Ni II-217	rI12'	giš ildag ₂
Ni U-05	rI11	[]-tur	Ni II-224	rII04'	giš ildag ₂
033 3133	giš al-la-nu-um		Ni II-267	rI05'	giš i[l dag ₂]
Ni I-01	I16'	giš al-la-nu-um	Ni II-290	I05'	[gi]š ildag ₂
Ni II-001	rII10	giš al-la-nu-um	Ni IV-07	1	giš ildag ₂
Ni II-013	rII03'	giš a[l-	Ni IV-12	rI25	[il]dag ₂
Ni II-015	rII10	giš al-la-nu-um	035 3140	giš ildag ₂ -kur	
Ni II-020	rII11	[] x-um	Ni I-01	I18'	giš ildag ₂ -kur
Ni II-046	rII08'	[] al-l[a]-n[u]-u[m]	Ni II-001	rII12	giš il[dag ₂ -
Ni II-058	rII17	[]-um	Ni II-013	rII05'	giš ildag ₂ -[
Ni II-074	rII07'	[]-la-nu-um	Ni II-014	rII01'	[il]dag ₂ -ku[r]-r[a]
Ni II-085	rII03	giš al-la-nu-um	Ni II-015	rII12	giš il[dag ₂]-ku[r-r]a
Ni II-088	rI05'	giš al-[	Ni II-020	rII13	giš ildag ₂ -[
Ni II-089	rII02'	giš al-la-nu-um	Ni II-037	rII02	giš ildag ₂ -[
Ni II-096	rII09	[-l]a-X-um	Ni II-058	rII19	[]-kur
Ni II-105	rII02	giš al-l[a]-nu-u[m]	Ni II-085	rII05	giš ild[ag ₂]-kur
Ni II-111	rI04'	[] al-la-nu-u[m]	Ni II-089	rII04'	giš ildag ₂ -kur
Ni II-116	rII04	giš al-la-nu-um	Ni II-096	rII11	[] ildag ₂
Ni II-141	rII06	giš al-la-nu-um	Ni II-105	rII04	giš il[dag ₂ -ku]r-ra
Ni II-143	rII08'	giš al-la-[n]u-um	Ni II-110	rII12	giš il[dag ₂]-kur-ra
Ni II-162	rII10	[a]l-la-nu-u[m]	Ni II-111	rI06'	[ild]ag ₂ -kur
Ni II-164	rII11	giš al-la-nu-um	Ni II-116	rII06	[] ildag ₂ -kur-ra
Ni II-174	rII09	giš al-la-nu-um	Ni II-141	rII08	giš ildag ₂ -kur
Ni II-197	rII08'	[gi]š al-la-nu-um	Ni II-143	rII10'	giš ildag ₂ -kur
Ni II-217	rI11'	giš al-la-nu-um	Ni II-159	rI03'	giš i[l dag ₂ -
Ni II-224	rII03'	giš []-lam?-nu-[	Ni II-162	rII12	[gi]š il[dag ₂]-GAM
Ni II-267	rI04'	giš al-[	Ni II-163	rII01	giš ildag ₂ -[
Ni II-290	I04'	[gi]š al-la-nu-um	Ni II-164	rII13	giš ildag ₂ -kur
Ni U-05	rI12	[]-nu-um	Ni II-174	rII11	giš ildag ₂ -kur
034 3138	giš ildag ₂		Ni II-197	rII10'	[gi]š ildag ₂ -kur
			Ni II-217	rI13'	giš ildag ₂ -kur-ra

Ni II-224	rII05'	giš ildag ₂ -kur	Ni II-217	rII15'	giš ildag ₂ -šita ₃ -[n]a
Ni II-290	I06'	[] ildag ₂ -kur	Ni II-290	I08'	[] ildag ₂ -šita ₃ -[
Ni IV-07	2	giš ildag ₂ -kur	Ni P-01	AI01'	[] i[ldag ₂ -
Ni IV-12	rI27	[]-kur	Ni U-05	rII04	giš ildag ₂ -šita ₃ -na
Ni U-05	rII02	giš ildag ₂ -ku[r-r]a			
036 3141	giš ildag ₂ -bur-ra		038 3152	giš kur-ra	
Ni I-01	I19'	[ild]ag ₂ -bur-ra	Ni II-001	rII15	giš kur-ra
Ni II-001	rII13	giš ildag ₂ -bur-ra	Ni II-013	rII08'	giš kur-[
Ni II-013	rII06'	giš ildag ₂-[	Ni II-014	rII04'	[] kur-ra
Ni II-014	rII02'	[gi]š ildag ₂ -bur-r[a]	Ni II-027	rII04	giš kur-[
Ni II-015	rII13	giš il[dag ₂ -	Ni II-029	rII03'	giš kur-ra
Ni II-027	rII02	giš il[dag ₂ -	Ni II-035	rII01	[gi]š kur-r[a]
Ni II-029	rII01'	giš ildag ₂ -bur-r[a	Ni II-037	rII05	giš kur-ra
Ni II-037	rII03	giš ildag ₂ -bur-ra	Ni II-066	rII02'	[]-ra
Ni II-085	rII06	giš []-bur-ra	Ni II-068	rI04'	giš kur-[
Ni II-089	rII05'	giš ildag ₂ -bur-ra	Ni II-085	rII08	giš kur-[
Ni II-105	rII05	giš [il]dag ₂ -b[ur-r]a	Ni II-089	rII07'	[]-ra
Ni II-110	rII13	giš ildag ₂-[	Ni II-105	rII07	[]-ra
Ni II-116	rII07	[ild]ag ₂ -bur-ra	Ni II-109	rII03'	[]-ra
Ni II-141	rII09	giš ildag ₂ -bur	Ni II-110	rII15	[-r]a
Ni II-143	rII11'	giš ildag ₂-[	Ni II-141	rII11	giš kur-ra
Ni II-159	rI04'	giš i[ldag ₂ -	Ni II-143	rII13'	giš k[ur-
Ni II-162	rII13	giš ildag ₂ -b[ur-	Ni II-159	rI06'	giš ku[r-
Ni II-163	rII02	giš [	Ni II-162	rII15	[] kur-[r]a
Ni II-164	rII14	giš ildag ₂ -bur	Ni II-163	rII04	giš kur-ra
Ni II-174	rII12	giš ildag ₂ -bur	Ni II-164	rII16	giš [ku]r-ra
Ni II-184	rI01	giš il[dag ₂ -	Ni II-174	rII14	giš kur-ra
Ni II-197	rII11'	[ild]ag ₂-[	Ni II-184	rI03	giš ku[r-
Ni II-217	rII14'	giš ildag ₂ -bur-ra	Ni II-211	rI02	[] kur-ra
Ni II-290	I07'	[] ildag ₂ -bur-[	Ni II-217	rII16'	giš kur-ra
Ni U-05	rII03	giš ildag ₂ -bur	Ni II-257	rII01'	giš kur-ra
Ni U-24	II04'	giš ildag ₂ -bu[r-	Ni II-286	rII03	giš kur-ra
			Ni II-290	I09'	[] kur-ra
			Ni P-01	AI02'	giš ku[r-
			Ni U-05	rII05	giš kur-ra
			Ni U-24	II05'	giš kur-ra
037 3146	giš ildag ₂ -šita ₃ -na		039 3154	giš ab-ba	
Ni I-01	I20'	[ild]ag ₂ -šita ₃ -n[a]	Ni II-001	rII16	giš ab-ba
Ni II-001	rII14	giš ildag ₂ -šita ₃ -na	Ni II-013	rII09'	giš ab-[
Ni II-013	rII07'	giš ildag ₂-[	Ni II-014	rII05'	[a]b-ba
Ni II-014	rII03'	[gi]š ildag ₂ -šita ₃ -na	Ni II-027	rII05	giš a[b-
Ni II-027	rII03	giš il[dag ₂ -	Ni II-035	rII02	giš ba-ab
Ni II-029	rII02'	giš ildag ₂ -BU-R[A?]	Ni II-037	rII06	giš b[a]-ab
Ni II-037	rII04	giš ildag ₂ -šita ₃ -X X	Ni II-062	rI02'	giš ab-[
Ni II-089	rII06'	giš ildag ₂ -ši[ta ₃]-na	Ni II-066	rII03'	[a]b-ba
Ni II-105	rII06	g[iš ild]ag ₂ -ši[ta ₃ -n]a	Ni II-068	rI05'	giš ab-[
Ni II-110	rII14	giš ildag ₂-[	Ni II-085	rII09	giš ab-ba
Ni II-116	rII08	[-š]ita ₃ -na	Ni II-091	rII01'	[] a[b-b]a
Ni II-141	rII10	giš ildag ₂ -šita ₃ -na	Ni II-092	rI02'	giš a[b-
Ni II-143	rII12'	[ild]ag ₂ -[šit]a ₃ -na	Ni II-097	I01	giš ab-b[a]
Ni II-159	rI05'	giš i[ldag ₂ -	Ni II-105	rII08	[a]b-ba
Ni II-162	rII14	[gi]š ildag ₂ -š[ita ₃ -	Ni II-109	rII02'	[a]b-ba
Ni II-163	rII03	giš [	Ni II-110	rII16	giš ab-ba
Ni II-164	rII15	giš ildag ₂ -šita ₃ -na	Ni II-141	rII12	giš ab-ba
Ni II-174	rII13	giš ildag ₂ -šita ₃ -na			
Ni II-184	rI02	giš il[dag ₂ -			
Ni II-211	rI01	giš ildag ₂ -šita ₃ -na			

Ni II-143	rII14'	giš ab-b[a]	Ni II-068	rI07'	giš gi ₆ -p[ar ₃]
Ni II-159	rI07'	giš a-ab-[	Ni II-091	rII03'	[g]li ₆ -par ₄
Ni II-162	rII16	[a]b-b[a]	Ni II-097	I03	giš gi ₆ -par ₄
Ni II-163	rII05	giš ab-ba	Ni II-105	rII10	[g]li ₆ -par ₄
Ni II-164	rII17	giš ab-ba	Ni II-106	rI02'	[] gi ₆ -[
Ni II-165	rII02	gi[š a]b-ba	Ni II-109	rII05'	[-p]ar ₄
Ni II-174	rII15	giš ab-ba	Ni II-110	rII18	giš gi ₆ -par ₄
Ni II-211	rI03	[] ab-ba	Ni II-141	rII14	giš gi ₆ -par ₄
Ni II-217	rI17'	giš a[b-	Ni II-143	rII16'	giš g[i ₆]-par ₄
Ni II-257	rII02'	giš ab-b[a]	Ni II-148	rIII02	giš gi ₆ -p[ar ₄]
Ni II-286	rII04	giš ab-ba	Ni II-149	rII02	[] gi ₆ -[
Ni II-290	I10'	[] ba-b[a] (sic!)	Ni II-162	rII18	[]-par ₄
Ni P-01	AI03'	giš a[b-	Ni II-163	rII07	[] gi ₆ -par ₄
Ni U-05	rII06	giš ab-ba	Ni II-164	rII19	giš NU-par ₄
Ni U-21	I01'	[a]b-b[a]	Ni II-174	rII17	giš gi ₆ -par ₄
040 3155 giš ab-ba-me-luh-ha			Ni II-211	rI05	[]-par ₄
Ni II-001	rII17	giš ab-ba-me-luh-ha	Ni II-239	rII02	giš gi ₆ -par ₄
Ni II-013	rII10'	giš ab-b[a-	Ni II-272	rII01'	giš []-par ₄
Ni II-037	rII07	giš ba-a[b-m]e-luh-ha	Ni IV-04	1	giš gi ₆ -par ₄
Ni II-040	rI03'	giš a[b-b]a-[	Ni IV-12	rII01	giš gi ₆ -par ₄
Ni II-062	rI03'	giš a[b-	Ni U-05	rII08	giš gi ₆ -par ₄
Ni II-068	rI06'	giš ab-b[a-	Ni U-21	I03'	[] gi ₆ -par ₄
Ni II-085	rII10	[]-ha	042 3158 giš ma-nu		
Ni II-091	rII02'	[-b]a-me-luh-ha	Ni I-08	II02'	[] ma-nu
Ni II-092	rI03'	giš ab-[	Ni II-001	rII19	[giš] ma-nu
Ni II-097	I02	giš ab-ba-me-luh-ha	Ni II-013	rII12'	giš [m]a-n[u]
Ni II-105	rII09	[a]b-ba-me-luh-ha	Ni II-020	rII20	[]-nu
Ni II-106	rI01'	[a]b-b[a-	Ni II-031	rI01	giš [m]a-nu
Ni II-109	rII04'	[-l]uh-ha	Ni II-035	rII04	giš nu-ma
Ni II-110	rII17	giš ab-ba-me-luh-ha	Ni II-037	rII09	giš [m]a
Ni II-141	rII13	giš ab-ba-me-luh-ha	Ni II-040	rI05'	giš m[a-
Ni II-143	rII15'	giš [	Ni II-068	rI08'	giš ma-[
Ni II-148	rIII01	giš a-ab-ba-m[e-	Ni II-085	rII12	giš ma-n[u]
Ni II-149	rII01	[]-ba-me-[-h]a	Ni II-091	rII04'	[] ma-nu
Ni II-162	rII17	[]-ba-me-luh-ha	Ni II-092	rI05'	giš ma-[
Ni II-163	rII06	giš ab-ba-[]-luh-[	Ni II-105	rII11	[] ma-nu
Ni II-164	rII18	giš ab-ba-m[e-lu]h-ha	Ni II-106	rI03'	[] ma-[
Ni II-165	rII03	[]-ba-[-lu]h-h[a]	Ni II-109	rII06'	[m]a-nu
Ni II-174	rII16	giš ab-ba-me-luh-ha	Ni II-110	rII19	[]-nu
Ni II-211	rI04	[-b]a-me-luh-ha	Ni II-140	rII22	giš ma-nu
Ni II-239	rII01	giš ab?-[]-ha	Ni II-141	rII15	giš ma-nu
Ni II-286	rII05	giš ab-me-luh-[	Ni II-143	rII17'	giš ma-nu
Ni II-290	I11'	[b]a-b[a]-m[e-	Ni II-144	rIII01'	[] ma-nu-um
Ni U-05	rII07	giš ab-ba-me-luh-ha	Ni II-148	rIII03	giš ma-nu
Ni U-21	I02'	[] ab-ba-me-luh-ha	Ni II-149	rII03	giš ma-nu
041 3156 giš gi ₆ -par ₄			Ni II-162	rII19	[] ma-nu
Ni I-08	II01'	[] g[i ₆ -	Ni II-163	rII08	giš ma-nu
Ni II-001	rII18	giš gi ₆ -p[ar ₄]	Ni II-164	rII20	giš ma-nu
Ni II-013	rII11'	giš gi ₆-[	Ni II-174	rII18	giš ma-nu
Ni II-020	rII19	[-p]ar ₄	Ni II-201	rI03'	giš ma-n[u]
Ni II-035	rII03	giš gi ₆ -par ₄	Ni II-239	rII03	giš nu-ma
Ni II-037	rII08	giš g[i ₆ -pa]r ₄	Ni II-272	rII02'	giš ma-nu
Ni II-040	rI04'	giš gi ₆ -p[ar ₄]	Ni IV-04	2	[gi]š ma-n[u]
			Ni IV-12	rII02	giš ma-nu

Ni U-05	rII09	giš ma-[	Ni II-162	rII21	[]-gibil ₂ -a-A[G]
Ni U-21	I04'	[gi]š ma-nu	Ni II-163	rII10	[m]a-nu-[
043 3163	giš ma-nu-šu-AG		Ni II-164	rIII01	giš [m]a-[n]u-gi[bi]l ₂]-A[G?]
Ni I-08	II03'	[] ma-nu-šu-a-AG	Ni II-174	rII20	giš ma-nu-gibil-AG
Ni II-004	rI01'	giš ma-nu-š[u]-a-[	Ni II-222	rIII01'	[]-a-AG
Ni II-013	rII13'	giš ma-n[u]-a-A[G]	Ni II-224	rIII01'	[m]a-n[u] \ gibil ₂ -a-AG
Ni II-020	rII21	[-A]G	Ni II-228	I02'	[]-nu-gibil ₂ -a-AG
Ni II-031	rI02	giš ma-nu-a-šu-a-A[G]	Ni II-239	rII04	giš nu-ma-gibil ₂ -a-AG
Ni II-035	rII05	giš nu-ma-šu-a-A[G]	Ni II-272	rII04'	giš ma-nu-gibil ₂ -ŠU-a-A[G]
Ni II-037	rII10	giš [traces]-a	Ni IV-08	2	giš ma-nu-gibil ₂ -AG
Ni II-039	rIII01'	[-A]G	Ni U-14	II01'	giš ma-nu-[
Ni II-040	rI06'	giš ma-[	Ni U-21	I06'	[]-a-A[G]
Ni II-068	rI09'	giš ma-[	044a 3171	giš ma-nu-kal-la	
Ni II-091	rII05'	[m]a-nu-šu-a-AG	Ni II-004	rI02'	giš ma-nu-kal-la
Ni II-092	rI06'	giš ma-[	045 3186	giš nu-ur ₂ -ma	
Ni II-105	rII12	[] ma-nu-a-[	Ni I-03	I01	giš nu-ur ₂ -ma
Ni II-106	rI04'	[gi]š ma-nu-šu-a-A[G]	Ni I-08	II05'	[]-ur ₂ -ma
Ni II-109	rII08'	[m]a-nu-šu-a-AG	Ni II-001	rIII01'	giš nu-ur ₂ -ma
Ni II-110	rII20	[]-X-šu-AG	Ni II-004	rI03'	giš nu-ur ₂ -[
Ni II-140	rII23	giš ma-nu-šu-[] \ AG	Ni II-013	rII15'	giš nu-ur ₂ -m[a]
Ni II-141	rII16	[]-nu-šu-AG	Ni II-024	rI07	giš nu-[
Ni II-143	rII18'	giš ma-nu-šu-a-AG	Ni II-031	rI05	giš nu-[
Ni II-144	rIII02'	[] ma-nu-šu-a	Ni II-035	rII07	giš nu-ma-ur ₂ -r[a?]
Ni II-148	rIII04	giš ma-nu-a-AG	Ni II-039	rIII03'	[]-ma
Ni II-149	rII04	giš ma-nu-š[u]-AG	Ni II-063	rII02'	[]-ma
Ni II-162	rII21	[] ma-nu-a-[]-A[G]	Ni II-085	rII15	[]-ur ₂ -ma
Ni II-163	rII09	[] ma-n[u] -A]G	Ni II-091	rII07'	[-u]r ₂ -ma
Ni II-164	rII21	giš ma-šu-nu-AG	Ni II-105	rII14	[-m]a
Ni II-174	rII19	giš ma-nu-a-gal-AG	Ni II-106	rI06'	[u]r ₂ -ma
Ni II-228	I01'	[]-nu-šu-a-AG	Ni II-110	rIII01	giš nu-ur ₂ -ma
Ni II-239	rII05	giš IGI-ma-šu-a-AG	Ni II-144	rIII04'	[-u]r ₂ -ma
Ni II-272	rII03'	giš ma-nu-šu-a-AG	Ni II-148	rIII06	[] nu-ur ₂ -ma
Ni IV-08	1	giš ma-nu-šu-AG	Ni II-149	rII06	[-u]r-ma
Ni U-21	I05'	[m]a-nu-a-AG	Ni II-155	rII17	giš nu-u[r ₂ -
044 3164	giš ma-nu-gibil ₂ -AG		Ni II-164	rIII02	giš nu-ur ₂ -ma
Ni I-08	II04'	[] ma-nu-gibil ₂ -a-AG	Ni II-174	rII21	giš ur ₂ -ma (sic!)
Ni II-013	rII14'	giš ma-nu-a-A[G]	Ni II-176	01	giš n[u-u]r ₂ -[
Ni II-031	rI03	giš ma-nu-gib[il ₂]-	Ni II-205	rII01	[]-ma
Ni II-031	rI04	giš m[a-	Ni II-222	rIII02'	giš nu-u[r ₂]-ma
Ni II-035	rII06	giš nu-ma-gibil ₂ -a-AG?	Ni II-224	rIII02'	giš nu-ur ₂ -ma
Ni II-039	rIII02'	[-A]G	Ni II-225	rI04'	giš nu-[
Ni II-085	rII14	[-n]u-gibil ₂-[	Ni II-228	I03'	[-u]r ₂ -ma
Ni II-091	rII06'	[]-nu-gibil ₂ -a-AG	Ni II-239	rII06	giš nu-u[r ₂ -
Ni II-105	rII13	giš gi]bil ₂ -a-[	Ni II-272	rII05'	giš nu-ur ₂ -ma
Ni II-106	rI05'	[gi]š ma-nu-gibil-AG	Ni II-275	rI02'	giš nu-u[r ₂ -
Ni II-109	rII07'	[m]a-nu-[]-a-AG	Ni IV-12	rII03	giš []-ur ₂ -[
Ni II-110	rII21	[m]a-nu-gibil ₂ -AG	Ni U-14	II02'	giš [n]u-ur ₂ -[
Ni II-140	rII24	giš ma-nu-X [] \ AG	046 3195	giš KID-da	
Ni II-141	rII17	[]-AG	Ni I-03	I02	giš KID-da
Ni II-144	rIII03'	[m]a-nu-gibil?-a-AG	Ni I-08	II06'	[] KID-da
Ni II-148	rIII05	[gi]š ma-nu-gi[bi]l ₂]-a-[A]G	Ni I-09	I01	[]-da
Ni II-149	rII05	giš ma-nu-gibil ₂ -AG	Ni II-001	rIII02'	giš KID-da
Ni II-155	rII16	giš ma-nu-gi[bi]l ₂ -			

Ni II-004	rI04'	giš KID-da	Ni II-275	rI04'	giš KI[D-
Ni II-013	rII16'	giš KID-da	Ni IV-12	rII05	giš KID-da
Ni II-035	rII08	[g]iš KID-[
Ni II-039	rIII04'	[-d]a	048 3199	giš KID-da-zil-la ₂	
Ni II-063	rII03'	[]-da	Ni I-03	I04	[] KID-[
Ni II-085	rII16	[]-da	Ni I-08	II08'	[g]iš [K]ID-da-zil-la ₂
Ni II-103	rII01'	[]-da	Ni I-09	I03	[-d]a-zil-la ₂
Ni II-106	rI07'	[]-da	Ni II-001	rIII04'	giš KID-da-zil-la ₂
Ni II-110	rIII02	giš KID-da	Ni II-013	rII19'	giš KID-[
Ni II-140	rIII01	giš KID-da	Ni II-015	rIII05	giš KID-da-zil-la ₂
Ni II-144	rIII05'	[-d]a	Ni II-026	rI01'	[] KID-[
Ni II-148	rIII07	[] KID-[d]a	Ni II-031	rI07	giš KI[D-
Ni II-155	rII18	giš KID-[	Ni II-035	rII10	g[iš] KID-da-X []
Ni II-164	rIII03	giš KID-da	Ni II-063	rII05'	[]-da-KU-me-e
Ni II-165	rII10	[-d]a	Ni II-067	rI02'	giš KID-da-zi[l
Ni II-174	rII22	giš KID-d[a]	Ni II-085	rII18	[]-da-[
Ni II-176	02	giš KID-[	Ni II-103	rII03'	[-zi]l-la ₂
Ni II-205	rII02	[]-da	Ni II-110	I01	giš KID-da-zil-la ₂
Ni II-211	rI10B	[K]ID-da	Ni II-110	rIII04	giš KID-da-zil-la ₂
Ni II-222	rIII03'	giš KID-da	Ni II-140	rIII03	giš KID-[]-la ₂
Ni II-224	rIII03'	giš KID-da	Ni II-143	rIII02'	[K]ID-da-zil-[
Ni II-225	rI05'	giš KID-[	Ni II-164	rIII05	giš KID-da!-LA-zil-la ₂
Ni II-239	rII07	giš KID-da	Ni II-176	04	giš KID-da-X
Ni II-240	rII01'	g[iš -d]a	Ni II-205	rII04	[-zi]l-la ₂
Ni II-275	rI03'	giš K[ID-	Ni II-211	rI12B	[g]iš K[ID]-da-[z]il-la ₂
Ni IV-12	rII04	giš KID-da	Ni II-222	rIII05'	giš K[ID- -zi]l-la ₂
			Ni II-224	rIII05'	[] KID-da-zil-[
047 3196	giš KID-da		Ni II-239	rII09	giš KID-da-zil-la?
Ni I-03	I03	giš KID-da	Ni II-240	rII03'	giš KID-da-zil-[
Ni I-08	II07'	[K]ID-da	Ni II-267	rII01'	[-d]a-zil-la ₂
Ni I-09	I02	[]-da	Ni II-275	rI05'	giš K[ID-
Ni II-001	rIII03'	giš KID-da	Ni IV-12	rII06	giš KID-da-zi[l-l]a
Ni II-004	rI05'	giš KID-d[a			
Ni II-013	rII17'	giš KID-[	049 3200	giš mes	
Ni II-015	rIII04	giš KI[D-d]a	Ni I-08	II09'	giš me[s]
Ni II-031	rI06	giš KI[D-	Ni I-09	I04	[] mes
Ni II-035	rII09	g[iš] KID-[	Ni II-001	rIII05'	giš mes
Ni II-039	rIII05'	[]-da	Ni II-005	rII01'	[me]s
Ni II-063	rII04'	[]-da	Ni II-013	rII20'	[g]iš mes
Ni II-067	rI01'	giš KID-d[a	Ni II-015	rIII06	giš mes
Ni II-085	rII17	[]-da	Ni II-026	rI02'	giš mes [
Ni II-103	rII02'	[]-da	Ni II-035	rII11	g[iš] mes
Ni II-110	rIII03	giš KID-da	Ni II-063	rII06'	[m]es
Ni II-140	rIII02	giš KID-da	Ni II-067	rI03	giš [m]es
Ni II-143	rIII01'	[K]ID-d[a]	Ni II-103	rII04'	[m]es
Ni II-148	rIII08	[K]ID-[	Ni II-110	I02	giš mes
Ni II-164	rIII04	giš KID-X	Ni II-110	rIII05	[] mes
Ni II-176	03	giš KID-d[a]	Ni II-140	rIII04	giš mes
Ni II-205	rII03	[]-da	Ni II-143	rIII03'	giš mes
Ni II-211	rI11B	[] KID-da	Ni II-164	rIII06	giš mes
Ni II-222	rIII04'	giš KID-da	Ni II-165	rII13	giš mes
Ni II-224	rIII04'	giš [K]ID-da	Ni II-176	05	giš mes
Ni II-225	rI06'	giš KI[D-	Ni II-205	rII05	[] mes
Ni II-239	rII08	giš KID-da	Ni II-211	rII01	giš mes
Ni II-240	rII02'	giš KID-da	Ni II-222	rIII06'	[me]s

Ni II-239	rII10	giš m[es]	Ni II-237	rII02'	[] mes-me-luh-ha
Ni II-240	rII04'	giš mes	Ni II-240	rII06'	giš mes-me-luh-ha
Ni II-267	rII02'	[] mes	Ni II-259	rII01'	giš mes-me-luh-ha
Ni II-275	rI06'	giš [m]es	Ni II-267	rII04'	[] mes-me-luh-ha
Ni IV-12	rII07	giš m[es]	Ni II-275	rI08'	giš mes-me-luh-ha
			Ni U-02	I02	[]-a
050 3204		giš mes-ma ₂ -gan-na	051a		giš mes-alan
Ni I-08	II10'	giš mes-ma ₂ -ga[n-n]a	Ni II-001	rIII08'	giš mes-alan
Ni II-001	rIII06'	giš mes-ma ₂ -gan-na	Ni II-005	rII04'	giš mes-alan
Ni II-005	rII02'	[m]es-m[a ₂ -	Ni II-026	rI03'	giš mes-al[an]
Ni II-013	rII21'	[]-gan	Ni II-085	rII22	giš alan
Ni II-015	rIII07	giš mes-m[a ₂ -ga]n-na	Ni II-211	rII04	giš mes-il
Ni II-035	rII12	[-m]a ₂ -g[an]-na			
Ni II-059	rII10	giš [m]es-ma ₂-[	051b 3211		giš mes-tu
Ni II-067	rI04'	giš mes-ma ₂ -g[an-	Ni II-005	rII05'	giš mes-tu
Ni II-085	rII20	giš me[s-m]a ₂ -[ga]n-na	Ni II-211	rII05	giš mes-tu
Ni II-103	rII05'	[]-gan-na			
Ni II-110	I03	giš mes-ma ₂ -gan-na	051c 3206		giš mes-ki-gar-ra
Ni II-110	rIII06	[gi]š mes-ma ₂ -gan-na	Ni II-001	rIII09'	giš mes-ki-gar-ra
Ni II-123	rII02'	[m]es-an-na	Ni II-005	rII06'	giš mes-ki-en-gi-ra
Ni II-140	rIII05	giš mes-ma ₂ -gan-[	Ni II-085	rII23	giš mes-ki-gar-ra
Ni II-143	rIII04'	giš mes-m[a ₂ -	Ni II-123	rII01'	[-r]a
Ni II-164	rIII07	giš mes-ma ₂ -gan-na	Ni II-164	rIII10	giš mes-ki-gar-ra
Ni II-176	06	giš mes-ma ₂ -gan-na	Ni U-02	I03	[]-gar-ra
Ni II-205	rII06	[-g]an-na			
Ni II-211	rII02	giš mes-ma ₂ -ga[n-n]a	051d 3216		giš mes-ha-lu-ub ₂ -har-ra-an-na
Ni II-237	rII01'	[] m[es-	Ni II-005	rII07f'	giš mes-SAR-ha-lu-ub-GIŠ-har-an-na
Ni II-240	rII05'	giš mes-ma ₂ -gan-na	Ni II-026	rI04'	giš mes ha-UB ₂ -LU-har-ra
Ni II-267	rII03'	[] mes-ma ₂ -gan-na	Ni II-211	rII06	giš mes-ha-lu-[
Ni II-275	rI07'	giš m[es]-ma ₂ -gan-na			
Ni IV-12	rII08	giš mes-m[a ₂]-gan	051e 3214		giš mes-gi ₆
Ni U-02	I01	[-n]a	Ni II-005	rII09'	giš mes-gi ₆
051 3205		giš mes-me-luh-ha	052 3217		giš erin
Ni I-04	II01'	[gi]š m[es-	Ni I-04	II02'	giš [
Ni I-08	II11'	giš mes-me-luh-ha	Ni I-08	II12'	giš erin
Ni II-001	rIII07'	giš mes-me-luh-ha	Ni II-001	rIII10'	giš DIŠ erin
Ni II-005	rII03'	[gi]š mes-me-luh-ha	Ni II-005	rII10'	giš erin
Ni II-013	rII22'	[-h]a?	Ni II-015	rIII09	giš [er]in
Ni II-015	rIII08	giš m[es]-me-lu[h-h]a	Ni II-026	rI05'	giš erin
Ni II-035	rII13	[-lu]h-ha	Ni II-035	rII14	[er]in
Ni II-063	rII08'	[-m]e-luh	Ni II-059	rII12	[g]iš e[rin
Ni II-067	rI05'	giš mes-me-lu[h-	Ni II-063	rII09'	[er]in
Ni II-085	rII21	giš mes-me-[]-NA	Ni II-065	rII01'	[e]rin
Ni II-103	rII06'	[-h]a	Ni II-085	rII24	giš erin
Ni II-110	I04	giš mes-me-luh-ha	Ni II-088	rII02'	[er]in
Ni II-110	rIII07	[-m]e-luh-ha	Ni II-110	I05	giš erin
Ni II-123	rII03'	[] mes-e-ha	Ni II-110	rIII08	[e]rin
Ni II-140	rIII06	giš []-ha	Ni II-123	rII04'	[gi]š erin
Ni II-143	rIII05'	giš mes-me-luh-ha	Ni II-140	rIII07	g[iš] erin
Ni II-164	rIII08	giš mes-me-luh-ha	Ni II-143	rIII06'	giš erin
Ni II-174	rIII01	giš me[s]-me-luh-[	Ni II-164	rIII11	giš erin
Ni II-176	07	giš mes-me-luh-ha	Ni II-174	rIII02	giš erin
Ni II-205	rII07	[-lu]h-ha			
Ni II-211	rII03	giš mes-m[e]-luh-ha			

Ni II-184	rII03	giš erin ₂	Ni II-140	rIII08	giš [š]u-u[r ₂ -
Ni II-200	rII03'	giš [eri]n	Ni II-143	rIII07'	giš šu-ur ₂ -m[in ₃]
Ni II-205	rII08	[-er]in	Ni II-164	rIII15	giš šu-ur ₂ -min ₃
Ni II-237	rII03'	giš erin	Ni II-166	rI06	[gi]š [-u]r ₂ -mi[n ₃]
Ni II-240	rII07'	giš erin	Ni II-174	rIII03	giš [š]u-ur ₂ -min ₃
Ni II-259	rII02'	giš erin	Ni II-184	rII04	giš šu-ur ₂ -min ₃
Ni II-267	rII05'	[er]in	Ni II-193	rI03	giš šu-[
Ni II-275	rI09'	giš erin	Ni II-200	rII04'	giš šu-ur ₂ -min ₃
Ni II-285	rI03'	giš erin	Ni II-205	rII09	[m]in ₃ ?
Ni IV-02	1	giš erin	Ni II-223	rII01'	[-u]r ₂ -min ₃
Ni U-02	I04	[] erin	Ni II-240	rII08'	giš šu-ur ₂ -min ₃
052a 3222	giš BAD-erin		Ni II-259	rII03'	giš šu-u[r ₂]-min ₃
Ni II-001	rIII11'	giš BAD-erin	Ni II-273	rI04'	[š]u-ur ₂ -šu
Ni II-026	rI06'	[giš] BAD-e[rin]	Ni II-275	rI10'	giš šu-ur ₂ -min ₃
Ni II-085	rII25	giš BAD-erin	Ni II-285	rI04'	giš šu-ur ₂ -30
Ni II-164	rIII12	giš BAD-erin	Ni IV-02	2	giš šu-ur ₂ -min ₃
Ni II-237	rII04'	giš BAD-erin	Ni IV-12	rII09	giš šu-ur-me
052b	giš pa-erin		Ni U-02	I05	[]-me
Ni II-026	rI07'	[giš] pa-e[rin]	Ni U-24	II07'	giš šu-ur ₂ -min ₃
Ni II-068	rII02'	[]-erin	Ni U-25	II06	giš šu-[
052c	giš LU-DUG ₃ -A		054 3226	giš za-ba-lum	
Ni II-001	rIII12'	giš LU-DUG ₃ -A	Ni I-04	II04'	giš za-b[a-
Ni II-068	rII03'	giš LU-DUG ₃ -A	Ni I-08	II14'	giš za-ba-lum
Ni II-085	rII26	giš LU-DUG ₃ -A	Ni II-001	rIII15'	giš [z]a-[b]a-lum
Ni II-164	rIII13	giš KU-DUG ₃ -A	Ni II-009	rI01	giš z[a-
Ni II-237	rII05'	giš LU-DUG ₃ -A	Ni II-013	rIII01'	giš za-ba-[
Ni II-273	rI01'	[L]U-DUG ₃	Ni II-015	rIII11	giš za-ba-lum
052d	giš A.TU.GAB.SIG.GAR		Ni II-026	rI11'	giš za-ba-[
Ni II-001	rIII13'	giš A.TU.GAB.SIG.GAR	Ni II-031	rII01	[] za-ba-[l]um
Ni II-026	rI08'	[] TU [	Ni II-040	rII01'	giš z[a]-b[a-
Ni II-068	rII04'	[].TU.X \ X.GAR	Ni II-047	rIII01	[-l]um
Ni II-085	rII27	giš A.TU.GAB.SIG.GAR	Ni II-059	rII17	giš za-[
Ni II-164	rIII14	giš A.TU.GAB.LIŠ.GAR	Ni II-063	rI11'	[]-lum
Ni II-193	rI02	giš A.[T]U.[	Ni II-065	rII03'	[]-lum
Ni II-237	rII06'	giš A.T[U.	Ni II-085	rIII01	giš []-ba-[l]um
Ni II-273	rI02'	[].GAB.TU.GAM	Ni II-088	rII04'	giš za-ba-lum
053 3225	giš šu-ur ₂ -min ₃		Ni II-089	rIII02'	[z]a-ba-lum
Ni I-04	II03'	giš šu-u[r ₂ -	Ni II-110	I07	[z]a-ba-lum
Ni I-08	II13'	giš šu-ur ₂ -min ₃	Ni II-110	rIII10	[] z[a-b]a-l[um]
Ni II-001	rIII14'	giš šu-ur ₂ -min ₃	Ni II-140	rIII09	giš za-ba-[
Ni II-015	rIII10	giš [š]u-ur ₂ -min ₃	Ni II-143	rIII08'	giš za-ba-lum
Ni II-026	rI10'	giš š[u	Ni II-164	rIII16	giš za-ba-lum
Ni II-059	rII16	[gi]š šu-[	Ni II-166	rI07	[gi]š za-ba-[
Ni II-063	rII10'	[]-min ₃	Ni II-174	rIII04	giš za-ba-lum
Ni II-065	rII02'	[]-min ₃	Ni II-184	rII05	giš za-b[a-
Ni II-088	rII03'	[] šu-ur ₂ -min ₃	Ni II-193	rI04	giš za-ba-[
Ni II-089	rIII01'	[-u]r ₂ -min ₃	Ni II-200	rII05'	giš za-ba-lum
Ni II-110	I06	giš šu-ur-me	Ni II-211	rII09B	giš za-[
Ni II-110	rIII09	[] šu-ur ₂ -me	Ni II-223	rII02'	[]-lum
Ni II-123	rII05'	giš šu-ur ₂ -min ₃	Ni II-240	rII09'	giš za-ba-lum
			Ni II-259	rII04'	giš za-ba-l[um]
			Ni II-273	rI05'	giš za-ba-[
			Ni II-275	rI11'	giš za-ba-lum
			Ni II-285	rI05'	giš za-ba-lu[m]

Ni IV-12	rII10	giš z[a-]-lum	Ni II-040	rII03'	giš gi-ri ₂ -lum
Ni U-02	I06	[]-lum	Ni II-059	rII19	giš gi-ri-lum
Ni U-24	II08'	giš za-ba-lum	Ni II-085	rIII03	giš gi-ri ₂ -lum
Ni U-25	II07	giš za-ba-[	Ni II-088	rII06'	giš gi-ri-lum
055 3227		giš e-la-ma-kum	Ni II-089	rIII04'	[-r] _{i₂} -lum
Ni I-04	II05'	giš e-la[m-	Ni II-110	I09	[g] _i -ri ₂ -lum
Ni I-08	II15'	giš e-lam-kum	Ni II-110	rIII12	[-r] _{i₂} -l[um?]
Ni II-001	rIII16'	giš e-lam-ma	Ni II-143	rIII10'	giš gi-l[um]
Ni II-013	rII02'	giš e-lam-ma-kum	Ni II-164	rIII18	giš g[i-]-lum
Ni II-015	rIII12	[gi]š e-[l]a-ma-kum	Ni II-165	rII20	giš g[i-
Ni II-020	rIII01'	giš e-lam-ma-k[um]	Ni II-166	rI09	giš gi-ri ₂ -l[um]
Ni II-026	rI12'	giš e-lam-ma-k[um]	Ni II-174	rIII06	giš gi-[]-lum
Ni II-031	rII02f.	giš e-la-MIN ₃ \ <giš G[I]> kum ₂	Ni II-211	rII11B	giš gi-ri ₂ -l[um]
Ni II-040	rII02'	giš e-lam-m[a-k]um	Ni II-218	rII02'	[g] _i -r[i ₂ -
Ni II-047	rIII02	[-k]um	Ni II-223	rII04'	giš gi-ri ₂ -lum
Ni II-059	rII18'	giš e-[	Ni II-240	rII11'	giš gi-ri ₂ -lum
Ni II-065	rII04'	[-k]um	Ni II-259	rII06'	giš gi-ri ₂ -lum
Ni II-085	rIII02	giš e-la-ma-kum	Ni II-269	rII03'	giš gi-[
Ni II-088	rII05'	giš e-lam-ma-kum	Ni II-273	rI07'	g[iš] g[i-
Ni II-089	rIII03'	[-l]am-ma-kum	Ni II-275	rI13'	[gi]š []-lum
Ni II-110	I08	[]-la-ma-kum	Ni IV-12	rII12	giš gi-[-l]um
Ni II-110	rIII11	[gi]š e-l[a-	Ni U-02	I08	[]-l[um]
Ni II-140	rIII10	giš e-[	Ni U-24	rI01	giš gi-ri-lu[m]
Ni II-143	rIII09'	giš e-lam-ma-kum	Ni U-25	II09	giš gi-[
Ni II-164	rIII17	giš e-la-ma-kum	057 3231		giš gi-rim
Ni II-166	rI08	giš e-la-ma-kum	Ni I-01	II02'	giš gi-[
Ni II-174	rIII05	giš e-lam-[k]um	Ni I-04	II07'	giš g[i-
Ni II-193	rI05	giš e-[	Ni I-08	II17'	giš gi-rim
Ni II-200	rII06'	[] e-lam-GAZ	Ni II-009	rI04	giš g[i-
Ni II-211	rII10B	giš e-lam-ma-kum	Ni II-013	rIII04'	giš gi-rim
Ni II-218	rII01'	[] e-[	Ni II-015	rIII14	[g] _i -rim
Ni II-223	rII03'	[]-kum	Ni II-019	rI02	giš gi-[
Ni II-240	rII10'	giš e-lam-ma-kum	Ni II-020	rIII03'	[] gi-rim
Ni II-259	rII05'	giš e-lam-[]-kum	Ni II-026	rI14'	giš gi-r[im]
Ni II-269	rII02'	giš e-la[m]-m[a-	Ni II-031	rII05	giš gi-rim
Ni II-273	rI06'	giš e-l[am-	Ni II-038	rI01'	giš g[i
Ni II-275	rI12'	giš e-lam-ma-kum	Ni II-040	rII04'	giš gi-rim
Ni IV-12	rII11	giš [-k]um	Ni II-059	rII20	giš gi-rim
Ni U-02	I07	[]-kum	Ni II-085	rIII04	giš gi-rim
Ni U-24	II09'	giš e-lam-ma-ku[]m	Ni II-088	rII07'	g[iš g[i]-LAGAB+LAGAB
Ni U-25	II08	giš e-lam-[	Ni II-110	I10	giš gi-rim
056 3229		giš gi-ri ₂ -lum	Ni II-110	rIII13	[]-rim
Ni I-04	II06'	giš gi-[	Ni II-116	rIII01	[]-LAGAB
Ni I-08	II16'	giš gi-ri ₂ -lum	Ni II-143	rIII11'	giš gi-rim
Ni II-001	rIII17'	giš gi-ri ₂ -l[um]	Ni II-164	rIII19	giš gi-rim
Ni II-009	rI03	giš g[i-	Ni II-165	rII21	giš g[i-
Ni II-013	rIII03'	giš gi-ri ₂ -lum	Ni II-166	rI10	giš gi-[
Ni II-015	rIII13	[gi]š [g] _i -ri ₂ -lum	Ni II-174	rIII07	giš gi-rim
Ni II-019	rI01	giš g[i-	Ni II-211	rII12B	giš gi-rim
Ni II-020	rIII02'	[] gi-ri ₂ -l[um]	Ni II-216	rII01'	[]-rim
Ni II-026	rI13'	giš gi-ri ₂ -l[um]	Ni II-218	rII03'	giš gi-[
Ni II-031	rII04	giš gi-ri	Ni II-223	rII05'	g[iš -r]im
			Ni II-225	rII01'	giš gi-rim
			Ni II-240	rII12'	giš gi-rim

Ni II-259	rII07'	giš gi-rim	059 3254	giš ur-nu-um	
Ni II-269	rII04'	giš gi-rim	Ni I-01	II04'	giš ur-nu-um
Ni U-24	rI02	giš gi-rim	Ni I-08	II19'	giš ur-nu-um
Ni U-25	II10	giš g[i-	Ni II-001	rIV01'	[giš ur-n]u-u[m]
058 3237	giš zi-ir-dum		Ni II-013	rIII06'	giš ur-nu-um
Ni I-01	II03'	giš zi-i[r	Ni II-019	rI04	giš ur-n[u-
Ni I-04	II08'	giš z[i-	Ni II-020	rIII04'	[] ur?-nu-um
Ni I-08	II18'	giš zi-ir-dum	Ni II-024	rII02	giš ur-nu-u[m]
Ni II-013	rIII05'	giš zi-ir-dum	Ni II-029	rIII01'	giš [u]r-[n]u-u[m]
Ni II-015	rIII15	[-u]m	Ni II-031	rII07	giš ur-nu-um
Ni II-019	rI03	giš zi-ir-[	Ni II-038	rI03'	giš ur-[
Ni II-024	rII01	giš zi-ir-d[um]	Ni II-040	rII06'	giš ur-n[u]-um
Ni II-026	rI15'	[z]i-[i]r-du[m]	Ni II-058	01	giš ur-nu-um
Ni II-031	rII06	giš zi-ir-[	Ni II-059	rII22	giš ur-nu-[
Ni II-038	rI02'	giš z[i	Ni II-062	rII02'	[] u[r]-n[u-u]m
Ni II-040	rII05'	giš zi-ir-dum	Ni II-085	rIII06	giš ur-nu-um
Ni II-059	rII21	giš zi-ir-d[um]	Ni II-116	rIII03	[]-um
Ni II-085	rIII05	giš zi-ir-dum	Ni II-143	rIII13'	giš MA-nu-X-um
Ni II-088	rII08'	[i]r-dum	Ni II-164	rIII21	giš ur-nu-u[m]
Ni II-110	I11	giš zi-ir-dum	Ni II-165	rII23	giš ur-nu-u[m]
Ni II-116	rIII02	[]-dum	Ni II-166	rI12	giš ur-nu-u[m]
Ni II-143	rIII12'	giš zi-ir-d[um]	Ni II-174	rIII09	[] ur-nu-um
Ni II-164	rIII20	giš gi-ir-du[m] (sic)	Ni II-216	rII03'	[]-um
Ni II-165	rII22	giš zi-ir-dum	Ni II-218	rII05'	giš ur-nu-um
Ni II-166	rI11	giš zi-ir-dum	Ni II-223	rII07'	giš ur-n[u-
Ni II-174	rIII08	[z]i-ir-dum	Ni II-252	rI03'	giš ur-nu-u[m]
Ni II-216	rII02'	[]-um	Ni II-269	rII06'	giš ur-nu-u[m]
Ni II-218	rII04'	giš zi ₂ -ir-[	Ni IV-12	rII15	giš []-nu-um?
Ni II-223	rII06'	giš zi-ir-du[m]	Ni U-24	rI05	giš ur-n[u-
Ni II-225	rII02'	giš zi-ir-MIN	060 3260	giš ti-a-ru-um	
Ni II-240	rII13'	giš zi-ir-dum	Ni I-01	II05'	giš ti-a-ru-um
Ni II-252	rI02'	[] zi-ir-d[um]	Ni I-08	II20'	giš U ₂ ?-r[u-
Ni II-269	rII05'	giš z[i?]-i[r-du]m	Ni II-001	rIV02'	giš ti-a-ru-u[m]
Ni IV-12	rII13	giš z[i-i]r-dum	Ni II-006	rI01'	[]-um
Ni U-24	rI03	giš zi ₂ -ir-dum	Ni II-013	rIII07'	[g]iš ti-ru-um
			Ni II-024	rII03	giš ti-a-ru-um
			Ni II-028	rI02'	giš ti-a-r[u
			Ni II-029	rIII02'	giš ti-a-ru-um
			Ni II-031	rII08	giš ti-ru-a-um
			Ni II-038	rI04'	giš ta-[
			Ni II-040	rII07'	giš ti-a-[]-um
			Ni II-058	02	giš ti-a-ru-um
			Ni II-059	rIII01	[] ti-a-r[u-
			Ni II-062	rII03'	[g]iš ti-r[u]-um
			Ni II-085	rIII07	giš ti-a-r[u-
			Ni II-088	rII09'	[r]u?-um
			Ni II-092	rII01'	[-r]u?-nu-um
			Ni II-116	rIII04	[]-um
			Ni II-143	rIII14'	giš ti-a-ri-[
			Ni II-165	rII24	giš t[i-
			Ni II-166	rI13	giš ti-a-ru-u[m]
			Ni II-167	rI02'	giš ti-a-[
			Ni II-174	rIII10	giš ti-a-[]-um
			Ni II-216	rII04'	[]-um

Ni II-218	rII06'	giš ta-a-ru-um	Ni II-252	rI06'	giš ur-zi-[-
Ni II-223	rII08'	giš te-[-	Ni II-269	rII08'	giš ur-za-nu-um
Ni II-252	rI04'	giš ti-a-ru-um	Ni II-272	rIII04'	giš ur-zi-nu-um
Ni II-269	rII07'	giš [t]i-a-ru-u[m]	Ni IV-23	02	giš ur-zi-num ₂
Ni IV-12	rII16	giš ti?-ru	Ni U-02	rI02	giš u[r-
Ni U-24	rI06	giš ti-[-			
061 3250	giš ri ₂ -a-num ₂		063	giš mi-ri ₂ -iš-gar-ra	
Ni I-01	II06'	giš ri ₂ -a-num ₂	Ni I-01	II08'	giš mi-ri ₂ -iš-gar-ra
Ni II-006	rI02'	[]-num ₂	Ni II-006	rI04'	[] mi-ri ₂ -iš-gar-ra
Ni II-013	rIII08'	[gi]š ri ₂ -a-ru-RU+UM	Ni II-013	rIII10'	giš mi-ri ₂ -iš-gar-LIŠ
Ni II-015	rIII18B	giš ri ₂ -a-[-	Ni II-024	rII06	giš mi-ri ₂ -iš-gar-ra
Ni II-024	rII04	giš ri ₂ -a-num ₂	Ni II-028	rI05'	giš mi-ri-[-
Ni II-028	rI03'	giš ri ₂ -a-nu-u[m]	Ni II-029	rIII05'	giš mi-ri ₂ -iš-gar-ra
Ni II-029	rIII03'	giš ri ₂ -a-nu-um	Ni II-040	rII10'	giš mi-ri-[-
Ni II-031	rII09	giš [r]i-x-a-u[m]	Ni II-058	05	giš m[i- -ga]r-ra
Ni II-038	rI05'	giš r[i ₂ -	Ni II-067	rII01'	giš m[i-i]š-gar-ra
Ni II-040	rII08'	giš ri ₂ -a-num ₂	Ni II-072	rI03'	giš m[i-
Ni II-058	03	giš ri ₂ -a-nu-um	Ni II-085	rIII10	giš me-ri ₂ -iš-ga[r]-r[a]
Ni II-059	rIII02	[] ri ₂ -a-nu-um	Ni II-110	I12	giš m[i-r]i ₂ -iš-ga ₂ -ra
Ni II-062	rII04'	[r]i ₂ -a-nu-u[m]	Ni II-143	rIII17'	giš mi-ri ₂ -iš-gar-ra
Ni II-085	rIII08	giš ri ₂ -a-nu-u[m]	Ni II-164	rIV01	giš mi-ri ₂ -iš-gar-ra
Ni II-088	rII10'	[-u]m	Ni II-167	rI05'	giš mi-ri ₂ -iš-[-
Ni II-092	rII02'	[r]i ₂ -a-nu-um	Ni II-174	rIII13	giš mi-ri ₂ -si-gar-r[a]
Ni II-143	rIII15'	giš ri ₂ -a-[- -u]m	Ni II-201	rII02'	[]-še-gar?-ra?
Ni II-167	rI03'	giš ri-a-nu-[-	Ni II-222	rIV01'	[]iš-gar-r[a]
Ni II-174	rIII11	giš ri ₂ -a-nu-um	Ni II-248	rII02	[]-gar-ra
Ni II-216	rII05'	[]-num ₂	Ni II-252	rI07'	giš {traces}
Ni II-218	rII07'	giš ri ₂ -a-ru-nu-um	Ni IV-12	rII14	giš m[i]-r[i]-i[š?]-gar-ra
Ni II-252	rI05'	giš ri ₂ -a-nu-um	Ni IV-23	01	giš mi-ri ₂ -iš-ra
Ni II-272	rIII03'	giš []-nu-um	Ni U-02	rI03	giš m[i-
Ni U-02	rI01	giš r[i ₂ -	Ni U-24	rI04	giš mi-ri ₂ -iš-ga ₂ -r[a]
062 3255	giš ur-zi-num ₂		064 3265	giš isi ₂ -mu ₂	
Ni I-01	II07'	giš ur-zi-num ₂	Ni I-01	II09'	giš isi ₂ -mu ₂
Ni II-006	rI03'	[z]i-nu-um	Ni II-006	rI05'	[g]iš isi ₂ -mu ₂
Ni II-013	rIII09'	[u]r-[z]i-num ₂	Ni II-013	rIII11'	giš isi ₂ -mu ₂
Ni II-015	rIII19B	giš ur-zi-n[u-	Ni II-015	rIII20B	giš isi ₂ -mu ₂
Ni II-024	rII05	giš ur-zi-num ₂	Ni II-024	rII07	giš isi ₂ -mu ₂
Ni II-028	rI04'	giš ur-zi-nu-[-	Ni II-029	rIII06'	[gi]š [is]i ₂ -mu ₂
Ni II-029	rIII04'	giš ur-zi-num ₂	Ni II-037	rIII01	giš isi ₂ -[-
Ni II-038	rI06'	giš ur-[-	Ni II-045	rI02'	giš is[i ₂ -
Ni II-040	rII09'	giš ur-[z]i-num ₂	Ni II-058	06	giš [is]i ₂ -mu ₂
Ni II-058	04	giš ur-z[i]-num ₂	Ni II-059	rIII04	[]-mu ₂
Ni II-059	rIII03	giš ur-zi-nu[m ₂]	Ni II-067	rII02'	giš isi ₂ -mu ₂
Ni II-072	rI02'	giš ur-[-	Ni II-085	rIII11	giš isi ₂ -mu ₂
Ni II-085	rIII09	giš [u]r-[z]i-n[um ₂]	Ni II-092	rII04'	[is]i ₂ -mu ₂
Ni II-092	rII03'	[u]r-zi-ir \ dum-num ₂	Ni II-164	rIV02	giš isi ₂ -mu ₂
Ni II-143	rIII16'	giš ur-z[i]-nu-um	Ni II-167	rI06'	giš isi ₂ -[-
Ni II-164	rIII23	giš ur-z[i-nu]m ₂	Ni II-174	rIII14	giš isi ₂ -[-
Ni II-167	rI04'	giš ur-zi-[-	Ni II-201	rII03'	[]-mu ₂
Ni II-174	rIII12	giš ur-zi-num ₂	Ni II-217	rII07'	[g]iš isi ₂ -[-
Ni II-201	rII01'	[]-um	Ni II-218	rII09'	[] isi ₂ -mu ₂
Ni II-218	rII08'	giš ur-zi-nu-um	Ni II-222	rIV02'	[is]i ₂ -mu ₂
Ni II-248	rII01	[]-nu-um	Ni II-244	rI01'	[] isi ₂ -m[u ₂]
			Ni II-248	rII03	giš isi ₂ -mu ₂

Ni II-252	rI08'	giš isi ₂-[	Ni II-119	rI02	giš nimbar-t[ur]
Ni IV-12	rII17	giš isi ₂ -mu ₂	Ni II-133	I03	giš nimbar-tur
Ni U-02	rI04	giš i[si ₂ -	Ni II-164	rIV04	giš nimbar-tur
064a 3266	giš gibil		Ni II-174	rIII16	giš nimbar-tur
Ni I-09	II01	giš gibil	Ni II-217	rII09'	[] nimbar-tur
Ni II-006	rI06'	[g]iš gibil	Ni II-222	rIV04'	[gi]š nimbar-tur
065 3280	giš nimbar		Ni II-244	rI03'	giš nimbar-tur
Ni I-01	II10'	giš nimbar	Ni II-248	rII05	[nim]bar-tur
Ni I-09	II02	giš nimbar	Ni II-273	I01'	[nim]bar-tu[r]
Ni II-006	rI07'	[g]iš nimbar	067 3282	giš nimbar-kur-ra	
Ni II-013	rIII12'	giš nimbar	Ni I-01	II12'	giš nimbar-kur
Ni II-015	rIII21B	giš nimbar	Ni I-09	II04	giš nimbar-kur-ra
Ni II-018	rI01'	giš nim[bar]	Ni II-013	rIII14'	giš nimbar-kur
Ni II-024	rII07	[gi]š [nim]bar	Ni II-018	rI03'	giš nimbar-kur-r[a]
Ni II-029	rIII07'	[nim]bar	Ni II-037	rIII04	giš nimbar-kur
Ni II-037	rIII02	giš nimbar	Ni II-045	rI05'	giš nimbar-[
Ni II-045	rI03'	giš [	Ni II-058	09	giš nimbar-kur
Ni II-058	07	giš [nim]bar	Ni II-059	rIII07	[g]iš [nim]bar-kur-r[a]
Ni II-059	rIII05	giš nimbar	Ni II-067	rII05'	giš nimbar-kur
Ni II-067	rII03'	giš nimbar	Ni II-085	I03	giš nimbar-kur
Ni II-072	rI04'	giš nim[bar]	Ni II-085	rIII14	giš nimbar-[
Ni II-085	I01	[] nimbar	Ni II-133	I02	giš nimbar-k[ur?]
Ni II-085	rIII12	giš nimbar	Ni II-119	rI03	giš nimbar-k[ur]
Ni II-092	rII05'	[] nimbar	Ni II-142	rI04'	giš nimbar-kur-[
Ni II-119	rI01	giš nim[bar]	Ni II-164	rIV05	giš nimbar-kur
Ni II-133	I01	giš nimbar	Ni II-174	rIII17	giš nimbar-kur
Ni II-164	rIV03	giš nimbar	Ni II-175	rI01'	giš nim[bar]-kur-r[a]
Ni II-167	rI07'	[gi]š n[imbar]	Ni II-217	rII10'	[gi]š nimbar-kur-ra
Ni II-174	rIII15	giš [ni]mbar	Ni II-222	rIV05'	[gi]š nimbar-kur-ra
Ni II-201	rII04'	[] nimbar	Ni II-244	rI04'	giš nimbar-kur-[
Ni II-214	I02	giš nim[bar]	Ni II-248	rII06	giš nimbar-ku[r]
Ni II-217	rII08'	[] nimbar	Ni II-249	I01'	[]-k[ur-r]a
Ni II-222	rIV03'	[gi]š nimbar	Ni II-273	I02'	[nim]bar-kur
Ni II-244	rI02'	[gi]š nimbar	Ni II-275	rII01'	[]-kur
Ni II-248	rII04	[gi]š nim[bar]	068 3284	giš nimbar-dilmun-na	
Ni II-252	rI09'	giš [	Ni I-01	II13'	giš nimbar-dilmun-na
Ni IV-12	rII18	giš nimbar	Ni I-09	II05	[g]iš nimbar-dilmun-na
066 3289	giš nimbar-tur		Ni II-013	rIII15'	giš nimbar-dilmun-na
Ni I-01	II11'	giš nimbar-tur	Ni II-018	rI04'	giš nimbar-dilmun-na
Ni I-09	II03	giš nimbar-tur	Ni II-045	rI06'	giš nimbar-dil[mun-
Ni II-006	rI08'	[g]iš nimbar-tur	Ni II-058	10	giš nimbar-dilmun-na
Ni II-013	rIII13'	giš nimbar-tur	Ni II-067	rII06'	giš nimbar-dilmun
Ni II-015	rIII22B	giš nimbar-tu[r]	Ni II-085	I04	giš nimbar-dilmun-na
Ni II-018	rI02'	giš nimbar-t[ur]	Ni II-085	rIII15	giš nimbar-[]-na
Ni II-037	rIII03	giš nimbar-tur	Ni II-090	rI01	giš nimbar-dilmun-na
Ni II-045	rI04'	giš nimbar-[	Ni II-133	I04	giš nimbar-dilmun-na
Ni II-058	08	giš nimbar-tur	Ni II-142	rI05'	giš nimbar-dilm[un-
Ni II-059	rIII06	giš nimbar-tur	Ni II-143	rIV02'	giš nimbar-dil[mun-
Ni II-067	rII04'	giš nimbar-tur	Ni II-164	rIV06	giš nimbar-dilmun
Ni II-085	I02	[g]iš nimbar-tur	Ni II-174	rIII18	giš nimbar-dilmun
Ni II-085	rIII13	giš nimbar-[	Ni II-175	rI02'	giš nimbar-[di]lmun-na
Ni II-092	rII06'	giš nimbar-tur	Ni II-217	rII11'	[gi]š nimbar-dil[mun-n]a
			Ni II-248	rII07	giš nimbar-dilmun

Ni II-249	I02'	[-d]ilmun-na	Ni II-013	rIII18'	[š]ab
Ni II-273	I03'	[nim]bar-dilmun-[-	Ni II-045	rI09'	[g]iš nimbar-al-ša[b-
Ni II-275	rII02'	[]-dilmun	Ni II-078	rI03'	giš [nim]bar-a[l-
Ni II-284	rI02'	giš nimbar-dil[mun-	Ni II-085	I07	giš nimbar-al-šab
069 3315	giš nimbar-al-dar-ra		Ni II-085	rIII18	giš nimbar-[-
Ni I-01	II14'	giš nimbar-al-dar-ra	Ni II-102	rI04'	giš nimbar-al-š[ab
Ni II-007	rII01	giš nimbar-al-dar-ra	Ni II-105	rIII04	[]-šab
Ni II-013	rIII16'	giš nimbar-dar-ra	Ni II-142	rI08'	giš []-al-[-
Ni II-045	rI07'	giš nimbar-al-d[ar-	Ni II-143	rIV05'	giš nimbar-al-šab
Ni II-058	11	giš nimbar-al-dar-ra	Ni II-150	rII02'	giš nimbar-a[l-ša]b-ba
Ni II-067	rII07'	giš nimbar-al-dar-r[a]	Ni II-164	rIV09	giš nimbar-al-šab-ba
Ni II-085	I05	giš nimbar-al-dar-ra	Ni II-174	rIII21	giš nimbar-al-šab
Ni II-085	rIII16	giš nimbar-[-	Ni II-217	rII14'	[nim]bar-al-šab-ba
Ni II-090	rI02	giš nimbar-al-dar-ra	Ni II-237	rIII01'	[]-al-šab
Ni II-102	rI02'	giš nimbar-a[l-	Ni II-248	rII10	[nim]bar-al-šab
Ni II-105	rIII02	[da]r-ra	Ni II-249	I04'	[]-al-šab
Ni II-133	I05	giš nimbar-al-da[r]-ra	Ni II-275	rII05'	[]-al-šab
Ni II-142	rI06'	giš nimbar-al-d[ar?-	Ni IV-06	2	giš nimbar-al-šab
Ni II-143	rIV03'	giš nimbar-al-dar-ra	072	giš nimbar-gu ₂ -na	
Ni II-164	rIV07	giš nimbar-al-dar-KUD	Ni I-01	II17'	giš nimbar-gu ₂ -na
Ni II-174	rIII19	giš nimbar-al-dar	Ni II-007	rII04	giš nimbar-gu ₂ -na
Ni II-175	rI03'	giš nimbar-al-dar-r[a]	Ni II-045	rI10'	[nimba]r-gu ₂ -[-
Ni II-217	rII12'	[] nimbar-al-d[ar-r]a	Ni II-078	rI04'	giš nimbar-gu ₂ -na
Ni II-248	rII08	gi[š nim]bar-al-dar	Ni II-085	I08	giš nimbar-gu ₂ -na
Ni II-275	rII03'	[]-al-dar-ra	Ni II-085	rIII19	giš nimbar-gu ₂ -n[a]
Ni II-288	rI03'	[g]iš nimbar-a[l] \ RI-ra	Ni II-102	rI05'	giš nimbar-gu ₂ -na
070 3309	giš nimbar-al-kud-da		Ni II-105	rIII05	[-n]a
Ni I-01	II15'	giš nimbar-al-kud-da	Ni II-133	I07	giš nimbar-al-gud-da
Ni II-007	rII02	giš nimbar-al-kud-da	Ni II-142	rI09'	giš nimbar-gu ₂ -n[a]
Ni II-013	rIII17'	giš nimbar-kud-da	Ni II-143	rIV06'	giš nimbar-gu ₂ -na
Ni II-045	rI08'	giš nimbar-al-ku[d-	Ni II-150	rII01'	[-n]a
Ni II-078	rI02'	giš nimbar-a[l-	Ni II-164	rIV10	giš nimbar-gu ₂ -na
Ni II-085	I06	giš nimbar-al-kud-da	Ni II-166	rII01	giš nimbar-gu ₂ -na
Ni II-085	rIII17	giš nimbar-[-	Ni II-174	rIII22	giš nimbar-gu ₂ -na
Ni II-090	rI03	giš nimbar-al-kud-d[a]	Ni II-217	rII15'	[gi]š nimbar-al-gu ₂ -na
Ni II-102	rI03'	giš nimbar-al-kud-[-	Ni II-237	rIII02'	[nim]bar-gu ₂ -na
Ni II-105	rIII03	[]-kud-da	Ni II-275	rII06'	[-g]u ₂ -na
Ni II-133	I06	giš nimbar-al-kud-da	073 3344	giš nimbar-LU ₂ -IM	
Ni II-142	rI07'	giš nim[bar-a]l-k[ud-	Ni I-01	II18'	giš nimbar-LU ₂ -IM
Ni II-143	rIV04'	giš nimbar-al-kud-da	Ni II-007	rII05	giš nimbar-LU ₂ -IM
Ni II-164	rIV08	giš nimbar-al-kud-da	Ni II-078	rI05'	giš nimbar-LU ₂ -IM
Ni II-174	rIII20	giš nimbar-al-kud-da	Ni II-085	I09	giš nimbar-LU ₂ -IM
Ni II-175	rI04'	giš nim[bar-a]l-	Ni II-085	rIII20	giš nimbar-L[U ₂ -
Ni II-217	rII13'	[] nimbar-al-kud-da	Ni II-143	rIV07'	giš nimbar-LU ₂ -IM
Ni II-248	rII09	[nim]bar-al-[-]da	Ni II-164	rIV11	giš nimbar-LU ₂ -IM
Ni II-249	I03'	[]-al-kud-da	Ni II-166	rII02	giš [nim]bar-LU ₂ -IM
Ni II-275	rII04'	[-a]l-kud-da	Ni II-174	rIII23	g[iš nimb]ar-LU ₂ -IM
Ni II-288	rI04'	giš nimbar-a[l] \ kud-d[a]	Ni II-237	rIII03'	[nimb]ar-LU ₂ -IM
Ni IV-06	1	[] nimbar-al-kud-da	Ni II-275	rII07'	[-I]M
071 3310	giš nimbar-al-šab		074 3294	giš nimbar-libiš-bu-ra	
Ni I-01	II16'	giš nimbar-al-šab	Ni I-01	II19'	giš nimbar-libiš-bu-ra
Ni II-007	rII03	giš nimbar-al-šab-ba	Ni II-007	rII06	giš nimbar-libiš-bi-ra

Ni II-085	I10	giš nimbar-libiš-b[u]-ra	Ni II-085	rIII25	giš nimbar-[{traces}
Ni II-085	rIII21	giš nimbar-l[ib]iš-	Ni II-133	I08	giš nimbar-al-ug ₅ -ga
Ni II-143	rIV08'	giš nimbar-libiš-bu-ra	Ni II-142	rII0'	giš nimbar-al-u[g ₅ ?-
Ni II-164	rIV12	giš nimbar-libiš-bu-ra	Ni II-143	rIV09'	giš nimbar-al-u[g ₅ ?]-ga
Ni II-166	rII03	giš nim[bar- -b]u-ra	Ni II-150	rII04'	giš nimbar-al-u[g ₅]-ga
Ni II-174	rIII24	[-lib]iš-b[u-r]a	Ni II-164	rIV16	giš nimbar-al-ug ₅ -ga
Ni II-190	rI03'	giš nimbar-libiš-bu-ra	Ni II-208	rII08'	giš nimbar-al-ug ₅ -g[a]
Ni II-213	I05'	giš nim[bar-l[ib]iš]-bu-r[a]	Ni II-240	rIII04'	giš nimbar-al-ug ₅ -ga
Ni II-237	rIII04'	[-lib]iš-bu-ra	Ni II-249	I05'	[]-al-ug ₅
Ni II-266	rI05'	giš nimbar-li[biš-	Ni II-291	rII01'	giš [nim]bar-a[l]-u[g ₅ -g]a
Ni II-275	rII08'	[]-ra			
Ni II-284	rI01'	giš nimbar-libiš?-[
075 3312		giš nimbar-al-kum-ma ₃	078a 3313		giš nimbar-al-gaz-za
Ni I-01	II20'	giš nimbar-al-kum-ma ₃	Ni II-249	I06'	[]-al-gaz-za
Ni I-03	rI01'	[-a]l-kum-[
Ni II-007	rII07	giš nimbar-al-kum-ma ₃	079 3303		giš nimbar-al-uš ₂ -a
Ni II-085	rIII22	giš nimbar-a[l-	Ni I-01	II24'	giš nimbar-al-uš ₂ -a
Ni II-150	rII03'	giš nimbar-al-kum-ma ₃	Ni II-004	rII03'	[u]š ₂ -a
Ni II-164	rIV13	giš nimbar-al-ma ₃ -kum ₂	Ni II-006	rII01'	[a]l-uš ₂
Ni II-190	rI05'	giš nimbar-al-kum?-ma ₃	Ni II-007	rII11	giš nimbar-[al-u]š ₂ -a
Ni II-248	rII11	g[iš nim]bar-kum-[	Ni II-013	rIV02'	giš nimbar-[]-a
Ni II-266	rI06'	giš nimbar-al-[	Ni II-040	rIII03'	[nim]bar-al-uš ₂ -a
Ni II-275	rII09'	[]-ma ₃	Ni II-085	I12	giš nimbar-a[l-u]š ₂ -a
075a		giš nimbar-kum ₂ -ma	Ni II-085	rIII26	giš nimbar-[{traces}
Ni II-007	rII08	giš nimbar-kum ₂ -ma	Ni II-142	rII11'	giš nimbar-al-uš ₂ -a
076		giš nimbar-izi-gu ₇ -a	Ni II-143	rIV10'	giš nimbar-al-uš ₂ -a
Ni I-01	II21'	giš nimbar-izi-gu ₇ -a	Ni II-150	rII05'	[gi]š nimbar-al-uš ₂ -a
Ni I-03	rI02'	[] nimbar-izi-gu ₇ -a	Ni II-164	rIV17	giš nimbar-al-uš ₂ -a
Ni II-007	rII10	giš nimbar-izi-gu ₇	Ni II-174	rIV01	[gi]š nimbar-al-uš ₂ -a
Ni II-085	rIII24	giš nimbar-izi-a (sic!)	Ni II-208	rII07'	giš nimbar-al-u[š ₂
Ni II-164	rIV14	giš nimbar-izi-gu ₇ -a	Ni II-240	rIII05'	giš nimbar-al-uš ₂ -a
Ni II-240	rIII02'	giš nimbar-al-KA-a	Ni II-259	rIII02'	[nimba]r-al \ []-a
077 3304		giš nimbar-uh-gu ₇ -a	Ni II-291	rII02'	giš nimbar-al-uš ₂ -a
Ni I-01	II22'	giš nimbar-uh-gu ₇ -a	080		giš nimbar-sig ₇ -sig ₇ -al-šeg ₆
Ni I-03	rI03'	[] nimbar-uh-gu ₇ -a	Ni I-01	II25'	giš nimbar-s[ig ₇ -si]g ₇ -al-šeg ₆
Ni II-007	rII09	giš nimbar-uh-g[u ₇]-a	Ni I-08	III01'A	[]-šeg ₆ -ga ₂
Ni II-059	rIII17	giš nimbar-uh-g[u ₇]-a	Ni II-006	rII02'	giš nimbar-si[g ₇ -
Ni II-085	rIII23	giš nimbar-uh-KA	Ni II-040	rIII04'	[nim]bar-sig ₇ -sig ₇ -al-šeg ₆ -
Ni II-164	rIV15	giš nimbar-uh-KA-a			ga ₂
Ni II-240	rIII03'	giš nimbar-uh-KA-a	Ni II-085	I13	giš []-al-[
Ni II-266	rI07'	giš nimbar-uh-[	Ni II-085	rIV01	giš nimbar-[] \ al-šeg ₆ -ga ₂
Ni U-01	I01'	[gi]š nimbar-uh-[	Ni II-142	rI12'	giš nim[bar]-šeg ₆ -ga ₂
077a 3306		giš nimbar gig-[	Ni II-143	rIV11'	giš nimbar-al-sig ₇ \ sig ₇ -al-
Ni U-01	I02'	giš nimbar-gig-[			šeg ₆ -ga ₂
078 3301		giš nimbar-al-ug ₅ -ga	Ni II-150	rII06'	[] nimbar-sig ₇ -sig ₇ -al-š[eg ₆ ']
Ni I-01	II23'	giš nimbar-al-ug ₅ -ga	Ni II-164	rIV18	giš nimbar-sig ₇ -sig ₇ -al-ga
Ni II-004	rII02'	[u]g ₅ -ga			(sic)
Ni II-040	rIII02'	[nim]bar-al-X-ga	Ni II-166	rII07	giš nim[bar-]-sig ₇ -al-[]-
Ni II-085	I11	giš nimbar-al-ug ₅ -ga			ga ₂
			Ni II-174	rIV02	giš nimbar-sig ₇ -sig ₇ -al-šeg ₆ -
					ga ₂
			Ni II-203	rII01'	giš nimbar-si[g ₇ -] \ al-šeg ₆ -
					ga ₂
			Ni II-240	rIII06'	giš nimbar-sig ₇ -X-al-šeg ₆ -ga ₂
			Ni II-259	rIII03'	[nimb]ar-sig ₇ \ []-al \ []-

		ga ₂	
Ni II-291	rII03'	giš nimbar-si[g ₇]-si[g ₇]-al-še[g ₆]	
081 3351	giš ša ₃ -nimbar		
Ni I-08	III02'A	[-nim]bar	
Ni II-006	rII03'	giš nimbar-ša ₃ \ ni[mbar]	
Ni II-013	rIV03'	giš ša ₃ -nimbar	
Ni II-015	rIV11	[š]a ₃ -n[imbar]	
Ni II-084	I01	[š]a ₃ -nimbar	
Ni II-085	I16	giš ša ₃ -[
Ni II-085	rIV02	giš ša ₃ -nimbar	
Ni II-133	I09	[š]a ₃ -nim[bar]	
Ni II-142	rI13'	giš []-nimbar	
Ni II-143	rIV12'	[gi]š ša ₃ -nimbar	
Ni II-150	rII07'	[] ša ₃ -nim[bar]	
Ni II-164	rIV19	giš ša ₃ -nimbar	
Ni II-165	rIII08	giš š[a ₃ -nimba]r	
Ni II-166	rII08	giš š[a ₃ -nim]bar	
Ni II-167	rII02'	giš ša ₃ -nimbar	
Ni II-174	rIV03	giš ša ₃ -nimbar	
Ni II-203	rII02'	[gi]š ša ₃ -nimbar	
Ni II-208	rII09'	giš ša ₃ -nimbar	
Ni II-239	rIII09	giš ša ₃ -nimbar	
Ni II-240	rIII07'	giš ša ₃ -nimbar	
Ni II-253	rII01'	giš š[a ₃ -	
Ni II-259	rIII04'	[š]a ₃ -nimbar	

082 3355	giš suhur-nimbar		
Ni II-006	rII04'	giš suhur-ni[mbar]	
Ni II-009	rII01	giš suhur-nimbar	
Ni II-015	rIV12	[suhu]r-n[imbar]	
Ni II-034	rII01'	giš suhur-nimbar	
Ni II-040	rIII06'	giš suhur-nimbar	
Ni II-084	I02	giš suhur-nimbar	
Ni II-085	rIV03	giš suhur-nimbar	
Ni II-133	I10	[suhu]r?-ni[mbar]	
Ni II-142	rI14'	gi[š su]hur-nimbar	
Ni II-143	rIV13'	[] suhur-nimbar	
Ni II-150	rII08'	[gi]š suhur-nim[bar]	
Ni II-164	rIV20	giš suhur-nimbar	
Ni II-165	rIII09	giš su[hur-nimba]r	
Ni II-166	rII09	giš [suh]ur-nimbar	
Ni II-167	rII03'	giš suhur-nimbar	
Ni II-172	rII01'	[suhu]r-nim[bar]	
Ni II-174	rIV04	giš suhur-nimbar	
Ni II-177	rI06'	[gi]š suhur-[
Ni II-203	rII03'	[gi]š suhur-nimbar	
Ni II-208	rII10'	giš suhur-nimbar	
Ni II-239	rIII10	giš suhur-nimbar	
Ni II-240	rIII08'	giš suhur-nimbar	
Ni II-253	rII02'	giš suhur-[
Ni II-259	rIII05'	[su]hur-nimbar	
Ni II-289	rI02'	giš suhur-nim[bar]	

083 3293	giš ama-nimbar		
Ni II-006	rII05'	giš ama-nimbar	
Ni II-009	rII02	giš ama-nimbar	
Ni II-015	rIV13	[a]ma-nimbar	
Ni II-034	rII02'	giš ama-nimbar	
Ni II-040	rIII07'	giš ama-nimbar	
Ni II-084	I03	giš ama-nimbar	
Ni II-085	I18	giš am[a-	
Ni II-085	rIV04	giš ama-nimbar	
Ni II-142	rI15'	[am]a-nimbar	
Ni II-143	rIV14'	giš ama-nimbar	
Ni II-150	rII09'	giš ama-[
Ni II-164	rIV21	giš am[a-	
Ni II-166	rII10	[a]ma-nimbar	
Ni II-167	rII04'	giš ama-nim[bar]	
Ni II-168	I01'	giš ama-ni[mbar]	
Ni II-172	rII02'	[a]ma-nimbar	
Ni II-174	rIV05	giš ama-nimbar	
Ni II-177	rI07'	giš ama-[
Ni II-203	rII04'	giš ama-nimbar	
Ni II-208	rII11'	giš ama-nimbar	
Ni II-239	rIII11	giš UŠ-nimbar	
Ni II-240	rIII09'	giš ama-nimbar	
Ni II-243	rI01'	[gi]š am[a-	
Ni II-253	rII03'	giš am[a]-nim[bar]	
Ni II-289	rI03'	giš ama-[

084	giš KU- ^{giš} kiri ₆ -nimbar		
Ni II-006	rII06'	giš KU- ^{giš} kiri ₆ -nimbar	
Ni II-009	rII03	giš KU- ^{giš} kiri ₆ -nimbar	
Ni II-015	rIV14	[] KU-kiri ₆ -nimbar	
Ni II-034	rII03'	[ki]ri ₆ -nimbar	
Ni II-040	rIII08'	[gi]š KU- ^{giš} kiri ₆ -nimbar	
Ni II-049	rI01'	giš KU-[
Ni II-084	I04	giš LAGAB- ^{giš} kiri ₆ -nimbar	
Ni II-085	rIV05	giš LAGAB- ^{giš} kiri ₆ -nimbar	
Ni II-142	rI16'	[]- ^{giš} kiri ₆ -nimbar	
Ni II-143	rIV15'	[gi]š K[U]- ^{giš} kiri ₆ -nimbar	
Ni II-166	rII11	[] ^{giš} kiri ₆ -nimbar	
Ni II-167	rII05'	giš DE ₂ -nimbar	
Ni II-168	I02'	giš KU- ^{giš} kiri ₆ -nimbar	
Ni II-172	rII03'	[] KU- ^{giš} kiri ₆ -nimbar	
Ni II-174	rIV06	giš KU- ^{giš} nimbar	
Ni II-208	rII12'	giš kiri ₆ -nim[bar]	
Ni II-239	rIII12	giš KU-nimbar	
Ni II-240	rIII10'	giš KU- ^{giš} ki]ri ₆ -nimbar	
Ni II-243	rI02'	giš TUG ₂ -[
Ni II-253	rII04'	giš KU-kiri ₆ -nimbar	
Ni II-260	I02'	giš KU-[
Ni II-289	rI04'	giš KU- ^{giš} kiri ₆ -nim[bar]	
Ni U-24	rII01	giš KU- ^{giš} kiri ₆ -nimbar	

085	giš KU- ^{giš} kiri ₆ -NE-nimbar		
Ni II-006	rII07'	giš KU- ^{giš} kiri ₆ -NE-ni[mbar]	
Ni II-040	rIII09'	[] KU- ^{giš} kiri ₆ -NE-nimbar	

Ni II-049	rI02'	giš KU- ^{giš}[	Ni II-260	I04'	giš p[a]-kud-[
Ni II-084	I05	giš LAGAB- ^{giš} kiri ₆ -x-NE- ni[mbar]	Ni II-289	rI08'	giš pa-kud-nimbar
Ni II-085	rIV06	giš LAGAB- ^{giš} kiri ₆ -UŠ- nimbar	Ni IV-05	2	giš pa-kud-nimbar
Ni II-243	rI03'	giš TUG ₂-[	Ni U-23	I02'	giš pa-kud-n[imbar]
Ni II-289	rI05'	giš KU- ^{giš} kiri ₆ -N[E-nim]bar	Ni U-24	rII03	giš pa-kud-nimbar
086 3356	giš pa-nimbar		088 3359	giš dalla ₂ -nimbar	
Ni I-08	III06'	giš p[a-	Ni I-08	III08'	giš dalla ₂ -[
Ni II-006	rII09'	giš pa-[	Ni II-009	rII06	giš dalla ₂ -nimbar
Ni II-009	rII04	giš pa-nimbar	Ni II-010	rII02'	giš dalla ₂ -nimbar
Ni II-034	rII04'	[] pa-nimbar	Ni II-015	rIV19B	[] dalla ₂ -nimbar
Ni II-049	rI04'	giš p[a-	Ni II-016	rI01	giš dal[la ₂
Ni II-084	I07	giš pa-[nimb]ar	Ni II-018	rII02'	giš dalla ₂ -[
Ni II-085	I22	giš pa-nimbar	Ni II-034	rII06'	[] dalla ₂ -nimbar
Ni II-085	rIV08	giš pa-nimbar	Ni II-049	rI06'	giš dal[la ₂
Ni II-086	rII02'	giš pa-nimbar	Ni II-069	rII01	giš dalla ₂ -ni[mbar]
Ni II-142	rI17'	giš pa-nimbar	Ni II-084	I09	giš dall[a ₂
Ni II-166	rII12	[] pa-nimbar	Ni II-086	rII04'	giš dalla ₂ -nimbar
Ni II-167	rII06'	giš p[a]-nimbar	Ni II-166	rII14	giš dalla ₂ -nim[bar]
Ni II-168	I03'	giš pa-nimbar	Ni II-168	I05'	[gi]š dalla ₂ -nimbar
Ni II-172	rII04'	giš pa-nimbar	Ni II-174	rIV09	[] dalla ₂ -nimbar
Ni II-174	rIV07	giš pa-nimbar	Ni II-188	rI02'	giš dalla ₂ -nim[bar]
Ni II-208	rII13'	giš pa-nimbar	Ni II-192	rI01	[d]alla ₂ -n[imbar]
Ni II-239	rIII13	giš pa-nimbar	Ni II-194	rII01'	[giš d]alla ₂ -[
Ni II-243	rI04'	giš pa-[	Ni II-220	I01'	giš [dal]la ₂ -nim[bar]
Ni II-253	rII05'	giš pa-nimbar	Ni II-239	rIII15	giš dalla ₂ -[
Ni II-260	I03'	giš p[a-	Ni II-260	I05'	giš dalla ₂ -[
Ni II-289	rI07'	giš [p]a-nimbar	Ni II-289	rI09'	giš dalla ₂ -nimbar
Ni IV-05	1	giš [p]a-nimbar	Ni U-23	I03'	giš dalla ₂ -nim[bar]
Ni IV-12	rII19	giš pa-DIŠ-ra	Ni U-24	rII04	giš dalla ₂ -[
Ni U-23	I01'	[] p[a-	089 3398	giš mud-nimbar	
Ni U-24	rII02	giš pa-nimbar	Ni I-08	III09'	giš mud-[
087 3357	giš pa-kud-nimbar		Ni II-010	rII03'	giš mud-nimbar
Ni I-08	III07'	giš pa-k[ud-	Ni II-015	rIV20B	[gi]š mud-nimbar
Ni II-009	rII05	giš pa-kud-nimbar	Ni II-018	rII03'	giš mud-nimbar
Ni II-010	rII01'	giš pa-kud-nimbar	Ni II-019	rII01	giš mud-nimbar
Ni II-018	rII01'	giš p[a-	Ni II-034	rII07'	[m]ud-nimbar
Ni II-034	rII05'	[gi]š pa-kud-nimb[ar]	Ni II-049	rI07'	giš mu[d-
Ni II-049	rI05'	giš pa-[	Ni II-069	rII02	[gi]š mud-ni[mbar]
Ni II-084	I08	giš pa-kud-nim[bar]	Ni II-084	I10	giš m[ud-
Ni II-086	rII03'	giš pa-kud-nimbar	Ni II-086	rII05'	giš mud-nimbar
Ni II-143	rIV17'	[] pa-kud-nimbar	Ni II-166	rII15	giš mud-nimbar
Ni II-165	rIII15	giš []-kud-[	Ni II-168	I06'	[mu]d-[
Ni II-166	rII13	[p]a-k[ud]-nimbar	Ni II-174	rIV10	g[iš] mud-nimbar
Ni II-167	rII07'	giš pa-kud-nimbar	Ni II-188	rI03'	giš mud-nimbar
Ni II-168	I04'	giš pa-kud-nimbar	Ni II-189	rI01'	[] m[ud-
Ni II-172	rII05'	giš pa-kud-nimbar	Ni II-192	rI02	[] mud-nimbar
Ni II-174	rIV08	[] pa-kud-nimbar	Ni II-194	rII02'	[m]ud-n[imbar]
Ni II-188	rI01'	g[iš p]a-k[ud-	Ni II-220	I02'	giš mu[d]-nim[bar]
Ni II-208	rII14'	giš pa-kud-nimbar	Ni II-289	rI10'	giš mud-nimbar
Ni II-239	rIII14	giš pa-kud-nimbar	Ni U-23	I04'	[gi]š m[ud-
Ni II-253	rII06'	giš []-kud-nim[bar]	Ni U-24	rII05	giš mud-[
090 3360	giš ze ₂ -na-nimbar				

Ni I-08	III10'	giš ze ₂ -n[a-	Ni II-200	rIII03'	giš zu ₂ -[
Ni II-015	rIV21B	[z]e ₂ -na-nimbar	Ni II-266	rII04'	giš zu ₂ -gu-[
Ni II-018	rII04'	giš ze ₂ -na-nimbar	Ni U-22	I01'	[gi]š z[u ₂ -
Ni II-019	rII02	[gi]š ze ₂ -na-nimbar			
Ni II-049	rI08'	giš ze ₂-[	094 3380	giš TUG ₂ -nimbar	
Ni II-069	rII03	giš ze ₂ -na-nimbar	Ni I-08	III12'	giš T[UG ₂ ?]-nimbar
Ni II-084	I11	giš z[e ₂ -	Ni II-008	rII03'	giš TUG ₂ -nimbar
Ni II-086	rII06'	[]-na-nimbar	Ni II-015	rIV23B	[] TUG ₂ -nimbar
Ni II-165	rIII16	giš ze ₂ -na-[ni]mbar	Ni II-016	rI02	giš TUG ₂ -[]-nimbar
Ni II-166	rII16	giš ze ₂ -na-nimbar	Ni II-018	rII06'	giš TUG ₂ -nimbar
Ni II-174	rIV11	[] ze ₂ -na-nimbar	Ni II-049	rI11'	giš TUG ₂ -[
Ni II-188	rI04'	giš ze ₂ -na-nim[bar]	Ni II-084	I15	giš TUG ₂ -nimbar
Ni II-189	rI02'	[gi]š ze ₂-[	Ni II-166	rII18	giš TUG ₂ -nimbar
Ni II-192	rI03	[] ze ₂ -na-nim[bar]	Ni II-174	rIV13	[gi]š TUG ₂ -nimbar
Ni II-194	rII03'	[gi]š ze ₂ -na-nimbar	Ni II-183	rI02	giš TUG ₂ -[
Ni II-220	I03'	giš ze ₂ -na-nim[bar]	Ni II-189	rI06'	[gi]š KU-nim[bar]
Ni II-266	rII01'	giš z[e ₂ -	Ni II-194	rII05'	[T]UG ₂ -nimbar
Ni II-289	rI11'	giš z[e ₂]-na-nimbar	Ni II-200	rIII04'	giš TUG ₂ -[
			Ni II-256	rII02'	[] TUG ₂ -nim[bar]
091 3369	giš zu ₂ -nimbar		Ni II-266	rII05'	giš TUG ₂ -nim[bar]
Ni I-08	III11'	giš zu ₂ -nimbar	Ni U-22	I02'	[gi]š TUG ₂ -[
Ni II-015	rIV22B	[] zu ₂ -nimbar			
Ni II-018	rII05'	giš zu ₂ -nimbar	095	giš pi-el-la ₂ -nimbar	
Ni II-019	rII03	[z]u ₂ -nim[bar]	Ni I-08	III13'	[gi]š pi-el-la ₂ -nimbar
Ni II-049	rI09'	giš zu ₂-[	Ni II-008	rII04'	giš pi-el-la ₂ -nimbar
Ni II-069	rII04	giš zu ₂ -ni[mbar]	Ni II-015	rIV24B	[e]l-la ₂ -nimbar
Ni II-084	I12	giš z[u ₂ -	Ni II-018	rII07'	giš pi-el-la ₂ -nimbar
Ni II-165	rIII17	giš [z]u ₂ -nimbar	Ni II-035	rIV01'	[]-la ₂ -nimbar
Ni II-166	rII17	giš zu ₂ -nimbar	Ni II-041	rII03'	giš pi-[
Ni II-174	rIV12	[] zu ₂ -nimbar	Ni II-045	rII03'	[-e]l-la ₂ -nimbar
Ni II-188	rI05'	giš zu ₂ -nim[bar]	Ni II-049	rI12'	giš pi-el-[
Ni II-189	rI03'	giš zu ₂-[	Ni II-069	rII06	[]-pi-ni[mbar]
Ni II-192	rI04	[gi]š zu ₂ -n[imbar]	Ni II-084	I16	giš pi-el-la ₂ -nimbar
Ni II-194	rII04'	[gi]š zu ₂ -nimbar	Ni II-166	rII19	giš pi-el-la ₂ -nimbar
Ni II-220	I04'	giš zu ₂ -nim[bar]	Ni II-174	rIV14	[gi]š pi-el-la ₂ -nimbar
Ni II-266	rII02'	giš zu ₂-[	Ni II-177	rII03'	giš pi-[
			Ni II-181	rII03'	[p]i-el-la ₂ -nimbar
092	giš zu ₂ -gan-na-nimbar		Ni II-183	rI03	giš [p]i-el-la ₂ -nim[bar]
Ni II-008	rII01'	giš zu ₂ -[]-na-ni[mbar]	Ni II-194	rII06'	[p]i-e[l- -ni]mbar
Ni II-019	rII05	[z]u ₂ -gan-[	Ni II-200	rIII05'	giš pi-el-la ₂ -nimbar
Ni II-049	rI10'	giš zu ₂-[	Ni II-256	rII03'	[] pi-el-la ₂ -nimbar
Ni II-084	I13	[-g]a ₂ -an-[	Ni II-266	rII06'	giš pi-el-la ₂ -nimbar
Ni II-183	rI01	[]-ga ₂-[	Ni U-22	I03'	[gi]š pi-el-l[a ₂ -
Ni II-188	rI06'	giš zu ₂ -gan-na-[
Ni II-189	rI04'	giš zu ₂ -ga ₂ -an-[	096	giš u ₃ -luh-nimbar	
Ni II-200	rIII02'	giš z[u ₂ -	Ni I-08	III14'	[] u ₂ -luh-nimbar
Ni II-266	rII03'	giš zu ₂ -AMA-[	Ni II-008	rII05'	[gi]š u ₃ -luh-nimbar
			Ni II-011	rI02'	giš u ₃ -[
093 3373	giš zu ₂ -gu-la-nimbar		Ni II-015	rIV25B	[ni]mbar
Ni II-008	rII02'	[gi]š zu ₂ -gu-la-nimbar	Ni II-035	rIV02'	giš u ₃ -luh-nimbar
Ni II-019	rII04	[z]u ₂ -gu-l[a	Ni II-041	rII04'	giš u ₃ -l[uh-
Ni II-069	rII05	[gi]š zu ₂ -g[u-]-nim[bar]	Ni II-045	rII04'	[]-luh-nimbar
Ni II-084	I14	giš zu ₂ -gu-l[a-	Ni II-049	rI13'	giš u ₃ -lu[h-
Ni II-189	rI05'	giš zu ₂ -sig ₇ -g[u-	Ni II-072	rII01'	[] u ₃ -luh-nimbar
Ni II-192	rI05	giš zu ₂ -gu-[	Ni II-084	I17	giš u ₃ -[lu]h-nimbar

Ni II-166	rII20	giš u ₃ -luh-nimbar	Ni II-292	rI01'	giš a[n-]-ni[mbar]
Ni II-174	rIV15	[gi]š u ₃ -luh-nimbar	099		giš ki-ta-nimbar
Ni II-175	rII01'	[gi]š u ₃-[	Ni I-08	III17'	giš [-t]a-nimbar
Ni II-181	rII04'	giš u ₃ -luh-nimbar	Ni II-016	rI05	giš ki-ta-[
Ni II-189	rI07'	giš u ₃-[	Ni II-035	rIV05'	giš ki-ta-nimbar
Ni II-200	rIII06'	giš u ₃ -luh-nimbar	Ni II-041	rII07'	giš ki-ta-[
Ni II-244	rII03'	giš u ₃ -luh-nimbar	Ni II-043	rI02'	[gi]š ki-ta-[-[
Ni II-266	rII07'	giš u ₃ -luh-nimbar	Ni II-072	rII04'	giš ki-ta-nimbar
Ni U-22	I04'	[] u ₃ -luh-[	Ni II-080	rII03'	giš ki-ta-nimbar
097 3389		giš ga ₂ -li-nimbar	Ni II-147	I02'	[k]i-ta-nimbar
Ni I-08	III15'	gi[š]-li-nimbar	Ni II-177	rII05'	giš ki-t[a-
Ni I-09	rI02'	giš ga ₂ -da-nimbar	Ni II-179	rII02'	giš ki-t[a-
Ni II-008	rII06'	[] ga ₂ -li-nimbar	Ni II-181	rII07'	giš ki-ta-nimbar
Ni II-016	rI03	giš [g]a ₂ -l[i-	Ni II-189	rI09'	[]-t[a-
Ni II-035	rIV03'	giš ga ₂ -li-nimbar	Ni II-194	rII10'	[] ki-ta-n[imbar]
Ni II-041	rII05'	giš ga ₂ -l[i	Ni II-200	rIII09'	giš ki-ta-nimbar
Ni II-045	rII05'	[]-li-nimbar	Ni II-204	rII01'	[gi]š [k]i-t[a-
Ni II-072	rII02'	giš ga ₂ -li-nim[bar]	Ni II-208	rIII02'	[k]i-ta-[
Ni II-080	rII01'	giš ga ₂ -l[i-	Ni II-240	rIV01'	giš ki-ta-nim[bar]
Ni II-084	I18	[g]a ₂ -[l]i-nimbar	Ni II-266	rII10'	giš ki-ta-nimbar
Ni II-147	I01'	[]-l[i-	Ni II-292	rI02'	giš []-ta-[
Ni II-166	rII21	giš ga ₂ -li-nimbar	099a		giš ša ₃ -ta-zu ₂ -lum-ri-ri-ga-nimbar
Ni II-174	rIV16	[g]a ₂ -li-nimbar	Ni I-08	III18'	giš š[a ₃ -t]a-zu ₂ -lum \ ri-ri-ge-
Ni II-175	rII02'	giš ga ₂-[			nimbar
Ni II-177	rII02'	giš g[a ₂ -	Ni II-041	rII08'	giš ša ₃ !-ta-zu ₂ -[
Ni II-181	rII05'	giš ga ₂ ?-li-nimbar	Ni II-053	rI10'	[-z]u ₂ -lum \ []-
Ni II-189	rI08'	giš ga ₂ -l[i-			nimbar
Ni II-190	rII02'	giš g[a ₂ ?-	Ni II-080	rII04'	giš ša ₃ -ta-[traces]-nimbar
Ni II-194	rII08'	[g]a ₂ -l[i-]-nim[bar]	Ni II-147	I03'	[]-ta-zu ₂ -lum \ ri-ri-
Ni II-200	rIII07'	giš ga ₂ -li-nimbar			nimbar
Ni II-244	rII04'	giš ga ₂ -li-nimbar	Ni II-181	rII08'	giš ša ₃ -ta-zu ₂ \ lum-ri-ri-ga-[
Ni II-266	rII08'	giš [g]a ₂ -li-nimbar	Ni II-204	rII02'	giš ša ₃ -ta-zu ₂ \ lum-ri-ri-ga \
Ni U-22	I05'	[g]a ₂ -l[i-			nimbar
098 3402		giš an-na-nimbar	Ni II-208	rIII03'	[]-ri-ri-nimbar
Ni I-08	III16'	giš [-n]a-nimbar	Ni II-240	rIV02'	giš DI-ta-su-lum!-ri-ri-ga-
Ni II-006	rII08'	giš an-[			nimbar
Ni II-011	rI04'	giš a[n-	Ni II-292	rI03'	giš š[a ₃]-ta-[
Ni II-016	rI04	giš an-na-nim[bar]	100 3407		giš nig ₂ -ki-luh-ha-nimbar
Ni II-035	rIV04'	giš an-na-nimbar	Ni I-08	III19'	giš [-k]i-luh-nimbar
Ni II-041	rII06'	giš an-na-[	Ni II-035	rIV06'	giš ki-lu?-ha?-nim[bar]
Ni II-072	rII03'	giš an-na-nimbar	Ni II-041	rII09'	giš nig ₂ -ki-luh-n[imbar]
Ni II-080	rII02'	giš an-na-nimbar	Ni II-043	rI03'	giš nig ₂ -ki-luh-[
Ni II-084	I06	giš an-na-[	Ni II-147	I04'	giš nig ₂ -ki-la ₂ -nimbar
Ni II-085	I21	giš an-na-[	Ni II-177	rII06'	giš nig ₂ -ki-luh-ha-nimbar
Ni II-085	rIV07	giš an-na-nimbar	Ni II-179	rII03'	giš nig ₂ -k[i-
Ni II-086	rII01'	[gi]š an-na-[	Ni II-190	rII03'	giš nig ₂ -[
Ni II-174	rIV17	[] an-na-nimbar	Ni II-196	rI02'	giš nig ₂ -[
Ni II-181	rII06'	giš an-na-nimbar	Ni II-208	rIII04'	[]-nimbar
Ni II-200	rIII08'	giš an-na-nim[bar]	Ni II-240	rIV03'	giš nig ₂ -ba-ra-nimbar
Ni II-244	rII05'	giš an-nimbar	101		giš nig ₂ -ga ₂ -nimbar
Ni II-256	rII05'	[]-na-nimbar	Ni I-01	III01'	[] n[ig ₂ -g]a ₂ -[
Ni II-266	rII09'	giš an-na-nimbar			
Ni II-289	rI06'	giš an-na-nimbar			

Ni I-08	III20'	giš []-ga ₂ -sa ₆ -ge-nimbar	Ni II-147	I07'	giš peš-ban ₃ -da-zi-nimbar
Ni II-035	rIV07'	giš nig ₂ -ga ₂ -nimbar	Ni II-175	rII06'	giš [H]A-banda ₃ -z[i]-nim[bar]
Ni II-041	rII10'	giš nig ₂ -ga ₂-[	Ni II-177	rII10'	giš peš-banda ₃ -zi
Ni II-043	rI04'	giš nig ₂ -ga ₂ -nimbar	Ni II-179	rII07'	giš peš-banda ₃ -zi-nimbar
Ni II-072	rII05'	[gi]š [ni]g ₂ -ki-ga ₂ -nimbar	Ni II-196	rI06'	giš peš-[
Ni II-080	rII06'	giš nig ₂ -ka-nimbar	Ni II-204	rII05'	[]-banda ₃ -zi \ nim[bar]
Ni II-177	rII07'	giš nig ₂ -ga ₂ -nimbar	Ni II-208	rIII08'	giš peš-banda ₃ -nimbar
Ni II-179	rII04'	giš nig ₂ -ga ₂ -nim[bar]	Ni II-240	rIV07'	giš peš-banda ₃ -zi-nimbar
Ni II-196	rI03'	giš nig ₂ -ga ₂ -nim[bar]			
Ni II-208	rIII05'	[-g]a ₂ -nimbar	105 3411	giš asal ₂	
Ni II-240	rIV04'	giš nig ₂ -ba-sum-nimbar	Ni I-01	III05'	giš asal ₂
102 3384	giš peš-nimbar		Ni I-08	III24'	[asa]l ₂
Ni I-01	III02'	giš peš-n[imbar]	Ni II-041	rII14'	giš as[al ₂]
Ni I-08	III21'	g[iš] peš-nimbar	Ni II-053	rI16'	[a]sal ₂
Ni II-041	rII11'	giš peš-ni[mbar]	Ni II-080	rII10'	[] a[al ₂]
Ni II-043	rI05'	giš peš-[	Ni II-147	I08'	giš asal ₂
Ni II-053	rI13'	[]-peš	Ni II-165	rIV04	giš asal ₂ (A-[T]U-GA[B]-ŠU ₂)
Ni II-080	rII07'	[p]eš-nimbar	Ni II-175	rII07'	giš as[al ₂]
Ni II-147	I05'	giš peš-nimbar	Ni II-177	rII11'	giš asal ₂
Ni II-165	rIV02	giš peš-nimbar	Ni II-179	rII08'	giš asal ₂
Ni II-175	rII03'	giš HA-[nim]bar	Ni II-208	rIII09'	giš asal ₂
Ni II-177	rII08'	giš peš-nimbar	Ni II-240	rIV08'	giš asal ₂
Ni II-179	rII05'	giš peš-nimbar	Ni III-05	01	[] as[al ₂]
Ni II-190	rII04'	giš pe[š-	Ni IV-12	rII20	giš asal ₂
Ni II-196	rI04'	giš peš-nim[bar]			
Ni II-204	rII03'	[g]iš peš-nimbar	106 3412	giš asal ₂ -kur	
Ni II-208	rIII06'	[]-nimbar	Ni I-01	III06'	giš asal ₂ -kur
Ni II-240	rIV05'	giš peš-nimbar	Ni II-041	rII15'	giš asal ₂ -kur
103	giš peš-murgu-nimbar		Ni II-053	rI17'	[as]al ₂ -kur-ra
Ni I-01	III03'	giš peš-murgu-nimbar	Ni II-165	rIV05	giš asal ₂ (A-[TU]-GAB-ŠU ₂)-kur
Ni I-08	III22'	[] peš-murgu-nimbar	Ni II-175	rII08'	giš [as]al ₂ -ku[r]
Ni II-041	rII12'	giš peš-murgu-nimbar	Ni II-177	rII12'	giš asal ₂ -k[ur?]
Ni II-043	rI06'	giš peš-murgu-[	Ni II-179	rII09'	giš asal ₂ -kur
Ni II-053	rI14'	[]-murgu	Ni II-208	rIII10'	giš asal ₂ -ku[r]
Ni II-080	rII08'	giš peš-murgu-[	Ni II-240	rIV09'	giš asal ₂ -kur
Ni II-147	I06'	giš peš-murgu-nimbar	Ni III-05	02	[g]iš asa[l ₂ -
Ni II-165	rIV03	giš peš-murgu-nimbar	Ni IV-12	rII21	giš asal ₂ -kur
Ni II-175	rII05'	giš HA-mu[rgu-			
Ni II-177	rII09'	giš peš-murgu-nimbar	107	giš asal ₂ -dug ₃	
Ni II-179	rII06'	giš peš-murgu-nimbar	Ni I-01	III07'	giš asal ₂ -dug ₃
Ni II-190	rII05'	giš pe[š-	Ni II-041	rII16'	giš asal ₂ -dug ₃
Ni II-196	rI05'	giš peš-[	Ni II-053	rI18'	[as]al ₂ -dug ₃
Ni II-204	rII04'	[pe]š-murgu-nimbar	Ni II-165	rIV06	giš a[al ₂]-d[ug ₃]
Ni II-208	rIII07'	[pe]š-murgu-nimbar	Ni II-175	rII09'	giš a[al ₂ -du]g ₃
Ni II-240	rIV06'	giš peš-din-nimbar	Ni II-208	rIII11'	giš asal ₂
104	giš peš-banda ₃ -zi-nimbar		Ni II-240	rIV10'	giš asal ₂ -dug ₃
Ni I-01	III04'	giš peš-banda ₃ -zi-nim[bar]	Ni III-05	03	giš asa[l ₂ -
Ni I-08	III23'	[] peš-banda ₃ -zi-nimbar	108 3416	giš NE-asal ₂	
Ni II-041	rII13'	giš peš-banda ₃ -zi-nimbar	Ni I-01	III08'	giš NE-asal ₂
Ni II-043	rI07'	giš peš-banda ₃-[	Ni I-05	I01	[N]E-a[al ₂]
Ni II-053	rI15'	[]-zi	Ni II-041	rII17'	giš NE-asal ₂
Ni II-080	rII09'	giš peš-banda ₃-[	Ni II-053	rI19'	[as]al ₂

Ni II-165	rIV07	giš N[E-	Ni II-278	rI08'	giš ki[ši ₁₆]
Ni II-175	rII10'	giš NE-asal ₂	Ni II-289	rII05'	[gi]š kiši ₁₆
Ni II-208	rIII12'	giš NE-[l]um?	Ni III-05	08	giš kiš[i ₁₆]
Ni II-240	rIV11'	giš [N]E?-asal ₂	Ni IV-12	rII23	giš kiši ₁₆
Ni II-278	rI05'	giš NE-as[al ₂]			
Ni II-289	rII02'	giš NE-as[al ₂]	113 3441	giš kiši ₁₆ -har	
Ni III-05	04	giš NE-a[sal ₂]	Ni I-01	III13'	giš ad ₂ -har
109 3421	giš numun-asal ₂		Ni I-05	I06	[] kiši ₁₆ -har
Ni I-01	III09'	giš numun-asal ₂	Ni II-012	rII05'	[] kiši ₁₆ -har
Ni I-05	I02	[] numun-as[al ₂]	Ni II-053	rI24'	[ha]r?
Ni II-009	rIII01	[as]al ₂	Ni II-165	rIV12	giš kiši ₁₆ -har
Ni II-012	rII01'	[num]un-a[sal ₂]	Ni II-177	rIII01'	[] GIR ₂ [
Ni II-041	rII18'	giš numun-asal ₂	Ni II-208	rIII16'	giš kiši ₁₆ -har
Ni II-053	rI20'	[as]al ₂	Ni II-239	rIV01'	[ki]ši ₁₆ -har
Ni II-165	rIV08	giš n[umun-	Ni II-278	rI10'	giš ad ₂ -[
Ni II-175	rII11'	giš numun-asal ₂	Ni II-289	rII07'	[] ad ₂ -har
Ni II-240	rIV12'	giš [] -as[al ₂]	Ni III-05	09	giš kiši ₁₆ -[
Ni II-278	rI06'	giš numun-a[sal ₂]	114 3441a	giš kiši ₁₆ -har-kur	
Ni II-289	rII03'	giš numun-as[al ₂]	Ni I-01	III14'	giš ad ₂ -har-kur
Ni III-05	05	giš numun-a[sal ₂]	Ni I-05	I07	[g]iš kiši ₁₆ -kur-r[a]
110 3422	giš il-ur ₂		Ni II-012	rII06'	[] kiši ₁₆ -har-kur
Ni I-01	III10'	giš il-ur ₂	Ni II-053	rI25'	[] -ra
Ni I-05	I03	[] il-[	Ni II-165	rIV13	giš kiši ₁₆ -[] -kur
Ni II-009	rIII02	[u]r ₃	Ni II-177	rIII02'	[] kiši ₁₆ -[
Ni II-012	rII02'	[] il-ur ₂	Ni II-208	rIII17'	giš kiši ₁₆ -har-kur-ra
Ni II-175	rII12'	giš il-ur ₂	Ni II-239	rIV02'	[] kiši ₁₆ -har-kur
Ni II-208	rIII13'	giš alan-nu	Ni II-278	rI11'	giš ad ₂ -har-[
Ni II-278	rI07'	giš il-[	Ni II-289	rII08'	[] ad ₂ -har-kur
Ni II-289	rII04'	giš il-ur ₂	Ni III-05	10	giš kiši ₁₆ -[
Ni III-05	06	giš i[l-	115 3447	giš sa-ma-na ₂	
Ni IV-14	1	giš il-ur ₂	Ni I-01	III15'	giš sa-ma-na ₂
111	giš ad ₂		Ni I-05	I08	giš sa-ma-nu-um
Ni I-01	III12'	giš ad ₂	Ni II-012	rII07'	[] -ma-na ₂
Ni I-05	I04	[] ad ₂	Ni II-053	rI26'	[] -na ₂
Ni II-009	rIII03	[] -GIR ₂	Ni II-165	rIV14	giš sa ₂ -[] -na ₂
Ni II-012	rII03'	[] ad ₂	Ni II-177	rIII03'	[] sa-ma-na ₂
Ni II-165	rIV10	giš [a]d ₂	Ni II-239	rIV03'	[] -ma-na ₂
Ni II-208	rIII14'	giš U ₂ .GIR ₂	Ni II-278	rI12'	giš sa-ma-n[um ₂]
Ni II-278	rI09'	giš [ad ₂]	Ni II-289	rII09'	[] sa-ma-na ₂
Ni II-289	rII06'	[] ad ₂	Ni III-05	11	giš sa-[
Ni III-05	07	giš a[d ₂]	Ni IV-12	rII24	giš sa-ma-na ₂
Ni IV-12	rII22	giš ad ₂	116 3448	giš sa-ma-zum	
Ni IV-14	2	giš ad ₂	Ni I-01	III16'	giš sa-ma-zum
112 3439	giš kiši ₁₆		Ni I-05	I09	giš sa-ma-zum
Ni I-01	III11'	giš kiši ₁₆	Ni II-053	rI27'	[] -zum
Ni I-05	I05	[] kiši ₁₆	Ni II-165	rIV15	giš sa ₂ -ma-[zu]m
Ni II-009	rIII04	[] -GIR ₂	Ni II-177	rIII04'	giš sa-ma-zum
Ni II-012	rII04'	[] kiši ₁₆	Ni II-239	rIV04'	[s]a-ma-zu[m]
Ni II-053	rI23'	[G]IR ₂	Ni II-278	rI13'	giš sa-ma-[
Ni II-165	rIV11	giš kiši ₁₆	Ni II-289	rII10'	[] sa-ma-zum
Ni II-208	rIII15'	giš kiši ₁₆	Ni III-05	r01	[] sa-m[a-z]um

117 3450 giš peš₇-kal
 Ni I-01 III17' giš peš₇-kal
 Ni I-05 I10 giš peš₇-kal
 Ni II-053 rI28' []-kal
 Ni II-122 I01 giš p[₇eš₇-
 Ni II-165 rIV16 giš p[₇eš₇]-kal
 Ni II-177 rIII05' giš peš₇-kal
 Ni II-239 rIV05' [] peš₇-[
 Ni II-278 rI14' giš peš₇-[
 Ni III-05 r02 giš peš₇-kal
 Ni IV-12 rII25 giš zu-ti-a-nu-um

118 giš ŠU.KAL
 Ni I-01 III18' giš ŠU.KAL
 Ni I-05 I11 giš ŠU.KAL
 Ni II-053 rI29' [] ŠU.KAL
 Ni II-122 I02 giš ŠU.[
 Ni II-165 rIV17 [] ŠU.KAL
 Ni II-177 rIII06' giš ŠU.KAL
 Ni II-208 rIII18' [gi]š ŠU.KAL
 Ni II-239 rIV06' giš ŠU.KAL
 Ni II-278 rI15' giš ŠU.[
 Ni II-289 rIII11' [] ŠU.KAL
 Ni III-05 r03 giš ŠU.KAL

119 giš šu-dib-ba
 Ni I-01 III19' giš šu-dib-ba
 Ni I-05 I12 giš šu-dib-ba
 Ni II-053 rI30' [] šu-dib-ba
 Ni II-122 I03 giš šu-dib-[
 Ni II-165 rIV18 [š]u-dab₅-e
 Ni II-177 rIII07' [gi]š [š]u-dib-ba
 Ni II-239 rIV07' giš šu-dib-e
 Ni III-05 r04 giš šu-di[b-b]a

120 giš ŠU.KAL
 Ni I-01 III20' giš ŠU.KAL
 Ni I-05 I13 giš ŠU.KAL
 Ni I-08 IV01'A [gi]š ŠU.KA[L]
 Ni II-053 rI31' giš ŠU.KAL
 Ni II-122 I04 giš ŠU.[
 Ni II-177 rIII08' [] ŠU.KAL
 Ni II-274 rII01' [gi]š Š[U.KA]L
 Ni III-05 r05 giš ŠU.K[AL]

121 3466 giš šušin (MUŠ₃-ERIN)
 Ni I-01 III21' giš ERIN
 Ni I-05 I14 [] šušin
 Ni I-08 IV02'A giš šu-ERIN
 Ni II-053 rI32' giš šu-ERIN
 Ni II-122 I05 giš šu-[
 Ni II-177 rIII09' giš šu-[s]um?
 Ni II-239 rIV08' [gi]š šu-ERIN
 Ni II-274 rII02' giš šušin
 Ni III-01 1 giš šušin

Ni III-05 r06 giš šušin

122 3238 giš ši-iq-dum
 Ni I-01 III22' giš ši-iq-d[um]
 Ni I-05 I15 []-iq-dum
 Ni I-08 IV03'A giš ši-iq-dum
 Ni II-049 rII01' giš ši-i[q]-dum
 Ni II-053 rI33' giš ši-iq-du
 Ni II-122 I06 giš ši-iq-[
 Ni II-177 rIII10' []-iq-dum
 Ni II-274 rII03' giš ši-iq-du[m]
 Ni III-01 2 giš ši-iq-dum
 Ni III-04 I02' giš ši-A[N-
 Ni III-05 r07 giš ši-iq-dum
 Ni IV-12 rII26 giš ši-iq-d[um]

123 3455 giš zar-si
 Ni I-01 III23' gi[š]
 Ni I-05 I16 []-si
 Ni I-08 IV04'A giš zar-si
 Ni II-011 rII01' giš zar?-[
 Ni II-049 rII02' giš LAGABxX-si
 Ni II-122 I07 giš za[r-
 Ni II-134 rI01' giš za[r-
 Ni II-177 rIII11' []-si
 Ni II-200 rIV02' []-LAGABxX?
 Ni II-274 rII04' giš [za]r-si
 Ni III-01 3 giš zar₃-si
 Ni III-04 I03' giš SU[G?-
 Ni III-05 r08 giš zar-si
 Ni IV-12 rII27 giš za-ri₃-aš-tum

124 giš mu-TUM-da
 Ni I-08 IV05'A giš mu-TUM-da
 Ni II-011 rII02' giš mu-TUM
 Ni II-049 rII03' giš [m]u-TUM-da
 Ni II-122 I08 [] m[u-
 Ni II-177 rIII12' []-DUMU-da
 Ni II-200 rIV03' []-TUM-da
 Ni II-274 rII05' giš m[u-]-da
 Ni III-04 I04' giš mu-TUM-[
 Ni III-05 r09 giš mu-TUM-da

124a giš zi₂-ir-dum
 Ni II-053 rI34' [gi]š zi₂-ir-dum
 Ni II-134 rI02' giš zi-x-[

125 3469 giš gi-zu₂-lum-ma
 Ni I-08 IV06'A [gi]š gi-zu₂-lu[m-
 Ni II-011 rII03' [gi]š gi-zu₂-[
 Ni II-049 rII04' giš gi-zu₂-lum-ma
 Ni II-053 rI36' giš gi-zu₂-ma-l[um?]
 Ni II-134 rI03' giš gi-e-[
 Ni II-177 rIII13' [-z]u₂-lum-ma
 Ni II-200 rIV04' [gi]i-zu₂-lum-ma

Ni III-01	4	giš gi-zu ₂ -lum-m[a	Ni I-08	IV11'	giš [
Ni III-04	I05'	giš gi-zu ₂ -lum-[	Ni II-011	rII08'	giš maš
Ni III-05	rI0	giš gi-zu ₂ -lum-ma	Ni II-049	rII09'	giš maš
Ni IV-12	rIII01	giš e-gi-zu-l[um	Ni II-053	rII01	[] maš
126 3470	giš BU-zu ₂ -lum-ma		Ni II-120	I01	giš maš
Ni I-07	I01'	[] BU-zu ₂ -lum-ma	Ni III-04	I10'	giš maš
Ni I-08	IV07'A	[] BU-zu ₂ -l[um-	Ni IV-12	1	giš maš
Ni II-011	rII04'	[gi]š BU-zu ₂-[	Ni IV-12	rIII06	giš maš
Ni II-049	rII05'	giš BU-zu ₂ -lum-ma	131 3488	giš maš-gurum	
Ni II-053	rI35'	[gi]š BU-zu ₂ -lum-[	Ni I-08	IV12'	giš maš-[
Ni II-134	rI04'	giš BU-g[i-	Ni II-011	rII09'	giš maš-gurum
Ni II-200	rIV05'	[] BU-zu ₂ -lum-ma	Ni II-049	rII11'	giš maš-gurum
Ni III-01	5	giš BU-zu ₂ -l[um-	Ni II-053	rII02	[] maš-gurum
Ni III-04	I06'	giš BU-zu ₂ -lu[m-	Ni II-120	I02	giš maš-gurum
Ni III-05	r11	giš BU-zu ₂ -lum-ma	Ni II-264	I01'	giš maš-A[B?]
Ni IV-12	rIII02	giš BU-zu-lum	Ni III-04	I11'	giš maš-gurum
127 3480	giš dili-bu-um		132 3489	giš guru ₅ -uš	
Ni I-07	I02'	[] dili-bu-um	Ni I-08	IV13'	giš guru ₅ -[
Ni I-08	IV08'A	[di]li-bu-[	Ni II-011	rII10'	giš guru ₅ -uš
Ni II-011	rII05'	[gi]š dili-bu-u[m]	Ni II-049	rII12'	giš guru ₅ -uš
Ni II-049	rII06'	giš dili-bu-um	Ni II-053	rII03	[] guru ₅ -uš
Ni II-053	rI37'	[] dili-bu-[	Ni II-120	I03	giš guru ₅ -uš
Ni II-134	rI05'	giš dili-bu-[	Ni II-206	rI04'	giš g[uru ₅ -
Ni II-200	rIV06'	[]-bu-um	Ni III-04	I12'	giš guru ₅ -uš
Ni III-01	6	giš dili-bu-[	Ni IV-12	rIII05	giš guru ₅ -uš
Ni III-04	I07'	giš dili-b[u-	133	giš sag-EZEN	
Ni III-05	r12	giš dili-bu-[	Ni I-08	IV14'	giš sag-[
Ni IV-03	1	giš dili-bu-[	Ni II-011	rII11'	giš sag-EZ[EN]
Ni IV-12	rIII03	giš dili-bu-um	Ni II-049	rII13'	giš sag-EZEN
128 3482	giš an-ta		Ni II-053	rII04	[gi]š sag-EZEN
Ni I-07	I03'	[] an-ta	Ni II-120	I04	giš sag-EZ[EN]
Ni II-011	rII06'	[gi]š an-t[a]	Ni II-206	rI05'	giš sa[g-
Ni II-049	rII07'	giš an-tag	Ni II-242	rI03'	giš sa[g-
Ni II-053	rI38'	[a]n-t[a]	Ni II-264	I02'	giš sag-[
Ni II-134	rI06'	giš an-[	Ni III-01	r2'	giš sag-EZEN
Ni II-196	rII01'	giš an-ta?	Ni III-04	I13'	giš sag-SI3?-EZEN
Ni II-200	rIV07'	[] an-ta	Ni IV-12	2	giš sag-EZEN
Ni III-01	7	giš an-[	Ni IV-12	rIII07	giš sag-EZEN
Ni III-04	I08'	giš a[n-	134	giš si-sag-EZEN	
Ni IV-03	2	giš an-t[a]	Ni II-011	rII12'	giš si-sag-EZEN
129 3483	giš huš		Ni II-041	rIII01'	[-sa]g-EZ[EN]
Ni I-07	I04'	[hu]š	Ni II-049	rII14'	giš si-sag-EZEN
Ni I-08	IV10'	giš [	Ni II-053	rII05	giš si-sag-EZEN
Ni II-011	rII07'	giš huš	Ni II-206	rI06'	giš si-[
Ni II-049	rII08'	giš huš	Ni II-242	rI04'	giš si-s[ag-
Ni II-196	rII02'	giš huš-x	Ni II-264	I03'	giš si-EZ[EN?]
Ni II-200	rIV08'	[] huš	Ni III-01	r3'	giš si-sag-EZEN
Ni III-04	I09'	giš h[uš]	Ni III-04	I14'	giš si-sag-EZEN
Ni IV-12	rIII04	giš huš	135 3493	giš i-ri ₉ -na	
130 3486	giš maš		Ni II-011	rII13'	[] i-r[i ₉]-na

Ni II-041	rIII02'	[] i-ri ₉ -na	Ni II-041	rIII08'	giš as ₄ -lum
Ni II-049	rII15'	giš i-ri ₉ -na	Ni II-043	rII02'	[]-lum
Ni II-053	rII06	giš i-ri ₉ -na	Ni II-053	rII14	giš as ₄ -um
Ni II-242	rI05'	giš i-[	Ni II-191	rII06'	giš as ₄ -lum
Ni III-04	I15'	giš i-ri ₉ -na	Ni II-231	rI04'	giš as ₄ -[
			Ni II-278	rII01'	[] a[s ₄ -
136 3494	giš a-ri ₉ -na		142a	giš [N]I-gu ₂	
Ni II-011	rII14'	[] i-r[i ₉]-na	Ni I-08	IV23'B	giš [N]I?-gu ₂
Ni II-041	rIII03'	[] a-i-ri ₉ -na			
Ni II-049	rII16'	giš a-i-r[i ₉ -n]a	143	giš SUG-da	
Ni II-053	rII07	giš a-ri ₉ -na	Ni II-041	rIII09'	giš SUG-da
Ni II-242	rI06'	giš a-[	Ni II-043	rII03'	[] SUG-da
Ni III-04	I16'	giš a-ri ₉ -na	Ni II-053	rII15	giš maš-da
			Ni II-231	rI05'	giš maš-[
137 3498	giš gilim-an-na		Ni II-278	rII02'	giš SUG-d[a]
Ni II-011	rII15'	[g]ilim \ an-n[a			
Ni II-041	rIII04'	[gi]š gilim-an-na	144 4006	giš dib-dib	
Ni II-049	rII17'	[gi]š [gi]lim-an-na	Ni I-08	IV24'B	giš dub-dub
Ni II-053	rII08	giš gu ₂ -gilim-na	Ni II-041	rIII10'	[] dib-LAGAB
Ni II-191	rII02'	[]-gilim-an-[	Ni II-043	rII04'	[] dib-dib
Ni II-242	rI07'	[] gi[lim-	Ni II-231	rI06'	giš dub-[
Ni III-04	I17'	giš gil[im-an-[	Ni II-278	rII03'	giš dab ₅ -da[b ₅]
138	giš gilim-ezen		145	giš u ₅	
Ni I-08	IV19'B	giš [b]ad ₃	Ni II-041	rIII11'	[] x-u ₅
Ni II-041	rIII05'	giš gilim-bad ₃	Ni II-043	rII05'	[] u ₅
Ni II-053	rII09	giš gilim-ba-ad	Ni II-053	rII16	giš []-um
Ni II-191	rII03'	giš gilim-ba[d ₃]	Ni II-278	rII04'	giš u ₅
Ni III-04	I18'	giš gi[lim-			
			145a	giš GAN-[
139 3505	giš u ₃ -luh		Ni I-08	IV25'B	[] GAN
Ni I-08	IV20'B	giš []-luh	Ni II-231	rI07'	giš GAN-[
Ni II-041	rIII06'	giš u ₃ -luh			
Ni II-053	rII10	giš u ₃ -luh	145b	giš kal-la-bi	
Ni II-191	rII04'	giš u ₃ -luh	Ni II-053	rII17	giš ka[l]-l[a]-bi
Ni II-231	rI02'	giš u ₃ -[
Ni IV-13	1	giš u ₃ -luh	145c	giš []-bi	
			Ni II-053	rII18	giš []-bi
140 3515	giš pa				
Ni II-053	rII11	giš pa	145d	giš gu ₇	
Ni IV-13	2	giš pa	Ni II-053	rII19	giš gu ₇
141 3512	giš pa-kud		146	giš ^d ha-ia ₃	
Ni I-08	IV21'B	giš [p]a-kud	Ni I-08	IV26'B	[] ^d ha-ia ₃
Ni II-041	rIII07'	giš pa-kud	Ni II-041	rIII12'	[]-ha-ia ₃
Ni II-043	rII01'	[]-kud	Ni II-043	rII06'	[] ^d ha-ia ₃
Ni II-053	rII12	giš pa-kud	Ni II-053	rII20	giš HA-AN-NI
Ni II-191	rII05'	giš pa-kud	Ni II-202	rI02'	giš ^d h[a-
Ni II-231	rI03'	giš pa-[	Ni II-231	rI08'	giš ^d ha-[
			Ni II-261	I01	giš ^d ha-ia ₃
141a	giš SUG		Ni II-278	rII05'	giš ^d ha-ia ₃
Ni II-053	rII13	giš SUG			
			147 4021	giš dub-dim ₂	
142 4001	giš as ₄ -lum		Ni I-08	IV27'B	[] dub-[d]im ₂
Ni I-08	IV22'B	giš []-lum			

Ni II-053	rII21	giš dub-TUG ₂ -NI					amar)
Ni II-202	rI03'	giš dub-d[im ₂]		Ni II-077	rII05'	giš ba-amar	
Ni II-231	rI09'	giš dub-[		Ni II-196	rIII07'	[-am]ar?	
Ni II-261	I02	giš dub-dim ₂		Ni II-202	rI09'	giš ba-amar	
Ni II-278	rII06'	giš dub-ba		Ni II-278	rII12'	giš ba-amar	
				Ni IV-17	01	giš ba-amar	
148 4022	giš šumun-gi ₄			154	giš ba-še		
Ni I-08	IV28'B	[] šumun-gi ₄		Ni I-06	I01'	[]-še	
Ni II-041	rIII14'	[]-gi		Ni II-053	rII29	giš ba-š[e]	
Ni II-053	rII22	giš šumun-gi ₄		Ni II-077	rII06'	giš ba-amar	
Ni II-191	rII07'	giš šumun-gi		Ni II-202	rI10'	giš ba-še	
Ni II-196	rIII02'	[]-gi		Ni II-278	rII13'	giš ba-še	
Ni II-202	rI04'	giš šumun-gi ₄		Ni IV-17	02	giš ba-še	
Ni II-261	I03	giš šumun-gi ₄					
Ni II-278	rII07'	giš šumun-gi ₄		155 4041	giš ba-šab		
149 4024	giš ti-bal			Ni I-06	I02'	[gi]š [b]a-šab	
Ni I-08	IV29'B	[] ti-bal		Ni II-053	rII30	giš ba-šab	
Ni II-041	rIII15'	[]-b]al		Ni II-077	rII07'	giš ba-ša ₆	
Ni II-053	rII23	giš ti-bal		Ni II-202	rI11'	[]-šab	
Ni II-077	rII01'	giš ti-bal		Ni II-278	rII14'	giš ba-PA-ŠE	
Ni II-196	rIII03'	[]-b]al?		155a	giš ba-kal		
Ni II-202	rI05'	giš di-bal		Ni I-06	I03'	giš ba-kal	
Ni II-278	rII08'	giš ti-bal					
150 4016	giš ŠID-ma			155b	giš ba-PA		
Ni I-08	IV30'B	[] ŠID-ma		Ni II-278	rII15'	giš ba-PA	
Ni II-053	rII24	giš ŠID-ma		156 4053	giš hub ₂		
Ni II-077	rII02'	giš ŠID-um		Ni I-06	I04'	giš hub ₂	
Ni II-191	rII08'	giš ŠID-ma		Ni II-053	rII31	giš hu[b ₂]	
Ni II-202	rI06'	giš ŠID-ma		Ni II-077	rII08'	[gi]š h[ub ₂]	
Ni II-278	rII09'	giš ŠID-ma		Ni II-278	rII16'	giš hub ₂	
151 4029	giš tun ₃			157 4054	giš na-ru ₂ -a		
Ni I-08	IV31'B	[] tun ₃		Ni I-06	I05'	giš na-ru ₂ -a	
Ni II-041	rIII13'	[]-UR		Ni II-053	rII32	giš na-ru ₂ -a	
Ni II-053	rII25	giš tun ₃		Ni II-079	I04'	giš na-ru ₂ -a	
Ni II-077	rII03'	giš UR		Ni II-206	rII01'	[n]a-ru ₂ -a	
Ni II-196	rIII05'	[] tun ₃		Ni II-278	rII17'	giš na-ru ₂ -a	
Ni II-202	rI07'	giš t[un ₃]		158 4055	giš ešgiri-šu-du ₇		
Ni II-278	rII10'	giš MA		Ni I-06	I06'	giš ešgiri-šu-du ₇	
152 4036	giš ba			Ni II-053	rII33	giš UŠ-d[a?]	
Ni II-053	rII26	giš ba		Ni II-079	I05'	giš ešgiri-šu-du ₈	
Ni II-077	rII04'	giš ba		Ni II-206	rII02'	giš ešgiri-šu-du ₇	
Ni II-191	rII10'	giš ba		Ni II-278	rII18'	[eš]giri-ME-šu-du ₇	
Ni II-196	rIII06'	[] ba		159	giš nig ₂ -na-UD		
Ni II-202	rI08'	giš ba		Ni I-06	I07'	giš nig ₂ -na-BAD	
Ni II-278	rII11'	giš ba		Ni II-206	rII03'	giš nig ₂ -na-UD	
152a 4038	giš ba-KA			Ni II-278	rII19'	[-n]a-UD	
Ni II-053	rII27	giš [b]a-KA		160 4069	giš gu-za		
153	giš ba-amar			Ni I-05	II06	giš gu-za	
Ni II-053	rII28	giš [] traces (prob. not					

Ni I-06	I08'	giš gu-za	Ni U-09	I09	giš gu-za-giš-gigir
Ni II-053	rII34	giš gu-za			
Ni II-206	rII04'	giš gu-za	169 4095	giš gu-za-anše	
Ni II-278	rII20'	[g]u-za	Ni I-05	II15	giš gu-za-anše
Ni IV-18	01	[g]u-[	Ni U-09	I10	giš gu-za-anše
Ni U-09	I01	giš gu-za			
161 4070	giš gu-za-sig ₅		170 4079	giš gu-za-kaskal	
Ni I-05	II07	giš gu-za-sig ₅	Ni I-05	II16	giš gu-za-kaskal-la
Ni I-06	I09'	gi[š g]u-za-sig ₅	Ni U-09	I11	giš gu-za-kaskal
Ni II-053	rII35	giš gu-za-s[ig ₅ ']	171	giš gu-za-garza ₂	
Ni II-206	rII05'	giš gu-za-sig ₅	Ni I-05	II17	giš gu-za-garza ₂
Ni II-278	rII21'	[]-sig ₅	Ni U-09	I12	[g]u-za-[ga]rza ₂
Ni IV-18	02	[]-za-s[ig ₅]			
Ni U-09	I02	giš gu-za-sig ₅	172	giš gu-za-nam-lugal-la	
162 4071	giš gu-za-gid ₂ -da		Ni I-05	II18	giš gu-za-nam-lugal
Ni I-05	II08	giš gu-za-gid ₂ -da	Ni II-053	rII01	giš []-lu[gal-
Ni I-06	I10'	[]-za-gid ₂ -d[a]	Ni II-202	rII01'	[]-na]m-lug[al]
Ni II-053	rII36	giš gu-za-g[id ₂ -d]a	173	giš gu-za-nam-en-na	
Ni P-05	AII01'	[]-d]a	Ni II-053	rII02	giš gu-[]-e[n]-n[a]
Ni U-09	I03	giš gu-za-gid ₂ -da	Ni II-202	rII02'	[]-nam-en-na
163 4072	giš gu-za-sir ₃ -da		174	giš gu-za-nam-nin-a	
Ni I-05	II09	giš gu-za-sir ₃ -da	Ni I-05	II19	[g]iš gu-za-n[am]-n[in-
Ni I-06	I11'	[]-za-sir ₃ -da	Ni II-053	rII03	giš gu-[]-a
Ni II-053	rII37	giš gu-za-[]-r]a?	Ni II-202	rII03'	[]-na]m-nin-a
Ni P-05	AII02'	giš gu-za-sir ₃ -da	175 4094	giš gu-za-ša ₃ -hul ₂ -la-a	
Ni U-09	I04	giš gu-za-sir ₃ -da	Ni I-05	II20	giš gu-za-ša ₃ -hu[l ₂ -
163a 4073	giš gu-za-munus-e-ne		Ni II-202	rII04'	[h]ul ₂ -la-a
Ni I-06	I12'	[]-za-munus-e-n[e]	176 4116	giš gu-za-šu-SAR-e-du ₃ -a	
164	giš gu-za-ma ₂ -lah ₅		Ni I-05	II21	giš gu-za-šu-SA[R-]-e-du ₃ -[
Ni I-05	II10	giš gu-za-ma ₂ -lah ₅	Ni II-053	rII06	giš gu-za-š[u-
Ni I-06	I13'	[]-DU-[	Ni II-202	rII05'	[]-S]AR-e-du ₃ -a
Ni P-05	AII03'	giš gu-za-ma ₂ -lah ₅	177 4118	giš gu-za-KA-[]-e-du ₃ -a	
Ni U-09	I05	giš gu-za-ma ₂ -lah ₅	Ni I-05	II22	giš gu-za-KA-SA[R-]-e-du ₃ -
165 4097	giš gu-za-giš-kin-ti			[
Ni I-05	II11	giš gu-za-giš-kin-ti	Ni II-053	rII07	giš gu-za-K[A?-
Ni II-053	rII40	giš gu-[]-t]i	Ni II-202	rII06'	[]x-e-du ₃ -a
Ni P-05	AII04'	giš gu-za-giš-kin-ti	178 4096	giš gu-za-ša[h-šum]-ma	
Ni U-09	I06	giš gu-za-giš-kin-ti	Ni I-05	II23	[]-za-š[ah-
166 4083	giš gu-za-nig ₂ -ba		Ni II-202	rII07'	[]-ma?
Ni I-05	II12	giš gu-za-nig ₂ -ba	Ni U-06	I01'	[gi]š gu-za-ša[h-
Ni U-09	I07	giš gu-za-nig ₂ -ba	179 4098	giš gu-za-ma ₂ -gan-na	
167 4084	giš gu-za-nig ₂ -šu		Ni II-202	rII08'	[]-n]a
Ni I-05	II13	giš gu-za-nig ₂ -šu	Ni U-06	I02'	[gi]š gu-za-ma ₂ -ga[n-
Ni U-09	I08	giš gu-za-nig ₂ -šu	180 4099	giš gu-za-me-luh-ha	
168 4085	giš gu-za-giš-gigir		Ni II-202	rII09'	[]-ha
Ni I-05	II14	giš gu-za-giš-gigir	Ni U-06	I03'	[gi]š gu-za-me-luh-[

181	4100	giš gu-za-ma ₂ -lah ₄		Ni II-156	rI11'	giš gu-za- ^{giš} [š]a ₃ -kal	
	Ni U-06	I04'	[gi]š gu-za-ma ₂ -la[h ₄	Ni II-255	I02'	giš gu-za- ^{giš} [
182	4076	giš gu-za-aratta		Ni II-263	rI02'	giš gu-za- ^{giš} š[a ₃ -	
	Ni I-08	V05'B	giš gu-za-LAM-[	Ni U-03	I03'	giš gu-za- ^{giš} [
	Ni II-053	rIII12	giš gu-za-L[AM-	192	4113a	giš gu-za- ^{giš} mes	
	Ni II-156	rI02'	giš gu-za- šurupak(SU.KUR.RU)		Ni II-156	rI12'	giš gu-za- ^{giš} me[s!]
					Ni II-255	I03'	giš gu-za- ^{giš} mes
					Ni U-03	I04'	[] gu-za- ^{giš} mes
183	4081	giš gu-za-nita		193	4114	giš gu-za- ^{giš} mes-ma ₂ -gan.ki	
	Ni I-08	V06'B	giš gu-za-nit[a]		Ni II-156	rI13'	giš gu-za- ^{giš} mes \ <[giš] gu-
	Ni II-053	rIII13	giš gu-za-n[ita]				za> ma ₂ -gan-na
	Ni II-156	rI03'	giš gu-za-nita		Ni II-255	I04'	[] gu-za- ^{giš} mes-ma ₂ -[
	Ni II-199	I02'	[g]iš gu-za-ni[ta]	194		giš gu-za- ^{giš} mes-me-[luh-ha]	
184	4082	giš gu-za-munus			Ni II-255	I05'	giš gu-za- ^{giš} mes-me-[
	Ni I-08	V07'B	giš gu-za-munus		Ni P-05	BI01'	[] me?-luh-[
	Ni II-053	rIII14	giš gu-za-[	195	4103	giš gu-za-gar ₃ -ba	
	Ni II-156	rI04'	giš gu-za-munus		Ni II-048	I01'	[]-za-gar ₃ -[
	Ni II-199	I03'	giš gu-za-munus		Ni P-05	BI02'	giš gu-za-gar ₃ -[
185		giš gu-za-ukkin-na		196	4105	giš gu-za-gar ₃ -ba-ku ₃ -babbar-g[ar-	
	Ni I-08	V08'B	giš gu-za-ukkin-[		Ni II-048	I02'	[g]u-za-gar ₃ -ba-ku ₃ -babb[ar
	Ni II-053	rIII15	giš gu-za-u[kkin-		Ni II-053	rIII30	giš gu-za-[]-babbar \ [
	Ni II-156	rI05'	giš gu-za-ukkin?-[		Ni P-05	BI04'	giš gu-za-ga[r ₃ -]-ku ₃ -
	Ni II-199	I04'	giš gu-za-ukkin-na				babbar-g[ar-
186		giš gu-za-lukur		197	4107	giš gu-za-gar ₃ -ba-zabar-[gar-ra]	
	Ni I-08	V09'B	giš gu-za-lu[kur]		Ni II-048	I03'	[g]u-za-gar ₃ -ba-za[bar]
	Ni II-053	rIII16	giš gu-za-lu[kur]		Ni P-05	BI03'	giš gu-za-gar ₃ -[-za]bar-[
	Ni II-156	rI06'	giš gu-za-lukur	198	4108	giš gu-za-gar ₃ -ba- ^{giš} kin ₂ -[
	Ni II-199	I05'	giš gu-za-lukur-ra		Ni II-048	I04'	giš g[u]-za-gar ₃ -ba- ^{giš} kin ₂ -[
186a	4093	giš gu-za-gi[dim?]			Ni II-263	rI06'	giš gu-[] \ kin ₂ ?-[
	Ni II-053	rIII17	giš gu-za-gi[dim?]		Ni P-05	BI05'	giš gu-za-gar ₃ -[
187	4078	giš gu-za-ki-uš ₂		199	4123	giš BAD-[gu-za]	
	Ni I-08	V10'B	giš gu-za-ki-[		Ni II-048	I05'	giš BAD-[
	Ni II-053	rIII18	giš gu-za-k[i	200	4126	[giš sag-gu-za]	
	Ni II-156	rI07'	giš gu-za-ki-uš ₂	201	4124	[giš di ₅ -gu-za]	
	Ni II-199	I06'	[]-k[i-u]š ₂	202	4125	[giš i-zi-gu-za]	
188		giš gu-za-silim-ma		203	4121	[giš umbin-gu-za]	
	Ni II-053	rIII19	giš gu-za-si[lim-	204	4129	giš šu ₂ -a	
	Ni II-156	rI08'	giš gu-za-silim-ma		Ni II-053	rIV01	[š]u ₂ -a
189	4110	giš gu-za- ^{giš} taskarin		205	4130	giš šu ₂ -a-du ₁₀ -sa	
	Ni II-156	rI09'	giš gu-za- ^{giš} taskarin		Ni II-053	rIV02	[š]u ₂ -a-du ₁₀ -s[a]
190	4111	giš gu-za- ^{giš} esi					
	Ni II-156	rI10'	giš gu-za- ^{giš} esi				
	Ni U-03	I02'	giš gu-za- ^{giš} [
191	4113	giš gu-za- ^{giš} ša ₃ -kal					

206		giš šu ₂ -a-nagar		221	4158	giš nu ₂ -ša ₃ -tuku-sik ₂ -ga-rig ₂ -ak
Ni II-053	rIV03	[š]u ₂ -a-[n]agar		Ni I-08	rI14'B	giš nu ₂ -[
				Ni II-052	I02	giš nu ₂ -ša ₃ -tuku-sik ₂ -ga-rig ₂ -ak
207	4134	giš šu ₂ -a-bur-gul				
Ni II-053	rIV04	[]-a-bur-gul		222		giš nu ₂ -ur ₄ -ma
Ni II-180	rI01	giš šu ₂ -a-[		Ni I-08	rI15'B	giš nu ₂ -u[r ₄ -
				Ni II-052	I03	giš nu ₂ -ur ₄ -ma
208	4135	giš šu ₂ -a-tibira				
Ni I-08	rI01'B	[] š[u ₂ -		223	4165	giš zag-an-dul ₃ -nu ₂
Ni II-053	rIV05	[]-a-tibira		Ni I-08	rI16'B	giš zag-an-[
Ni II-180	rI02	giš šu ₂ -a-[		Ni II-052	I04	giš zag-an-dul ₃ -nu ₂
209	4133	giš šu ₂ -a-kaskal-la		224		giš bar-si-nu ₂
Ni I-05	III10	giš šu ₂ -a-kask[al-		Ni I-08	rI17'B	giš bar-s[i-
Ni I-06	II02'	giš šu ₂ -a-[		Ni II-052	I05	giš bar-si-nu ₂
Ni I-08	rI02'B	[] šu ₂ -a-[
Ni II-053	rIV06	[]-a-kaskal-la		225		giš BAD-[nu ₂]
Ni II-180	rI03	giš šu ₂ -a-kaskal-[		Ni I-08	rI18'B	giš BAD-[
				Ni II-052	I06	[BA]D-n[u ₂]
				Ni II-082	rI01'	giš BAD-[
210	4140	giš šu ₂ -a-nig ₂ -gu-la				
Ni I-05	III09	giš šu ₂ -a-ni[g ₂ -		226	4166	giš sag-[nu ₂]
Ni I-06	II03'	giš šu ₂ -a-[		Ni I-08	rI19'B	giš sa[g-
Ni I-08	rI03'B	[gi]š šu ₂ -a-nig ₂-[		Ni II-082	rI02'	giš sag-n[u ₂]
Ni II-053	rIV07	[]-a-nig ₂ -gu-la				
Ni II-180	rI04	giš šu ₂ -a-nig ₂ -gu-[
				227	4170	giš di ₃ -[nu ₂]
				Ni I-08	rI20'B	giš di ₃ -[
211	4143	giš gir ₃ -gub				
Ni I-05	III11	giš gir ₃ -gub				
Ni I-06	II04'	giš gi[r ₃ -				
Ni I-08	rI04'B	[gi]š gir ₃ -[
Ni II-053	rIV08	[gi]r ₃ -gub				
212	4144	giš gir ₃ -gub- ^d lama				
Ni I-05	III12	giš gir ₃ -gub- ^d la[ma]				
Ni I-06	II05'	giš gi[r ₃ -				
Ni I-08	rI05'B	[gi]r ₃ -gu[b-				
213	4145	giš gir ₃ -gub-zu ₂ -am-si				
Ni I-05	III13	giš gir ₃ -gub-zu ₂ -a[m-				
214	4146	giš nu ₂				
Ni I-05	III14	giš nu ₂				
215	4147	giš nu ₂ -AŠ-nu ₂				
Ni I-05	III15	giš nu ₂ -AŠ-nu ₂				
216	4148	giš nu ₂ -ki-nu ₂				
Ni I-05	III16	giš nu ₂ -ki-nu ₂				
217	4149	giš nu ₂ -g[u ₂]-z[i]-g[a]				
Ni I-05	III17	giš nu ₂ -g[u ₂]-z[i]-g[a]				
220	4157	giš nu ₂ -ša ₃ -tuku				
Ni II-052	I01	giš nu ₂ -ša ₃ -tuku				

228	4172	giš i-[zi-nu ₂]			Ni II-263	rII06'	[] k[a-]-zu ₂ -[]-si-ga
	Ni I-08	rI21'B	giš i-[		241		giš maš-tak-da
229	4173	[giš umbin-nu ₂]			Ni II-053	rIV40	[]-da
					Ni II-056	12	giš maš-tak-da
230	4175	giš dilim ₂ -gal			Ni II-263	rII07'	giš maš-tak-da
	Ni II-056	01	[]-gal		242	4209	giš emerah
	Ni II-082	rI06'	giš dilim ₂-[		Ni II-053	rIV41	[] eme]rah
231	4174	giš dilim ₂			Ni II-056	13	giš emerah
	Ni II-056	02	[] dilim ₂		Ni II-082	rI14'	giš emerah
	Ni II-082	rI07'	giš dilim ₂-[		Ni II-263	rII08'	giš emerah
232		giš dilim ₂ -da			243		giš emerah-GAM-ga
	Ni II-056	03	[] dilim ₂ -da		Ni II-082	rI15'	giš emerah-GAM-ga
233	4181	giš ma-al-tum			244		giš emerah-ti
	Ni II-056	04	[gi]š ma-al-tum		Ni II-082	rI16'	[gi]š emerah-ti
	Ni II-082	rI09'	giš ma-TUM-tum		245	4223	giš muru ₅ -za-nu-um
234	4188	giš banšur			Ni II-056	14	giš muru ₅ -za-nu-um
	Ni II-056	05	giš banšur		Ni II-082	rI17'	[]x-za-nu-um
	Ni II-082	rI10'	giš [ban]šur		246	4225	giš kun ₄
235	4200	giš dilim ₂ -banšur			Ni II-056	15	giš kun ₄
	Ni II-056	06	giš dilim ₂ -banšur		247	4226	giš kun ₄ -bad ₃ -da
	Ni II-236	I03'	giš dilim ₂-[		Ni II-056	16	giš kun ₄ -bad ₃ -da
236	4203	giš umbin-banšur			248		giš kun ₄ -M[E?-]-U-SI?
	Ni II-056	07	giš umbin-banšur		Ni II-056	17	giš kun ₄ -M[E?-]-U-SI?
	Ni II-236	I04'	giš umbin-[		250	4231	giš u ₃ -[kun ₄]
237	4198	giš banšur-zag-gu-la			Ni II-053	rV01	giš u ₃ -[
	Ni II-056	08	[] banšur-zag-gu-la		251	4232	giš S[UH-kun ₄]
	Ni II-082	rI11'	giš [ban]šur-[z]ag-[g]u-l[a		Ni II-053	rV02	giš S[UH?-
	Ni II-236	I05'	giš [ba]nšur-[z]ag-g[u-		252	4233	giš bu[gin (LAGABxA)]
238	4199	giš banšur-zag-gar-ra			Ni II-053	rV03	giš bu[gin]
	Ni II-056	09	[] ban]šur-zag-gar-ra		253	4235	giš bugin-tur
	Ni II-082	rI12'	giš banšur-zag-gar-[		Ni II-053	rV04	[gi]š bugin-tur
	Ni II-236	I06'	giš ba[nšur-z]ag-[		254	4238	giš [bugin]-ZU-bar-ra
239	4204	giš ka-kara ₄ (KAD ₄)			Ni II-053	rV05	giš []-ZU-bar-ra
	Ni II-053	rIV38	[gi]š k[a]-kara ₄		255	4242	giš naga ₃
	Ni II-056	10	[]-DUG		Ni II-053	rV06	giš naga ₃
	Ni II-082	rI13'	giš ka-kara ₄		Ni II-219	I01'	[] na]ga ₂
	Ni II-236	I07'	giš ka-k[ara ₄]		256	4243	giš naga ₃ -nig ₂ -še
	Ni II-263	rII05'	giš [k]a-[ka]ra ₄		Ni II-053	rV07	giš naga ₃ -nig ₂ -š[e]
240	4208	giš ka-kara ₄ -zu ₂ -am-si-si-ga			Ni II-219	I02'	[]-š[e]
	Ni II-053	rIV39	[gi]š k[a-]-zu ₂ -am \ si-s[]i-				
			ga				
	Ni II-056	11	giš k[a- a]m-s[i]-ga				
	Ni II-236	I08'	giš ka-ka[ra ₄] \ zu ₂ -am-[

257	4244	giš naga ₃ -še-giš-i ₃		266	4263	giš ma ₂ -gur	
Ni II-053	rV08	giš naga ₃ -š[e-		Ni II-053	rV17	[g]ur	
Ni II-219	I03'	[na]ga ₂ -še-giš-i ₃		Ni II-082	rII09'	giš ma ₂ -gur	
258		giš naga ₃ -esir-e ₃ -a		Ni II-098	I04'	giš ma ₂ -gur	
Ni II-053	rV09	giš n[aga ₃ -		Ni P-06	BI07'	[]-gur	
Ni II-219	I04'	[g]iš naga ₂ -esir-e ₃ -a		267	4273	giš ma ₂ -sig-ga?	
259	4247	giš tukul-naga ₃ -si ₃ -gaz		Ni II-082	rII10'	giš ma ₂ -sig-ga?	
Ni II-053	rV10	giš tuk[ul- -ga]z		Ni P-06	BI08'	[-g]a	
Ni II-082	rII02'	giš tukul-naga _{2/3} -s[i ₃ -		268		giš ma ₂ -[] x	
Ni II-219	I05'	[g]iš tukul-naga ₂ -si ₃ -gaz		Ni II-082	rII11'	giš ma ₂ -X	
260	4248	giš gan-na		269	4265	giš ma ₂ -u ₅	
Ni II-053	rV11	giš gan-n[a]		Ni I-08	rII13'B	[-m]a ₂ -u ₅	
Ni II-082	rII03'	g[iš ga]n-na?		Ni II-082	rII12'	giš ma ₂ -u ₅	
Ni II-171	I01	giš gan		270		giš ma ₂ -da-la ₂	
Ni P-06	BI01'	[ga]n-n[a]		Ni I-08	rII14'B	[m]a ₂ -da-la ₂	
261	4251	giš girah (ŠU-DIM ₂)		Ni II-026	01'	giš ma ₂ -d[a-	
Ni I-08	rII02'C	giš ŠU-[		Ni II-053	rV22	[m]a ₂ -da-[
Ni II-053	rV12	[gi]š ŠU-DIM ₂		Ni II-100	rI02'	giš ma ₂ -da-[
Ni II-171	I02	giš ŠU-DIM ₂		271	4274	giš ma ₂ -gur-šu-ku ₆	
Ni P-06	BI02'	[]-DIM ₂		Ni I-08	rII15'B	[m]a ₂ -gur-šu-ku ₆	
261a		[]-DIM ₂		Ni II-026	02'	giš ma ₂ -gur-[
Ni P-06	BI03'	[]-DIM ₂		Ni II-053	rV23	[] ma ₂ -gur-[
262	4252	giš eme-sig		Ni II-082	rII13'	giš ma ₂ -g[ur]-š[u]-ku ₆	
Ni I-08	rII03'C	giš e[me-		Ni II-100	rI03'	giš ma ₂ -[]-k[u ₆]	
Ni II-053	rV13	[e]me-sig		272	4275	giš ma ₂ -peš-peš	
Ni II-082	rII05'	giš eme-[		Ni I-08	rII16'B	[m]a ₂ -peš-peš	
Ni II-098	I01'	giš eme-[		Ni II-026	03'	giš m[a ₂ - -p]eš	
Ni II-171	I03	giš eme-sig		Ni II-032	I01'	giš ma ₂ -peš-peš	
Ni P-06	BI04'	[em]e-sig		Ni II-100	rI04'	giš ma ₂ -peš-pe[š]	
263	4254	giš mi-ri ₂ -za		273		giš ma ₂ -gur-šu-gi ₄	
Ni I-08	rII04'C	giš mi-[		Ni I-07	rII01'	[]-šu-gi	
Ni II-053	rV14	[-r]i ₂ -za		Ni I-08	rII17'B	[m]a ₂ -gur-šu-gi ₄	
Ni II-082	rII06'	giš mi-r[i ₂ -		Ni II-026	04'	[m]a ₂ -[]-ga	
Ni II-098	I02'	giš mi-ri ₂-[		Ni II-032	I02'	giš ma ₂ -[-g]i?	
Ni P-06	BI05'	[]-ri ₂ -za		Ni II-100	rI05'	giš ma ₂ -e-gi ₄	
Ni U-29	rII06'	[]-za		273a		giš ma ₂ -X-LAGAB	
264	4255	giš mi-ri ₂ -za-zag-gi-a		Ni II-026	05'	[] ma ₂ -X-LAGAB	
Ni I-08	rII05'C	giš mi-r[i ₂ -		274	4277	giš ma ₂ -ma ₂ -ri	
Ni II-053	rV15	[-g]i ₄ -a		Ni I-07	rII02'	[]-ma-ri	
Ni II-082	rII07'	giš mi-[]-[z]a-[z]ag-[g]i ₄ -a		Ni I-08	rII18'B	[-m]a ₂ -ma ₂ -ri ₂	
Ni U-29	rII07'	[]-za-zu ₂ -gi ₄ ?-a		Ni II-026	06'	[] ma ₂ -m[a ₂]-ri ₂	
265	4262	giš ma ₂		Ni II-032	I03'	giš ma ₂ -ri ₂	
Ni II-082	rII08'	giš ma ₂		Ni II-060	rI03'	giš ma ₂ -m[a ₂ -	
Ni II-098	I03'	giš ma ₂		Ni II-082	rII16'	[] ma ₂ -ma ₂ -ri ₂	
Ni P-06	BI06'	[] ma ₂		Ni II-100	rI06'	giš ma ₂ -ma ₂ -ri ₂	
				Ni II-101	rI05'	giš ma ₂ -m[a ₂ -	

275	4284	giš ma ₂ -su-a	283a	giš ma ₂ -15-gur
Ni I-08	rII19'B	[-m]a ₂ -su!-a	Ni II-100	rII15' giš ma ₂ -15-gur
Ni II-026	07'	[] ma ₂ -su-a		
Ni II-032	I04'	giš ma ₂ -su-a	284	4359 giš ma ₂ -15-gur
Ni II-060	rI04'	giš ma ₂ -s[u?]-	Ni II-053	rV42 giš ma ₂ -1[5]-g[ur]
Ni II-100	rI07'	giš m[a ₂]-su-a	Ni II-100	rII16' giš ma ₂ -15-gur
Ni II-101	rI06'	giš ma ₂ -s[u-	Ni II-182	rI05' giš ma ₂ -15-gur
276	4285	giš ma ₂ -dim-dug ₄ -ga	285	4360 giš ma ₂ -10-gur
Ni II-026	08'	[m]a ₂ -dim-dug ₄ -g[a]	Ni II-100	rII17' giš ma ₂ -10-[
Ni II-060	rI05	giš ma ₂ -dim-[	Ni II-101	rII16' giš m[a ₂]-10-[
Ni II-100	rI08'	giš ma ₂ -dim-du[g ₄]-ga	Ni II-182	rI06' giš ma ₂ -10-gur
Ni II-101	rI07'	giš ma ₂ -dim-du[g ₄]-ga		
Ni U-10	I02'	giš ma ₂ -d[im-	286	4361 giš ma ₂ -5-gur
			Ni II-100	rII18' giš ma ₂ -5-[
			Ni II-101	rII17' giš ma ₂ -5-[
			Ni II-182	rI07' giš ma ₂ -5-gur
277	4287	giš ma ₂ -NE		
Ni II-060	rI06'	giš ma ₂ -N[E	287	4264 giš ma ₂ -tur
Ni II-100	rI09'	giš ma ₂ -NE	Ni II-060	rII02' giš m[a ₂ -
Ni II-101	rI08'	giš ma ₂ -NE	Ni II-100	rII19' giš ma ₂ -tur?
			Ni II-182	rI08' giš ma ₂ -tur
278		giš ma ₂ -du ₈		
Ni II-060	rI07'	giš ma ₂-[	288	4293 giš ma ₂ -an-na
Ni II-100	rII10'	giš ma ₂ -du ₈	Ni II-060	rII03' giš ma ₂ -a[n-
Ni II-101	rI09'	giš ma ₂ -du ₈-[	Ni II-099	I01 [] ma ₂ -an-na
			Ni II-100	rI20' giš ma ₂ -a[n
			Ni II-182	rI09' giš ma ₂ -an-na
279	4354	giš ma ₂ -60-gur		
Ni II-053	rV37	[m]a ₂ -60-[	289	4295 giš ma ₂ -aš-te
Ni II-060	rI08'	giš ma ₂ -60-[	Ni II-060	rII04' giš ma ₂ -aš-t[e
Ni II-100	rII11'	giš ma ₂ -60-gur	Ni II-099	I02 giš ma ₂ -aš-te
Ni II-101	rII10'	giš ma ₂ -60-gur	Ni II-100	rI21' giš ma ₂ -[
			Ni II-146	rI01 giš ma ₂ -aš-t[e]
280	4355	giš ma ₂ -50-gur		
Ni II-053	rV38	[] ma ₂ -50-[	290	4299 giš ma ₂ -gur ₈ - ^d nin-lil ₂
Ni II-100	rII12'	giš ma ₂ -50-gur	Ni II-060	rII05' giš ma ₂ -gur ₈ - ^d nin-lil ₂
Ni II-101	rII11'	giš ma ₂ -50-gur	Ni II-099	I03 giš ma ₂ -gur ₈ - ^d nin-lil ₂
Ni II-182	rI01'	giš ma ₂ -5[0-	Ni II-101	rII01' []-lil ₂
Ni U-08	I01'	[] ma ₂ -5[0-	Ni II-146	rI02 giš ma ₂ -gur ₈ - ^d n[in-
			Ni IV-16	01 giš ma ₂ -gur ₈ - ^d nin-lil ₂ -la
			Ni IV-19	01 giš ma ₂ -gur ₈ - ^d nin-lil ₂ -[
281	4356	giš ma ₂ -40-gur		
Ni II-053	rV39	giš ma ₂ -40-[	291	4319 giš ma ₂ -gur ₈ - ^d da-mu
Ni II-100	rII13'	giš ma ₂ -40-gur	Ni II-060	rII06' giš ma ₂ -gur ₈ - ^d da-mu
Ni II-101	rII12'	giš ma ₂ -[4]0-g[ur]	Ni II-099	I04 giš ma ₂ -gur ₈ - ^d da-m[u]
Ni II-182	rI02'	giš ma ₂ -40-gur	Ni II-101	rII02' [] ma ₂ -[d]a-mu
Ni U-08	I02'	giš ma ₂ -40-g[ur]	Ni II-115	rII01' [-d]a-mu
			Ni II-146	rI03 giš ma ₂ -gur ₈ - ^d d[a-
			Ni IV-16	02 giš ma ₂ -gur ₈ - ^d da-mu
			Ni IV-19	02 giš ma ₂ -gur ₈ - ^d da-m[u]
282	4357	giš ma ₂ -30-gur		
Ni II-053	rV40	giš ma ₂ -30-[	292	4308 giš ma ₂ -kar-nun-ta-e ₃ -a
Ni II-100	rII14'	giš ma ₂ -30-gur	Ni II-060	rII07' giš ma ₂ -kar-ME-nun-ta-e ₃ -a
Ni II-182	rI03'	giš ma ₂ -30-gur		
Ni U-08	I03'	giš ma ₂ -30-[
283	4358	giš ma ₂ -20-gur		
Ni II-053	rV41	giš ma ₂ -20-g[ur]		
Ni II-182	rI04'	giš ma ₂ -20-gur		

Ni II-099 I05 [m]a₂-gur₈-kar-ra-[t]a-e₃-a
 Ni II-101 rII03' [m]a₂ [k]ar-nu[n]-t[a-
 Ni II-115 rII02' [n]un-ta

293 4304 giš ma₂-dara₃-abzu
 Ni II-060 rII08' giš ma₂-dara₃-ab[zu
 Ni II-099 I06 [m]a₂-dara₃-abzu
 Ni II-100 rII03 [d]ara₃-[
 Ni II-101 rII04' [] ma₂-da[ra₃]-ab[zu]
 Ni II-115 rII03' []-abzu
 Ni II-233 I01 []-dara₃-ab[zu]
 Ni IV-21 01 giš ma₂-dara₃-abzu
 Ni U-29 rI07' giš ma₂-dara₃-[

294 4312 giš ma₂-nu-ri
 Ni II-060 rII09' giš ma₂-nu-ri
 Ni II-099 I07 [m]a₂-nu-ri
 Ni II-100 rII04 [] ma₂-nu-[
 Ni II-101 rII05' []-nu-ri
 Ni II-233 I02 []-nu-[
 Ni IV-20 01 giš ma₂-nu-ri
 Ni IV-21 02 giš ma₂-nu-ri

294a 4313 giš ma₂-nu-ri-ban₃-da
 Ni IV-20 02 giš ma₂-nu-ri-ban₃-da

294b giš ma₂-UD-nu-ri
 Ni II-100 rII05 [gi]š ma₂-UD-nu-ri

295 4297 giš ma₂-gur₈-nu-ub₂-zu
 Ni II-060 rII10' giš m[a₂-n]u-ub-zu
 Ni II-099 I08 [m]a₂-gur₈-nu-ub-zu
 Ni II-101 rII06' [] ma₂-gur₈-nu-ub₂-zu
 Ni II-233 I03 []-gur₈-nu-ub₂-z[u]

296 4281 giš ma₂-dilmun-na
 Ni II-060 rII11' giš ma₂-dilmun-na
 Ni II-099 I09 [] ma₂-dilmun-[
 Ni II-100 rII06 [gi]š ma₂-dilmun-na
 Ni II-101 rII07' giš ma₂-dilmun.ki
 Ni II-233 I04 []-ma₂-x []
 Ni U-29 rI05' giš ma₂-dilmun-[

297 4362 giš u₃-ma₂
 Ni II-060 rII12' giš ma₂-u₃-[m]a₂
 Ni II-099 I10 [gi]š u₄-ma₂
 Ni II-100 rII07 [] u₃-ma₂
 Ni II-101 rII08' giš u₃-ma₂
 Ni II-233 I05 [] u₃-m[a₂

298 4380 giš e₂-ma₂
 Ni II-060 rII13' giš e₂-ma₂
 Ni II-099 I11 [] e₂-ma₂
 Ni II-100 rII08 [] e₂-ma₂
 Ni II-101 rII09' [gi]š e₂-ma₂
 Ni II-233 I06 giš e₂-[

299 4367 giš si-ma₂
 Ni II-060 rII14' giš si-ma₂

Ni II-099	I12	[] si-ma ₂	307	4352	giš ma ₂ -addir
Ni II-100	rII09	[] e ₂ -ma ₂	Ni I-08	rIII09'	[gi]š [m]a ₂ -a[ddir?]
Ni II-101	rII10'	[] si-ma ₂	Ni II-060	rIII04'	giš ma ₂ -[ad]dir
Ni II-233	I07	giš si-[	Ni II-100	rII17	giš ma ₂ -addir
Ni II-277	rI01	giš s[i-	Ni II-182	rII05'	[-a]ddir
Ni P-06	BII02'	[gi]š s[i]-m[a ₂]	Ni P-02	BII01'	giš PAD-DIRI-GI[SAL?-]-m[a ₂]
300	4373	giš anše-ma ₂	Ni P-06	BII10'	giš ma ₂ -addir
Ni II-060	rII15'	giš anše-ma ₂	307a		giš ma ₂ -lugal
Ni II-099	I13	[] anše-ma ₂	Ni II-182	rII06'	[m]a ₂ -lugal
Ni II-100	rII10	[an]še-ma ₂	308	4391	giš ma ₂ -du ₃
Ni II-101	rII11'	[g]iš anše-ma ₂	Ni I-08	rIII10'	giš ma ₂ -d[u ₃]
Ni II-233	I08	giš anše-[	Ni II-060	rIII05'	giš ma ₂ -du ₃
Ni II-277	rI02	giš anš[e-	Ni II-100	rII18	giš ma ₂ -du ₃
Ni P-06	BII03'	[gi]š [anš]e-m[a ₂]	Ni II-182	rII07'	[m]a ₂ -du ₃
301	4374	giš dim-ma ₂	Ni P-02	BII02'	giš ma ₂ -du ₃
Ni II-060	rII16'	giš d[im ₂ -	Ni P-06	BII11'	giš ma ₂ -du ₃
Ni II-099	I14	[] dim ₂ -ma ₂	309		giš bal-ma ₂ -du ₃
Ni II-100	rII11	giš dim-ma ₂	Ni I-08	rIII11'	giš bal-ma ₂ -du ₃
Ni II-101	rII12'	giš dim-ma ₂	Ni II-182	rII08'	[]-ma ₂ -du ₃
Ni II-233	I09	giš dim-[	309a		giš zag-ma ₂ -du ₃
Ni II-277	rI03	giš dim-[	Ni II-100	rII19	giš zag-ma ₂ -du ₃
Ni P-06	BII04'	giš dim-ma ₂	310	4393	giš gir ₂ -ma ₂ -du ₃
302		giš dib-ma ₂	Ni II-060	rIII06'	giš gir ₂ -ma ₂ -du ₃
Ni II-100	rII12	giš dab ₃ -ma ₂	Ni II-100	rII20	giš gir ₂ -ma ₂ -du ₃
Ni II-101	rII13'	[gi]š dab ₃ -ma ₂	Ni II-182	rII09'	[]-ma ₂ -du ₃
Ni II-233	I10	[gi]š dib-[	310a		giš peš-ma ₂ -du ₃
Ni P-06	BII05'	giš dib-ba-ma ₂	Ni P-02	BII03'	giš peš-ma ₂ -du ₃
303		giš lu ₂ -KA-ma ₂	Ni P-06	BII12'	giš peš-ma ₂ -du ₃
Ni II-100	rII13	[gi]š lu ₂ -KA-ma ₂	311	4392	giš uš ₂ -ma ₂ -du ₃
Ni P-06	BII06'	giš sag-ma ₂	Ni I-08	rIII12'	giš uš ₂ -ma ₂ -du ₃
304		giš u ₃ -zi-pa-ah-ma ₂	Ni II-060	rIII07'	giš uš ₂ -ma ₂ -du ₃
Ni II-060	rIII01'	[] u ₃ -zi-pa-ah-ma ₂	Ni II-100	rII21	giš uš ₂ -ma ₂ -du ₃
Ni II-100	rII14	[gi]š e ₂ -zi-pa-ah-ma ₂	Ni P-02	BII04'	giš uš ₂ -ma ₂ -du ₃
Ni II-182	rII02'	[] x-zi-ah-ma ₂	312	4388	giš durgul (MA ₂ -DU ₃)
Ni P-06	BII08'	giš u ₃ -zi-pa-ah-ma ₂	Ni I-08	rIII13'	[gi]š durgul-[
305	4376	giš egir-ma ₂	Ni II-060	rIII08'	giš durgul
Ni II-060	rIII02'	giš egir-ma ₂	Ni II-100	rII22	[d]urgul
Ni II-100	rII15	giš egir-ma ₂	Ni P-02	BII05'	giš durgul
Ni II-101	rII14'	[eg]ir-ma ₂	313	4389	giš an-ta-durgul
Ni II-182	rII03'	[e]gir-ma ₂	Ni II-060	rIII09'	giš an-ta-durgul
Ni P-06	BII07'	giš egir-ma ₂	Ni II-100	rII23	[dur]gul
306		giš peš-eš ₃ -ma ₂	Ni II-146	rII01	giš an-ta-durgul
Ni II-060	rIII03'	giš peš-eš ₃ -ma ₂	Ni P-02	BII06'	giš ma ₂ -durgul
Ni II-100	rII16	giš peš-eš ₂ -ma ₂	314	4417	giš zi-gan
Ni II-101	rII15'	[pe]š?-ma ₂			
Ni II-182	rII04'	[pe]š-eš ₂ -ma ₂			
Ni P-06	BII09'	giš peš-u ₃ -ma ₂			

Ni II-060	rIII10'	giš [z]i-gan	324 4430	giš gag-šibir
Ni II-146	rII02	giš zi-gan	Ni I-08	rIV02D giš gag-[
Ni P-02	BII07'	giš zi-gan	Ni II-060	rIII17' [šibi]r
Ni U-29	rII02'	[] zi-gan	Ni II-114	rII03 giš NI-šibir
315 4419	giš dilim ₂ -zi-gan		Ni II-195	I06' [] gag-šibir
Ni II-060	rIII11'	giš dilim ₂ -zi-gan	Ni II-207	I06 [-šibi]r
Ni II-146	rII03	giš dilim ₂ -zi-gan	Ni U-29	rII14' [ga]g-ši[bir]
Ni P-02	BII08'	[-z]i-[	325 7b146	giš kab-bar
Ni U-29	rII03'	[]-zi-gan	Ni I-08	rIV03D giš kab-bar
316 4420	giš sig-zi-gan		Ni II-060	rIV01' []-bar
Ni II-060	rIII12'	giš s[ig-z]i-gan	Ni II-114	rII04 [ka]b-bar
Ni II-146	rII04	giš UMBIN-zi-gan	Ni II-146	rII12 giš k[ab-
Ni U-29	rII04'	[] UMBIN-zi-gan	Ni II-187	rII02' giš kab-b[ar]
317 4025	giš an-ti-bal		Ni II-195	I07' [] kab-bar
Ni II-060	rIII13'	giš ti-bal	Ni II-277	rII01 giš ka[b-b]ar
Ni II-146	rII05	[] an-ti-b[al]	326 5006	giš gigir
Ni II-207	I01	giš an-ti-bal	Ni II-060	rIV02' [gi]gir
318	giš zi-in-hur		Ni II-081	rII01' g[iš]-gigir
Ni II-060	rIII14'	giš zi-in-hur	Ni II-082	I01 [] gigir
Ni II-146	rII06	[gi]š zi-in-[	Ni II-095	rI01 [] gigir
Ni II-207	I02	giš zi-in-hur	Ni II-114	rII05 [g]igir
319 4421	giš kak		Ni II-146	rII13 giš gi[gir]
Ni II-060	rIII15'	giš gag	Ni II-175	I01 giš g[igir] :: giš [
Ni II-195	I01'	[] gag	Ni II-187	rII03' giš gigir
Ni II-207	I03	giš gag	Ni II-195	I08' [] gigir
Ni U-29	rII08'	[] gag	Ni II-277	rII02 giš gigir
320 4422	giš ir		327 5015	giš e ₂ -gigir
Ni II-060	rIII16'	giš ir	Ni I-08	rIV05D giš e ₂ -[
Ni II-195	I02'	[gi]š ir	Ni II-060	rIV03' []-e ₂ -gigir
Ni II-207	I04	[gi]š ir	Ni II-081	rII02' giš e ₂ -gigir
Ni U-29	rII09'	[] ir	Ni II-082	I02 giš e ₂ -gigir
321 4428	giš ENxKAR ₂		Ni II-095	rI02 [] e ₂ -gigir
Ni II-195	I03'	[gi]š ENxKAR ₂	Ni II-146	rII14 giš e ₂ -gigir
Ni U-29	rIII11'	[] ENxKAR ₂	Ni II-175	I02 giš e ₂ -g[igir] :: giš e ₂ -[
322 4428a	giš gag-ENxKAR ₂		Ni II-187	rII04' [gi]š e ₂ -gigir
Ni II-114	rII01	giš NI-ENxKAR ₂	Ni II-195	I09' [gi]š e ₂ -gigir
Ni II-187	rII01'	[gi]š g[ag]-EN[xKAR ₂]	Ni II-277	rII03 giš e ₂ -gi[gir]
Ni II-195	I04'	[gi]š gag-ENxKAR ₂	328 5016	giš e ₂ -usan ₃ -gigir
Ni U-29	rII12'	[ga]g-ENxKAR ₂	Ni I-08	rIV06D giš e ₂ -us[an ₃ -
323 4429	giš šibir		Ni II-060	rIV04' []-e ₂ -usan ₃ -gigir
Ni II-114	rII02	giš šibir	Ni II-081	rII03 giš e ₂ -usan ₃ -gigir
Ni II-195	I05'	[gi]š šibir	Ni II-082	I03 giš e ₂ -usan ₃ -gigir
Ni II-207	I05	[] šibir	Ni II-095	rI03 [] e ₂ -usan ₃ -gigir
Ni II-241	rI01'	[g]iš š[ibir]	Ni II-146	rII15 giš e ₂ -usan ₃ -gigir
Ni U-29	rII13'	[] šibir	Ni II-175	I03 giš usan ₃ -gi[gir]:: giš usan ₃ -[
			Ni II-187	rII05' [] e ₂ -usan ₃ -gigir
			Ni II-195	I10' [] e ₂ -usan ₃ -gigir
			329	giš SUM-KI-A-gigir
			Ni I-08	rIV07D giš SUM-KI-A-[
			Ni II-060	rIV05' [SU]M-KI-A-gigir

Ni II-081	rII04'	giš KI-A-gigir	Ni II-060	rIV09'	[gi]š su-lum-PA-gigir
Ni II-082	I04	giš SUM-KI-A-gigir	Ni II-082	I08	giš su-lum-mar-[
Ni II-095	rI04	giš [SU]M?-KI-[-gi]gir	Ni II-095	rI09	[] su-mar-lu[m]-gigir
Ni II-146	rII1'	giš KI-A-gigir	Ni II-146	rII21	[] su-lum-mar-gigir
Ni II-175	I04	giš SUM-KI-A-gigir :: giš	Ni II-153	rII04'	giš su-lu-mar-gigir
		SU[M-	Ni II-175	I08	giš su-mar-[
Ni II-195	I11'	[SU]M-KI-A-gigir	Ni P-04	BI05'	giš [-m]ar-g[igir]
330 5042		giš kun-gigir	335 5052		giš sag-kul-gigir
Ni I-08	rIV08D	giš ku[n-	Ni I-01	rI03'	giš KA-[
Ni II-081	rII05'	giš [k]un-gigir	Ni II-060	rIV10'	giš sag-kul-gigir
Ni II-082	I05	giš kun-gigir	Ni II-082	I09	giš sag-BAL-gigir
Ni II-095	rI05	giš GIR ₂ -gigir	Ni II-095	rI10	giš [
Ni II-146	rII17	giš ku[n]-gigir	Ni II-146	rII22	[] sag-kul-gigir
Ni II-153	rII01'	g[iš] k[un?-	Ni II-153	rII06'	giš sag-kul-gigir
Ni II-175	I05	giš kun-gigir	Ni II-175	I09	giš sag-ku[l-
Ni II-195	I12'	[ku]n-gigir	Ni P-04	BI06'	giš sag-kul-[
Ni P-04	BI03'	giš kun-gi[gir]			
331 5056		giš GUL-gigir	336 5040		giš sag-dur ₂ -gigir
Ni I-01	rI04'	giš G[UL-	Ni I-01	rI03'	giš KA-[
Ni II-060	rIV06'	giš GUL-gigir	Ni I-08	rIV14'	giš sag-du[r ₂]-g[igir]
Ni II-081	rII06'	[G]UL-gigir	Ni II-060	rIV11'	[s]ag-dur ₂ -gigir
Ni II-082	I11	giš GUL-gi[gir]	Ni II-082	I10	giš sag-dur ₂ -gigir
Ni II-095	rI06	[gi]š GUL-gigir	Ni II-095	rI11	giš x [] dur ₂ -gigir
Ni II-146	rII18	[gi]š GUL-gigir	Ni II-153	rII05'	giš sag-LAGAB-gigir
			Ni P-04	BI07'	giš sag-dur ₂ -[
331a		giš ŠIBIR-en-DU-[	337 5034		giš gir ₃ -gub-gigir
Ni P-04	BI01'	giš ŠIBIR-en-DU-[	Ni I-01	rI05'	giš gi[r ₃
332 5023		giš sahar-gi-gigir	Ni I-08	rIV15'	giš gir ₃ -gub-gigir
Ni I-02	I04'	[g]i ₄ -gigir	Ni II-060	rIV12'	[g]ir ₃ -gub-gigir
Ni II-060	rIV07'	[gi]š sahar-gi-gigir	Ni II-082	I12	giš g[ir ₃ -
Ni II-081	rII07'	[-g]i-gi[gir]	Ni II-095	rI12	giš gi[r ₃ -gu]b-gigir
Ni II-082	I06	giš sahar-g[i ₄]-gigir	Ni II-153	rII07'	giš gir ₃ -gub-gigir
Ni II-095	rI07	[gi]š sahar-gi-gigir			
Ni II-146	rII19	[] sahar-gi-gigir	338 5045		giš mud-gigir
Ni II-153	rII02'	giš sahar-gi ₄-[	Ni I-01	rI06'	giš mud-[
Ni II-175	I06	giš sahar-gi ₄ -gigir	Ni I-02	I08'	[]-mud-gigir
Ni II-195	I13'	[-g]i-gigir	Ni I-08	rIV16'	giš mu[d]-gi[gir]
Ni P-04	BI02'	giš sahar-gi-gi[gir]	Ni II-005	I01'	[m]ud-gig[ir]
333 5047		giš su-din-gigir	Ni II-060	rIV13'	[mu]d-gigir
Ni I-01	rI01'	[g]iš s[u-	Ni II-095	rI13	giš mu[d
Ni I-02	I10'	[] su-din-gigir	Ni II-146	rIII03	[m]ud-gigir
Ni II-060	rIV08'	[gi]š su-din-gigir	Ni II-153	rII08'	[gi]š mud-gigir
Ni II-082	I07	giš su-din-gi[gir]	Ni II-241	rI10'	giš mud-[
Ni II-095	rI08	[gi]š su-din-gigir			
Ni II-146	rII20	[] su-din-gigir	339		giš gag-mud-gigir
Ni II-153	rII03'	giš su-din-gi[gir]	Ni I-01	rI07'	giš gag-mud-[
Ni II-175	I07	giš su-din-gigir	Ni I-08	rIV17'	giš gag-mud-gi[gir]
Ni P-04	BI04'	giš su-din-gi[gir]	Ni II-005	I02'	giš gag-mud-gigir
334		giš su-lum-mar-gigir	Ni II-095	rI14	gi[š] mu[d-
Ni I-01	rI02'	giš su-l[um	Ni II-146	rIII04	[]-mud-gigir
			Ni II-153	rII09'	[] gag-mud-gigir
			Ni II-241	rI11'	giš gag-m[ud-

340	5049	giš šudul-gigir	Ni I-08	rIV25'	giš [us]an ₃
	Ni I-01	rI10' giš šu[dul-	Ni II-081	rIII01'	[] usan ₃
	Ni I-02	I12' [] šudul-gigir	Ni II-095	rII01	giš u[san ₃]
	Ni I-08	rIV18' giš šudul ₄ -gi[gir]	Ni II-146	rIII12	[] usan ₃
	Ni II-005	I05' giš šudul ₄ -gigir	Ni II-241	rI17'	giš u[san ₃]
	Ni II-095	rI15 gi[š ni]r?-gigir			
	Ni II-146	rIII05 [šu]dul-gi[gir]	348	giš usan ₃	
			Ni II-146	rIII13	[] usan ₃
			Ni II-241	rI18'	giš u[san ₃]
341	5050	giš gag-šudul-gigir	349	giš eme-usan ₃	
	Ni I-01	rI11' giš gag-[	Ni II-146	rIII14	[] eme-usan ₃
	Ni I-08	rIV19' giš gag-šudul ₄-[	Ni II-241	rI19'	giš eme?-u[san ₃]
	Ni II-005	I06' giš gag-šudul ₄ -gi[gir]	Ni II-262	rII01'	[em]e-[
	Ni II-095	rI16 giš gag-nir-gigir	Ni P-06	BIII03'	giš [em]e-us[an ₃]
	Ni II-146	rIII06 [] gag-šudul-[
342	5054	giš umbin-gigir	350	giš ama-usan ₃	
	Ni I-01	rI08' giš umbin-[	Ni I-08	rIV26'	giš [us]an ₃
	Ni I-08	rIV20' giš umbin-[	Ni II-081	rIII02'	giš ama-usan ₃
	Ni II-005	I03' giš umbin-gigir	Ni II-095	rII02	giš ama-[u]san ₃
	Ni II-095	rI17 giš umbin-gigir	Ni II-146	rIII15	[] ama-usan ₃
	Ni II-146	rIII07 [um]bin-gigir	Ni II-241	rI20'	giš ama-[
	Ni II-241	rI12' giš umbin-gi[gir]	Ni II-262	rII02'	giš ama-u[san ₃]
	Ni P-04	BI15' [umb]in-[	Ni P-06	BIII04'	giš ama-us[an ₃]
343	5055	giš gag-umbin-gigir	351	5059	giš gag-sal ₄
	Ni I-01	rI09' giš gag-um[bin	Ni II-081	rIII03'	giš gag-sal ₄
	Ni I-08	rIV21' giš gag-umbin-[	Ni II-095	rII03	giš gag-sal ₄
	Ni II-005	I04' giš gag-umbin-gigir	Ni II-146	rIII16	[] gag-sal ₄
	Ni II-095	rI18 giš gag-umbin-gigir	Ni II-262	rII03'	giš gag-sa[l ₄]
	Ni II-146	rIII08 [um]bin-gigir	Ni II-277	rIII01	[] gag-sa[l ₄]
	Ni II-241	rI13' giš gag-umbin-gi[gir]	Ni P-06	BIII05'	giš gag-sa[l ₄]
	Ni P-04	BI16' [] gag-umbin-[
344	5025	giš si-gigir	352	giš za-ra-gag-sal ₄	
	Ni I-01	rI12' giš s[i]?	Ni II-095	rII04	giš [z]a-[r]a-ga[g-
	Ni I-08	rIV22' giš si-AŠ ₂-[	Ni II-146	rIII17	[] za-ra-gag-sal ₄
	Ni II-005	I07' giš GUR-[	Ni II-262	rII04'	giš za-gag-sa[l ₄]
	Ni II-095	rI19 giš s[i-	Ni II-277	rIII02	[] za-ra-gag-sal ₄
	Ni II-146	rIII09 [] si-[	Ni P-06	BIII07'	giš za-[
	Ni II-241	rI14' giš si-gigir			
345		giš gaba-gigir	353	giš umbin-gag-sal ₄	
	Ni I-02	I05' [g]ab-šu ₂ -gigir	Ni II-095	rII05	giš [u]mbin-ga[g-
	Ni I-08	rIV23' giš x-gaba-[	Ni II-146	rIII18	[]-sal ₄
	Ni II-005	I08' [gi]š gaba-[	Ni II-262	rII05'	giš umbin-gag-sal ₄
	Ni II-146	rIII10 [] gaba-gigir	Ni II-277	rIII03	giš umbin-gag-sal ₄
	Ni II-241	rI15' giš gaba-gigir	Ni P-06	BIII08'	giš umbin-[
346	5021	giš gaba-gal ₂ -gigir	354	giš šid-du ₃ -gar	
	Ni I-08	rIV24' giš ga[ba- -gig]ir	Ni II-095	rII06	giš šid-du ₃ -[
	Ni II-005	I09' [] gaba-gal ₂-[	Ni II-241	rII01'	[g]iš ši[d-d]u ₃ -gar
	Ni II-146	rIII11 [] gaba-gal ₂ -gigir	Ni II-262	rII06'	giš šid-d[u ₁₀]-r[a?]
	Ni II-241	rI16' giš gaba-gal ₂ -gigir	Ni II-277	rIII04	gi[š š]id-du ₁₀ -gar-ra
			Ni P-02	CI01'	[] š[id-
			Ni P-04	BI18'	[] šid-d[u ₃ ?]-[
347		giš usan ₃	Ni P-06	BIII09'	giš šid-du ₁₀ -[

355 5068	giš šid-du ₃ -bar	363 5085	giš gir ₃ -gub-mar-gid ₂ -da
Ni I-05	rI02' giš šid-[-	Ni I-05	rI09' giš gir ₃ -gub-mar-gi[d ₂ -
Ni II-095	rII07 giš ši[d]-du ₃ -bar-[-	Ni I-12	I04' giš gir ₃ -gub-mar-gid ₂ -d[a]
Ni II-241	rII02' giš šid-du ₃ -bar	Ni II-241	rII09' giš gi[r ₃]-gub-mar-gid ₂ -da
Ni II-262	rII07' giš šid-d[u ₁₀]-bar	364	giš mud-mar-gid ₂ -da
Ni II-277	rIII05 gi[š š]id-du ₁₀ -bar-ra	Ni I-05	rI10' giš mud-mar-g[id ₂ -
Ni P-02	CI02' [] šid-[-	Ni I-12	I05' giš mud-mar-gid ₂ -d[a]
Ni P-06	BIII10' giš šid-du ₁₀ -[-	Ni II-095	rII16 giš mud-mar-gid ₂ -da
356 5070	giš šid-du ₃ -a-ša ₃	Ni II-221	rI01 giš mu[d-
Ni I-05	rI03' giš šid-d[u ₁₀ -	Ni II-241	rII10' giš mud-mar-gid ₂ -da
Ni II-095	rII08 giš šid-du ₃ -a-ša ₃	365	giš gag-mud-mar-gid ₂ -da
Ni II-241	rII03' giš šid-du ₃ -a-ša ₃	Ni I-05	rI11' giš gag-mu[d-
Ni II-277	rIII06 giš ši[d-d]u ₁₀ -[-š]a ₃ -ga	Ni I-12	I06' giš gag-mud-mar-gid ₂ -d[a]
Ni P-02	CI03' [gi]š ši[d-	Ni II-095	rII17 []-mud-mar-gid ₂ -da
Ni P-06	BIII11' giš šid-du ₁₀ -[-	Ni II-221	rI02 giš gag-m[u-d-
357 5073	giš mar-gid ₂ -da	Ni II-241	rII11' [gi]š gag-HU-mar-gid ₂ -da
Ni I-05	rI04' giš mar-gi[d ₂ -	366	giš šudul ₄ -mar-gid ₂ -da
Ni II-095	rII09 giš mar-gid ₂ -d[a]	Ni I-05	rI12' giš š[udul ₄]-mar-g[id ₂ -
Ni II-241	rII04' giš mar-gid ₂ -da	Ni I-12	I07' giš URšeššig-mar-gid ₂ -d[a]
Ni II-277	rIII07 giš mar-gid ₂ -da	Ni II-230	rI02' giš šudul ₄ -[-
Ni P-06	BIII12' giš mar-gid ₂ -[-	Ni II-241	rII12' [] UR-mar-gid ₂ -da]
357a	giš mar-gid ₂ -[da-	367	giš gag-šudul ₄ -mar-gid ₂ -da
Ni P-06	BIII13' giš mar-gid ₂ -[-	Ni I-05	rI13' giš gag-š[udul ₄ -
358	giš gu-za-mar-gid ₂ -da	Ni I-12	I08' giš gag-URšeššig-mar-gid ₂ -
Ni I-05	rI05' giš gu-za-mar-gid ₂ -d[a]		d[a]
Ni II-095	rII10 giš g[u-]-gid ₂ -da	Ni II-230	rI03' giš gag-U[Ršeššig-
Ni II-241	rII05' giš gu-za-mar-gid ₂ -da	Ni II-241	rII13' giš []-UR-mar-gid ₂ -d[a]
359	giš za-ra-mar-gid ₂ -da	368 5092	giš umbin-mar-gid ₂ -da
Ni I-05	rI06' giš za-ra-mar-gid ₂ -d[a]	Ni I-05	rI14' giš umb[in-
Ni I-12	I01' [] za-r[a]-ma[r-	Ni I-12	I09' giš umbin-ma[r-
Ni II-095	rII11 giš DU ₃ -mar-gid ₂ -da	Ni II-230	rI04' giš um[bin-
Ni II-221	rI03 giš za-[-	Ni II-241	rII14' giš [um]bin-mar-gid ₂ -da
Ni IV-22	01 [] za-ra-mar-gid ₂ -da	369 5095g	giš gag-umbin-mar-gid ₂ -da
360	giš gag-za-ra-mar-gid ₂ -da	Ni I-05	rI15' giš gag-um[bin-
Ni I-12	I02' giš gag-za-r[a]-mar-g[id ₂ -	Ni II-241	rII15' giš gag-umbin-mar-gid ₂ -da
Ni II-095	rII12 giš gag-za-mar-gid ₂ -da	370 5090	giš u ₄ -sakar-mar-gid ₂ -da
Ni II-241	rII07' giš gag-z[a-r]a-ma[r-	Ni I-01	rI01 giš u ₄ -sakar-mar-[-
Ni IV-22	02 [gi]š gag-za-ra-mar-gid ₂ -da	Ni I-05	rI16' giš u ₄ -sa[kar-
361	giš sag-kul-mar-gid ₂ -da	371 5091	giš gag-u ₄ -sakar-mar-gid ₂ -da
Ni I-05	rI07' giš KA-kul-mar-gid ₂ -d[a]	Ni I-01	rII02 giš gag-u ₄ -sakar-mar-g[id ₂ -
Ni I-12	I03' giš KA-kul-mar-gi[d ₂ -	Ni I-08	rV10" [sak]ar-mar-gid ₂ -da
Ni II-095	rII13 giš sag-ZI-X-X-gid ₂	372 5088	giš nam-ha-ru-um-mar-gid ₂ -da
Ni II-241	rII08' giš sag-kul-mar-gid ₂ -da	Ni I-01	rII03 giš nam-ha-ru-um-mar-gid ₂ -
362	giš sag-dur ₂ -mar-gid ₂ -da		da
Ni I-05	rI08' giš sag-dur ₂ -mar-gid ₂ -d[a]	Ni I-08	rV11" [-h]a-ru-um \ [gi]d ₂ -da
		Ni II-241	rII16' giš ZI-ha-ru-um-um-mar-

		gid ₂ -da			Ni II-083	rI05	giš ig-di[b]
					Ni II-093	rI05	giš ig-di[b]
373	5083	giš en ₃ -dur-mar-gid ₂ -da			Ni II-095	rIII06	giš ig-dib
	Ni I-01	rII04	giš en ₃ -dur-mar-gid ₂ -da		Ni II-137	rI06	[i]g-dib-ba
	Ni I-08	rV12"	[]-dur \ []-da		Ni II-170	rI04'	giš ig-dib-ba
	Ni II-241	rII17'	giš en ₃ -dur-mar-gid ₂ -da		Ni II-173	rI03'	giš ig-dib-ba
374	5199	giš ig			380	5244	giš ig-suh ₄
	Ni I-01	rII05	giš ig		Ni I-10	I04'C	[i]g-suh ₄
	Ni I-08	rV13"	[] ig		Ni II-093	rI06	giš ig-suh ₄
	Ni II-083	rI01	giš i[g		Ni II-095	rIII07	giš ig-URU
	Ni II-093	rI01	giš ig		Ni II-137	rI07	[]-suh ₄
	Ni II-095	rIII02	giš ig		Ni II-170	rI05'	giš ig-suh ₄
	Ni II-137	rI01	giš i[g]		Ni II-173	rI04'	giš ig-suh ₄
	Ni II-241	rII18'	giš ig		Ni U-17	I01'	[g]iš [i]g-[s]uh ₄
375	5200	giš ig-gal			380a	5236	giš ig-pa-pah
	Ni I-02	II01'	[i]g-dagal		Ni II-137	rI12	giš ig-pa-pa[h]
	Ni II-083	rI02	giš ig-gal		381	5218	giš ig-maš-tab-ba
	Ni II-093	rI02	giš ig-gal		Ni I-10	I05'C	[i]g-maš-tab-b[a]
	Ni II-095	rIII03	giš ig-gal		Ni II-048	rI01'	[] ig-maš-[
	Ni II-137	rI02	giš ig-[ga]		Ni II-093	rI07	giš ig-maš-tab-ba
	Ni II-170	rI01'	gi[š i]g-ga[l]		Ni II-095	rIII08	giš ig-maš-tab-[b]a
	Ni II-241	rII19'	giš ig-gal		Ni II-137	rI13	giš ig-maš-tab-ba
	Ni U-12	I01'	[i]g-g[al		Ni II-173	rI05'	giš ig-maš-tab-ba
376	5233	giš ig-i ₃			Ni II-241	rIII02'	[] ig-maš-tab-ba
	Ni I-02	II02'	g[iš i]g-i ₃		Ni U-17	I02'	giš ig-tab-ba
	Ni II-093	rI03	giš ig-i ₃		381a		giš ig-ba-ša ₃ -ga
	Ni II-095	rIII04	giš ig-i ₃		Ni II-137	rI14	giš ig-ba-ša ₃ -ga
	Ni II-137	rI03	giš ig-i ₃		382	5251a	giš ig-u ₃ -ma
	Ni II-170	rI02'	giš ig-i ₃		Ni I-10	I06'C	[i]g-u ₃ -m[a]
	Ni U-12	I02'	[i]g-i ₃		Ni II-048	rI04'	giš ig-u ₃ ?-ma?
377	5234	giš ig-i ₃ -šeš ₂			Ni II-093	rI08	giš ig-u ₃ -ma
	Ni I-02	II03'	giš [i]g-šeš ₂		Ni II-095	rIII09	giš ig-u ₃ -ma
	Ni II-083	rI03	giš ig-LAM		Ni II-137	rI08	[]-u ₃ -ma
	Ni II-137	rI05	[i]g-šeš ₂ -na		Ni II-170	rI06'	giš ig-u ₃ -ma
	Ni II-173	rI02'	giš ig-šeš ₂		Ni II-173	rI06'	giš ig-u ₃ -ma-a
	Ni U-12	I03'	[i]g-i ₃ -š[eš ₂]		Ni II-241	rIII03'	[] ig-u ₃ -ma
378	5210	giš ig-li			Ni U-17	I04'	giš ig-u ₃ -ma
	Ni I-02	II04'	giš i[g]-li		383	5206	giš ig-ul-la
	Ni I-10	I02'C	[i]g-l[i]		Ni I-10	I08'C	[i]g-ul-[]-a
	Ni II-083	rI04	giš ig-l[i]		Ni II-093	rI09	giš ig-u ₃ -BU-a
	Ni II-093	rI04	giš ig-li		Ni II-170	rI07'	giš ig-ul-la-a
	Ni II-095	rIII05	giš ig-li		Ni II-173	rI07'	giš ig-ul-l[a
	Ni II-137	rI04	[g]iš ig-li		384	5239	giš ig-ze ₂ -na
	Ni II-170	rI03'	giš ig-li		Ni I-10	I09'B+	[]-na
	Ni II-173	rI01'	giš ig-li		Ni II-093	rI10	[gi]š ig-[z]e ₂ -na
	Ni U-12	I04'	[]-l[i]		Ni II-170	rI08'	giš ig-ze ₂ -na
379	5207	giš ig-dib			Ni II-173	rI08'	giš ig-ze ₂ -na
	Ni I-02	II05'	giš ig-[d]ib ₂ -MA		Ni II-241	rIII05'	[]-n]a
	Ni I-10	I03'C	[i]g-dib-ba				

Ni U-12	I05'	[-z]e ₂ -n[a	Ni II-093	rI17	giš []-du ₃ -ig
385 5237	giš ig-mi-ri ₂ -za		Ni II-137	rI20	giš bar-du ₃ -ig
Ni I-02	II06'	giš ig-m[i- -z]a	Ni II-173	rI15'	giš [b]ar-du ₃ -i[g]
Ni I-10	I10'B+	giš ig-mi-[]-za	Ni II-186	rI03'	giš bar-du ₃ -i[g]
Ni II-093	rI11	[] ig-[]-ri ₂ -z[a]	Ni II-227	I04	[gi]š bar-du ₃ -ig
Ni II-095	rIII10	giš [i]g-mi-GIR ₂ -za	392 5255	giš dun ₃ -la ₂ -ig	
Ni II-170	rI09'	[i]g-mi-ri ₂ -za	Ni I-02	rI02'	giš du-[
Ni II-173	rI09'	giš ig-mi-r[i ₂ -z]a	Ni I-10	I17'A+	[] dun ₃ -la ₂ -[
Ni II-241	rIII04'	[]-m[i-r]i ₂ -za	Ni II-093	rI18	giš du[n ₃]-la ₂ -ig
386 5250	giš ig-ka ₂ -tilla ₂		Ni II-137	rI21	giš dun ₃ -ig
Ni I-10	I11'B+	giš ig-ka ₂-[	Ni II-173	rI16'	giš dun ₃ -la ₂ -ig
Ni II-048	rI06'	[i]g-k[a ₂]-til[la ₂]	Ni II-186	rI04'	giš dun ₃ -la ₂ -ig
Ni II-093	rI12	giš ig-[k]a ₂ -tilla ₂	Ni II-227	I05	[gi]š dun ₃ -la ₂ -ig
Ni II-095	rIII11	[i]g-E ₂ -na	Ni II-241	rIII13'	[] dun ₃ -la ₂ -ig
Ni II-137	rI15	[] ig-ka ₂ -tilla ₂	393	giš ir-ig	
Ni II-173	rI10'	giš ig-ka ₂ -tilla ₂	Ni I-10	I18'A+	[] ir-[
Ni II-241	rIII07'	[]-AN	Ni II-093	rI19	giš [] i[g]
387 5247	giš ig-ka ₂ -e ₂ -gal-la		Ni II-137	rI22	giš ir-i[g]
Ni I-10	I12'B+	giš ig-e ₂ -[]-la	Ni II-186	rI05'	giš ir-ig
Ni II-048	rI05'	giš ig-ka ₂ -gal?-x	Ni II-227	I06	[gi]š ir-ig
Ni II-093	rI13	giš [k]a ₂ ?-e ₂ -gal	Ni II-241	rIII14'	giš ir-ig
Ni II-137	rI16	[] ig-e ₂ -g[al-l]a	394 5267	giš suhub ₄ -ig	
Ni II-173	rI11'	giš ig-ig-e ₂ -g[al-l]a	Ni I-02	rI05'	giš suhub ₄ -i[g]
388 5252	giš suku ₅ -ig		Ni I-10	I19'A+	[] su[hub ₄ -
Ni I-10	I13'B+	[gi]š suku ₅ -[i]g	Ni II-093	rII01	giš suh[ub ₄ -i]g
Ni II-093	rI14	giš suku ₅ -ig	Ni II-137	rI23	giš ŠU-DI-i[g]
Ni II-137	rI17	[gi]š su[ku ₅ -i]g	Ni II-173	rI17'	giš RU [?] -DI [?] -A[Š [?]]
Ni II-173	rI12'	giš [s]uku ₅ -ig	Ni II-186	rI06'	giš su[hub ₄]-ig
Ni II-227	I01	[gi]š suku ₅ -ig	Ni II-227	I07	[gi]š su[hub ₄]
Ni II-230	rII01'	[su]ku ₅ -i[g]	Ni II-241	rIII15'	giš suhub ₄
389 5253	giš u ₃ -ig		394a 5267	giš ŠU-DI	
Ni II-093	rI15	giš u ₃ -ig	Ni II-137	rI24	giš ŠU-D[I]
Ni II-137	rI18	[g]iš u ₃ -ig	394b 5268	giš šu-ga	
Ni II-173	rI13'	giš u ₃ -ig	Ni II-173	rI18'	[] šu-g[a]
Ni II-186	rI01'	giš u ₃-[	395 5264	giš nu-kuš ₂ -u ₃	
Ni II-227	I02	[g]iš u ₃ -ig	Ni I-02	rI06'	giš nu-ku[š ₂
Ni II-230	rII02'	[] u ₃ -ig	Ni I-10	I20'A+	[] nu-ku[š ₂ -
390 5254	giš u ₄ -sakar-ig		Ni II-093	rII02	giš nu-ku[š ₂]-u ₃
Ni I-02	rI03'	giš u ₃ -sakar-i[g]	Ni II-137	rI25	giš nu-kuš ₂ -u ₃
Ni I-10	I15'A+	[] u ₄ -[-i]g	Ni II-173	rI19'	[] nu-kuš ₂ -u ₃
Ni II-093	rI16	giš []-sakar-ig	Ni II-186	rI07'	giš nu-k[uš ₂]-u ₃
Ni II-137	rI19	[gi]š u ₄ -sakar-i[g]	Ni II-241	rIII16'	giš nu-kuš ₂ -u ₃
Ni II-173	rI14'	giš u ₄ -saka[r]-ig	396 5265	giš nu-kuš ₂ -u ₃ -an-na	
Ni II-186	rI02'	giš u ₃ -sakar-[	Ni I-02	rI07'	giš nu-kuš ₂ -a[n-n]a-[
Ni II-227	I03	[gi]š u ₃ -sakar-ig	Ni I-10	I21'A+	[] nu-kuš ₂ -u ₃ -[
Ni II-230	rII03'	[] u ₄ -sakar-ig	Ni II-093	rII03	[]-kuš ₂ -[]-an-na
391 5259	giš bar-du ₃ -ig		Ni II-137	rI26	giš nu-kuš ₂ -u ₃ -[
Ni I-10	I16'A+	[] bar-du ₃-[	Ni II-173	rI20'	[]-kuš ₂ -u ₃ -a[n-

Ni II-186	rI08'	[gi]š []-u ₃ -an-na	Ni I-02	rI14'	[]-e ₃ -a
Ni II-241	rIII17'	giš nu-kuš ₂ -u ₃ -an-na	Ni I-05	rII03'	giš si-gar \ gu ₂ -e ₃ -a
397 5266		giš nu-kuš ₂ -u ₃ -ki-ta	Ni I-10	I28'D	[] si-gar-[]
Ni I-10	I22'A+	[n]u-kuš ₂ -u ₃ -ki-t[a]	Ni II-095	rIV08	[]-a
Ni II-093	rII04	[k]uš ₂ -[traces]	Ni II-170	rII03'	giš si-LAGAB-X
Ni II-137	rI27	giš nu-kuš ₂ -u ₃ -k[i-	Ni II-173	rI28'	giš si-g[ar-g]u ₂ -e ₃ -a
Ni II-173	rI21'	[]-kuš ₂ -u ₃ -[]	Ni P-06	CI07'	giš []-gu ₂ -e ₃ -a
Ni II-241	rIII18'	giš []-kuš ₂ -u ₃ -ki-ta	405 5286		giš mud
Ni P-06	CI03'	giš n[u- -k]i-ta	Ni I-05	rII04'	giš mud
398 5270		giš sag-kul	Ni I-10	I29'D	[] mu[d]
Ni I-02	rI08'	giš sag-kul	Ni II-137	rII02	giš mu[d]
Ni I-10	I23'A+	[] sag-kul-[]	Ni II-170	rII04'	giš mu[d]
Ni II-093	rII05	giš sag-kul	Ni II-173	rI29'	giš [m]ud
Ni II-137	rI28	giš sa[g-ku]l	Ni II-232	rI01	giš mu[d]
Ni II-173	rI22'	[] sa[g-	Ni P-06	CI08'	giš [m]ud
Ni II-241	rIII19'	g[iš -B]AL	406 5287		giš gag-mud
Ni P-06	CI04'	giš sag-kul	Ni I-05	rII05'	giš gag-mud
399 5271		giš sag-kul-nim-ma	Ni I-10	I30'D	[] gag-mu[d]
Ni I-02	rI09'	giš sag-ku[l]-ni[[m]-m[a]	Ni II-137	rII03	giš gag-mu[d]
Ni I-10	I24'A+	[] sag-kul-nim-ma	Ni II-170	rII05'	giš gag-m[ud]
Ni II-093	rII06	gi[š] sa[g]-ku[l]-nim-m[a]	Ni II-173	rI30'	giš gag-mud
Ni II-137	rI29	[] s[ag- -ni]m-m[a]	Ni II-232	rI02	giš gag-mud
Ni P-06	CI05'	giš sag-kul-nim-ma	Ni P-06	CI09'	giš gag-m[ud]
400 5275		giš eš ₂ -sag-kul	407		giš šerim(TAG)
Ni I-02	rI10'	giš eš ₂ -sag-kul	Ni I-05	rII06'	giš [{traces}
401		giš sag-kul-la ₂ -a	Ni I-10	I31'D	[] T[AG?]
Ni I-02	rI11'	[] TUN ₃ -la ₂	Ni II-093	rII13'	giš T[AG]
Ni I-10	I25'A+	[] sag-kul-la ₂ -a	Ni II-137	rII04	giš []
Ni II-137	rI30	[-ku]l-la ₂	Ni II-170	rII06'	giš x []
402 5294		giš si-gar	Ni II-173	rI31'	giš x
Ni I-02	rI12'	[] si-gar	Ni II-232	rI03	giš TAG!
Ni I-05	rII01'	giš s[i-	Ni P-06	CI10'	giš []
Ni I-10	I26'A+	[] si-ga[r]	408 5300		giš TAG-TUG ₂
Ni II-093	rII07	[]-gar	Ni I-05	rII07'	g[iš
Ni II-137	rI31	[]-gar	Ni I-10	I32'D	[TA]G?-[]
Ni II-170	rII01'	giš si-[]	Ni II-093	rII14	[T]AG-T[UG ₂]
Ni II-173	rI26'	giš s[i-g]ar	Ni II-137	rII05	giš TAG-T[UG ₂]
Ni P-06	CI06'	giš si-gar	Ni II-170	rII07'	giš T[AG
403 5295		giš gag-si-gar	Ni II-173	rI32'	giš GA-AŠ
Ni I-02	rI13'	[] si-gar	Ni II-232	rI04	giš TAG-ŠU!-ma
Ni I-05	rII02'	giš gag-si-gar	Ni II-241	rIV01'	[] TA[G-
Ni I-10	I27'D	[] gag-[]	Ni P-06	CI11'	giš TAG-[]
Ni II-093	rII08	[-s]i-gar	409 5307a		giš kur-ra
Ni II-095	rIV07	[]-gar	Ni I-05	rII08'	[k]ur-ra
Ni II-170	rII02'	giš gag-si-gar	Ni II-093	rII15	giš kur-r[a]
Ni II-173	rI27'	giš ga[g-s]i-gar	Ni II-137	rII06	giš kur-ra
404		giš si-gar-gu ₂ -e ₃ -a	Ni II-170	rII08'	giš k[ur
			Ni II-173	rII01	giš kur-ra
			Ni II-232	rI05	[] kur-ra
			Ni II-241	rIV02'	[] kur-ra

410	5308	giš nu-ra	Ni II-173	rII09	giš a ₂ -šu-du ₇ -tug ₂ -ga
	Ni I-05	rII09' [gi]š nu-ra	Ni II-241	rIV10'	[] da-[
	Ni II-093	rII16 giš nu-[r]a	418	6012	giš ga-rig ₂
	Ni II-137	rII07 giš nir?-ra		Ni I-05	rII17' giš ga-rig ₂
	Ni II-173	rII02 giš nu-ra		Ni II-093	rIII07 giš ga-rig ₂
	Ni II-241	rIV03' [] nu-ra		Ni II-137	rII17 giš ga-rig ₂
411	5314	giš il ₂ -il ₂		Ni II-173	rII10 giš ga-rig ₂
	Ni I-05	rII10' [] il ₂ -il ₂		Ni II-241	rIV11' [] ga-r[ig ₂]
	Ni II-093	rII17 giš i[l ₂]-il ₂	419	6013	giš ga-rig ₂ -sig ₂
	Ni II-137	rII08 giš UR ₂ -il ₂		Ni I-05	rII18' giš ga-rig ₂ -sig ₂
	Ni II-173	rII03 giš il ₂ -il ₂		Ni II-093	rIII08 giš g[a]-ri[g ₂]-si[g ₂]
	Ni II-241	rIV04' [] ALAN-i[l ₂ ?]		Ni II-137	rII18 giš ga-rig ₂ -sig ₂
	Ni II-280	I01' [] il ₂ -il ₂		Ni II-173	rII11 giš ga-rig ₂ -sig ₂
412	5312	giš bar-bar		Ni II-241	rIV12' [] ga-rig ₂ -sig ₂
	Ni I-05	rII11' [] bar-bar	420	6014	giš ga-rig ₂ -sag-du
	Ni II-093	rIII01 []-bar		Ni I-05	rII19' giš ga-rig ₂ \ sag-du
	Ni II-137	rII09 giš bar-bar		Ni II-093	rIII09 giš g[a]-r[ig ₂ -
	Ni II-173	rII04 giš NI-bar		Ni II-137	rII19 giš ga-rig ₂ -[sa]g-du
	Ni II-280	I02' [] bar-bar		Ni II-173	rII12 giš ga-rig ₂ -MUŠEN-du (sic)
413	5317	giš tug ₂ -tug ₂		Ni II-241	rIV13' [] ga-rig ₂ -sag-du
	Ni I-05	rII12' [gi]š tug ₂ -tug ₂	421	6015	giš ga-rig ₂ -pa-mušen
	Ni II-093	rIII02 []-tug ₂		Ni I-05	rII20' giš ga-rig ₂ \ pa-mu[šen
	Ni II-137	rII10 [gi]š tug ₂ -tug ₂		Ni II-093	rIII10 giš [
	Ni II-173	rII05 giš KU-KI		Ni II-137	rII20 giš ga-rig ₂ -p[a-muše]n-[n]a
	Ni II-280	I03' [] tug ₂ -tug ₂		Ni II-173	rII13 giš ga-rig ₂ -pa-mu[šen]
414	5319	giš nig ₂ -zu		Ni II-186	rII02' giš g[a-
	Ni I-05	rII13' giš nig ₂ -zu		Ni II-241	rIV14' [] ga-rig ₂ -pa-mušen-na
	Ni II-093	rIII03 traces	421a	6018	giš ga-rig ₂ -e ₂ -pa-na
	Ni II-137	rII11 [] nig ₂ -z[u]		Ni II-137	rII21 giš ga-rig ₂ -e ₂ -p[a-n]a
	Ni II-173	rII06 giš nig ₂ -zu	422	6019	giš bal
	Ni II-280	I04' []-zu		Ni I-05	rII21' giš bal
415	5318	giš nig ₂ -gi-na		Ni II-093	rIII11 giš ba[l]
	Ni I-05	rII14' giš ni[g ₂]-gi-na		Ni II-137	rII22 giš bal
	Ni II-093	rIII04 [ni]g ₂ -gi-na		Ni II-173	rII14 giš bal
	Ni II-137	rII12 [ni]g ₂ -g[i-		Ni II-186	rII03' giš b[al]
	Ni II-173	rII07 giš nig ₂ -gi-na		Ni II-241	rIV15' [] bal
	Ni II-280	I05' []-na		Ni II-268	I01 giš bal
416	5313	giš nig ₂ -menbulug ₂ (BULUG/BULUG)	423	6030	giš e ₂ -bal
	Ni I-05	rII15' giš nig ₂ -menbulug ₂		Ni I-05	rII22' giš e ₂ -bal
	Ni II-093	rIII05 giš n[ig ₂]-menbulug ₂		Ni II-093	rIII12 giš e ₂ -bal
	Ni II-137	rII15 giš menbulug ₂		Ni II-137	rII23 giš e ₂ -bal
	Ni II-173	rII08 giš menbulug ₂		Ni II-173	rII15 giš e ₂ -bal
417		giš a ₂ -šu-du ₇ -tug ₂ -ga		Ni II-186	rII04' giš e ₂ -b[al]
	Ni I-05	rII16' giš a ₂ -šu-du ₇ -tug ₂ -ga		Ni II-241	rIV16' [] e ₂ -bal
	Ni II-093	rIII06 giš a ₂ -šu-du ₇ -x-ga		Ni II-251	rI01' []-ba[l]
	Ni II-137	rII16 giš a ₂ -šu-du ₇ -tug ₂ -ga		Ni II-268	I02 giš e ₂ -bal
			424	6026	giš sag-bal

Ni I-10	II03'	giš sa[g-	Ni I-10	II11'	[] BU
Ni II-093	rIII13	giš sag-bal	Ni II-137	rII32	giš BU
Ni II-137	rII24	giš [s]ag-bal	Ni II-173	rII24	giš BU
Ni II-173	rII16	giš sag-bal	Ni II-232	rII03	[B]U
Ni II-186	rII05'	giš sag-b[al]	Ni U-13	I04'	[gi]š BU
Ni II-241	rIV17'	[] X-bal	Ni U-26	I04'	[B]U
Ni II-251	rI02'	[]-bal			
424a	giš BAR?-bal		432 6084	giš BU	
Ni II-137	rII25	giš BAR?-bal	Ni I-10	II12'	[] B[U]
425 6028	giš me-te-bal		Ni II-022	01'	giš BU
Ni I-10	II04'	giš me-t[e-	Ni II-137	rII33	giš BU
Ni II-093	rIII14	giš me-te-bal	Ni II-173	rII25	giš BU
Ni II-137	rII26	giš me-te-bal	Ni II-224	I01	[g]iš BU
Ni II-173	rII17	giš me-te-bal	Ni II-232	rII04	[B]U
Ni II-241	rIV18'	[] X-bal	Ni U-26	I05'	[B]U
Ni II-251	rI03'	[]-te!-bal			
426 6043	giš LAGAB		433 6092	giš sahar-BU	
Ni II-093	rIII15	giš LAGAB	Ni I-10	II13'	[] sahar-[
Ni II-137	rII27	giš U LAGAB	Ni II-022	02'	giš sahar-BU
Ni II-251	rI04'	[] LAGAB	Ni II-173	rII26	g[iš s]ahar-BU
			Ni II-224	I02	giš sahar-BU
427 6044	giš LAGAB		Ni II-232	rII05	[B]U
Ni II-093	rIII16	giš LAGAB	Ni U-26	I06'	[B]U
Ni II-137	rII28	giš U LAGAB			
Ni II-173	rII19	giš L[AGAB]	434 6097	giš bu	
Ni II-251	rI05'	[] LAGAB	Ni I-10	II14'	[] gi-b[u]
			Ni II-022	03'	giš bu
428 6045	giš LAGAB		Ni II-173	rII27	giš gi-BU/BU
Ni II-093	rIII17	giš LAGAB	Ni II-224	I03	giš bu
Ni II-137	rII29	giš LAGAB			
Ni II-173	rII20	giš LA[GAB]	435 6098	giš bu- ^{gi} ma-an-sim	
Ni II-251	rI06'	[] LAGAB	Ni I-10	II15'	[] gi-bu- ^{gi} m[a]-an-sim
Ni U-13	I01'	[g]iš LAGAB	Ni II-173	rII28	giš gi- ^{gi} ma-a[n]-sim
Ni U-26	I01'	[LA]GAB	Ni II-224	I04	giš bu-ma-an-sim
429 6081	giš BU		435a	giš bu-ŠID	
Ni I-10	II09'	giš B[U]	Ni II-022	04'	giš bu-ŠID
Ni II-093	rIII18	[] BU			
Ni II-137	rII30	gi[š B]U	436 6108	giš rin ₂	
Ni II-232	rII01	[] BU	Ni I-10	II16'	[] rin ₂
Ni II-251	rI07'	[B]U	Ni II-022	05'	giš rin ₂
Ni U-13	I02'	giš BU	Ni II-173	rII29	giš [ri]n ₂
Ni U-26	I02'	[B]U	Ni II-224	I05	[] rin ₂
430 6082	giš BU		437 6110	giš rin ₂ -lib-lib-bi	
Ni I-10	II10'	[] B[U]	Ni I-10	II17'	[] rin ₂ -lib-lib-bi
Ni II-137	rII31	giš BU	Ni II-022	06'	giš rin ₂ -lib-lib-ba!
Ni II-232	rII02	[] BU	Ni II-173	rII30	giš [ri]n ₂ -[l]ib-[
Ni U-13	I03'	[gi]š BU	Ni II-224	I06	[] rin ₂ -lib-[li]b-[b]i
Ni U-26	I03'	[B]U			
431 6083	giš BU		438 6113	giš rin ₂ -1-gun	
			Ni I-10	II18'	[ri]n ₂ -1(AŠ)-gu-[
			Ni II-022	07'	giš rin ₂ -1(AŠ)-DA
			Ni II-173	rIII01	giš rin ₂ -gu[n]-na-AŠ

439	giš rin ₂ -ma-na			Ni I-06	rI04'	giš apin-[
Ni I-10	II19'	[	-n]a-[-	Ni II-125	I07	giš apin-gud-4-la ₂
Ni II-022	08'	giš rin ₂ -ma-na		Ni II-137	rIII02'	giš apin-g[ud-
Ni II-130	rI01'	giš rin ₂ -m[a-		Ni II-158	rII05'	giš apin-gud-[-
				Ni II-173	rIII10	giš apin-gud-4-la ₂
440 6116	giš e ₂ -rin ₂			449 5135	giš sag-apin	
Ni II-022	09'	giš e ₂ -rin ₂		Ni I-06	rI05'	giš sa[g-
Ni II-130	rI02'	giš e ₂ -r[in ₂]		Ni II-125	I08	giš sag-apin
Ni II-173	rIII02	giš e ₂ -rin ₂		Ni II-137	rIII03'	giš sag-ap[in]
Ni P-06	CH03'	giš e ₂ -[-		Ni II-158	rII06'	giš sag-a[pin]
				Ni II-173	rIII11	giš sag-apin
441 6115	giš dilim ₂ -rin ₂			450 5137	giš eme-apin	
Ni II-130	rI03'	giš dilim ₂ -rin ₂		Ni I-06	rI06'	giš e[me-
Ni II-173	rIII03	giš [di]lim ₂ -rin ₂		Ni II-125	I09	giš KA-apin
				Ni II-137	rIII04'	giš eme-apin
442 5110	giš apin			Ni II-158	rII07'	giš eme-apin
Ni II-022	10'	giš apin		Ni II-173	rIII12	giš eme-apin
Ni II-125	I01	giš ap[in]		Ni II-255	rI01'	[] em[e-
Ni II-173	rIII04	g[iš a]pin				
Ni P-06	CH04'	giš api[n]				
				451 5144	giš ka-šu ₂ -apin	
443 5116	giš apin-šu			Ni II-125	I10	giš ka-šu ₂ -apin
Ni II-022	11'	giš apin-šu		Ni II-137	rIII05'	giš ka-šu ₂ -apin
Ni II-125	I02	giš apin-š[u]		Ni II-158	rII08'	giš k[a-š]u ₂ -apin
Ni II-173	rIII05	gi[š a]pin-šu		Ni II-173	rIII13	giš ka-šu ₂ -apin
				Ni II-255	rI02'	giš ka-[-
444 5117	giš apin-šu-du ₇			Ni III-02	I01	[g]i[š k]a-šu ₂ -a[pin]
Ni II-022	12'	giš apin-š[u-d]u ₇				
Ni II-125	I03	giš apin-šu-d[u ₇]		452 5152	giš šu-sag-apin	
Ni II-158	rII01'	[] apin-š[u?-		Ni II-125	I11	giš šu-sag-apin
Ni II-173	rIII06	giš ap[in-š]u-du ₇		Ni II-137	rIII06'	giš šu-š[a]-KUM?-apin
Ni U-19	I01'	[-š]u-du ₇		Ni II-158	rII09'	giš šu-sag-apin
				Ni II-173	rIII14	giš [š]u-sag-apin
445 5118	giš apin-šu-nu-du ₇			Ni II-255	rI03'	giš šu-sag-[-
Ni II-022	13'	giš apin-[-d]u ₇		Ni III-02	I02	giš [š]u-[sa]g-a[pin]
Ni II-125	I04	giš apin-šu-nu-d[u ₇]				
Ni II-173	rIII07	giš api[n-š]u-nu-du ₇		452a 5151	giš igi-gal ₂ -apin	
Ni U-19	I02'	[]-šu-nu-du ₇		Ni I-05	rIII01'	[gal] ₂ -apin
				Ni II-137	rIII07'	giš i[gi-g]al ₂ ?-apin
446 5123	giš apin-tug ₂ -sig ₁₈			Ni II-255	rI04'	giš igi?-gal ₂ -[-
Ni I-06	rI02'	giš apin-[-				
Ni II-022	14'	[ap]in-[-		453 5157	giš nig ₂ -kud-apin	
Ni II-125	I05	giš apin-tug ₂ -s[ig ₁₈]		Ni II-125	I12	giš nig ₂ -kud-apin
Ni II-158	rII03'	giš apin-tug ₂ -si[ig ₁₈]		Ni II-137	rIII08'	giš nig ₂ -kud-apin
Ni II-173	rIII08	giš apin-tug ₂ -sig ₁₈		Ni II-158	rII10'	giš [n]ig ₂ -kud-apin
Ni U-19	I03'	[ap]in-tu[g ₂ -		Ni II-173	rIII15	giš []-apin
				Ni II-255	rI05'	[gi]š nig ₂ -kud-[-
447	giš apin-sag-e ₃			454 5158	giš nig ₂ -PI-apin	
Ni I-06	rI03'	giš apin-[-		Ni II-137	rIII09'	giš nig ₂ -PI-apin
Ni II-125	I06	giš apin-sag-e ₃		Ni II-158	rII11'	giš nig ₂ -PI-apin
Ni II-137	rIII01'	giš a[pin-		Ni II-173	rIII16	gi[š n]ig ₂ -P[I-a]pin
Ni II-158	rII04'	giš apin-s[ag-		Ni II-255	rI06'	[gi]š nig ₂ -PI-[-
Ni II-173	rIII09	giš apin-[s]ag-eš		Ni III-02	I03	giš nig ₂ -P[I]-a[pin]
448 5131	giš apin-gud-4-la ₂					

455	5161	giš sal-la-apin	Ni II-251	rII06'	giš da-apin
Ni I-05	rIII02'	[] sal-la-apin	Ni III-02	I10	giš da-[
Ni II-137	rIII10'	giš sal!-[l]a-apin	462		giš gan-apin
Ni II-173	rIII17	[g]iš sal-la-ap[in]	Ni II-173	rIII22	giš gan-apin
Ni II-250	rI02'	giš sa[l]-l[a-	Ni II-251	rII07'	giš KAB-apin
456	5162	giš gag-sal-la-apin	Ni III-02	rI01	giš gan-apin
Ni I-02	rII04'	[]-la-apin	463	5141	giš li-apin
Ni I-05	rIII03'	[] gag-sal-la-apin	Ni II-173	rIII23	giš li-apin
Ni II-137	rIII11'	[]-l]a-apin	Ni II-251	rII08'	giš li-apin
Ni II-173	rIII18	giš gag-sal-la-ap[in]	Ni III-02	rI02	giš li-apin
Ni II-250	rI03'	giš gag-[]-ap[in]	464	5146	giš ninda ₂ -apin
Ni II-251	rII01'	giš g[ag]-s[al]-l[a]-ap[in]	Ni II-173	rIII24	giš ninda ₂ -apin
457	5159c	giš nig-apin	Ni III-02	rI03	giš ninda ₂ -apin
Ni I-05	rIII06'	[] nig-apin	465		giš a ₂ -gud-apin
Ni II-137	rIII12'	[n]ig-apin	Ni II-173	rIII25	giš a ₂ -gud-apin
Ni II-173	rIII19	giš nig-apin	Ni III-02	rI04	giš a ₂ -gud-apin
Ni II-215	rI01	giš nig-apin	Ni U-26	II03'	giš DA-gud-[
Ni II-250	rI04'	giš nig-[
Ni II-251	rII02'	giš nig-apin			
Ni III-02	I06	giš n[ig]-[a]pin			
458		giš gag-nig-apin			
Ni I-05	rIII07'	[] gag-nig-apin			
Ni II-137	rIII13'	giš gag-nig-apin			
Ni II-173	rIII20	giš gag-nig-apin			
Ni II-215	rI02	giš gag-nig-apin			
Ni II-250	rI05'	giš gag-nig-[
Ni II-251	rII03'	giš gag-nig-apin			
Ni III-02	I07	giš gag-n[ig]-[a]pin			
459	5166	giš šudul-apin			
Ni I-05	rIII04'	[] šudul ₄ -apin			
Ni II-137	rIII15'	giš šudul-apin			
Ni II-215	rI03	giš šudul-apin			
Ni II-250	rI06'	giš [šu]dul-[
Ni III-02	I08	[g]iš šudul-apin			
460	5167	giš gag-šudul-apin			
Ni I-05	rIII05'	[] gag-šudul ₄ -apin			
Ni II-215	rI04	giš gag-šudul-apin			
Ni II-250	rI07'	giš gag-šudul-ap[in]			
Ni III-02	I09	giš gag-šudul-apin			
460a		giš muš-apin			
Ni II-251	rII04'	giš muš-apin			
460b		giš gag-muš-apin			
Ni II-251	rII05'	giš gag-mu[š]-apin			
461	5139	giš da-apin			
Ni II-137	rIII14'	giš da-apin			
Ni II-173	rIII21	giš da-apin			

466		giš an-za-am-apin			
Ni II-173	rIII26	giš an-za-am-apin	Ni II-173	rIV02	giš al
Ni III-02	rI05	giš an-za-am-apin	Ni IV-26	01	giš al
Ni U-26	II04'	giš en ₃ -za-[
467		giš gag-sa-la ₂	478	7a155	giš al-zu ₂
Ni I-05	rIII13'	[g]ag-sa-[	Ni I-05	rIII22'	giš al-zu ₂
Ni II-173	rIII27	giš gag-sa-la ₂	Ni II-117	I07'	giš al-[
Ni III-02	rI06	giš gag-sa-la ₂	Ni II-127	I01	giš al-zu ₂
Ni U-26	II05'	giš gag-sa-[	Ni II-145	rII03	giš al-z[u ₂]
			Ni II-173	rIV03	giš al-zu ₂
468	5173	giš gan ₂ -ur ₃	479	7a166	giš al-šub
Ni I-05	rIII14'	giš [g]an ₂ -[u]r ₃	Ni I-05	rIII23'	giš a[l]-šub
Ni II-173	rIII28	giš [-u]r ₃	Ni II-117	I08'	[g]iš al-šu[b]
Ni III-02	rI07	giš gan ₂ -ur ₃	Ni II-145	rII04	giš al-šub
Ni U-26	II06'	giš gan ₂ -u[r ₃]	Ni II-173	rIV04	giš al-šu[b]
			Ni IV-26	02	giš al-šub
469	5174	giš gan ₂ -ur ₃ -sar-ra	480	7a159	giš al-zu ₂ -2
Ni I-05	rIII15'	giš []-ur ₃ -[]-ra	Ni I-05	rIII24'	giš [a]l-zu ₂ -2
Ni II-173	rIII29	giš gan ₂ -ur ₃ -sar-ra	Ni II-117	I09'	giš al-2
			Ni II-127	I02	giš al-zu ₂ -2
470	5175	giš gan ₂ -ur ₃ -zu ₂ -gal-la	Ni II-145	rII05	giš al-zu ₂ -2
Ni I-05	rIII16'	giš gan ₂ -ur ₃ \ zu ₂ -gal-la	Ni II-173	rIV05	giš al-zu ₂ -2
Ni II-173	rIII30	giš sa-gan ₂ -ur ₃ -zu ₂ -gal-[
471		giš sa-gan ₂ -ur ₃	481	7a160	giš al-zu ₂ -3
Ni I-05	rIII17'	giš sa-gan ₂ -ur ₃	Ni II-117	I10'	giš al-3
			Ni II-145	rII06	giš al-zu ₂ -3
472	5185	giš u ₅ -gan ₂ -ur ₃	Ni II-173	rIV06	giš al-zu ₂ -3
Ni I-05	rIII18'	giš u ₅ -gan ₂ -ur ₃			
Ni II-117	I02'	giš u ₅ -g[an ₂ -	482	7a161	giš al-zu ₂ -4
Ni II-173	rIII31	giš u ₅ -gan ₂ -ur ₃	Ni I-05	rIII25'	giš al-zu ₂ -4
			Ni II-127	I03	giš al-zu ₂ -4
473	5183	giš sag-gan ₂ -ur ₃	Ni II-137	rIV07'	giš [i]š a[l]-[z]u ₂ -4
Ni II-117	I03'	giš sag-[	Ni II-145	rII07	giš al-zu ₂ -4
Ni II-173	rIII32	[g]iš s[ag?]-g[an ₂ -u]r ₃	Ni II-173	rIV07	giš al-zu ₂ -4
474	5160	giš da-an-ga	483	7a169	giš u ₃ -šub
Ni I-05	rIII19'	giš da-an-ga	Ni II-127	I04	giš u ₃ -šub
Ni II-117	I04'	giš d[a-	Ni II-137	rIV08'	giš u ₃ -šub-dur ₂
Ni II-173	rIII33	[]-an-ga	Ni II-145	rII08	giš u ₃ -š[ub]
			Ni II-173	rIV08	giš u ₃ -šub
475	7a148	giš suhur	Ni II-250	rII02'	giš u ₃ -[
Ni I-05	rIII20'	giš suhur			
Ni II-117	I05'	giš s[uhur]	484	7a173	giš u ₃ -šub-ab-ba
Ni II-173	rIII34	[su]hur	Ni II-127	I05	giš u ₃ -šub-ab-ba
			Ni II-137	rIV09'	giš u ₃ -šub-ab-ba
476	7a149	giš suhur-gud	Ni II-145	rII09	giš u ₃ -š[ub-
Ni II-145	rII01	giš suhur-gud	Ni II-173	rIV09	[g]iš u ₃ -šub-ab-ba
Ni II-173	rIV01	gi[š su]hur-TA	Ni II-250	rII03'	giš u ₃ -šub-[
477	7a152	giš al	485	7a170	giš u ₃ -šub-sig ₄
Ni I-05	rIII21'	giš al	Ni II-127	I06	giš u ₃ -šub-sig ₄
Ni II-117	I06'	giš al	Ni II-137	rIV10'	giš u ₃ -šub-sig ₄
Ni II-145	rII02	giš al	Ni II-145	rII10	[gi]š u ₃ -[
			Ni II-173	rIV10	giš u ₃ -šub-sig ₄

Ni II-250	rII04'	giš u ₃ -šub-sig ₄	Ni I-06	rII03'	giš tukul-šu
486 7a171	giš u ₃ -šub-sig ₄ -al-ur ₅ -ra		Ni II-127	I17	giš tukul-šu
Ni II-127	I07	giš u ₃ -šub-sig ₄ -al-ur ₅ -ra	Ni II-173	rIV20	giš tukul-šu
Ni II-137	rIV11'	giš u ₃ -šub-si[g ₄ - -u]r ₅ -ra	498 7a015	giš tukul-ur ₂ -ra	
Ni II-173	rIV11	giš u ₃ -šub-al-ur ₃ -ra	Ni I-06	rII04'	giš tukul-ur ₃ -ra
Ni II-250	rII05'	giš u ₃ -šub-sig ₄ -[a]l-ur ₅ -ra	Ni II-127	I18	giš tukul-ur ₂ -ra
487 6133	giš gag-du ₆ -ba-al-la ₂		Ni II-173	rIV21	giš tukul-ur ₃ -r[a]
Ni II-127	I08	giš gag-du ₆ -ba-al-la ₂	499 7a024	giš tukul-kun	
Ni II-137	rIV12'	giš gag-du ₆-[	Ni I-06	rII05'	giš tukul-kun
488 6134	giš gag-sum-ba-al-la ₂		Ni II-127	I19	giš tukul-kun
Ni II-127	I09	giš gag-sum-ba-al-la ₂	Ni II-173	rIV22	giš tukul-kun
Ni II-137	rIV13'	giš gag-z[i?]-	500 7a010	giš TUKUL-DINGIR	
Ni II-173	rIV12	giš gag-sum-ba-la ₂	Ni I-06	rII10'	giš TUKUL-DINGIR
Ni II-250	rII06'	giš gag-[s]um-ba-la ₂	Ni II-173	rIV23	g[iš TU]KUL-DINGIR
489	giš gag-sum-sal-la		Ni II-210	rI05'	giš TUKUL-DIN[GIR]
Ni II-137	rIV14'	giš gag-z[i?]-	501	giš tukul-gaz	
Ni II-173	rIV13	giš gag-sum-sa[l]-la	Ni I-06	rII06'	giš tukul-gaz
Ni II-250	rII07'	giš gag-sum-sal-la	Ni II-127	I20	giš tukul-gaz
490 6135	giš gag-sum-šir-dili		501a	giš tukul-mah	
Ni II-127	I10	giš gag-sum-šir-dili	Ni II-210	rI04'	giš tukul-ma[h]
Ni II-173	rIV14	giš gag-sum-šir-dili	502 7a028	giš sag-tukul	
Ni II-250	rII08'	giš [g]ag-sum-šir-dili	Ni I-06	rII07'	giš sag-tukul
491 6150	giš zi-ri ₂ -qum		Ni II-127	I21	giš sag-tukul
Ni II-127	I11	giš zi-ri ₂ -qum	Ni II-210	rI03'	giš sag?-tukul?-[
Ni II-173	rIV15	giš zi-ri ₂ -qum	503 7a030	giš a-ga-tukul	
Ni II-250	rII09'	giš z[i-r]i ₂ -qum	Ni I-06	rII08'	giš a-ga-tukul
492	giš gu ₂ -zi-ri ₂ -qum		Ni II-127	I22	giš a-ga-tukul
Ni II-127	I12	giš gu ₂ -zi-ri ₂ -qum	504 7a012	giš mi-tum	
Ni II-173	rIV16	giš [g]u ₂ -zi-[-qu]m	Ni II-127	I23	giš mi-tum
493 6153	giš nam-nu-tar-re		Ni II-173	rIV24	[] mi-tum
Ni II-127	I13	giš nam-nu-tar-re	Ni II-210	rI06'	giš mi-tum
494 6157	giš I-LU		Ni II-214	rI02'	giš mi-tu[m]
Ni II-127	I14	giš I-LU	505	giš mi-tum-sag-50	
Ni II-173	rIV17	giš I-LU	Ni II-127	I24	giš mi-tum-sag-50
495 6158	giš I-DIB		Ni II-173	rIV25	[] m[i-tu]m-s[ag-5]0
Ni I-06	rII01'	giš I-[	Ni II-210	rI07'	giš mi-tum-sag-50
Ni II-127	I15	giš I-DIB	Ni II-214	rI03'	giš mi-tum-sag-50
Ni II-173	rIV18	giš I-LU	506 7a001	giš utug ₂	
496 7a006	giš tukul		Ni I-06	rII09'	giš utug ₂
Ni I-06	rII02'	giš tu[kul]	Ni II-127	I25	giš utug ₂
Ni II-127	I16	giš tukul	507	giš utug ₂ -sag-50	
Ni II-173	rIV19	giš tukul	Ni II-127	I26	giš utug ₂ -sag-50
497 7a014	giš tukul-šu		Ni II-210	rI09'	[ut]ug ₂ [

508	7a174	giš dur ₂		519		giš nig ₂ -2-sila ₃
Ni I-06	rII11'	giš dur ₂		Ni II-061	rI05	giš nig ₂ -2-sila ₃
Ni II-127	I27	giš dur ₂		Ni II-173	rV05	giš nig ₂ -2-sila ₃
Ni II-173	rIV26	[] dur ₂		Ni II-281	I03	giš 2-[-
509	7a200	giš dur ₂ -pisan		520	7a237	giš 1 sila ₃
Ni I-06	rII12'	giš dur ₂ -pi[an]		Ni II-033	rI01	giš 1-[-
Ni II-127	I28	giš dur ₂ -pisan		Ni II-061	rI06	giš 1 sila ₃
510	7a178	giš dur ₂ -ab-ba		Ni II-173	rV06	giš [sil]a ₃
Ni II-127	I29	[] dur ₂ -ab-ba		521		giš 1/2 sila ₃
Ni II-173	rIV27	[d]ur ₂ -ab-ba		Ni II-033	rI02	giš 1/2 [
511	7a175	giš dur ₂ -sig ₄		Ni II-061	rI07	giš 1/2 sila ₃
Ni II-127	I30	[] dur ₂ -sig ₄		Ni II-173	rV07	giš [sil]a ₃
Ni II-173	rIV28	[]-sig ₄		522	7a239	giš 1/3 sila ₃
Ni II-226	I01'	[] du[r ₂ -		Ni II-152	I01	giš 1/3 [
512	7a176	giš dur ₂ -sig ₄ -al-ur ₃ -ra		Ni II-173	rV08	giš [sil]a ₃
Ni II-127	I31	[]-sig ₄ -al-ur ₃ -ra		523	7a240	giš 2/3 sila ₃
Ni II-154	rI01'	giš d[ur ₂ -n]ig ₂ -[]-a[I?]-		Ni II-033	rI03	giš 2/3 [
		u[r ₃ -		Ni II-061	rI08	giš 2/3 sila ₃
Ni II-173	rIV29	[]-ur ₃ -ra		Ni II-173	rV09	giš [sil]a ₃
Ni II-226	I02'	giš dur ₂ -s[ig ₄ -		524		giš 10 gin ₂
513	7a204	giš dur ₂ -bi-eš-gar-[ra]		Ni II-033	rI04	giš 10-g[in ₂
Ni II-154	rI02'	giš dur ₂ -bi-eš-gar-[-		Ni II-061	rI09	giš 10 g[in ₂]
Ni II-226	I03'	giš dur ₂ ?-b[i-		Ni II-152	I02	giš 10 [
Ni II-270	I01'	giš dur ₂-[		Ni II-173	rV10	[] g[in ₂]
514	7a205	giš bar-bi-eš-gar-ra		525		giš 5 gin ₂
Ni II-154	rI03'	giš bar <DUR ₂ > bi-eš-gar-ra		Ni II-033	rI05	giš 5-[-
Ni II-226	I04'	giš bar-[-		Ni II-061	rI10	giš 5 g[in ₂]
Ni II-270	I02'	giš bar-b[i-		Ni II-152	I03	giš 5 [
515	7a226	giš lid ₂ -ga		Ni II-173	rV11	[] gin ₂
Ni II-061	rI01	giš IR-[-		525a		giš 3 gin ₂
Ni II-154	rI04'	giš lid ₂ !-ga		Ni II-033	rI06	giš 3-[-
Ni II-173	rV01	giš lid ₂ -da		Ni II-281	I04	giš 3-[-
Ni II-270	I03'	giš lid ₂-[		525b		giš 2 gin ₂
516	7a218	giš ba-ri ₂ -ga		Ni II-033	rI07	giš 2-[-
Ni II-061	rI02	giš ba-ri ₂ -g[a]		526		giš 1 gin ₂
Ni II-154	rI05'	giš ba-an-ri ₂ -ga		Ni II-033	rI08	giš 1-[-
Ni II-173	rV02	giš ba-r[i ₂]-ga		Ni II-061	rI11	[] 1 [
517	7a231	giš ba-an		Ni II-281	I05	g[iš] 1?-[
Ni II-061	rI03	giš ba-an		527	6160	giš sa
Ni II-173	rV03	giš ba-an		Ni II-173	rV12	[] sa
Ni II-281	I01	giš ba-[-		528	6164	giš sa-gal
518	7a235	giš ba-an-5-sila ₃		Ni II-173	rV13	[s]a-gal
Ni II-061	rI04	giš ba-an-5-sila ₃				
Ni II-173	rV04	giš ba-an-5-sila ₃				
Ni II-281	I02	giš ba-an-5-sila ₃				

529	giš sa-sig				
Ni II-173	rV14	[s]a-sig			
530 6169	giš sa-ur ₃ -ra				
Ni II-173	rV15	[s]a-ur ₃ -ra			
531 6183a	giš sa-giš-gi				
Ni II-173	rV16	[s]a-giš-gi			
532 6171	[giš sa-šu]-uš-gal				
Ni II-173	rV17	[]-uš-gal			
533 6190	[giš sa]-hir				
Ni I-05	rIV01'	[h]ir			
Ni II-173	rV18	[-h]ir			
534 6175	[giš sa]-du ₃				
Ni I-05	rIV02'	[]-du ₃			
535	[giš sa]-NI				
Ni I-05	rIV03'	[]-NI			
536 6220	giš har-mušen-na				
Ni I-05	rIV04'	[]-mušen-na			
Ni II-173	rV20	[-n]a			
537 6221	giš gidru-har-mušen-na				
Ni I-05	rIV05'	[gi]dru-har-mušen-na			
Ni II-071	I01'	[]-n[a]			
Ni II-173	rV21	[-n]a			
538 6222	giš gur ₂ -har-mušen-na				
Ni I-05	rIV06'	[g]ur ₂ -har-mušen-na			
Ni II-071	I02'	[]-mušen-n[a]			
Ni II-173	rV22	[-n]a			
539	giš ellag ₂ -du				
Ni I-05	rIV07'	[] ellag ₂ -du			
Ni II-071	I03'	[el]lag ₂ -d[u]			
Ni II-135	I01	[el]lag ₂ -du			
540	giš ellag ₂ -du-tur-ra				
Ni II-071	I04'	[] ellag ₂ -tur-r[a]			
Ni II-135	I02	[gi]š ellag ₂ -du-tur-ra			
541	giš šul-ka-tar-ra				
Ni I-05	rIV08'	[] šul-ka-tar-ra			
Ni II-033	rII01	giš X-tar-[
Ni II-071	I05'	[š]ul-ka-tar-ra			
Ni II-135	I03	[gi]š šul-ka-tar-r[a]			
Ni II-154	rII01'	giš X-tar-[
541a	giš šul-HAR-tur-ra				
Ni I-05	rIV09'	[] šul-HAR-tur-ra			
542	giš šu-uš				
Ni I-04	rI02'	giš š[u-			
Ni I-05	rIV10'	giš šu-uš			
Ni II-033	rII02	giš šu-DU			
Ni II-071	I06'	[] šu-DU			
Ni II-131	rI01'	[-D]U?			
543 4027	giš igi-gal ₂				
Ni I-04	rI03'	giš i[gi-			
Ni I-05	rIV11'	giš igi-gal ₂			
Ni II-033	rII03	giš igi-g[al ₂]			
Ni II-071	I07'	[gi]š igi-gal ₂			
Ni II-131	rI02'	[]-gal ₂			
Ni II-154	rII02'	giš igi-gal ₂			
544 3269	giš ligima(IGI-TUR-TUR)				
Ni I-04	rI04'	giš I[GI-			
Ni I-05	rIV12'	giš IGI-TUR-TUR			
Ni II-033	rII04	giš IGI-T[UR-TU]R			
Ni II-071	I08'	[gi]š IGI-TUR-TUR			
Ni II-131	rI03'	[]-TUR-TUR			
Ni II-135	I04	[gi]š IGI-[T]UR-[T]UR			
Ni II-154	rII03'	giš IGI-TUR-TUR			
545 3270	giš ligima(IGI-TUR-TUR)				
Ni II-071	I09'	[gi]š IGI-TUR-TUR			
Ni II-131	rI04'	[T]UR-TUR			
Ni II-135	I05	giš IGI-TUR-TUR			
Ni II-154	rII04'	giš IGI-TUR-TUR			
546 3271	giš ligima(IGI-TUR-TUR)				
Ni II-131	rI05'	[T]UR-TUR			
Ni II-135	I06	[gi]š IGI-TUR-[T]UR			
Ni II-154	rII05'	giš IGI-TUR-TUR			
547 6234	giš IGI-NI				
Ni I-04	rI05'	giš IGI-[
Ni II-033	rII05	giš IGI-NI			
Ni II-126	I01	[] IGI-NI			
Ni II-131	rI06'	[]-NI			
Ni II-154	rII06'	giš IGI-NI			
547a	giš IGI-NI				
Ni II-131	rI07'	[]-NI			
548 6235	giš IGI-KAK				
Ni I-04	rI06'	giš IGI!-K[AK]			
Ni II-033	rII06	[] KAK?			
Ni II-126	I02	[] IGI-KAK			
Ni II-131	rI08'	[]-KAK			
Ni II-154	rII07'	giš IGI-NI			
549 6237	giš za-am-ru-tum				
Ni I-04	rI07'	giš za-mir-tu[m]			
Ni II-033	rII07	giš z[a-a]m-ru-tum			

Ni II-126	I03	giš za-am-ri-tum	Ni II-108	I01	[] pan
Ni II-154	rII08'	giš za-am-ru-tum	556 7a049	giš e ₂ -pan	
Ni II-212	rI02	giš za-mi-ru-t[um]	Ni I-06	rIII06'	[]-pan
550 7a039	giš šu-nir		Ni II-108	I02	[g]iš e ₂ -pan
Ni I-04	rI08'	giš šu-n[ir]	557 7a052	giš gag-pan	
Ni II-033	rII08	giš šu-nir	Ni I-06	rIII07'	[]-p]an
Ni II-126	I04	[] šu-nir	Ni II-108	I03	giš gag-pan
Ni II-154	rII09'	giš [š]u?-AŠ-nir	Ni II-151	I01	giš gag-pan
551 6239	giš gid ₂ -da		558	giš gag-si-sa ₂	
Ni I-04	rI09'	giš gid ₂ -da	Ni I-04	rI16'	[]-si-[
Ni II-033	rII09	giš gid ₂ -da	Ni I-06	rIII08'	[]-s]a ₂
Ni II-126	I05	[] gid ₂ -d[a]	Ni II-108	I04	giš gag-si-sa ₂
Ni II-161	I01	[]-d[a]	Ni II-151	I02	giš gag-si-sa ₂
Ni II-212	rI01	giš gid ₂ -d[a]	Ni P-03	CI01	[ga]g-si-sa ₂
551a	giš lugud ₂ -da		559	giš gag-si-eš	
Ni I-04	rI10'	[g]iš lugud ₂ -da	Ni II-108	I05	giš gag-si-MIN ₃
552 7a066	giš illar		Ni II-151	I03	giš gag-si-eš
Ni I-04	rI11'	giš illar	560	giš eš-ad	
Ni II-126	I06	[il]lar	Ni II-108	I06	giš eš-ad
Ni II-161	I02	[illar	Ni II-151	I04	[gi]š eš-ad
Ni II-212	rI03	giš illar	Ni III-03	I01	g[iš -a]d
552a	giš illar-šu-lugal		Ni P-03	CI02	[] eš-ad
Ni II-033	rII10	giš []-šu-lugal	561 6192	giš sa-ad	
553 7a069	giš illar-šub-ba		Ni II-108	I07	giš sa-ad
Ni I-04	rI12'	giš illar-šub	Ni II-151	I05	[]-ad
Ni I-06	rIII01'	[]-šub	Ni III-03	I02	giš []-ad
Ni II-033	rII11	giš illar-šub-ba	Ni P-03	CI03	giš sa-ad
Ni II-161	I03	giš illar-šub	562 7a243	giš lib-bi-da	
554 7a077	giš illar-e-ba-an		Ni II-033	rIII01	[l]ib-bi-d[a
Ni I-04	rI13'	[il]lar-e ₂ -pa-n[a]	Ni II-108	I08	giš lib-bi-da
Ni I-06	rIII02'	[]-e ₂ -pa-an-na	Ni II-151	I06	[]-bi-d[a]
Ni II-033	rII12	giš illar-[	Ni III-03	I03	giš [li]b-bi-da
Ni II-161	I04	giš illar-e-ba-an	Ni P-03	CI04	[] lib-da
Ni II-212	rI04	[gi]š il[lar]-e-p[a-n]a	563	giš ha-bu-da	
554a	giš [illa]r-NUN-dili		Ni II-033	rIII02	giš h[a]-bu-d[a]
Ni I-06	rIII03'	[illa]r-NUN-dili	Ni II-108	I09	giš ha-bu-da
554b	giš illar-DUšeššig-DU-a		Ni III-03	I04	giš ha-bu-da
Ni I-06	rIII04'	[illa]r-DUšeššig-DU-A	Ni P-03	CI05	[] ha-bu-da
Ni II-161	I05	giš illar-DU-D[U	564 7a105	giš igi-gal ₂	
554c 7a079	giš LAGAB-illar		Ni II-033	rIII03	giš igi-gal ₂
Ni I-04	rI14'	[] LAGAB-il[lar]	Ni II-108	I10	giš igi-gal ₂
555 7a048	giš pan		Ni III-03	I05	giš igi-mar
Ni I-04	rI15'	giš pan	Ni P-03	CI06	[ig]i-g[al ₂ ']
Ni I-06	rIII05'	[] pan	565 6231	giš gin ₂	
			Ni II-033	rIII04	giš tun ₃

Ni II-108	I11	giš tun ₃	567	6227	giš aga
Ni III-03	I06	giš tun ₃	Ni II-033	rIII06	giš a[ga]
566	6233	giš gin ₂ -sal	Ni II-042	I03'	giš [
Ni II-033	rIII05	giš gin ₂ -sal?	Ni II-108	I13	giš aga
Ni II-042	I02'	giš g[in ₂ -	Ni II-180	I03'	giš a[ga]
Ni II-108	I12	giš gin ₂ -min ₃	Ni III-03	I07	giš aga
Ni II-180	I01'	[g]iš gin ₂-[	568	6228	giš aga-GIN ₂ -ma
			Ni II-042	I04'	giš aga-GI[N ₂ -
			Ni II-108	I14	giš aga-ga ₂
			Ni II-180	I04'	giš aga-[
			Ni II-246	I01'	[a]ga-GI[N ₂ -
			Ni III-03	I08	giš [ag]a-GIN ₂ -ma
			569	6229	giš aga-šilig-ga
			Ni II-042	I05'	[gi]š aga-šili[g-
			Ni II-108	I15	giš aga-šilig-ga
			Ni II-180	I02'	giš aga-šilig-g[a]
			Ni II-246	I02'	[] aga-šili[g-
			Ni III-03	I09	giš aga-šilig-ga-ga
			569a		giš aga-AŠ-GAR
			Ni II-108	I16	giš aga-AŠ-GAR
			570		giš aga-e-da?
			Ni II-033	rIII07	giš aga-e-da?
			Ni II-246	I03'	giš aga-e?-[
			571		giš U ₂ -e-[
			Ni II-042	I07'	giš U ₂ -e-[
			Ni II-154	rIII01'	[] KID-[
			Ni II-246	I04'	giš U ₂ -[
			572		giš KID-a ₂ -gar
			Ni II-033	rIII09	giš KID-aš ₂ ?-gar
			Ni II-042	I08'	[g]iš KID-[
			Ni II-154	rIII02'	giš KID-a ₂ -g[ar]
			Ni II-180	I05'	giš KID-a ₂ -[
			573		giš KID-tukul-mah
			Ni II-033	rIII10	giš KID-tukul-mah
			Ni II-154	rIII03'	giš KID-tukul-mah
			574		giš KID-dim
			Ni II-154	rIII04'	giš KID-dim
			Ni III-03	I10	giš KID-di[m]
			575		giš KID-dim-[
			Ni II-131	rII02'	giš K[ID
			Ni II-136	I01'	[-d]a
			Ni II-154	rIII05'	giš KID-dim-[
			576		giš [u ₄ -sakar]
			Ni II-131	rII03'	giš [

577	giš gag-[u ₄ -sakar]	Ni U-04	rI04'	giš mar-za[bar]
Ni II-131	rII04' giš gag-[	Ni U-15	rI04'	giš mar-za[bar]
578 7a116	giš ni ₃ -sakar	589	giš ŠID-mar	
Ni II-131	rII05' giš ni ₃-[	Ni II-033	rIV01 [] ŠID-mar	
Ni II-136	I02' giš n[i ₃]-sakar	Ni II-169	I01 giš ŠI[D-	
Ni II-154	rIII06' giš ni ₃ -sakar	Ni U-04	rI05' giš ŠID-[
579 7a118	giš ni ₃ -sakar-bur ₃ -bur ₃	590 7b030	giš eme-mar	
Ni II-131	rII06' giš ni ₃ -s[akar-	Ni II-033	rIV02 giš [e]me-mar	
Ni II-136	I03' giš ni ₃ -sakar-bur ₃ -bur ₃	Ni II-169	I02 giš eme-[
Ni II-154	rIII07' giš ni ₃ -sakar-bur ₃ -bur ₃	Ni U-04	rI06' giš eme-[
580 7b001	giš mar	Ni U-15	rI05' giš eme-ma[r	
Ni II-131	rII07' giš [	591 7b033	giš kul-mar	
Ni II-136	I04' giš mar	Ni II-033	rIV03 giš kul-ma[r]	
Ni II-154	rIII08' giš mar	Ni U-04	rI07' giš kul-[
Ni II-258	I01 [] mar	Ni U-15	rI06' giš kul-mar	
581 7b010	giš mar-šu	592 6058	giš BAD	
Ni II-131	rII08' giš ma[r-	Ni II-033	rIV04 giš BAD	
Ni II-136	I05' giš mar-šu	Ni II-169	I03 giš BAD-[
Ni II-154	rIII09' giš mar-šu	Ni II-276	rII01' giš BAD	
Ni II-258	I02 giš mar-šu	593 6059	giš BAD	
582 7b012	giš mar-ninda	Ni II-033	rIV05 giš BAD	
Ni II-131	rII09' g[iš] m[ar-	Ni II-075	rI01' giš [
Ni II-136	I06' giš mar-ninda	Ni II-276	rII02' giš BAD	
Ni II-154	rIII10' giš mar-ninda	Ni U-04	rI09' giš B[AD	
Ni II-258	I03 giš mar-ninda	594 6060	giš BAD	
583	giš mar-ninda-sig ₅	Ni II-033	rIV06 giš BAD	
Ni II-136	I07' giš mar-ninda-sig ₅	Ni II-075	rI02' giš [
Ni II-154	rIII11' giš mar-ninda-sig ₅	Ni II-276	rII03' giš BAD	
584 7b014	giš mar-nig ₂ -sur-ra	Ni U-04	rI09' giš BAD	
Ni II-136	I08' giš mar-nig ₂ -sur-ra	595 7a145	giš dag-si	
Ni II-154	rIII12' [-r]a	Ni II-033	rIV07 giš dag-si	
Ni II-258	I04 giš mar-nig ₂ -sur-r[a]	Ni II-075	rI03' giš da[g-	
585 7b026	giš mar-im-ma	Ni II-276	rII04' []-si	
Ni II-258	I05 giš mar-im-ma	Ni U-04	rI11' giš dag-[
586 7b005	giš mar-še-bad	596 7a147	giš dag-si-e-ba-na	
Ni II-258	I06 giš mar-[š]e-bad	Ni II-033	rIV08 giš dag-s[i]-e-b[a-n]a	
Ni IV-15	01 giš mar-še-bad	Ni II-075	rI04' giš da[g	
Ni U-04	rI02' giš ma[r-	Ni II-169	I07 giš dag-[
Ni U-15	rI02' giš mar-[	Ni U-04	rI12' giš dag-si-e-[
587	giš mar-še-du ₃	Ni U-16	I01' [gi]š d[ag]-s[i-	
Ni IV-15	02 giš mar-še-du ₃	597 7b039	giš balag	
Ni U-04	rI03' giš ma[r	Ni II-033	rIV09 giš [b]alag	
Ni U-15	rI03' giš mar-še-[	Ni II-075	rI05' giš [
588	giš mar-zabar	Ni II-169	I08 [g]iš ba[lag?-	
		Ni U-16	I02' giš [

598	7b040	giš balag-di			
	Ni II-075	rII06'	giš bala[g-		
	Ni U-16	I03'	giš balag-d[i]		
599		giš a ₂ -balag			
	Ni II-033	rIV10	giš a ₂ -balag		
	Ni II-075	rII07'	giš a ₂ -[
	Ni II-128	I01'	[] a ₂ -balag		
	Ni U-16	I04'	giš a ₂ -[
600	7b062	giš a ₂ -la ₂			
	Ni II-064	rII02'	giš a ₂ -[
	Ni II-128	I02'	giš a ₂ -la ₂		
	Ni U-16	I05'	giš a ₂ -[
601	7b063	giš al-gar			
	Ni II-064	rII03'	giš al-gar		
	Ni II-128	I03'	giš al-gar		
602	7b059	giš al-gar-sur ₉			
	Ni I-04	rII01'	[-ga]r-[s]ur ₉		
	Ni II-064	rII04'	giš al-gar-sur ₉ -a		
	Ni II-128	I04'	giš al-gar-sur ₉		
	Ni U-16	I06'	[] a ₂ -gar-[
603	7b074	giš sa-bi ₂ -tum			
	Ni I-04	rII02'	[s]a-bi ₂ -tum		
	Ni II-064	rII05'	giš sa-bi ₂ -tum		
	Ni II-128	I05'	giš sa-bi ₂ -tum		
	Ni U-16	I07'	[]-bi ₂ -[
604	7b077	giš mi-ri ₂ -tum			
	Ni I-04	rII03'	[m]i-ri ₂ -tum		
	Ni II-064	rII06'	giš mi-ri ₂ -tum		
	Ni U-16	I08'	[m]i-r[i ₂ -		
605	7b079	giš ur-za-ba ₄ -ba			
	Ni I-04	rII05'	[]-bi ₂		
	Ni II-064	rII07'	giš ur-za-ba ₄ -ba		
606	7b086	giš ur-gu-la			
	Ni I-04	rII06'	[]-gu-la		
	Ni II-064	rII08'	gi[š]-gu-la		
607	7b055	giš h[ar]-har			
	Ni I-04	rII07'	[]-har		
	Ni II-064	rII09'	giš h[ar-		
608		giš nig ₂ -har-mu[šen]			
	Ni I-04	rII08'	[]-na-x		
	Ni II-064	rII10'	giš nig ₂ -har-mu[šen]		
609		giš []-gal ₂ ?			
	Ni I-04	rII09'	[]-x-gal ₂ ?		
	Ni II-064	rII11'	giš X [
610	7b044	giš za ₃ -mi ₂			
	Ni I-04	rII10'	[-m]i ₂		
	Ni II-064	rII12'	giš za ₃ -[
	Ni IV-25	01	giš za ₃ -[
	Ni P-03	DI01	giš za ₃ -mi ₂		
611		giš kul-za ₃ -mi ₂			
	Ni II-064	rII13'	giš kul-[
	Ni IV-25	02	giš kul-za ₃ -[
	Ni P-03	DI02	giš kul-za ₃ -mi ₂		
612	7b050	giš dub-za ₃ -mi ₂			
	Ni II-064	rII14'	giš dub-[
	Ni P-03	DI03	giš dub-za ₃ -mi ₂		
613		giš tigidlu(ŠA ₃ /DI-TAR)			
	Ni II-064	rII15'	giš ŠA ₃ -[
	Ni P-03	DI04	giš DI-TAR		
614		giš tigidlu-kaskal-la			
	Ni II-064	rII16'	giš ŠA ₃ -[
	Ni II-076	I01'	giš DI-TAR-kas[kal-		
	Ni P-01	FI01'	[]-TAR-X		
	Ni P-03	DI05	[gi]š DI-TAR-kaskal-la		
615		giš tigidlu-sa-III			
	Ni II-076	I02'	giš DI-TAR-sa-I[II]		
	Ni P-01	FI03'	[-s]a-a		
	Ni P-03	DI06	[] DI-TAR-sa-III		
616		giš tigidlu-NIM-ma			
	Ni II-076	I03'	giš DI-TAR-NIM-ma		
	Ni P-01	FI02'	[NI]M-ma		
	Ni P-03	DI07	[] DI-TAR-NIM-ma		
617	7b117	giš gu ₃ -di			
	Ni II-075	rII01'	gi[š] g[u ₃]-d[i]		
	Ni II-076	I04'	giš SAG-di		
	Ni P-01	FI04'	[]-di		
	Ni P-03	DI08	[g]u ₃ -di		
	Ni U-15	rII01'	[] gu ₃ -[]		
618	7b126	giš du ₃ -a			
	Ni II-075	rII02'	giš du ₃ -a		
	Ni II-076	I05'	giš du ₃ -a		
	Ni P-01	FI05'	[]-a		
	Ni P-03	DI09	[d]u ₃ -a		
	Ni U-15	rII02'	[] du ₃ []		
619		giš šu-kar ₂			
	Ni II-064	rII01'	[] šu-[
	Ni II-075	rII03'	giš šu-kar ₂		
	Ni II-076	I06'	giš šu-kar ₂		
	Ni P-01	FI06'	[]-kar ₂		

Ni P-03	DI10	[] X-kar ₂	Ni U-04	rII02'	g[iš g]a-an-nu-um-ga
Ni U-15	rII03'	giš šu-[
620	giš šu		627 7a129	giš ga-an-nu-um-kaš	
Ni U-15	rII04'	giš šu	Ni II-033	I05'	giš ga-nu-um-kaš
			Ni II-064	rIII08'	[gi]š ga-an-nu-um-k[aš]
621 7a134	giš ebir		Ni II-075	rII10'	giš ga-nu-um-kaš
Ni II-064	rIII02'	giš ebir	Ni II-087	I06'	giš ga-nu-um-kaš
Ni II-075	rII04'	giš ebir	Ni U-04	rII03'	g[iš]-nu-um-kaš
Ni II-076	I07'	giš ebir			
Ni II-087	I01'	giš ebir	627a	giš DUG-DUG-imin-bi	
Ni P-01	FI07'	[] ebir	Ni II-118	rII05'	giš DUG-DUG-imin-bi
Ni U-15	rII05'	giš ebir			
622	giš ebir-a		628 7a139	giš DUG-gub	
Ni II-033	I01'	g[iš]-a	Ni II-033	I06'	giš DUG-gub
Ni II-064	rIII03'	giš ebir-a!	Ni II-064	rIII09'	giš DU[G]-KIB
Ni II-075	rII05'	giš []-a	Ni II-087	I07'	giš DUG-gub
Ni II-076	I08'	giš ebir-a	Ni II-102	I01	giš DUG-gub
Ni II-087	I02'	giš ebir-[	Ni II-118	rII06'	giš DU[G]-gub
Ni P-01	FI08'	[]-a	Ni U-04	rII04'	g[iš D]UG-gub
Ni U-15	rII06'	giš ebir-a			
623 7a135	giš ebir-kaš		629 7a141	giš zabar-gub	
Ni II-033	I02'	giš ebir-kaš	Ni I-10	rII02'E	[za]bar-gub
Ni II-064	rIII04'	giš ebir-kaš	Ni II-033	I07'	giš zabar-gub
Ni II-076	I09'	giš ebir-kaš	Ni II-064	rIII10'	giš UD-BAR-[gu]b?
Ni II-087	I03'	giš ebir-[	Ni II-102	I02	giš zabar-gub
Ni II-118	rII01'	giš ebir-kaš	Ni II-118	rII07'	giš zabar-gub
Ni U-15	rII07'	giš ebir-kaš	Ni U-04	rII05'	[za]bar-gub
624 7a128	giš ga-an-nu-um		630	giš ma ₂ -gaz	
Ni II-033	I03'	giš ga-nu-um	Ni I-10	rII03'E	giš m[a ₂]-gaz
Ni II-064	rIII05'	[gi]š ga-an-nu-um	Ni II-033	I08'	giš ma ₂ -gaz
Ni II-075	rII07'	[-u]m	Ni II-064	rIII11'	giš ma ₂ -[ga]z
Ni II-076	I10'	giš ga-an-nu-um	Ni II-102	I03	giš ma ₂ -gaz
Ni II-087	I04'	giš ga-nu-u[m]	Ni II-118	rII08'	giš SUR-gaz
Ni II-118	rII02'	giš ga-nu-um	Ni U-04	rII06'	giš ma ₂ -gaz
Ni U-15	rII08'	giš ga-nu-um			
625 7a129	giš ga-an-nu-um-a		631	giš ma ₂ -gaz-bur ₃ -bur ₃	
Ni II-033	I04'	giš ga-nu-um-a	Ni I-10	rII04'E	giš ma ₂ -[ga]z-bur ₃ -bur ₃
Ni II-064	rIII06'	[gi]š ga-an-nu-um-a	Ni II-064	rIII12'	giš ma ₂ -gaz-bur ₃ -bur ₃
Ni II-075	rII08'	[]-um-a	Ni II-102	I04	giš ma ₂ -gaz-bur ₃ -bur ₃
Ni II-076	I11'	giš ga-an-nu-um-a	Ni II-118	rII09'	g[iš] SUR-gaz-bur ₃ -bur ₃
Ni II-087	I05'	giš ga-nu-um-a	Ni U-04	rII07'	giš ma ₂ -gaz-bur ₃ -kur
Ni II-118	rII03'	giš ga-nu-um-a			
Ni U-04	rII01'	[g]a-an-nu-um-a	632 7b037	giš in-nu-šu-gur ₁₀ -a	
Ni U-15	rII09'	[-u]m-a	Ni I-10	rII05'E	giš in-[š]u-gur ₁₀ -a
626 7a129	giš ga-an-nu-um-ga		Ni II-102	I05	[gi]š in-nu-šu-gur ₁₅ (UR ₄)-a
Ni II-064	rIII07'	[] ga-an-nu-um-ga	Ni II-118	rII10'	[-n]u-šu-gur ₁₀ -a
Ni II-075	rII09'	[g]a-nu-um-ga	Ni U-04	rII08'	[gi]š in-nu-šu-g[ur ₁₀]-a
Ni II-076	I12'	[-a]n-[
Ni II-118	rII04'	giš ga-nu-um-g[a]	633	giš pap-hal-la	
			Ni I-10	rII06'E	giš pap-hal-la
			Ni II-102	I06	[] pap-hal-la
			Ni II-118	rII11'	[]-l[a?]
			Ni U-04	rII09'	[]-AN-la

634	7a088	giš gud-si-dili	Ni I-10	rII07'	giš gud-si-dili	Ni I-10	rII16'	[g]iš ur ₂ -tal ₂ -[
	Ni II-064	rIII13'	giš gud-si-dili			Ni II-139	rI09	giš ur ₂ -tal ₂ -l[a]
	Ni II-102	I07	[] gud-si-dili			645	4410	giš gisal
	Ni U-04	rII10'	[]-si-dili			Ni I-10	rII17'	giš gisal
635	7a090	giš zu ₂ -gud-si-dili				646	4411	giš gisal-šu
	Ni I-10	rII08'	giš zu ₂ -gud-si-d[ili]			Ni I-10	rII18'	giš gisal-šu
	Ni II-064	rIII14'	giš zu ₂ -si-dili			Ni U-28	II01'	[gi]š gi[sal-
	Ni II-102	I08	[z]u ₂ -gud-si-dili			647	4413	giš gisal-anše
	Ni U-04	rII11'	[gi]š z[u ₂]-gud-si-dili			Ni I-10	rII19'	giš gisal-anše
636		giš eme-gud-si-dili				Ni U-28	II02'	[g]iš gisal-an[še]
	Ni I-10	rII09'	giš eme-gud-si-dili			648		giš kab
	Ni II-064	rIII15'	giš eme-si-dili			Ni I-10	rII20'	giš kab
	Ni II-102	I09	[em]e-gud-si-dili			649		giš kab-gir ₂
	Ni II-139	rI03	giš e[me-			Ni I-10	rII21'	giš kab-gir ₂
	Ni II-234	rI01'	[] e[me-			Ni II-286	I02'	giš kab-gir ₂
	Ni U-04	rII12'	g[iš em]e-gud-si-d[ili]			650		giš kab-UR ₄ -LAGAB
637	7a091	giš murgu-gud-si-dili				Ni I-10	rII22'	giš kab-UR ₄ -LAGAB
	Ni I-10	rII10'	giš murgu-gud-si-dili			651		giš kab-nig ₂ -kiši ₁₆
	Ni II-102	I10	[murg]u-gud-si-dili			Ni I-10	rII23'	giš kab-nig ₂ -kiši ₁₆
	Ni II-139	rI04	giš murgu gud-[			652		giš gišgal
	Ni II-234	rI02'	giš murgu-g[ud-			Ni I-10	rII24'	giš gišgal
	Ni U-04	rII13'	[g]ud-si-d[ili]			Ni II-132	I02'	[g]iš giš[gal]
638	7a092	giš gešpu ₂ -gud-si-dili				653	7a142	giš halba ₅
	Ni I-10	rII11'	giš ŠU-DIM ₄ -gud-si-dili			Ni I-10	rII25'	giš halba ₅
	Ni II-064	rIII16'	giš šu-dim-dim			Ni II-132	I03'	giš hal-ME-a
	Ni II-102	I11	[]-gud-si-dili			654		giš tir-ug ₅ -ga
	Ni II-234	rI03'	giš ŠU-D[IM ₄ -g]ud-s[i-			Ni I-10	rII26'	giš tir-ug ₅ -g[a]
639	7a081	giš ze ₂ -na				Ni II-132	I04'	giš tir-ug ₅ -ga
	Ni I-10	rII12'	giš ze ₂ -na			655		giš pa-gibil-ug ₅ -g[a]
	Ni II-064	rIII17'	giš ze ₂ -na			Ni I-10	rII27'	giš pa-gibil-ug ₅ -g[a]
	Ni II-139	rI05	giš ze ₂ -na			655a		[g]iš pa-kud-ug ₅ -ga
	Ni IV-24	01	giš ze ₂ -na			Ni II-132	I05'	[g]iš pa-kud-ug ₅ -ga
640	7a083	giš ze ₂ -na-mah				656		giš ni[nda ₂]
	Ni I-10	rII13'	giš ze ₂ -na-mah			Ni I-10	rII28'	giš n[inda ₂]
	Ni II-064	rIII18'	giš ze ₂ -na-BI			Ni II-132	I06'	giš ni[nda ₂]
	Ni II-139	rI06	giš ze ₂ -na-m[ah]			657		giš ninda ₂
641		giš ur ₂ -TUG ₂				Ni II-132	I07'	giš ninda ₂
	Ni I-10	rII14'	giš [u]r ₂-[			658		giš en-ninda ₂
	Ni II-064	rIII19'	giš ur ₂ -TUG ₂			Ni I-10	rII30'	giš en-[
642		giš ur ₂ -eš ₅				Ni II-132	I08'	giš en-ninda ₂
	Ni II-139	rI07	giš ur ₂ -eš ₅					
643		giš ur ₂ -limmu						
	Ni II-139	rI08	giš ur ₂ -limmu					
644		giš ur ₂ -tal ₂ -la						

662	[giš] gir ₃ -re				Ni II-002	rII5'	giš šu-[-
Ni II-139	rII01	[]	gir ₃ -re		682	7a209	giš kun-UMBIN
663	6046	giš	KUR		Ni I-10	rIII10'	giš kun-UMBIN
Ni II-139	rII02	[]	KUR		Ni II-002	rII6'	giš kun-[-
Ni U-04	rIII03'	[]	KUR		683	7a210	giš nig ₂ -UMB[IN]
664	6047	giš	KUR		Ni I-10	rIII11'	giš nig ₂ -UMB[IN]
Ni II-139	rII03	[]	KUR		Ni II-002	rII7'	giš nig ₂ -[-
Ni U-04	rIII04'	[]	KUR		684		giš šagan-la ₂
665	6048	giš	KUR		Ni I-10	rIII12'	giš šagan-l[a ₂]
Ni II-139	rII04	[]	-KUR		Ni II-002	rII8'	giš šagan-[-
Ni U-04	rIII05'	[]	KUR		685		giš u ₃ -nu-di[b?]
666	6052	giš	KAL		Ni I-10	rIII13'	giš u ₃ -nu-d[ib?]
Ni II-139	rII05	[]	KAL		Ni II-002	rII9'	giš šu-nu-[-
667	6053	giš	KAL		686		giš [
Ni II-139	rII06	[]	KAL		Ni I-10	rIII14'	giš [
668	6054	giš	KAL		Ni II-002	rII20'	giš [
Ni II-139	rII07	[]	K]AL		687		giš im?
673		giš	gi-dub		Ni I-10	rIII15'	giš im?
Ni I-10	rIII01'	[]	g]i-dub		Ni II-002	rII21'	giš [
Ni II-002	rII07'		giš gi[d ₂ -		688		giš ur ₂
674		giš	KA-gud		Ni I-10	rIII16'	giš ur ₂
Ni I-10	rIII02'		giš KA-gud		Ni P-01	FII02'	giš u[r ₂]
Ni II-002	rII08'		giš KA-[-		689		giš dub-ba?
675		giš	LUM-LUM-anše		Ni I-10	rIII17'	giš [d]ub
Ni I-10	rIII03'		giš LUM-LUM-anše		Ni II-002	rII22'	giš dub-[-
Ni II-002	rII09'		giš LUM-L[UM-		Ni P-01	FII03'	giš du ₁₀ -ba
676	3476	giš	NIM		690		giš šu
Ni I-10	rIII04'		giš NIM		Ni I-10	rIII18'	giš šu
677		giš	NIM		Ni II-002	rII23'	giš [
Ni I-10	rIII05'		giš NIM		Ni P-01	FII04'	giš šu
678		giš	NIM		691	7b230	giš gu ₂
Ni I-10	rIII06'		giš NIM		Ni I-10	rIII19'	giš gu ₂
679	3477	giš	NIM-kur		Ni P-01	FII05'	giš gu ₂
Ni I-10	rIII07'		giš NIM-kur		692		giš an-ti-bal-gu ₇ -a
Ni II-002	rII13'		giš NI[M-		Ni I-10	rIII20'	giš an-ti-bal-g[u ₇]-a
680	7b141	giš	rab		Ni II-002	rII25'	giš an-bal-gu ₇ -[a]
Ni I-10	rIII08'		giš rab		Ni P-01	FII06'	giš an-ti-bal-g[u ₇]-a
681	7b139	giš	šu-lu ₂		693	7a119	giš dur
Ni I-10	rIII09'		giš šu-lu ₂		Ni I-10	rIII21'	giš dur
					Ni I-11	I03'	giš d[ur?]-
					Ni II-002	rII26'	giš d[ur]
					Ni II-073	I01	giš d[ur]
					Ni P-01	FII07'	giš dur

694	7a120	giš dur-si			
	Ni I-10	rIII22'	giš dur-si		
	Ni I-11	I04'	giš dur-[-		
	Ni II-002	rI27'	giš dur-[-si]		
	Ni II-073	I02	giš dur-si		
	Ni P-01	FII08'	giš dur-si		
695	7a121	giš dur-peš-peš			
	Ni I-10	rIII23'	giš dur-peš-peš		
	Ni I-11	I05'	giš peš-[-		
	Ni II-002	rI28'	giš dur-peš-[-		
	Ni II-073	I03	giš dur-peš-peš		
	Ni P-01	FII09'	giš dur-peš-peš		
696	7b152	giš alan			
	Ni I-10	rIII24'	giš alan		
	Ni I-11	I06'	giš alan-[-		
	Ni II-002	rI29'	giš alan		
	Ni II-073	I04	giš a[lan]		
	Ni P-01	FII10'	[gi]š al[an]		
697	7b159	giš az			
	Ni I-10	rIII25'	giš az		
	Ni II-073	I05	giš a[z]		
698	7b161	giš pirig			
	Ni I-10	rIII26'	giš pirig		
699		giš pirig-tur			
	Ni I-10	rIII27'	giš pirig-tur		
	Ni II-073	I07	giš pi[rig-		
700		giš ur			
	Ni I-10	rIII28'	giš ur		
701		giš za-na			
	Ni I-10	rIII29'	giš za-na		
	Ni II-254	rII05'	[] za-na		
702		giš e ₂ -za-na			
	Ni I-10	rIII30'	giš e ₂ -za-na		
	Ni II-254	rII06'	[gi]š e ₂ -za-na		
703		giš nam-ra			
	Ni I-10	rIII31'	giš nam-ra		
704	7b304	giš ša-u ₁₈ -ša			
	Ni I-10	rIII32'	giš ša-u ₁₈ -ša		
	Ni II-002	rII01'	[-š]a		
705	7b307	giš ar-gibil ₂			
	Ni I-10	rIII33'	giš ar-gibil ₂		
	Ni II-002	rII02'	[a]r-gibil ₂		
706	7b312	giš šu-nigin ₂ -na			
	Ni I-10	rIII34'	giš šu-nigin ₂ -na		
707		^d nisaba za ₃ -mi ₂			
	Ni I-10	rIII35'	[^d ni]saba [z]a ₃ -[m]i ₂		
	Ni II-002	rII03'	^d nisaba za ₃ -mi ₂		

5.5 Non-Standard Nippur Texts

Most of the tablets edited in this section have been included in the score (§5.3), but could not be adequately represented that way because of smaller or larger deviations from the standard text. In the editions below items are preceded by three numbers. The first two refer to the corresponding line in the standard Nippur text and in first millennium ur_5 -ra. Thus the number 332 5023 means: line 332 in the reconstructed Nippur text, corresponding to line 23 of ur_5 -ra 5. The next number identifies the column and line number on the tablet.

Ni I-02 N 1465 + N 1500 (+) N 6125

Ni I-02 has a deviant version of the section $giš$ gigir (obverse column I). Obverse column II and reverse column I preserve items from the section 'doors and locks'. As far as it is preserved this section follows the common Nippur text. Reverse II has $giš$ apin (plough) items, but almost nothing is preserved. Only the $giš$ gigir section is edited here.

	I01'	[]-gigir
	I02'	[]-gigir
	I03'	[] x-gigir
332 5023	I04'	[g]li ₄ -gigir
345	I05'	[g]ab-š _u ₂ -gigir
5022	I06'	[a]d-uš-gigir
	I07'	[]-gigir
338 5045	I08'	[]-mud-gigir
	I09'	[] e ₂ ?-usan ₃ -amar-gigir
333 5047	I10'	[] su-din-gigir
	I11'	[gi]š hur-zi-pa-ag ₂ -gigir
340 5049	I12'	[] šudul-gigir

Commentary to Ni I-02

I11' The entry $giš$ hur-zi-pa-ag-gigir means 'a hole for breathing in a chariot', which is otherwise unknown to me.

Ni II-048 CBS 06496

The reverse of Ni II-048 has a version of the section $giš$ ig, which is at variance with the common Nippur text. The obverse ($giš$ gu-za) is not edited here.

390 5218	rI01'	[] ig-maš-[
	rI02'	giš ig-giš X [
5238	rI03'	giš ig- $giš$ nimbar
391 5251a	rI04'	giš ig-u ₃ ?-ma?
396 5247	rI05'	giš ig-ka ₂ -gal?-x
395 5250	rI06'	[i]g k[a ₂]-a[n]-a[n]

Ni II-104 not only has numerous items that are missing from the standard text, but also has a sequence of sections that is unlike any other Nippur example. Moreover, the rounded left edge is unusual for Nippur type II tablets. It is very possible that the tablet either comes from elsewhere, or was made and inscribed by someone raised in another scribal tradition. It should be noted, however, that the obverse exercise, a list of field names, does not depart from the common Nippur text (see *MSL* 11, p.96 L). In places the tablet is difficult to read. Since parallels are of little help here, there remain some uncertainties in reading. The tablet is not included in the score in §5.4. It is assumed that the columns run from left to right. In all versions of the giš list the section ^{giš}gu-za follows almost immediately after the trees and should, therefore, precede the other sections included here. Since the text does not follow any known version, this may well be incorrect.

Ni II-104

	rI01'	giš X
	rI02'	giš gu-[
	rI03'	giš gu-za-X
	rI04'	giš g[u]-z[a]-X
	rI05'	giš [g]u-za-lugal?
	rI06'	giš g[u-]-X-DU?
	rI07-09'	traces only
	rI10'	giš gu-za-gar-ra
	rI11'	giš g[u-]-dingir-ra
176 4116	rI12'	giš gu-za-X-SAR-e?-du-a
181 4100	rI13'	giš gu-za-ma ₃ -lah ₆
179 4098	rI14'	giš gu-ma ₃ -na(sic!)
184 4082	rI15'	giš gu-za-munus
183 4081	rI16'	giš gu-za-nita
	rI17'	[]-iti?-m[a]
	rII	four lines with traces only.
412 5312	rII05'	giš [ba]r-bar
413 5317	rII06'	giš [t]ug ₂ -tug ₂
	rII07'	giš i[l ₂ ?]
	rII08'	giš {traces}
	rII09'	giš ŠID-[
415 5318	rII10'	giš nig ₂ -[g]i-[n]a
414 5319	rII11'	giš nig ₂ -il
374 5199	rII12'	giš ig
	rII13'	giš ig-tab
	rII14'	giš ig-tab-ba
385 5237	rII15'	giš ig-mi-ri-za
	rII16'	giš ig-u ₃ -X-tum
	rII17'	giš ig-e ₂ -gal
	rII18'	giš ig-[
	rII19'	giš [
	rII20'	giš [
	rII21'	g[iš
	rIII01'	giš X [
	rIII01-09'	traces only
333 5047	rIII10'	giš su-din-gigir
	rIII11'	giš gag-tab-ba-gigir

337	5034	rIII12'	giš gir ₃ -gub-gi[gir]
		rIII13'	giš a[d]-X [
		rIII14'	giš X [
		rIII15'	g[iš
		rIV	Traces of GIŠ only.

Ni II-138

UM 29-16-056

The piece is difficult to read. It includes items not found in the standard Nippur text. The transcription is offered here with many reservations. This tablet is not included in the score in §5.4.

001	3001	rI01	giš taskarin
002	3002	rI02	giš esi
003	3003	rI03	giš nu ₁₁
004	3004	rI04	giš ha-lu-ub ₂
005	3005	rI05	giš š[a ₃ ?-
006	3006	rI06	[] kin ₂
		rI07	illegible
		rI08	[] kin ₂ -[
		rI09	giš [
		rI10	giš GI? [] MI
		rI11-13	illegible
008	3012	rI14	giš geštin
009	3013	rI15	giš geštin-kir ₄
010	3015	rI16	giš geštin-k[a ₃]-a?
011	3017	rI17	giš geštin-gam-ma
		rI18	giš geštin-e-na
		rI19	giš geštin
		rII01	giš geš[tin?]-BU-x [
		rII02-13	illegible
	3045	rII14	giš hašhur-M[A?]
	3041	rII15	giš hašhur-ab-ba
015	3050	rII16	giš še-dug ₃
016	3049	rII17	giš še-[
017	3052	rII18	giš še-[
		rIII01	lost
018	3067	rIII02	giš ši[nig-
019	3072	rIII03	giš ši[nig-
020	3068	rIII04	giš šinig-[
		rIII05-13	illegible
029	3092	rIII14	giš ši[m?-
		rIII15	giš UŠ?-KU-ga
		rIII16	giš HI-nu?-um
		rIII17	giš ga-e-nu-la
030	3126	rIII18	giš šennur
		rIV01-17	illegible
		rIV18	giš ma-nu-[

Ni II-254

CBS 10778

The tablet preserves a section close to the end of the giš list. At this particular point there is only one other source (Ni I-10). Unfortunately, Ni II-254 is badly preserved and it can only partly be harmonized with the text in Ni I-10.

Ni II-254

	rI	Only GIŠ signs remain.
	rII01'	[] X
	rII02'	[] LA?
	rII03'	[] BAR-PAP?
	rII04'	[] -da
701	rII05'	[] za-na
702	rII06'	[gi]š e ₂ -za-na
	rII07'	giš [

Ni IV-11

2N-T459

The text of this lentil cannot be placed in the standard text:

Ni IV-11

1	giš suhur-[
2	giš suhur-a-[

Ni IV-12

IM 58046 (2N-T730)

The obverse of this piece looks like an ordinary lentil. Its reverse, however, has an abbreviated version of the tree list in three columns. Moreover, the text includes a few Akkadian translations of words which are usually listed in Sumerian.

Obv.:

130 3486	1	giš maš
133	2	giš sag-EZEN

Rev.:

001 3001	rI01	[gi]š taskarin
002 3002	rI02	giš esi
003 3003	rI03	giš nu ₁₁
004 3004	rI04	giš ha-lu-ub ₂
005 3005	rI05	giš ša ₃ -kal
006 3006	rI06	giš kin ₂
007 3011	rI07	giš gi ₆
008 3012	rI08	giš geštin
012 3029	rI09	giš peš ₃
013 3032	rI10	giš hašhur
014 3033	rI11	giš hašhur-kur
015 3050	rI12	giš še-dug ₃

016	3049	rI13	giš še-nu
018	3067	rI14	giš šinig
020	3068	rI15	giš šinig-kur
021	3053	rI16	giš šar ₅ (NE)-ša ₄ -bid ₃
023	3061	rI17	giš lam
024	3062	rI18	giš LUH?
025	3074	rI19	giš u ₃ -suh ₅
026	3083	rI20	giš še-u ₃ -suh ₅
029	3092	rI21	giš šim-gig
		rI22	giš gilim
031	3136	rI23	giš lam-gal
032	3137	rI24	[gi]š lam-tur
034	3138	rI25	[il]dag ₂
		rI26	[]-KAM
035	3140	rI27	[]-kur
041	3156	rII01	giš gi ₆ -par ₄
042	3158	rII02	giš ma-nu
045	3186	rII03	giš []-ur ₇ -[
046	3195	rII04	giš KID-da
047	3196	rII05	giš KID-da
048	3199	rII06	giš KID-da-zi[l-l]a
049	3200	rII07	giš m[es]
050	3204	rII08	giš mes-m[a ₂]-gan
053	3225	rII09	giš šu-ur-me
054	3226	rII10	giš z[a-]-lum
055	3227	rII11	giš [-k]um
056	3229	rII12	giš gi-[-l]um
058	3237	rII13	giš z[i-i]r-dum
063		rII14	giš m[i]-r[i]-i[š?]-gar-ra
059	3254	rII15	giš []-nu-um?
060	3260	rII16	giš ti?-ru
064	3265	rII17	giš isimu ₂
065	3280	rII18	giš nimbar
086	3356	rII19	giš pa-DIŠ-ra
105	3411	rII20	giš asal ₂
106	3412	rII21	giš asal ₂ -kur
111		rII22	giš ad ₂
112	3439	rII23	giš kiš ₁₆
115	3447	rII24	giš sa-ma-na ₂
117	3450	rII25	giš zu-ti-a-nu-um
122	3238	rII26	giš ši-iq-d[um]
123	3455	rII27	giš za-ri ₃ -aš-tum
125	3469	rIII01	giš e-gi-zu-l[um]
126	3470	rIII02	giš BU-zu-lum
127	3480	rIII03	giš dili-bu-um
129	3483	rIII04	giš huš
132	3489	rIII05	giš guru ₅ -uš
130	3486	rIII06	giš maš
133		rIII07	giš sag-EZEN
		rIII08	giš

Ni U-07

CBS 08269

Ni U-07 is an oval tablet inscribed with three lines of text running parallel to the longer side. It does not conform to any known tablet type. The text consists of three names of trees, but not in an order known from any lexical tradition. It is possible that this is not a school tablet, though no other obvious possibility presents itself. Ni U-07 has not been included in the score in §5.4.

013	3032	I01	giš hašhur
045	3186	I02	giš nu-ur ₂ -ma
012	3029	I03	giš peš ₃

Ni U-20

UM 29-16-604

Ni U-20 has a version of the passage between the trees and the furniture, plus the beginning of the ^{giš}gu-za section. The text of this passage is rather poorly standardized, so the degree of deviation displayed in this tablet is not unusual. However, full integration of this text into the score proved impractical. For this reason the tablet is presented here.

		I01'	illegible
		I02'	[] maš-dara ₃ ?
		I03'	[] U-D[U]-ZA-LE-UD
145		I04'	[] le-u ₃
		I05'	[] ma-da-šU ₂ +AN
		I06'	[] gi-dim ₂
144	4006	I07'	[] dib-dib
144	4006	I08'	[di]b-dib
149	4024	I09'	[]-bal
		I10'	[] x
		II01'	giš [
		II02'	giš gu-za-[
		II03'	giš gu-za-[
		II04'	giš gu-z[a
		II05'	giš gu-z[a
		II06'	giš g[u-

Ni U-28

CBS 10071

Ni U-28 has the end of the section ^{giš}gisal, continuing with ^{giš}gam₃ items. The section has been preserved on only one other tablet (Ni I-10). It is impossible to decide, therefore, which one has the 'standard' text, and which one is deviant. The version of Ni U-28, however, is more like the tradition known from later parallels. See the discussion in the comments to Nippur 648 (§5.3).

		I	traces only
646	4411	II01'	[gi]š gi[sal-
647	4413	II02'	[g]iš gisal-an[še]
	7b291	II03'	giš gam ₃
	7b292	II04'	giš gam ₃ -gir ₂
	7b295	II05'	giš gam ₃ -gir ₂ -šu-i
		II06'	[-g]ir ₂ -m[uhaldim?]

Ni U-29 CBS 10192

This tablet has a somewhat deviant version of the section boats. It includes a number of words not found anywhere else in the Nippur giš lists.

	rI01'	gi[š
	rI02'	giš [
	rI03'	giš ma ₂ -
	rI04'	giš ma ₂ x [
296 4281	rI05'	giš ma ₂ -dilmun-[
	rI06'	giš ma ₂ -gur-[
293 4304	rI07'	giš ma ₂ -dara ₃ -[
	rI08'	giš ma ₂ -ŠU ₂ -AN-[
	rI09'	[gi]š m[a ₂ -
	rII01'	traces
314 4417	rII02'	[] zi-gan
315 4419	rII03'	[]-zi-gan
316 4420	rII04'	[] UMBIN-zi-gan
4407	rII05'	[giš gi]-muš
263 4254	rII06'	[]-za
264 4255	rII07'	[]-za-zu ₂ -gi ₄ ?-a
319 4421	rII08'	[] gag
320 4422	rII09'	[] ir
4424	rII10'	[giš ir]-dim
321 4428	rII11'	[] ENxKAR ₂
322 4428a	rII12'	[ga]g-ENxKAR ₂
323 4429	rII13'	[] šibir
324 4430	rII14'	[ga]g-ši[bir]

5.6 Non-Nippur Texts

An important characteristic of the Old Babylonian lexical tradition is the existence of local versions. These local versions vary to differing degrees from the Nippur text and from each other. Non-Nippur lists of trees and wooden objects are edited here in four sections: the Isin version, the Ur version, Uruk fragments, and unprovenanced texts. Texts from Northern Babylonia are excluded (see §5.1). A few unprovenanced texts carry a tradition that is close to that from Ur or Isin. These texts are edited in the appropriate sections.

As in §5.3, each line of text is preceded by three numbers: the corresponding line number in the Nippur standard text, the number of the corresponding entry in late ur₅-ra, and, finally, the column and line number on the tablet edited.

5.6.1 The Isin Tradition

Only a small part of the rich lexical finds from Isin have been published so far. The giš texts include type I tablets and lentils. There are three type I tablets. Is I-01 begins with the trees and ends with the section ^{giš}mar-gid₂-da (wagons). Is I-03 begins with the section doors (^{giš}ig) and presumably continued until the end of the giš chapter of ur₅-ra. The third type I tablet (Is I-02) begins with the trees and ends somewhere in the middle of the section chairs (^{giš}gu-za). The tradition found in Isin is close to that from Nippur. The order of the sections is approximately the same but the Isin text is somewhat more elaborate. The division of the text over type I tablets corresponds to the subdivision of the giš chapter attested in some of the Nippur type I tablets. This division was to become the standard in Ugarit and Emar. Since the Isin text must have been longer than that in Nippur it is plausible that the former used a standard two-tablet edition.

The Isin texts are roughly contemporaneous with, or slightly earlier than the Nippur tablets. One lexical text is dated Samsuiluna 12 (Is I-02). Other tablets in the same context are dated slightly earlier, the earliest being Hammurabi 31¹.

Included in the edition of the Isin texts is a prism of unknown provenance, now kept in the Kelsey Museum, Ann Arbor, Michigan. The prism covers the same sections as Is I-01, beginning with the trees and ending with the section ^{giš}mar-gid₂-da. The Kelsey prism and the Isin tablets are almost identical in the sequence of the sections and exhibit many similarities in individual items. However, the Kelsey piece does not strictly speaking duplicate the Isin text.

The unpublished Isin texts edited here were made available to me by Prof. C. Wilcke, who generously sent me his hand copies of a large number of lexical tablets from Isin. The only piece that could be collated by autopsy was the Kelsey prism (NP P-01). Prof. Piotr Michalowski was so kind as to relinquish his rights to this important text. The director of the Kelsey Museum of Archaeology, Prof. E.K. Gazda, kindly gave her permission to publish the text here, for which my sincere thanks.

¹ See Wilcke 1987, p.84.

Is I-01

IB 1535 + IB 1606

001	3001	I01	giš taskarin	053	3225	II21	giš šu-ur ₂ -min ₃
002	3002	I02	giš esi	054	3226	II22	giš za-ba-lum
003	3003	I03	giš nu ₁₁	055	3227	II23	[gi]š e-lam-ma-kum
006	3006	I04	giš kin ₂	056	3229	II24	[gi]š gi-ri-lum
006a	3007	I05	giš kin ₂ -babbar	057	3231	II25	giš gi-rim
006b	3008	I06	giš kin ₂ -gi ₆	058	3237	II26	[z]i ₂ -ir-dum
004	3004	I07	giš ha-lu-ub ₂ !	060	3260	II27	[t]i-ia-a[r]
005	3005	I08	giš ša ₃ -kal			II28	traces
007	3011	I09	giš gi ₆	051d	3216	II81	g[iš m]es-ha-lu-ub ₂
008	3012	I10	giš [geš]tin				[h]ar-ra-an-na
009	3013	I11	giš geštin-[k]ir ₄			III01	giš nim[bar-
010	3015	I12	giš geštin-ka ₃ -a			III02	giš ša ₃ -[
011	3017	I13	giš geštin-gam-ma	081	3351	III03	giš ša ₃ -[
012	3029	I14	giš peš ₃	082	3355	III04	giš su[hur-
	3030a	I15	giš peš ₃ -ma ₂ -ri ₂	086	3356	III05	giš pa [
013	3032	I16	giš hašhur	087	3357	III06	giš p[a-
014	3033	I17	giš hašhur-kur-ra			III07	giš []-nimbar
	3037	I18	giš hašhur-ar-ma-nu-um	088	3359	III08	giš [dal]la ₂ -nimbar
	3040	I19	giš hašhur-dam-ši-lum	091	3369	III09	[z]u ₂ ?-nimbar
	3042	I20	giš hašhur-ba-za			III10	[] X-nimbar
	3044	I21	giš hašhur-gud	084		III11	[k]iri ₆ -nimbar
016	3049	I22	giš še-nu	090	3360	III12	[-n]a-nimbar
015	3050	I23	giš še-dug ₃	089	3398	III13	[m]ud-nimbar
017	3052	I24	giš še ₃ -š[e ₃]			III14	[L]AGAB?-nimbar
018	3067	I25	giš ši[nig]	097	3389	III15	giš ga ₂ -li-nimbar
019	3072	I26	giš šinig-[		3403	III16	giš he ₂ -BAD-nimbar
020	3068	I27	giš ši[nig-	094	3380	III17	giš TUG ₂ -nimbar
021	3053	I28	giš š[ar _x (NE)			III18	giš KA-nim[bar]
		I29	gi[š	102	3384	III19	giš peš-[nimba]r
039	3154	II01	giš ab-ba	103		III20	giš peš-murgu-[nimba]r
040	3155	II02	giš ab-ba-me-luh-ha	104		III21	giš peš-banda ₃ -zi-
041	3156	II03	giš gi ₆ -par ₄				[nim]bar
042	3158	II04	giš ma-nu			III22	giš ha-[r]a?-[nimba]r
	3159	II05	giš ma-nu-duru ₅	098	3402	III23	giš an-[
043	3163	II06	giš ma-nu-šu-AG			III24	giš [
044	3164	II07	giš ma-nu-gibil ₂ -AG			IV01'	gi[š
	3167	II08	giš ma-nu-mur-ra-an-na			IV02'	giš X [
045	3186	II09	giš nu-ur ₂ -ma			IV03'	giš [
046	3195	II10	giš E ₂ -d[a]			IV04'	giš ma[š?-
047	3196	II11	giš E ₂-[			IV05'	giš [
048	3199	II12	giš E ₂-[			IV06'	gi[š
049	3200	II13	giš [m]es			rI01'	[gi]š [
050	3204	II14	giš mes-m[a ₂ -]-na			rI02'	[gi]š [
051	3205	II15	giš mes-[-h]a			rI03'	[gi]š [
		II16	giš m[es-			rI04'	[gi]š [g]u-[
051c	3206	II17	giš [k]i-e[n-			rI05'	[] gu-z[a-
051d	3216	II18	giš mes-ha-lu-ub ₂ -har-ra-	4104		rI06'	[] gu-[]-sig ₁₇ -g[ar?
			an-na			rI07'	[a]l [
030	3126	II19	giš [šen]nur			rI08'	[z]a-al-[
052	3217	II20	giš erin	197	4107	rI09'	[g]iš [z]a-[]-za[bar?-

192	4133a	rII0'	giš gu-[]-mes-[	284	4359	rIII28'	[gi]š ma ₂ -15-g[ur]
201	4124	rII1'	giš di ₃-[	285	4360	rIII29'	[m]a ₂ -10-gur
200	4126	rII2'	giš sa[g-		4382	rIII30'	[] gur?-ma ₂
202	4125	rII3'	giš N[E?-		4383	rIII31'	[] te-ma ₂
		rII4'	giš x[	321	4428	rIII32'	[gi]š ENxKAR ₂
		rII5'	g[iš	322	4428a	rIII33'	[gi]š ENxKAR ₂
		rII6'	giš Š[U ₂ ?	323	4429	rIII34'	[gi]š ENxKAR ₂
		rII7'	giš Š[U ₂ ?			rIV01'	traces
		rII8'	giš Š[U ₂ ?	342	5054	rIV02'	gi[š] umbin-x-gi[gir]
		rII9'	giš Š[U ₂ ?			rIV03'	giš ka-umbin-gi[gir]
		rII01'	giš KID?-[]-g[a ₂ -			rIV04'	gi[š] maš ₂ -umbin-gi[gir]
233	4181	rII02'	giš ma-[] x [			rIV05'	giš da-umbin-gigir
231	4174	rII03'	giš [dil]im ₂ ?	351	5059	rIV06'	g[iš] gag-sal ₄
230	4175	rII04'	giš []-gal	352		rIV07'	[z]a-ra-gag-sal ₄
		rII05'	giš []-gal			rIV08'	[-s]al ₄
		rII06'	g[iš	355	5068	rIV09'	g[iš] š[id- -b]ar-ra
		rII07'	giš [	356	5070	rIV10'	giš ši[d-d]u ₁₀ -ša ₃ -ga
236	4203	rII08'	giš umbin-[	354		rIV11'	giš š[id-d]u ₁₀ -gar-ra
237	4198	rII09'	giš banšur-zag-g[u]-la ₂	357	5073	rIV12'	giš mar-[gi]d ₂ -da
238	4199	rII10'	giš ban[šur-]-gar!-ra!	5077		rIV13'	giš mar-[gid ₂]-da-su!-
		rII11'	giš ban[šur-]-tum				bi[r ₄ -k]i
		rII12'	giš ban[šur-]-AN-am-			rIV14'	giš HI-MAŠ-mar-gid ₂ -da
			s[i-s]i-ga			rIV15'	giš d[al]-mar-gid ₂ -da
242	4209	rII13'	giš U[D-	373	5083	rIV16'	giš e[n ₃]-dur-mar-da
		rII14'	appr. 8 lines lost			rIV17'	giš [us]an ₃ ?-mar-gid ₂ -da
		rII22'	giš [	368	5092	rIV18'	giš u[mbin]-mar-gid ₂ -da
		rII23'	giš [			rIV19'	giš k[a]-umbin-mar-gid ₂ -
		rII24'	giš x[				da
		rIII01'	giš m[a ₂ -			rIV20'	giš maš ₂ -umbin-mar-
		rIII02'	giš ma ₂-[				gid ₂ -da
		rIII03'	giš ma ₂ -ki-[			rIV21'	giš [da-umbi]n-mar-gid ₂ -
		rIII04'	giš ma ₂-[				da
		rIII05'	giš m[a ₂ -	363	5085	rIV22'	giš gir ₃ -g[ub]-mar-gid ₂ -
	4269	rIII06'	giš ma ₂ -gi[d ₂ -				da
297	4362	rIII07'	giš u ₅-[	366		rIV23'	giš šudul ₄ -mar-gid ₂ -da
	4371	rIII08'	giš murgu-m[a ₂	367		rIV24'	giš gag-šudul ₄ -mar-gi[d ₂ -
		rIII09'	giš LUM-ma ₂	359		rIV25'	giš za-ra-mar-gi[d ₂ -
	4363	rIII10'	giš ad-ma ₂			rIV26'	giš []-mar-[
	4364	rIII11'	giš ad-us ₂ -ma ₂			rIV27'	giš KAM-DAR-mar-
299	4367	rIII12'	giš si-ma ₂				gid ₂ -da
		rIII13'	giš gu ₂ ?-A[B?]-ma ₂	361		rIV28'	giš KA-kul-mar-gid ₂ -da
306		rIII14'	giš peš-eš ₃ -ma ₂				
		rIII15'	giš []-ma ₂				
301	4374	rIII16'	giš dim-ma ₂				
300	4373	rIII17'	[gi]š anše-[
304		rIII18'	gi[š] u ₅ -zi-pa-ah-m[a ₂]				
308	4391	rIII19'	gi[š] ma ₂ -du ₃				
309		rIII20'	gi[š]-ma ₂ -du ₃				
		rIII21'	gi[š]-du ₃				
		rIII22'	gi[š				
		rIII23'	gi[š				
		rIII24'	giš m[a ₂ -				
		rIII25'	giš m[a ₂ g]ur				
		rIII26'	giš m[a ₂ -				
283	4358	rIII27'	giš ma ₂ -20-				

Commentary to Is I-01

I24 The variant ^{giš}še₃-še₃ for ^{giš}še-še in the Nippur text (line 17) is known only from Isin. The same line is found in Is I-02.

Is I-02 IB 1547

		I01'	[] x	048	3199	II23'	giš [KI]D-da-si?
		I02'	[] x	049	3200	II24'	giš mes
008	3012	I03'	giš[^{giš}] geš[^{giš} tin]	050	3204	II25'	[g]iš mes-g[an?
009	3013	I04'	giš geš ^{giš} tin-kir ₄	051	3205	III01	giš mes-me-lu[h-h]a
		I05'	giš geš ^{giš} tin-HUR-ma	051c	3206	III02	giš mes-ki-en-gi-ra
011	3017	I06'	giš geš ^{giš} tin-gam-ma	051d	3216	III03	giš mes-ha-lu-ub ₂ ?-har-
012	3029	I07'	giš peš ₃				ra-an-na
	3030a	I08'	giš peš ₃ -ma ₂ -ri ₂	052d		III04	giš asal (ŠILIG)
013	3032	I09'	giš hašhur	052	3217	III05	[giš] eri[n]
014	3033	I10'	giš hašhur-kur-ra	053	3225	III06	giš šu-u[r ₂ -mi]n ₃
	3037	I11'	[gi]š [haš]hur-ar-ma-nu	054	3226	III07	giš za-ba-lum
	3040	I12'	[gi]š [haš]hur-dam-ši- RI-lum	055	3227	III08	giš e-lam-ma-kum
	3042	I13'	[gi]š hašhur-ba-za	056	3229	III09	giš gi-ri-lum
	3044	I14'	[gi]š hašhur-gud	057	3231	III10	giš gi-rim
016	3049	I15'	[g]iš še-nu	058	3237	III11	giš zi ₂ -ir!-du
015	3050	I16'	giš še-dug ₃	060	3260	III12	giš ti-ia-ar
017	3052	I17'	giš še ₃ -še ₃	061	3250	III13	giš e-[l]a-nu-um
018	3067	I18'	giš šinig	063		III14	giš mi-ri ₂ -i-ereš ₄ .eš
020	3068	I19'	giš šinig-kur-ra	059	3254	III15	giš ur-nu-um
019	3072	I20'	giš šinig-dili	062	3255	III16	giš ur-zi-n[u]-um
021	3053	I21'	[š]ar _x (NE)-ša ₄ -bi[d ₃]		3261	III17	giš ar-ma[n]-nu-um
022	3054	I22'	[š]ar _x (NE)-š[a ₄ -	064	3265	III18	giš ar-ga-nu-um
029	3092	II01'	[š]im?-[			III19	giš GUL-X
		II02'	giš NIM			III20	giš u ₃ -l[uh-giš.ki]ri ₆
031	3136	II03'	giš lam-gal			III21	giš nunuz-giš.[ki]ri ₆
032	3137	II04'	giš lam-tur	065	3280	III22	giš nimbar
033	3133	II05'	giš al-la-nu-u[m]	067	3282	III23	giš nimbar-kur
117	3450	II06'	giš peš ₇ -kal	066	3289	III24	giš nimbar-tur
034	3138	II07'	giš ildag ₂	068	3284	III25	giš nimbar-dilmun?-na
035	3140	II08'	[il]dag ₂ -kur		3286	III26	gi[š] nimbar-ma ₂ -[]-na
036	3141	II09'	[-bu]r-ra			III27	[gi]š nimbar? X X
037	3146	II10'	giš ilda[g]-RI	077	3304	III28	[] nimbar uh ₂ -g[u,?]
038	3152	II11'	giš kur-ra			IV01	[]
039	3154	II12'	giš ab-ba			IV02	giš
040	3155	II13'	giš ab-ba-me-luh-ha			IV03	giš nim[bar?]-
041	3156	II14'	giš gi ₆ -par ₄			IV04	giš nimbar-[
042	3158	II15'	giš ma-nu	081	3351	IV05	giš ša ₃ -nimbar
	3159	II16'	giš ma-nu-duru ₃			IV06	giš HU-nimbar
043	3163	II17'	giš ma-nu-šu-AG	082	3355	IV07	giš suhur-nimbar
044	3164	II18'	giš ma-nu-gibil ₂ -AG	086	3356	IV08	giš pa-nimbar
	3167	II19'	giš ma-nu-mur-ra-an-na	087	3357	IV09	giš pa-kud-nimbar
045	3186	II20'	giš nu-ur ₂ -ma	088	3359	IV10	giš IGI-KUD-nimbar
046	3195	II21'	giš KID-da			IV11	giš ligima-nimbar
047	3196	II22'	[giš K]ID-da			IV12	giš UR-nimbar
				091	3369	IV13	giš zu ₂ -nimbar

090	3360	IV14	giš ze ₂ -na-nimbar		rII19'	giš tun ₃ -muhaldim
089	3398	IV15	giš mud-nimbar	4031	rII20'	giš tun ₃ -[šu]-i?
		IV16	giš LAGAB?-nimbar		rII21'	giš tun ₃ -[
097	3389	IV17	giš ga ₂ -li-nimbar		rIII01-11	illegible
	3403	IV18	giš he ₂ -BAD-nimbar	162 4071	rIII12	giš gu-za-gid ₂ -da
094	3380	IV19	giš TUG ₂ -nim[bar]		rIII13	giš [-d]a
		IV20	giš KA-nim[bar]		rIII14	giš [
102	3384	IV21	giš peš-[		rIII15	giš g[u-
103		IV22	giš peš-[		rIII16	giš gu-za-[
104		IV23	giš peš-banda ₃ -zi-[		rIII17	giš g[u-
		IV24	giš ha-ra-[		rIII18	giš gu-za-[]-SU
		IV25	giš (traces)	4101	rIII19	giš gu-za-nig ₂ -nigin ₂ -na?
		IV26	giš ki X X [	179 4098	rIII20	giš gu-za-ma ₂ -gan-na
		IV27	giš X X X [		rIII21	giš gu-za-me-da-da
		IV28	giš nimbar-al-[	186a 4093	rIII22	giš gu-za-gidim
		IV29	giš nimbar-al-[		rIII23	giš gu-za-[
		IV30	giš nimbar-al-dar?-x	178 4096	rIII24	giš gu-za-šah?-X-ma
		IV31	giš nimbar-SI-DU ₃ -X [		rIV01-03	lost
		IV32	giš X X X [		rIV04	[]-du ₃ ?-a
		IV33	g[iš] i[n] X [	177 4118	rIV05	[]-sag-e-du ₃ -a
		rI01'	[] b]i		rIV06	[]-IB
121	3466	rI02'	[] šu[ši]n		rIV07	[]-za-GAR-[
		rI03'	[]-ra?-X		rIV08	[g]u-za-[
		rI04'	[] X X	189 4110	rIV09	giš gu-za- ^{giš} taskarin
		rI05'	[] pa?-sik[il-	192 4113a	rIV10	giš gu-za- ^{giš} mes
		rI06'	[] pa-AN X [] ti-bal	4112	rIV11	giš gu-za- ^{giš} ha-lu-ub ₂
		rI07'	traces	195 4103	rIV12	giš gu-za-gar ₃ -ba
		rI08'	traces		rIV13	iti-GAN-GAN-e ₃ u ₄ 22-
123	3455	rI09'	giš LAGABxZA-ZUM			kam
125	3469	rI10'	giš gi-zu ₂ -lum-na		rIV14	mu sa-am-su-i-li-na
126	3470	rI11'	giš BU-zu ₂ -lum-na?			lu[gal
127	3480	rI12'	giš dili-bu-ma		rIV15	usu-mah ^d Mar[duk
128	3482	rI13'	giš an?-t[a]			
129	3483	rI14'	giš huš			
130	3486	rI15'	giš maš			
131	3488	rI16'	giš maš-gurum			
132	3489	rI17'	giš guruš-uš			
133		rI18'	giš sa[g]-EZEN			
134		rI19'	giš MES-[sa]g-EZEN			
135	3493	rI20'	giš i-r[i ₉]-[n]a			
		rI21'	[]-eš			
137	3498	rI22'	[]-na			
		rII01-06'	illegible			
		rII07'	giš kar ₂ ?-bi			
		rII08'	giš DU-x			
		rII09'	giš X-na			
145a		rII10'	giš GAN-[L]A?			
550	7a039	rII11'	giš šu-nir			
619		rII12'	giš šu-kar ₂ ?			
147	4021	rII13'	giš dub-dim ₂			
148	4022	rII14'	giš šumun-g[i ₄]			
149	4024	rII15'	giš te-bal			
151	4029	rII16'	giš tun ₃			
		rII17'	giš tun ₃ -X			
		rII18'	giš tun ₃ -UD-X			

Commentary to Is I-02

III20f. The items ^{giš}u₃-luh-^{giš}kiri₆ and ^{giš}nunuz-^{giš}kiri₆ are not found anywhere else in the Old Babylonian tradition. They do fit the corresponding passage in late ur₅-ra, where a number of words for shoot are collected (ur₅-ra 3, 264a-272; *MSL* 5, pp.114-116).

Rev. The reverse columns run from left to right. After rIV12 there is a double line, followed by scribbles. The date is added at the bottom of the column (Samsuiluna 12).

Is I-03 IB 1512c + IB 1516 + IB 1550 + IB 1561 + IB 1563

		I01'	traces	430	6082	II27'	[] BU
		I02'	traces	431	6083	II28'	[] BU
		I03-10'	broken	432	6084	III01	lost
380	5244	I11'	[]g-a?-suh ₄	433	6092	III02	[] BU
381	5218	I12'	[gi]š ig-maš-tab-ba	434	6097	III03	[] bu
385	5237	I13'	[gi]š ig-mi-ri ₂ -za	435	6098	III04	giš BU-ERIN ₂ -AŠ-GI-MA
384	5239	I14'	[gi]š ig-ze ₂ -na				
		I15'	[gi]š ig-gu-zu			III05	giš BU
388	5252	I16'	[gi]š suku ₅ -ig	436	6108	III06	giš rin ₂
392	5255	I17'	[gi]š du-ig			III07	giš rin ₂ -lu ₂
390	5254	I18'	[gi]š u ₄ -sakar-ig	437	6110	III08	giš rin ₂ -lib?-bi
394	5267	I19'	[gi]š suhub ₄			III09	giš rin ₂ {traces}
394b	5268	I20'	[] šu-ga	440	6116	III10	giš e ₂ -[
395	5264	I21'	[]n]u-kuš ₂	442	5110	III11	giš [
396	5265	I22'	[]-ku]š ₂ -an-na			III12	giš a[pin-
397	5266	I23'	[]-ku]š ₂ -ki-ta	443	5116	III13	giš [api]n-š[u]
398	5270	I24'	[]-kul	444	5117	III14	giš apin-šu-du ₇
		II01'	traces	445	5118	III15	giš apin-šu-mu-du ₇ (sic!)
		II02'	giš TAG.T[UG ₂ -]-x	446	5123	III16	giš apin-tug ₂ -sig ₁₈
412	5312	II03'	giš bar-bar	447		III17	giš apin-sag-tuku
413	5317	II04'	giš KU-KU		5128	III18	giš apin ^{giš} šu-kar ₂ !-bir-bir
414	5319	II05'	giš nig ₂ -zu?	449	5135	III19	giš sag-apin
415	5318	II06'	giš nig ₂ -gi-na		5136	III20	giš gag-sag-apin
416	5313	II07'	giš nig ₂ -menbulug ₂	451	5144	III21	giš ka-šu ₂ ?-apin
417		II08'	giš da-šu-du ₇ -tug ₂ -ga?		5136a	III22	giš ama-apin
	5315	II09'	giš il ₂ -sik ₂			III23	giš PA-GUD-KAM-apin
411	5314	II10'	giš il ₂ -il ₂	452	5152	III24	giš šu-sag-apin
		II13'	giš ga-ri[g ₂ -	453	5157	III25	giš nig ₂ -kud-apin
	6016	II14'	giš ga-rig ₂ -š[u-i?]	454	5158	III26	giš nig ₂ -PI-[
421	6015	II15'	giš ga-rig ₂ -pa-m[ušen]-na!		5170	III27	[gi]š har-apin
						III28	[] gag-har-apin
421a	6018	II16'	giš ga-rig ₂ -e ₂ -pa-na	463	5141	III29	[]i-apin
422	6019	II17'	giš bal		5142	III30	[gi]š gag-l[i]-apin
423	6030	II18'	giš e ₂ -bal	455	5161	III31	giš sal-la-apin
424	6026	II19'	giš sag-bal	456	5162	III32	giš gag-sal-la-apin
425	6028	II20'	giš me-te-[		5159c	IV01	giš dam-apin
317	4025	II21'	giš an-ti-b[al]	459	5166	IV02	giš šudul-apin
		II22'	giš zi-SA[R]	462		IV03	giš gan-apin
426	6043	II23'	giš LAG[AB]			IV04	giš gaba-apin
427	6044	II24'	giš LAGAB	465		IV05	giš a ₂ ?-gud?-apin
428	6045	II25'	giš LAGAB			IV06	giš [
429	6081	II26'	giš BU			IV07	giš [

		IV08	giš [
		IV09	gi[š
		IV13	gi[š
		IV14	giš [
		IV15	giš KU-[
475	7a148	IV16	giš [
476	7a149	IV17	giš suhur-g[ud]
477	7a152	IV18	giš al
479	7a166	IV19	giš al-šub
478	7a155	IV20	giš al-sag
480	7a159	IV21	giš al-zu ₂ -2
482	7a161	IV22	giš al-zu ₂ -4?
	7a166	IV23	giš al-u ₃ ?-šub?
483	7a169	IV24	giš u ₃ -šub
484	7a173	IV25	giš u ₃ -šub-ab-ba
485	7a170	IV26	giš u ₃ -šub-sig ₄
		IV27	giš u ₃ -šub-sal-la
		IV28	giš MA?-dim
		IV29	giš M[A?]-dim-tur
487	6133	IV30	giš gag-du ₆ -ba?-la ₂
488	6134	IV31	giš gag-du ₆ -sum-ba-la ₂
490	6135	IV32	giš gag-sum-šir-dili
	7b034	IV33	giš dubšig
	7b034	rI01	giš dubšig-za ₃ -lal ₂
491	6150	rI02	[-r]i ₂ -qum
492		rI03	giš gu ₂ ?-zi-ri ₂ -q[um?]
494	6157	rI04	giš I-LU
495	6158	rI05	giš I-[
496	7a006	rI06	giš tukul
		rI07	giš tukul-[
498	7a015	rI08	giš tukul-[u]r ₂ -ra
499	7a024	rI09	giš tu[kul]-k[un?]
		rII	traces of 5 lines

Commentary to Is I-03

- III04 The item is not understood. Similar items are ^{giš}bu-šID and ^{giš}bu-ma-an-sim. See the commentary at lines 435 and 435a of the Nippur text.
- III23 Perhaps the line should be read ^{giš}pa-al¹-kam-apin, as in Ur I-01 rIII11'.
- IV28-29 The first sign after the GIŠ is damaged but the sign is clear in IB 1618 (Is IV-06). It is not completely certain, however, that this is the same item since the lentil is damaged in the second half of the line.

Is IV-01 Krebern timer 1992, p.110 (IB 1701)

- 1 giš gir₂-[
- 2 giš umbin-[
- 3 giš sag-umbin-[

Commentary to Is IV-01

The items may belong to the section ^{giš}gigir, which is very incompletely preserved in Is I-01. But other sections are possible as well.

Is IV-02 IB 1620

374	5199	1	giš ig
375	5200	2	giš ig-gal
376	5233	3	giš ig-i ₃

Is IV-03 IB 1495

231	4174	1	giš dilim ₂
230	4175	2	giš dilim ₂ -gal
	4176	3	giš dilim ₂ -tur

Is IV-04 IB 1613

474	5160	1	giš da-an-ga-apin
468	5173	2	giš gan ₂ -DAGAL
469	5174	3	giš gan ₂ -GAN ₂ -sar-ra

Commentary to Is IV-04

Lines 2 and 3 contain the word ^{giš}gan₂-ur₃[†].

Is IV-05 IB 1614

440	6116	1	giš e ₂ -rin ₂
		2	giš X X X X-LUM
442	5110	3	giš apin

Is IV-06 IB 1618

484	7a173	1	giš u ₃ -šub-[]-ba
		2	[gi]š []-la?
		3	[gi]š MA-[di]m?

Commentary to Is IV-06

3 See the commentary to Is I-03: IV28-29

Is IV-07 IB 1619

227	4170	1	giš di ₃ ?-nu ₂
226	4166	2	giš sag!-nu ₂
225		3	giš BAD-nu ₂

Is U-01 IB 1566

		rI01'	[-p]an
558		rI02'	[g]ag-si-sa ₂
556	7a049	rI03'	giš e ₂ -pan
		rI04'	giš sa-pan
	6159	rI05'	giš dim ₃
	5061	rI06'	giš dim ₃ -mar-šu
581	7b010	rI07'	giš mar-šu
620		rII01'	[] šu
662		rII02'	[] gir ₃
619		rII03'	[]-kar ₂
624	7a128	rII04'	[]-nu

Commentary to Is U-01

This fragment may belong to Is I-03.

NP P-01 KM 89542

		I	Approximately 10 lines lost			VI28	[]-X
						VI29	[]-ku[n ₃]
009	3013	I11	giš [geš]tin-k[ir ₄ ?]			VI30	[]-ku[n ₃]
010	3015	I12	giš geštin-k[a ₅ -	252	4234	VI31	[bug]in
011	3017	I13	giš geštin-[g]am-m[a]	253	4235	VI32	[-t]ur
	3016c	I14	giš geštin-had ₂		4236	VI33	[g]u-la
012	3029	I15	giš peš ₃	254	4238	VI34	[] x-ba[r-r]a
	3030a	I16	giš peš ₃ -ma ₂ -ri ₂ .ki	255	4242	VI35	[nag]a _{2/3}
013	3032	I17	giš hašhur			VI36-38	destroyed
014	3033	I18	giš hašhur-kur-ra	259	4247	VI39	[ga]z
	3037	I19	giš hašhur-ar-wa(sic!)-nu-um			VII	Approximately 15 lines lost or illegible.
	3040	I20	giš hašhur-dam-ši-l[um]			VII16	giš LU[M]-Aš ₂ ?-ma ₂
	3042	I21	giš hašhur-ba-za	4363		VII17	giš ad-ma ₂
	3044	I22	giš hašhur-še-gud	4364		VII18	giš ad-uš-ma ₂
		I23	giš še-X	300	4373	VII19	giš anše-ma ₂
		I24	giš še-X	299	4367	VII20	giš si-ma ₂
015	3050	I25	giš še-dug ₃	303		VII21	giš u ₅ -KA-ma ₂
018	3067	I26	giš ši[nig??]	304		VII22	giš u ₅ -zi-pa-ah-ma ₂
		VI	Approximately 8 lines lost and 4 lines illegible.			VII23	giš peš-LU ₂ -HU-ma ₂
231	4174	VI13	[] dil[im ₂]	308	4391	VII24	giš ma ₂ -d[u ₃]
230	4175	VI14	[-g]al	310	4393	VII25	giš gir ₂ -ma ₂ -d[u ₃]
	4177	VI15	[-t]ur	311	4392	VII26	giš uš ₂ -ma ₂ -du ₃
233	4181	VI16	[-t]um	279	4354	VII27	giš ma ₂ -60-gur
234	4188	VI17	[] banšur	280	4355	VII28	giš ma ₂ -50-gur
		VI18	[]-banšur	281	4356	VII29	giš ma ₂ -40-gur
		VI19	[]-banšur	282	4357	VII30	giš ma ₂ -30-gur
	4191	VI20	[-s]ag-du	283	4358	VII31	giš ma ₂ -20-gur
246	4225	VI25	[k]un ₃	284	4359	VII32	giš ma ₂ -15-gur
247	4226	VI26	[b]ad ₃	285	4360	VII33	giš ma ₂ -10-gur
		VI27	[]-sig ₅	286	4361	VII34	giš ma ₂ -5-gur
				319	4421	VII35	giš gag-ma ₂

	4386	VII36	giš me-te-ma ₂
321	4428	VII37	giš ENxKAR ₂
322	4428a	VII38	giš gag-ENxKAR ₂
323	4429	VII39	giš šibir
324	4430	VII40	giš gag-šibir
		VII41	[gi]š š[a ₃ ?]-hi-li-a
325	7b146	VII42	[] ka-bar
326	5006	VII43	[] gigir
327	5015	VII44	[] e ₂ -gigir
328	5016	VII45	[] e ₂ -usan ₃ -gigir
329		VII46	[K]I?-A-gigir
332	5023	VII47	[]-gi-[
		VII48	[gi]gir
		VII49	[gi]gir
		VII50	[gigi]r
		VIII	approximately 8 lines lost
		VIII09	[KA[K-]-gigir
342	5054	VIII10	giš um[bin]-gigir
		VIII11	giš ka-umbin-gigir
		VIII12	giš maš ₂ -umbin-gigir
		VIII13	giš HI-MAŠ-gigir
335	5052	VIII14	giš KA-kul-gigir
351	5059	VIII15	giš gag-sal ₄
352		VIII16	giš za-ra-gag-sal ₄
353		VIII17	giš umbin-gag-sal ₄
		VIII18	giš ka-umbin-gag-sal ₄
		VIII19	giš maš ₂ -umbin-gag-sal ₄
355	5068	VIII20	giš šid-du ₁₀ -bar-[r]a
356	5070	VIII21	giš šid-du ₁₀ -ša ₃ -[
354		VIII22	giš šid-du ₁₀ -ga[r]-r[a]
357	5073	VIII23	giš mar-gid ₂ -da
	5077	VIII24	giš mar-gid ₂ -da-su- bi[r ₄].ki
		VIII25	giš HI-MAŠ-mar-gid ₂ -da
		VIII26	giš dal-mar-gid ₂ -d[a]
373	5083	VIII27	giš en ₃ -dur-mar-gid ₂ -[
		VIII28	giš X []-mar-gid ₂ -da
		VIII29	giš X X -mar-gid ₂ -da
		VIII30	giš gag-[] X-mar-gid ₂ - da
		VIII31	giš [-d]a-mar-gid ₂ -da
368	5092	VIII32	giš umbin-mar-gid ₂ -da
		VIII33	giš ka-umbin-mar-gid ₂ - da
		VIII34	giš maš ₂ -umbin-mar- gid ₂ -da
		VIII35	giš K[I?-k]al-mar-gid ₂ - da
361		VIII36	giš K[A]-k[ul?]-
		VIII37	giš [

Commentary to NP P-01

VII41 See the commentary at Nippur lines 321-325.

5.6.2 The Ur Tradition

The *giš* chapter of *ur₅-ra* is represented in Ur by one big type I tablet and a number of lentils. The type I tablet must have covered the whole *giš* section. Only the reverse has been preserved. The Ur recension differs in many places from the Nippur text in the order of the sections. A number of unprovenanced pieces demonstrate the same or a very similar arrangement. This concerns NP I-03 (*BRM* IV 29+30) and NP I-04 (published in *SMEA* 18, 1977). NP III-03 has a version of the section *giš* *gigir* (chariot). It almost duplicates NP I-03 and is therefore also included here.

The following table shows the correspondence between the Ur text and NP I-03 on the one hand, and the differences and similarities with the Old Babylonian Nippur version and the late recension on the other.

Ur	NP I-03	Nippur	Late <i>ur₅-ra</i>
[]	<i>giš</i> <i>gigir</i>	326-346	5:1-58
<i>giš</i> <i>mar-gid₂-da</i>	<i>giš</i> <i>mar-gid₂-da</i>	357-373	5:71-99
[]	<i>giš</i> <i>šid-du₁₀</i>	354-356	5:68-70
<i>giš</i> <i>apin</i>	<i>giš</i> <i>apin</i>	442-466	5:110-172
<i>giš</i> <i>gan₂-ur₃</i>	[] 468-473		5:173-186
loom etc.	[] 407-417		5:298-320
[]	[]		
<i>giš</i> <i>LAGAB</i> (3x)[]	426-428	6:43-45	
<i>giš</i> <i>KUR</i> (3x)	[] 663-665	6:46-48 (<i>gur₄</i>)	
<i>giš</i> <i>KAL</i> (3x)	[] 666-668	6:52-54	
<i>giš</i> <i>URI</i> ⁷ (3x)	[] [669-671?]	6:55-57	
<i>giš</i> <i>BU</i>	[] 429-435a	6:81-95	
<i>giš-rin₂</i>	<i>giš-rin₂</i> 436-441	6:108-118	
<i>giš</i> <i>al</i>	<i>giš</i> <i>al</i>	477-482	7A:152-166
<i>giš</i> <i>u₃-šub</i>	[] 483-486	7A:169-173	
[]	[]		
<i>giš</i> <i>nig₂-N-sila₃</i>	[] 515-526	7A:237-240	
<i>giš</i> <i>sa</i>	<i>giš</i> <i>sa</i>	527- 535	6:160-191
<i>giš</i> <i>illar</i>	[] 552-554c	7A:66-80	
<i>giš</i> <i>pan</i>	[] 555-557	7A:48-63	
[]	[]		
<i>giš</i> <i>mar</i>	[] 580-591	7B:1-34	

The similarity between NP I-03 and the Ur version appears, for instance, from the placement of the section *giš* *apin-giš* *gan₂-ur₃* (plough and harrow). In the Nippur version this passage is found between *giš-rin₂* (scales) and *giš* *al* (hoe). In Ur it is placed immediately after the wagons (*giš* *mar-gid₂-da*). In Nippur *giš* *mar-gid₂-da* is followed by a section 'doors and locks'. In the Ur version the doors probably preceded the chariots and wagons. Particularly in the first half (until *giš-rin₂*), the organization of late *ur₅-ra* 5 and 6 is more like the Ur version than the Nippur text. An important similarity is the collection of repetitive items (*LAGAB*, *KUR*, *URI*, etc.). These same items are found in sections far apart in the Nippur redaction. The Yale tablet (NP I-03) begins on the

obverse with ^{giš}gigir. This is an important difference with both the Nippur and the Middle Babylonian peripheral versions, where the second half of the ^{giš} list always begins with the section ^{giš}ig (doors). It is in agreement with the late version of ur₅-ra 5 which begins with ^{giš}gigir. Curiously, after ^{giš}rin₂ the two Old Babylonian versions are more similar and often agree against the late tradition.

NP I-03 is dated to the 28th year of Samsuiluna. This is after the abandonment of the Southern Babylonian cities. In Samsuiluna 28 Ur was not a scribal centre. We must assume that the Ur school tradition was brought to the north and was kept alive there.

NP I-04 is a relatively small fragment of a Type I tablet. It is large enough, however, to display a number of striking similarities with the Ur tradition. The section ^{giš}rin₂ is followed immediately by ^{giš}al and ^{giš}u₃-šub which, after a gap, is followed by measuring vessels (^{giš}nig₂-¹/₂-sila₃; etc.). Moreover, the texts include a number of items not found anywhere else (e.g. ^{giš}al-sag-gal₂-la; ^{giš}al-sag-nu-gal₂-la; ^{giš}al-gú-sag).

Ur I-01 *UET 7, 87 + UET 7, 91 + UET 6/3, 549*

		rI01'	giš	461	5139	rII05'	giš da-[
		rI02'	giš [			rII06'	giš a ₂ -ap[in]
338	5045	rI03'	giš mu[d-		5136a	rII07'	giš ama-apin
339		rI04'	giš gag-[	450	5137	rII08'	giš eme-apin
		rI05'	giš ni[g ₂ -			rII09'	giš eme-sig-apin
		rI06'	giš [			rII10'	giš šu-ša-NINDA ₂ -apin
		rI07'	giš			rII11'	giš pa-al-kam-apin
		rI17'	giš	460a	rII12'	giš muš-apin	
		rI18'	giš [	460b	rII13'	giš gag-muš-apin	
352		rI19'	giš za-r[a-	455	5161	rII14'	giš sal-la-apin
357	5073	rI20'	giš mar-[	456	5162	rII15'	giš gag-sal-la-api[n]
		rI21'	giš LUM-mar-[	457	5159c	rII16'	giš nig-ap[in]
		rI22'	giš [š -ma]r-[	458		rII17'	giš gag-nig-[
358		rI23'	giš [g]u-za-mar-g[id ₂ -	459	5166	rII18'	giš šu[dul?-
359		rI24'	giš za-ra-mar-gid ₂-[			rII19'	giš bar-bar-[
360		rI25'	giš gag-za-ra-mar-gi[d ₂ -	454	5158	rII20'	giš nig ₂ -PI-[
361		rI26'	giš sag-kul-mar-[			rII21'	giš [iš] gag-nig ₂ -PI-apin
		rI27'	giš HI-MAŠ-mar-[			rII22'	giš sa-KIN-apin
364		rI28'	giš mud-ma[r-			rII23'	giš da-an-ga-apin
365		rI29'	giš gag-mud-ma[r-			rII24'	giš šu-kam?-apin
		rI30'	giš dar-mar-[	444	5117	rII25'	giš šu-du ₇ -apin
		rI31'	giš gag-dar-mar-[	468	5173	rII26'	giš gan ₂ -ur ₃
363	5085	rI32'	giš ma-an-za ₃ -ma[r-	469	5174	rII27'	giš gan ₂ -ur ₃ -sar-ra
370	5090	rI33'	giš u ₄ -sa[kar-		5180	rII28'	giš za-ra-gan ₂ -ur ₃
		rI34'	giš [		5180a	rII29'	giš gag-za-ra-gan ₂ -ur ₃
		rI35'	giš	473	5183	rII30'	giš sag-gan ₂ -ur ₃
		rII01'	giš	472	5185	rII31'	giš u ₅ -gan ₂ -ur ₃
		rII02'	giš [	471		rII32'	giš sa-gan ₂ -ur ₃
		rII03'	giš [			rII33'	giš na ₄ -gug-zi-na ₄ -gug
		rII04'	giš gag-x [			rII34'	giš sag-du

411	5314	rII35'	giš il ₂ -il ₂	517	7a231	rIV03'	giš nig ₂ -ban
412	5312	rII36'	giš bar-bar	518	7a235	rIV04'	giš nig ₂ -5-sila ₃
413	5317	rII37'	giš tug ₂ -tug ₂	520	7a237	rIV05'	giš nig ₂ -1 sila ₃
414	5319	rII38'	giš nig ₂ -zu	521		rIV06'	giš nig ₂ -1/2 sila ₃
415	5318	rII39'	giš gi-na	523	7a240	rIV07'	giš nig ₂ -2/3 sila ₃
410	5308	rII40'	giš nir-r[a]	524		rIV08'	giš nig ₂ -10 gin ₂
	5309	rII41'	giš [ni]r-[	525		rIV09'	giš nig ₂ 5 g[in ₂]
418	6012	rII42'	giš g[a-	526a	rIV10'	giš nig ₂ 1 g[in ₂]	
		rII43'	giš g[a-	527	6160	rIV11'	giš s[a]
		rII44'	giš ga-[			rIV12'	giš sa-[
		rII45'	giš [			rIV13'	giš sa-[
426	6043	rIII01'	giš LAGAB			rIV14'	giš sa-[
427	6044	rIII02'	giš LAGAB		6165	rIV15'	[]-tur-[
428	6045	rIII03'	giš LAGAB		6163	rIV16'	[s]a-mah
663	6046	rIII04'	giš KUR	530	6169	rIV17'	[s]a-ur ₃
664	6047	rIII05'	giš KUR			rIV18'	[s]a-za ₃ -la-an-na
665	6048	rIII06'	giš KUR			rIV19'	[gi]š bur
666	6052	rIII07'	giš KAL		6216	rIV20'	[gi]š mah
667	6053	rIII08'	giš KAL	536	6220	rIV21'	[]-na
668	6054	rIII09'	giš KAL	537	6221	rIV22'	[gi]dru-[]-mušen-na
	6055	rIII10'	[UR]I	538	6222	rIV23'	[]-har-mušen-[n]a
	6056	rIII11'	[UR]I	543	4027	rIV24'	[] igi-[
	6057	rIII12'	[UR]I			rIV26'	traces
		rIII13'	Lost			rIV27'	[g]iš il[lar]-giš
429	6081	rIII14'	[] BU		7a068	rIV28'	giš illar-zi
430	6082	rIII15'	[] BU	553	7a069	rIV29'	giš illar-šub
431	6083	rIII16'	gi[š] BU	552a	rIV30'	giš illar-šu-lugal	
432	6084	rIII17'	giš BU		7a067	rIV31'	giš illar-DU-a
433	6092	rIII18'	giš sahar-BU	554c	7a079	rIV32'	[gi]š LAGAB-illar
434	6097	rIII19'	giš gi-bu		7a063	rIV33'	giš ti
435a	rIII20'	giš g[i]-bu-ŠID		555	7a048	rIV34'	giš pan
	6099	rIII21'	giš [g]ur ₂	557	7a052	rIV35'	giš gag-pan
		rIII22'	giš [] gur ₂	558		rIV36'	giš gag-si-sa ₂
436	6108	rIII23'	giš rin ₂	559		rIV37'	[] gag-šu-e[š?]
437	6110	rIII24'	[ri]n ₂ -BU-bi	582	7b012	rV01'	[]-ninda
438	6113	rIII25'	[ri]n ₂ -1(AŠ)-gun		7b013	rV02'	[-nin]da-gur ₄ -ra
439		rIII26'	[ri]n ₂ -60(DIŠ)-ma-na-			rV03'	[m]ar-ninda-gur
			la ₂	585	7b026	rV04'	[] mar-i[m?]-
		rIII27'	gi[š]-rin ₂ -MIN-la ₂		7b002	rV05'	[] mar-še
477	7a152	rIII28'	giš al	587		rV06'	[] mar-še-da
479	7a166	rIII29'	giš [a]l-šub			rV07'	[] mar-ra
478	7a155	rIII30'	giš [a]l-sag			rV08'	[] mar-gi?
		rIII31'	giš al-sag-gal ₂ -la			rV09'	[] mar-LAGAB-da
		rIII32'	giš a[l-sa]g-nu-gal ₂ -la	589		rV10'	giš ŠID-ma[r]
		rIII33'	giš al-[-g]al ₂ ?-l[a?]	591	7b033	rV11'	giš kul?-mar
	7a165	rIII34'	giš al-QUM-DUG ₃		7b029	rV12'	giš lagab-mar
480	7a159	rIII35'	giš a[l-z]u ₂ -2		7b035	rV13'	giš še-ra-ah
482	7a161	rIII36'	[-z]u ₂ -4		7b036	rV14'	[]-še-ra-ah
483	7a169	rIII37'	[]-šub			rVI01'	[]-a
485	7a170	rIII38'	[]-sig ₄	4407		rVI02'	[]-muš
484	7a173	rIII39'	[]-ab-ba			rVI03'	traces
		rIII40'	[]-tum				
494	6157	rIII41'	[]-LU				
		rIV01'	giš nig ₂ -[
		rIV02'	giš nig ₂ -baneš				

Commentary to Ur I-01

- rI32' Ma-an-za₃ is very probably derived from *manz-zu*, the common Akkadian rendering of gir₃-gub (footboard).
 rII19' In Emar the entry ^{giš}bar-bar-apin is rendered *ukû* (*Emar* 6/4, p.70: 168'). The ^{giš}bar-bar or *ukû* is the weaving shuttle (see the commentary to the Nippur version line 412), and apparently also the name of a part of the plough.
 rII34' For ^{giš}sag-du (warpbeam) see the commentary to Nippur lines 414-416.

Ur IV-01 *Archaeologia* 70 (1920), p.125 (UR 1918-10-12, 458)

- | | | | |
|-----|-------|---|-----------------------------|
| 591 | 7b033 | 1 | giš kul-mar |
| | | 2 | giš dilim ₂ -mar |
| | 7b031 | 3 | giš igi-mar |
| | | 4 | giš ra-mar |

Ur IV-02 *Archaeologia* 70 (1920), p.125 (UR 1918-10-12, 459)

- | | | | |
|-----|------|---|---|
| 384 | 5239 | 1 | giš ig-ze ₂ -na |
| 380 | 5244 | 2 | giš ig-suh ₄ |
| | | 3 | giš ig- ^{giš} a-dar-ra |
| | | 4 | giš ig- ^{giš} u ₃ -suh ₅ |

Ur IV-03 *UET* 6/3, 342

- | | | | |
|-----|------|-----|-----------------------------------|
| 082 | 3355 | 01 | giš suhur-nimbar |
| 094 | 3380 | 02 | giš TUG ₂ -nimbar |
| 091 | 3369 | 03 | giš zu ₂ -nimbar |
| | | 04 | mu-ha-du-um |
| | | r04 | a- ^d nisaba arad-X-bal |

Ur IV-04 *UET* 6/3, 338

- | | | | |
|-----|------|----|-----------------|
| 137 | 3498 | 01 | giš gilim-an-na |
| | | 02 | giš gilim-abzu |

Ur IV-05 *UET* 6/3, 373

- | | | | |
|-----|------|----|---------|
| 666 | 6052 | 01 | giš KAL |
| 667 | 6053 | 02 | giš KAL |
| 668 | 6054 | 03 | giš KAL |

NP I-03 *BRM* IV 29 + 30

- | | | | | | | | |
|-----|------|-----|--|------|------|-----|--------------------|
| 326 | 5006 | I01 | giš gigir | 332 | 5023 | I06 | giš sahar-gi-gigir |
| 327 | 5015 | I02 | giš e ₂ ?-gigir | 344 | 5025 | I07 | giš si-gigir |
| 328 | 5016 | I03 | giš e ₂ - ^{kuš} usan ₃ -gigir | | | I08 | giš sag-gigir |
| 345 | | I04 | giš gaba-gigir | | | I09 | giš BAD-gigir |
| 346 | 5021 | I05 | giš gaba-gal ₂ -gigir | 5039 | I10 | | giš gu-za-gigir |

338	5045	I11	giš mud-gigir	532	6171	V06'	giš sa-šu ₂ -uš-gal
339		I12	giš gag-mud-gigir			V07'	giš sa-TUG ₂ -an-dim ₂
		I13	giš i-zi-GAM-gigir	6163		V08'	giš sa-mah
342	5054	I14	giš [um]bin-gigir			V09'	giš sa-gar ₃ -ra
343	5055	I15	giš g[ag-]-gigir			V10'	giš sa-dul-la
	5029	I16	giš za-ra-gigir	528	6164	V11'	giš sa-gal
		I17	giš gag-za-ra-gigir	536	6220	V12'	giš har-mušen-na
		I18	giš kab-il ₂ -gigir	537	6221	V13'	giš gidru-har-mušen-[]
		I19	[s]ag-kul-gigir	538	6222	V14'	giš gur ₂ -har-mušen-[]
		I20	{traces} gigir			V15'	giš X-[]
		II01	giš [			V16'	giš
369	5095g	II02	giš gag-um[bin-			rII01'	giš LUH-x-[]
	5095d	II03	giš gu ₂ -um[bin-	7b048		rII02'	giš DIM ₃ -DIM ₃ -[]
		II04	giš a ₂ -umb[in]-m[ar-			rII03'	giš nig ₂ -[]
363	5085	II05	giš gir ₃ -mar-[]	7b115		rII04'	giš sig ₃ -[]
		II06	giš dul ₃ -la?-mar-[]	7b116		rII05'	giš sig ₃ -sig ₃ -e ₂ -[]
373	5083	II07	giš e[n ₃ ?-du]r?-m[ar-			rII06'	giš sag-[]
		II08	giš šid-[]	598	7b040	rII07'	[ba]lag?-[]
		II09	giš šid-d[u ₁₀]-r[u-			rII01'	giš
355	5068	II10	giš šid-du ₁₀ -a-b[ar-			rII02'	giš [
442	5110	II11	giš a[pin]			rII03'	giš ur[i?]
		II12	giš apin-[]	630		rII04'	giš ma-gaz
448	5131	II13	giš apin-gud-[]	631		rII05'	giš ma-gaz-b[ur ₃ -
444	5117	II14	giš apin-šu-du ₇	682	7a209	rII06'	giš kun-z[i]
445	5118	II15	giš apin-nu-šu-du ₇	683	7a210	rII07'	giš nig ₂ -UM[BIN]
446	5123	II16	giš apin-tug ₂ -sig ₁₈			rII08'	giš [
		II17	giš apin-[E]ZEN-X			rII09'	giš [
	5128	II18	giš apin- ^{giš} šu-kar ₂ -bir-bir- ra			rII10'	giš [
						rII11'	giš SU-[]
	5127	II19	giš apin-a ₂ -kar ₂			rII12'	giš x-erin ₂ ?-[]
449	5135	II20	giš sag-apin			rII13'	giš nig ₂ -dim ₂ -dim ₂ -ma
	5136	II21	giš gag-sag-apin	679	3477	rII14'	giš nim-kur-ra
451	5144	II22	[g]iš [k]a-šu ₂ -ap[in]			rII15'	giš nam-d[ul?]
		II23	traces	681	7b139	rII16'	giš šu-lu ₂
		III	Only a few times GIŠ			rII17'	giš kur-ra
			preserved.			rIII01'	giš
437	6110	IV01'	[g]iš rin ₂ -li[b-			rIII02'	giš [
		IV02'	lost			rIII03'	giš X [
439		IV03'	[-m]a-na-l[a ₂]			rIII04'	giš DINGIR [
		IV04'	[]-rin ₂			rIII05'	giš šu-[]
477	7a152	IV05'	[] al			rIII06'	giš BAR?-[]
		IV06'	[gi]š al-ki			rIII07'	giš [
	7a154	IV07'	[gi]š al-sag			rIII08'	giš [
		IV08'	giš al-sag-gal ₂ -la			rIII09'	giš X [
		IV09'	giš al-sag-nu-gal ₂			rIII10'	lost
		IV10'	giš al-mud-sag			rIII11'	giš
		IV11'	giš al-u ₃ ?-šub			rIII12'	giš [
478	7a155	IV12'	giš al-zu ₂			rIII13'	giš [
480	7a159	IV13'	giš al-[z]u ₂ -2			rIII14'	giš r[a-
		IV14'	giš al-[]			rIII15'	giš r[a-
		V01'	[] nig ₂ -x [			rIII16'	giš X [] HU
527	6160	V02'	giš sa			rIII17'	giš X []-ta-bal
534	6175	V03'	giš sa-du ₃			rIII18'	giš NIG ₂ ?-[] x-bur?-ra
535		V04'	giš sa-NI			rIII19'	giš ME?-[]-da-ne
531	6183a	V05'	giš sa-giš-gi			rIII20'	giš še-[]-da-ne

		rIII21'	giš ŠI[D?-]-AK
704	7b304	rIII22'	giš ša-[UR]U-ša
		rIII23'	giš BUR?-[]-tag ₄
705	7b307	rIII24'	giš IGI-[] KU
		rIII25'	giš še-[gi]bil-NI-a
		rIII26'	giš š[u-nig]in ₂ -na
		rIV01'	[Š]U+NIGIN ₂ 6 šu-ši 28
			mu-bi
		rIV02'	iti kin- ^d inanna ud-5?-[
		rV01'	erased
		rV02'	mu sa-am-su-i-lu-na
			lugal-e
			a ₂ -ag ₂ -ga ₂ ^d en-lil ₂ -ka

Commentary to NP I-03

rI04-05' The items are to be restored ^{gis}sig₃-[sig₃] and ^{gis}sig₃-sig₃-e-[pa-na]. The reading sig₃ for PA is now demonstrated by the corresponding Emar entries (see *Emar* 6/4, p.76, 419'-420' with Civil 1989, p.13): s i-si-ig = *ši-in-ni-tum*; sig₃-sig₃-e₂-pa-na = *da-pa-na*. See also NP P-02 VII17-18'.

NP I-04 SMEA 18 (1977), Plate III

437	6110	I01'	[] rin ₂ -lib-[b]i
438	6113	I02'	[gi]š rin ₂ -1(AŠ)-gun
439		I03'	[gi]š rin ₂ -ma-na-la ₂
440	6116	I04'	[gi]š e ₂ -r[in ₂]
477	7a152	I05'	[gi]š al
479	7a166	I06'	[] al-šub
		I07'	[a]l-k[i]
		rI01'	giš al-sag-gal ₂ -[
		rI02'	giš al-nu-sag-gal ₂ -la
		rI03'	giš al-gu ₂ -sag
		rI04'	giš al- ^{gis} ur ₂
478	7a155	rI05'	giš al-zu ₂
480	7a159	rI06'	giš al-zu ₂ -2
481	7a160	rI07'	giš al-zu ₂ -3
482	7a161	rI08'	giš al-zu ₂ -4
	7a165	rI09'	[g]iš al+ur ₂ -gaz-[
483	7a169	rI10'	giš u ₃ -DUR ₂
484	7a173	rI11'	giš u ₃ -DUR ₂ -ab-ba
485	7a170	rI12'	[gi]š u ₃ -DUR ₂ -sig ₄
486	7a171	rI13'	[gi]š u ₃ -DUR ₂ -sig ₄ -[
		rII01-03	lost
		rII04	[-s]ila ₃
		rII05	[-s]ila ₃
		rII06	[-s]ila ₃
		rII07	[g]in ₂ ?
		rII08	[g]in ₂ ?

NP III-03 NBT 1891

328	5016	01	giš e ₂ -usan ₃ -gigir
-----	------	----	--

345		02	giš gaba-gigir
346	5021	03	giš gaba-gal ₂ -gigir
332	5023	04	giš sa[har]-gi-gigir
344	5025	05	giš si-gigir
		06	giš sag-gigir
		07	giš šu-kal-gigir
	5039	08	giš gu-za-gigir
338	5045	r01	giš mud-gigir
339		r02	giš gag-mud-gigir
		r04	traces (erased)

5.6.3 Texts from Uruk

Old Babylonian school texts from Uruk have been published by Cavigneaux 1982 and Cavigneaux 1996. Among them are only two pieces with ur₅-ra giš. Both derive from the so-called 'Scherbenloch.' This was a hole that was filled with waste in antiquity. It included a large number of clay tablets: administrative texts, letters, literary texts, and school tablets. According to Cavigneaux the 'Scherbenloch' tablets constitute a coherent archive (Cavigneaux 1996, p.5). This archive may be dated by means of the administrative tablets, which carry year names between Rim-Sîn 32 and 43.

The two pieces with ur₅-ra giš are too small to compare the Uruk tradition with anything else. The first is a type II text. A small part of one of the pupil's columns of the obverse has been preserved. The second piece is of unknown type.

Uk II-01 Cavigneaux 1996, no. 176

381	5218	I01'	[]-tab-ba
	5240	I02'	[i]g-gi-guruš ₃ (URUxGU!)
385	5237	I03'	giš ig-mi-r[i ₂ -z]a

Uk U-01 Cavigneaux 1996, no. 174

		I	traces
221	4158	II01'	[] nu ₂ -š[a ₃ -] \ sik ₂ -uz ₃ -i[n-
		II02'	giš nu ₂ -u[ri [?]] \ ba-am ₃ -[
		II03'	giš nu ₂ -umb[in-
		II04'	gi[š n]u ₂ -[

5.6.4 Unprovenanced Giš Lists

In this section a wide variety of giš texts has been brought together. Texts kept in the museums of Berlin, Yale, London, Oxford, and Leiden have been examined by autopsy. For the other tablets published copies or transliterations were used.

NP P-01 KM 89542: see the Isin version (§5.6.1).

NP P-02 MSL SS1, 96 (Plates XIX-XX)

		I01-02'	giš ig items, broken.			III01'	[-ap]in
		I03'	[] x-PA-ra			III02'	[-ap]in
380a	5236	I04'	[] -pa-pah			III03'	[-ap]in
	5246	I05'	[] -e ₂ -gu-la			III04'	[-ap]in
	5243	I06'	[] gi-gam-ma			III05'	[-ap]in
		I07'	[i]g-X-X			III06'	[]-apin
384	5239	I08'	[] ig-ze ₂ -na	466		III07'	[]-am-apin
385	5237	I09'	[] ig-mi-ri ₂ -za	451	5144	III08'	[k]a-šu ₂ -apin
383	5206	I10'	[i]g-ul-li ₂ -a		5169b	III09'	[-g]ur ₁₀ -apin
		I11'	[i]g-ul-[l]i ₂ -a	455	5161	III10'	[]-sal-apin
		I12'	[]-me			III11'	[] x-HAR-apin
		I13'	[ba]r?-da	452	5152	III12'	[š]u-sag-apin
		I14'	traces	453	5157	III13'	[]-kud-apin
		I15'	traces	454	5158	III14'	[]-PI-apin
		I16'	[] ig-[]-giš?-UR ₄ ?-[]-ga			III15'	[g]a-apin
		I17'	[] suh ₄ -[i]g	5163		III16'	[]-kul-apin
		I18-34'	traces and detached signs			III17'	[]-apin
398	5270	I35'	[-k]ul			III18'	[-K]A?-apin
399	5271	I36'	[-n]im			III19'	[]-apin
		I37'	[-k]ur			III20'	[]-apin
		I38'	traces			III21'	[]-apin
		I39'	[]-tar			III22'	[-ap]in
		I40'	[]-DU-DU			III23'	[-ap]in
595	7a145	I41'	[]-dag [?] -si [?]			III24'	[-ap]in
		II01'	lost			III25'	[-ap]in
422	6019	II02'	[] b[al]			III26-31'	lost
		II03'	[] bal-x [			III32'	traces
423	6030	II04'	g[iš] e ₂-[	474	5160	III33'	[]-an-gi[d ₂ ?]
424	6026	II05'	giš sag-[			III34'	[] kun?-[
425	6028	II06'	giš me-te-[			III35'	traces
		II07'	[giš] [			III36'	[] x-ra-kam?
		II08'	giš [	488	6134	III37'	[b]a-al-la ₂
		II09'	giš [	490	6135	III38'	[-š]ir-dili
		II10'	giš KUR? [			III39'	[] X-la ₂
		II11-29	lines mostly empty			III40'	[] A
432	6084	II30'	[] B[U?]	491	6150	III41'	[]-ri ₂ -qum
433	6092	II31'	giš sahar-B[U]	493	6153	III42'	[]-tar-re
434	6097	II32'	giš bu ₁₀	492		III43'	[-z]i-ri ₂ -qum
435	6098	II33'	giš bu ₁₀ -gi.ma-an-s[im]			III44'	[]-bal
	6099	II34'	giš gur ₂			III45'	[] KID
	6100	II35'	giš gur ₂ -gi.ma-[			IV01-02'	lost
	6103	II36'	giš gur ₂ -ba-[	536	6220	IV03'	giš har-mušen-[
		II37'	giš gur ₂ -X	538	6222	IV04'	giš []-har-mušen-[
6107	II38'	giš gur ₂ -dub ₂ -dub ₂		537	6221	IV05'	giš gidru-har-mušen-[
		II39'	giš da-[	539		IV06'	giš ellag ₂ -[
		II40'	giš [	550	7a039	IV07'	giš šu-[
		II41'	giš balag?-[			IV08'	giš š[u?]-
		II42'	giš [	564	7a105	IV09'	giš igi-k[al?]
		II43'	giš [	576		IV10'	giš u ₄ -[sakar]
				577		IV11'	giš gag-u ₄ -[sakar]
						IV12'	giš [

		IV13'	giš [	479	7a166	V38'	giš al-š[ub]
		IV14'	giš [	483	7a169	V39'	[] u ₃ ?-š[ub]
		IV15'	giš dim-[	485	7a170	V40'	[] u ₃ ?-šub-s[ig ₄]
		IV16'	giš [	486	7a171	V41'	[] u ₃ -šub-sig ₄ -al-ur ₃ -ra
		IV17'	giš I[GI-	484	7a173	V42'	[] u ₃ -šub-ab-ba
549	6237	IV18'	giš za-am-ru-[	508	7a174	V43'	[] dur ₂
		IV19'	giš N[E]-gi-z[um]	511	7a175	V44'	[] dur ₂ -sig ₄
		IV20'	giš KAXX-ša-z[um]	512	7a176	V45'	[d]ur ₂ -sig ₄ -al-ur ₃ -ra
	6238	IV21'	giš e ₂ -m[i-	510	7a178	V46'	[] dur ₂ !-ab-[
555	7a048	IV22'	giš [pan]			V47'	[] dur ₂ -g[i?
556	7a049	IV23'	giš e ₂-[			V48'	traces
557	7a052	IV24'	giš gag-[			VI01-11'	measuring vessels
558		IV25'	giš gag-si-[			VI12-19'	unidentified
		IV26'	[] m[a ₂ ?]	580	7b001	VI20'	giš [mar]
		IV27'	[]-GAM-mar-x-[	586	7b005	VI21'	giš mar-še-[
		IV28'	[]-mar-x-[			VI22'	giš mar-[
		IV29'	traces			VI23'	giš mar-[
		IV30'	traces		7b013	VI24'	giš mar-ninda-kur ₄ -r[a]
		IV31'	traces	584	7b014	VI25'	giš mar-nig ₂ -sur-r[a]
		IV32'	traces		7b016	VI26'	giš mar-u[dun]
		IV33'	[] gin ₂-[	583		VI27'	giš mar-ninda-s[ig ₅ ?]
		IV34'-end	traces and detached			VI28'	giš mar-x [
			signs.	585	7b026	VI29'	giš mar-im-m[a]
		V01-06'	traces	590	7b030	VI30'	giš eme-ma[r]
		V07'	[]-bal	591	7b033	VI31'	giš kul-m[ar]
		V08'	[]-BUR ₂		7b029	VI32'	giš lagab-mar
656		V09'	[] ninda ₂		7b034	VI33'	giš d[ubšig?]
657		V10'	[] ninda ₂		7b034	VI34'	giš dubšig-za-l[al ₂ ?]
658		V11'	[] ninda ₂	601	7b063	VI35'	giš al-[
	4407	V12'	[]-muš	602	7b059	VI36'	giš al-gar-[
	4409	V13'	[]-gi-muš	603	7b074	VI37'	giš s[a]-bi ₂ -[
314	4417	V14'	[]-gan	604	7b077	VI38'	giš mi-ri ₂ -[
315	4419	V15'	[]-z[i-gan			VI39'	giš BAR-x-[
645	4410	V16'	[] gisal	610	7b044	VI40'	giš za-am ₃ -[
646	4411	V17'	[]-šu			VI41'	giš x-za ₃ [-[
647	4413	V18'	[]-anše	611		VI42'	giš kul-za ₃ -[
619		V19'	[] šu-kar ₂	612	7b050	VI43'	giš dub-[
	7a138	V20'	[] gur ₇			VI44'	giš dim ₃ -[
		V21'	[] da-da	5061		VI45'	giš dim ₃ -m[ar?-
703		V22'	[] nam-ri	5062		VI46'	giš dim ₃ -m[ar?-
621	7a134	V23'	[] ebir			VI47'	giš dim ₃ -[
624	7a128	V24'	[]-an-nu-u ₂			VI48'	traces
625	7a129	V25'	[]-um-a			VII01'	lost
627	7a129	V26'	[]-um-kaš			VII02'	[] gag-[
		V27'	traces			VII03'	[] gag-šir-[
		V28'	unidentified signs	684		VII04'	[] šagan-[l]a
629	7a141	V29'	[za]bar-gub		7b291	VII05'	[g]am ₃ ?
475	7a148	V30'	[] suhur			VII06'	[] s[u
		V31'	[] x-suhur-ra			VII07'	[] traces
477	7a152	V32'	[] al	541		VII08'	[-k]a-tar-ra
	7a153	V33'	[a]l-sa-l[a ₂]	541a	VII09'	g[iš]-DU-tur-ra	
478	7a155	V34'	giš al-zu ₂	662		VII10'	g[iš] gir ₃
480	7a159	V35'	giš al-zu ₂ -2	211	4143	VII11'	gi[š gi]r ₃ -gub
481	7a160	V36'	giš al-zu ₂ -3	700		VII12'	[] ur?
482	7a161	V37'	giš al-zu ₂ -4			VII13'	traces

	VII14'	[] si
	VII15'	[] s[a?-]-si
	VII16'	[] x-gin ₂ ?-[]-si
7b115	VII17'	[] sig ₃ -sig ₃
7b116	VII18'	[] sig ₃ -sig ₃ [-b]a-an-n[a]
690	VII19'	[] šu
693	7a119 VII20'	[] dur
	VII21'	[] X
321	4428 VII22'	[] ENxKAR ₂ ?
	VII23-31'	traces or unidentified signs
6064	VII32'	giš KUD
6065	VII33'	[gi]š KUD
6066	VII34'	[] KUD
	VIII01'	giš [
	VIII02'	giš [
	VIII03'	giš [
	VIII04'	lost
	VIII05'	[] QUM-[
7b153	VIII06'	giš alam- ^d [
	VIII07'	giš alam-[
	VIII08'	giš [
	VIII09'	giš
	VIII10'	[] MA-[
	VIII11'	giš ma-ab-[
	VIII12'	giš QUM x x
	VIII13'	[gi]š al-[]-MA
	VIII14-22	traces and unidentified signs

Commentary to NP P-02

II11-29 This damaged section very probably contained the items ^{giš}KUR; ^{giš}KAL; ^{giš}URI, etc. The final lines of the section ^{giš}BU have been preserved.

IV09-21' The interpretation of this section is based upon a comparison with the Emar text (*Emar* 6/4, p.73-74) and parallels.

VII17-18' See the commentary to NP I-03 rI04-05' (§5.6.2).

NP I-01 VAT 06588

	I01'	giš [	3037	I14'	[] hašhur ar-ma-nu-um
004	3004 I02'	giš hu-lu-u[b]	3039	I15'	[h]ašhur-kur-di-lum
005	3005 I03'	giš ša ₃ -kal	3045	I16'	[]-peš ₃
006	3006 I04'	giš kin ₂		II01'	gi[š
006a	3007 I05'	[g]iš kin ₂ -babbar		II02'	gi[š
006b	3008 I06'	[gi]š kin ₂ -gi ₆		II03'	gi[š
007	3011 I07'	[gi]š gi ₆		II04'	gi[š
	I08'	[] babbar		II05'	gi[š
012	3029 I09'	[] peš ₃		II06'	gi[š
	I10'	[] peš ₃ -da-di		II07'	giš [
	3030e I11'	[] peš ₃ -še-er-g[u]		II08'	giš [
013	3032 I12'	[] hašhur		II09'	gi[š] m[a-
014	3033 I13'	[] hašhur-kur-ra		II10'	giš ma-nu-[

044	3164	II11'	giš ma-nu-gibil-a-[
	3165	II12'	giš ma-nu-lu ₂ -kam
044a	3171	II13'	giš []-nu-kal
043	3163	II14'	[š]u-a-AG
		II15'	traces
		III01'	gi[š
		III02'	gi[š
		III03'	gi[š
		III04'	gi[š
		III05'	[g]iš [

		I01'	[] X	215	4147	II26'	giš nu ₂ -AŠ-nu ₂
		I02'	[] nimbar	216	4148	II27'	giš nu ₂ -ki-nu ₂
		I03'	[] nimbar	217	4149	II28'	giš nu ₂ -gu ₂ -zi-da
		I04'	[] nimbar		4154	II29'	giš nu ₂ -umbin
		I05'	[] nimbar		4156	II30'	giš nu ₂ -umbin-sal-la
		I06'	[] X-nimbar		4155	II31'	giš nu ₂ -umbin-gud
		I07'	[]-na-nimbar			II32'	giš nu ₂ -gar ₃ -ga-ku ₃ -sig ₁₇ -ra
		I08'	[] X-da-nimbar				
		I09'	[] ha?-ŠID?-ma-nimbar			II33'	[ga]r ₃ -ga-x-[
094	3380	I10'	[gi]š da-nimbar	189	4110	III01'	[-taska]rin?
		I11'	[gi]š TUG ₂ -nimbar	191	4113	III02'	[-z]a-ša ₃ -kal
		I12'	[] IŠ-nimbar	163	4072	III03'	giš gu-za-sir ₃ -da
		I13'	[] SU-nimbar	169	4095	III04'	giš gu-za-anše(?)
		I14'	[h]a-ra-nimbar		4088	III05'	giš gu-za-lugal
		I15'	[a]n-nimbar	164		III06'	giš gu-za-ma ₂ -lah ₅
		I16'	[]-nimbar			III07'	[g]u-za-ki-mah
		I17'	[]-nimbar			III08'	[g]u-za-šu-nigin ₂ ?-ban ₃ -da
		I18'	[]-nimbar				
		I19'	[]-nimbar	200	4126	III09'	giš sa[g]-gu-za
		I20'	[]-nimbar	201	4124	III10'	giš di ₅ -gu-za
		I21'	[-nim]bar	202	4125	III11'	giš ezen-gu-za
		I22'	[nimba]r	203	4121	III12'	giš umbin-g[u-
		I23'	[nimba]r	234	4188	III13'	giš banšur
		I24'	[nimba]r			III14'	giš banšur-lu ₂ -du ₇
		II01'	[] x			III15'	giš banšur-MUL
		II02'	[s]uhuš?			III16	giš banšur-GAM-ma
		II03'	[]-SU			III17'	[banš]ur-dag(?) -ga
		II04'	[-u]s ₂ -a			III18'	[] X-X
		II05'	traces			III19'	[banš]ur-hu-un-nu-um
		II06'	traces			III20'	[banš]ur-zag-gub-ba
		II07'	lost	238	4199	III21	[] banšur-zag-gar-ra
		II08'	[] GAM-[	239	4204	III22'	[] ka- ^{giš} kara ₄
		II09'	giš ŠU-[			III23'	[] ka- ^{giš} kara ₄ -[
		II10'	giš TUG ₂-[			III24'	[] ka- ^{giš} kara ₄ -[
		II11'	giš gur ₂ -gur ₂-[			III25'	giš ka- ^{giš} kara ₄ -[
		II12'	giš gur ₂ -gur ₂ -r[a?	233	4181	III26'	giš ma-al-LIŠ
		II13'	giš bara ₂?-[	231	4174	III27'	giš dilim ₂ -dilim ₂
		II14'	giš GIR ₂ +KI??	230	4175	III28'	giš dilim ₂ -gal
211	4143	II15'	giš gir ₃ -gub		4176	III29'	giš dilim ₂ -tur
212	4144	II16	giš gir ₃ -gub- ^d lama	241		III30'	giš maš-tak(?) -da
	5297	II17'	giš gag-gar ₃ -b[a]	442	5110	III31'	[gi]š apin
245	4223	II18'	giš mur-zi-nu-um		5135	III32'	[] sag-apin
		II19'	giš U.PIRIG?-[			III33'	[]-sag-apin
		II20'	giš DAG?-na[m]		5136	III34'	[g]ag-sag-apin
		II21'	giš nam-TUK+PI-TAR-LA	461	5139	III35'	[d]a?-apin
					5140	III36'	[] a ₂ ?-apin
261a	II22'	giš me-ta-šidim		463	5141	III37'	[l]i(?) -ap[in]
261	4251	II23'	giš ba-ŠU-DIM ₂			III38'	[]-a[pin]
262	4252	II24'	giš eme-sig			III39'	[]-a[pin]
214	4146	II25'	giš nu ₂			III40'	[]-a[pin]

		III41'	traces	594	6060	V13'	giš BAD
		IV01'	giš RI-[	666	6052	V14'	giš KAL
		IV02'	giš dal-d[al-	667	6053	V15'	giš KAL
		IV03'	giš mar-gid ₂ -d[a-	668	6054	V16'	giš KAL
351	5059	IV04'	giš gag-[]	429	6081	V17'	giš BU
352		IV05'	giš za-ra-gag-sa[l ₄]	430	6082	V18'	giš BU
		IV06'	giš gag-za-ra-gag-sa ₄	431	6083	V19'	giš BU
353		IV07'	giš umbin-gag-sa ₄	432	6084	V20'	giš BU
354		IV08'	giš ŠID-gar-ra	255	4242	V21'	giš [naga ₃]
355	5068	IV09'	giš ŠID-bar-ra	256	4243	V22'	giš naga ₃ -[še]
356	5070	IV10'	giš ŠID-ša ₃ -ga	257	4244	V23'	giš naga ₃ -še-giš-[i ₃]
326	5006	IV11'	giš gigir	259	4247	V24'	giš naga ₃ -tukul-g[az]
327	5015	IV12'	giš e ₂ -gigir		4211	V25'	giš tur-UD-HUB ₂ -[
328	5016	IV13'	giš e ₂ -suhur-gigir		4210	V26'	giš gal-UD-HUB ₂ -[
345		IV14'	giš gaba-gigir	628	7a139	V27'	giš DUG-gub
346	5021	IV15'	[] gaba-PI-gigir			V28'	giš DUG-gub-a
330	5042	IV16'	[k]un-gigir			V29'	giš DUG-gub-kaš
344	5025	IV17'	[s]i-gigir	418	6012	V30'	giš ga-ri[g ₂]
342	5054	IV18'	[] umbin-gigir			V31'	giš [g]a-rig ₂ -munus
343	5055	IV19'	[g]ag-umbin-gigir			V32'	[]-rig ₂ -nita
		IV20'	giš X-gigir			V33'	giš UD.S[AL?+H]UB ₂
		IV21'	giš []-gigir			V34'	[] UD.SAL?+HUB ₂ -
		IV22'	gi[š -gi]gir				mun[us]
		IV23'	gi[š			V35'	[g]iš UD.SAL+HUB ₂ -
		IV24'	gi[š				ni[ta]
339		IV25'	giš []-mud-gigir			V36'	giš [
374	5199	IV26'	giš ig			VI01-31'	traces or isolated signs
375	5200	IV27'	giš ig-ki-gal	536	6220	VI32'	giš har-mušen-n[a]
		IV28'	giš ig-ka ₂	537	6221	VI33'	giš gidru-har-mušen-n[a]
		IV29'	giš ig-KAK-ra			VI34'	traces
384	5239	IV30'	giš ig-ze ₂ -na	283	4358	VII01'	giš ma ₂ -20-gur
	5259	IV31'	giš ig-bar-da	285	4360	VII02'	giš ma ₂ -10-gur
385	5237	IV32'	giš ig-ma-ri ₂ !-za	286	4361	VII03'	giš ma ₂ -5?-gur
382	5251a	IV33'	giš ig-u ₃ -ma	314	4417	VII04'	giš zi-ga-an
		IV34'	giš ig-KAK-AD(?)		4407	VII05'	giš gi-nu-u[š]
		IV35'	giš ig-LUL(?) -da		4269	VII06'	[] ma ₂ -gid ₂ !-da
		IV36'	giš ig-šinig			VII07'	giš di ₃ ?-ma ₂ -gid ₂ -da
387	5247	IV37'	[] ig-e ₂ -gal			VII08'	giš TU?-ma ₂ -gid ₂ -da
380	5244	IV38'	[] ig-suh ₄			VII09'	giš [
388	5252	IV39'	[s]uku ₃ -ig			VII10'	g[iš
		IV40'	[]-ig			VIII01'	[]-kin
		IV41'	[]-ma-ig			VIII02'	[]-kin
		IV42'	traces			VIII03'	traces
		V01'	traces			VIII04'	[]-si-[
		V02'	giš LA?-KAB-AB ₂ -D[U				
147	4021	V03'	giš dub-dim ₂				
	4022	V04'	giš šu-me ₃ ?-gi				
	4023	V05'	giš DIB-QA?-B[UR?]				
	6007	V06'	giš EZ[EN?]				
		V07'	giš EZ[EN?]				
426	6043	V08'	giš LAGAB				
427	6044	V09'	giš LAGAB				
428	6045	V10'	giš LAGAB				
592	6058	V11'	giš BAD				
593	6059	V12'	giš BAD				

Commentary to NP I-02

The sequence giš-nu₂; ^{giš}gu-za; followed at some distance by ^{giš}apin, is also found in NP I-05.

NP I-03 *BRM* IV 29+ 30: see the Ur Version (§5.6.2).

NP I-04 *SMEA* 18 (1977), Plate III: see the Ur Version (§5.6.2).

NP I-05 BM 080790 (Bu 91-5-9,928)

		I01'	[] x-nu ₂
228	4172	I02'	[] -zi-da-nu ₂
160	4069	I03'	[] gu-za
184	4082	I04'	[] -z]a-munus
		I05'	[] -z]a-urdu
		I06'	[] -z]a-ad
	4119	I07'	[] šu-nigin,?-na
170	4079	I08'	[] -kaskal
		I09'	[] -si
452	5152	II01'	[g]iš [š]u-sa[g-
464	5146	II02'	giš ninda ₂ -ap[in]
460a		II03'	giš muš-apin
	5170	II04'	giš har-apin
	5140	II05'	giš a ₂ ?-apin
		II06'	giš []-apin
	5136a	II07'	giš ama-ap[in]
457	5159c	II08'	giš n[ig]-ap[in]
458		II09'	giš gag-n[ig-

Commentary to NP I-05

See the commentary to NP I-02.

NP I-06 BM 16653 (92-5-16, 189)

		I01'	[] -K]A [?]
		I02'	[] -lu ₂
		I03'	[] -AGA [?]
351	5059	II01'	[] ga[g-
352		II02'	giš za-ra [?] -g[ag-
354		II03'	giš ŠID-g[ar-
355	5068	II04'	giš ŠID-bar-[
356	5070	II05'	giš ŠID-ša ₃ -[
326	5006	II06'	giš [
327	5015	II07'	giš ¹ e ₂ -[

Commentary to NP I-06

The second column runs parallel to NP I-02 IV04'-IV12'. The entries in the first column are not identified.

NP II-01 *BRM* IV, 31

I01 giš IGI-TUR

544	3269	I02	giš ligima
065	3280	I03	giš nimbar
066	3289	I04	giš nimbar-tur
		I05	[]-X-tur
		rI01'	giš [
		rI02'	giš [
		rI03'	giš [
		rI04'	giš [
		rI05'	gi[š
		rI06'	gi[š
059	3254	rII01'	giš ur-n[u-
060	3260	rII02'	giš ti-a-ru-um
061	3250	rII03'	giš i-ri-a-nu-um
062	3255	rII04'	giš ur-zi-num ₂
064	3265	rII05'	giš isi ₂ -mu ₂
		rII06'	giš IGI-TUR
544	3269	rII07'	giš ligi[ma]
065	3280	rII08'	giš ni[mbar
066	3289	rII09'	giš nimbar-t[ur
		rII10'	giš nim[bar-
		rIII	metrological (N še ku ₃ -babbar)

NP II-02 *MSL SS1, 95 (Plate XVIII)*

	4075	01'	[] gu-za-zag-n[a [?] -
182	4076	02'	[] gu-za-LAM-KUR-[

NP III-01 *MSL SS1, 97 (Plate XXI)*

246	4225	01	giš kun ₄
247	4226	02	giš kun ₄ -bad ₃
	4228	03	giš kun ₄ -al-aš
	4230	04	giš ku[n ₄]-gu ₂ -lu-lu
		05	giš []-kun ₄
252	4233	06	giš bugin
253	4235	07	giš bugin-tur
		r01	giš bugin-X-bi

NP III-02 *LB 1080*

039	3154	01	giš a-ab-b[a]
040	3155	02	giš a-ab-ba-luh-ha (sic!)
		03	giš mes-ša ₃ -kal
055	3227	04	giš e-lam-ma-kum
		05	giš gi-zi-lum
058	3237	06	giš zi-ir!-du-[u]m
122	3238	07	giš ši-[i]q-du-um
005	3005	08	giš š[a ₃]-kal
021	3053	09	giš ša[r _x (NE)]-ša ₄ -X
		10	giš X X
		11	giš KA?-PA-ŠU ₂ X X X

062	3255	12	giš ur-z[i]-nu-um
059	3254	13	giš ur-nu-um
061	3250	14	giš i-li-nu-um
135	3493	r01	giš (traces) a-ri ₉ ?
136	3494	r02	giš a- (traces) - r[i ₉ ?]-na?
		r03	giš URU?-X

NP III-03 NBT 1891: see the Ur version (§5.6.2)

NP III-04 YBC 06702

111		01	[g]iš ad ₂
112	3439	02	giš kiš ₁₆
113	3441	03	giš kiš ₁₆ -HA-har
114	3441a	04	giš kiš ₁₆ -HA-har-kur-ra
115	3447	05	giš sa-ma-num ₂
116	3448	06	giš sa-ma-zum
123	3455	07	giš [z]ar?-si
125	3469	08	giš gi-zu ₂ -lum-ma

NP III-05 YBC 12048

257	4244	01	giš naga ₃ -še-giš-i ₃
256	4243	02	giš naga ₃ -še
260	4248	03	giš gan-na
261	4251	04	giš ŠU-DIM ₂
	5017	05	giš e ₂ -zu!-lum-ma
		06	giš LA[GAB-
		07	giš LA[GAB-

Commentary to NP III-05

06-07 Perhaps LAGAB is to be read gi[gir].

NP III-06 YBC 06717

155	4041	01	giš ba-šab
154		02	giš ba-še
156	4053	03	giš hub ₂
157	4054	04	giš na-ru ₂ -a
158	4055	05	giš ešgiri-šu-du ₈
159		06	giš nig ₂ -na-UD
160	4069	07	giš gu-za
161	4070	08	giš gu-za-sig ₅

NP III-07 YBC 01991

385	5237	01'	g[iš i]g-m[i-
		02'	giš ig-šu-ur ₂ ?-tum
		03'	giš ig-PAP-GIR ₃
	5222	04'	giš ig-giš.erin
376	5233	05'	giš ig-i ₃
377	5234	06'	giš ig-i ₃ -še[š ₂]

387	5247	07'	giš ig-an-an-e ₂
382	5251a	08'	giš ig-u ₃ -m[a]
388	5252	09'	giš suku ₅ -i[g]
		10'	giš AB-ig
390	5254	11'	[] u ₄ -[saka]r-i[g?]
		r01	giš kul-šu-x [
399	5271	r02	giš sag-[
402	5294	r03	giš si-[
		r04	giš ŠU?-si-g[ar]
		r05	giš {erased}
		r06	giš HUR-MAŠ ₂ ?-ma?
405	5286	r07	giš mud
406	5287	r08	giš gag-mud[
		r09	giš mud-[
		r10	giš nam-ba-[
		r11	[g]iš [-n]am-[

NP IV-01 JCS 8 (1954), p.146

031	3136	1	giš lam-gal
032	3137	2	giš lam-tur
		3	giš še-er-ha-zum

Commentary to NP IV-01

- 3 ^{giš_v}še-er-ha-zum is probably equivalent to *tur'azum*, the Akkadian rendering of ^{giš}lam-tur in late ur₃-ra (*MSL* 5, p.103).

NP IV-02 BIN II, 50

023	3061	1	[] lam
024	3062	2	giš LAM
025	3074	3	giš u ₃ -suh ₅
026	3083	4	giš še-u ₃ -suh ₅
027	3088	5	giš pa-u ₃ -suh ₅
	3084	6	giš numun-u ₃ -suh ₅

NP IV-03 BIN II, 65

059	3254	1	[u]r-nu-um
060	3260	2	[-t]i-a-ru-um
061	3250	3	giš i-li-a-nu-um

NP IV-04 JCS 8 (1954), p.146

419	6013	1	giš ga-rig ₂ -sig ₂
		2	giš ga-rig ₂ -sig ₂ -sig ₂ ?
420	6014	3	giš ga-rig ₂ -sag-du

NP IV-05 BIN II, 54

1	giš ad-[
2	giš ki-X
3	giš x [

NP IV-06 TIM X/1, 1

326	5006	1	giš gigir!
327	5015	2	giš e ₂ -gigir
332	5023	3	giš sahar?-gi ₄ -gigir

NP IV-07 TIM X/1, 7

169	4095	1	giš gu-za-anše
170	4079	2	giš gu-za-kaskal
		3	giš gu-za-al-zi-ra

NP IV-08 CT 44, 43

368	5092	01	giš umbin-mar-gid ₂ -da
369	5095g	02	giš gag-umbin-mar-gid ₂ -da
	5093	03	giš igi-umbin-mar-gid ₂ -da

NP IV-09 SMEA 18 (1977), p.106: 4

231	4174	01	[] dilim ₂
230	4175	02	[] dilim ₂ -gal
233	4181	03	giš ma-al-tum ₂

NP IV-10 YBC 08936

089	3398	01	giš mud-nimbar
		02	giš mud-al-gaz-nimbar
083	3293	03	giš am[a]-nimbar

NP IV-11 YBC 09907

102	3384	01	giš peš-nimbar
103		02	giš peš-murgu-nimbar
	3385	03	giš peš-UŠ-nimbar
		04	ta-ri-ba-tum

NP IV-12 LB 0998

524		01	giš 10 gin ₂
525		02	giš 5 gin ₂
526		03	giš 2 [gi]n ₂

NP IV-13 Freedman 1975 no. 243

292	4308	01	giš ma ₂ - ^d nin-urta
		02	giš ma ₂ -SIG
299	4367	03	giš si-ma ₂

NP IV-14 Freedman 1975 no. 244

328	5016	01	giš e ₂ ?-usan ₃ ?-gigir
337	5034	02	giš gir ₃ -gub-[
		03	giš HI-MAŠ-gigir

NP IV-15 NCBT 1918

094	3380	01	[gi]š TUG ₂ ?-[
090	3360	02	[] ze ₂ -na-[
	3403	03	[] he ₂ -BAD-[

NP IV-16 NBC 8048

4059	01	giš na
4060	02	giš na-gal
4062	03	giš na-šu

NP IV-17 NBC 8063

214	4146	01	giš nu ₂
215	4147	02	giš nu ₂ -AŠ-nu ₂
216	4148	03	giš nu ₂ -ki-nu ₂

NP IV-18 *AUCT* 5 (forthcoming), 207

327	5015	01	giš e ₂ -gigir
328	5016	02	giš e ₂ -suhur-la ₂ -gigir

NP IV-19 *AUCT* 5 (forthcoming), 234

285	4360	01	giš ma ₂ -10-gur
		02	giš ma ₂ -[]-gur
280	4355	03	giš ma ₂ -50-gur

5.7 Catalogue

5.7.1 Tablets from Nippur

5.7.1.1 Prisms

Ni P-01	N 6766 + N 6960
Side A:	37-39
Side F:	I: 614-622; II: 688-696
Remarks:	Small fragment of a six-sided prism, with two columns per side. Parts of sides one and six preserved.
Ni P-02	3N-T905,211
Side B:	307-315
Side C:	354-356
Publication:	<i>SLFN</i> 73
Remarks:	Fragment of a rectangular prism. The preserved part probably belongs to side two; very few traces of side three remain. Side three was not copied in <i>SLFN</i> .
Ni P-03	N 5260
Side C:	558-564
Side D:	610-619
Remarks:	Top fragment of a square prism, probably with three columns per side. One column of side three and two columns of side four are partly preserved.
Ni P-04	CBS 12486
Side B:	330-354
Remarks:	Large fragment of a square prism, which probably had three columns per side. The sides preserved are sides two and three. On side three only some traces remain. The writing is badly eroded. There are clear remains of the hole that was pierced from bottom to top.
Ni P-05	IM 58599 (3N-T655)
Side A:	162-165
Side B:	194-198
Remarks:	Corner fragment of a square prism with parts of two sides preserved, probably sides one and two. On each side one column remains. The piece was studied from a cast in Chicago.
Ni P-06	A 30187 (3N-T259)
Side B:	I: 260-267; II: 299-310a; III: 349-357a
Side C:	I: 397-408; II: 440-442
Remarks:	Bottom piece of a square prism with parts of two sides preserved (sides one and two). On side two there are the remains of three columns. The piece probably had four columns per side.

5.7.1.2 Type I Tablets

Ni I-01	CBS 06068
Obverse:	I: 18-37; II: 57-80; III: 101-123

- Reverse: I: 333-344; II: 370-374
Publication: *SLT* 170
Remarks: Lower left corner of a large tablet with small writing. The tablet contained the first half of the list and has a catch-line: ^{giš}ig. Two columns on the reverse were left unused. Obverse column IV has traces of ^{giš}(15x), not copied in *SLT*. The tablet probably had six columns per side. Colophon: šu ab-bi-e-tum.
- Ni I-02 N 1465 + N 1500 (+) N 6125
Obverse: I: 332-340; II: 375-385
Reverse: I: 392-404; II: 456
Remarks: Right edge part of a tablet which contained the whole ^{giš} list. The fragment N 6125 has a point of contact, but not enough to glue the pieces together. The text has some idiosyncrasies, especially in the section ^{giš}gigir. This passage has been edited separately in §5.5.
- Ni I-03 N 4983
Obverse: 45-48
Reverse: 75-77
Remarks: Upper right corner of a small tablet. There are traces of at least one column to the left. This is probably an example of a small type I tablet which had only the list of trees. Similar is N 5881 (Ni I-09).
- Ni I-04 N 5589
Obverse: I: 11-21; II: 51-58
Reverse: I: 542-558; II: 602-610
Remarks: Central part of a large tablet which contained the whole ^{giš} list. The piece is close to the left edge. A handcopy of the tablet is reproduced in §2.3.3.1.
- Ni I-05 UM 55-21-314 (=3N-T354) + UM 55-21-386 (=3N-T909A)
Obverse: I: 108-123; II: 160-178; III: 209-217
Reverse: I: 355-370; II: 402-423; III: 452a-482; IV: 533-544
Edition: *MSL* 5, pp.132-133 (column I); *MSL* 6, p.11; pp.40-41 (reverse column I); pp.45-46 (reverse column II)
Remarks: Upper right corner of a very large tablet. Relatively small script. The text contained the whole ^{giš} list. Parts of the right and upper edges have been preserved.
- Ni I-06 N 5223
Obverse: I: 154-164; II: 209-212
Reverse: I: 446-450; II: 495-509; III: 553-558
Remarks: Central part of a large tablet which contained the whole ^{giš} list.
- Ni I-07 N 4640
Obverse: 126-129
Reverse: 273-274
Remarks: Small fragment from the middle of a tablet. On the reverse a few signs are legible which belong to the ^{giš}ma₂ passage (273-274). Therefore the tablet cannot have contained the whole ^{giš} list. It probably ended with the ^{giš}mar-gid₂-da section.
- Ni I-08 N 1361 + N 5907 + N 5912 + N 5957 + N 6035 + N 6053 + N 6089 + HS 1823 (+) N 4098 + N 6011 (+) N 5134 (+) N 5405 (+) N 6087
Obverse: I: 7-26; II: 41-60; III: 80-105; IV: 120-151; V: 182-187
Reverse: I: 208-228; II: 261-275; III: 307-312; IV: 324-350; V: 371-374
Remarks: Central part of a type I tablet. Part of the left edge is preserved in the HS fragment part of the bottom edge in N 5405. The tablet contained the first half of the ^{giš} tablet and has

the catch-line ^{giš}ig. It has five columns per side. In the transcription the indirect joins are identified by a letter. N 5134 = A; N 6011 = B; N 6087 = C; N 5405 = D. Fragment D has a few signs from the bottoms of columns II and III of the obverse. These signs could not be deciphered. The piece N 4098 + N 6011 actually touches the main piece, but the point of contact is too small to glue them together. Colophon: ^dšara₂-lugal-zu DUMU DINGIR-š_u-i-bi-š_u.

- Ni I-09 N 5881
 Obverse: I: 46-49; II: 64a-68
 Reverse: 97
 Remarks: Upper right corner of a small tablet. The piece contains no more than 16 lines in each of 5 columns on the obverse. On the reverse only the last line of the first column has been preserved. The tablet probably covered the whole tree section. Similar is N 4983 (Ni I-03).
- Ni I-10 CBS 05931 + CBS 06589 + CBS 07204 + CBS 08468
 Obverse: I: 378-408; II: 424-439
 Reverse: I: traces; II: 629-658; III: 673-707
 Publication: *SLT* 165 A + *SLT* 159 + *SLT* 132 (+) *SLT* 165 BCDE
 Edition: *MSL* 6, p.45
 Remarks: Large tablet which contained the second half of the ^{giš}ig list, beginning with the section ^{giš}ig. CBS 6589 (= *SLT* 165) A, B, C, D; CBS 5931 (= *SLT* 159) and CBS 8468 belong to the obverse. CBS 6589 E (= *SLT* 165 E) and CBS 7204 (big piece; = *SLT* 132) belong to the reverse. *SLT* 165 B has badly deteriorated since being copied by Chiera. CBS 7204 is accompanied by four more fragments, two of which bear writing. The largest of these joins CBS 8468. Due to plaster restorations on CBS 7204 most joins cannot be actually glued. A possible candidate to belong to the same tablet is CBS 6572 (^{giš} signs and traces only). CBS 7204 preserves the upper edge of the tablet.
- Ni I-11 N 4947
 Reverse: 693-696
 Remarks: Small fragment of the bottom edge of the reverse of a large tablet. The right column has items near the end of the ^{giš}ig list. The left column is unused. The text most probably represents the Old Babylonian version, though the writing could be post-Old Babylonian.
- Ni I-12 N 6207
 Reverse[?]: 359-368
 Remarks: Fragment; part of one column has been preserved. The piece is rather thick; it may belong to a type I tablet or even to a prism.

5.7.1.3 Type II Tablets

- Ni II-001 CBS 04866
 Reverse: I: 4-23; II: 25-42; III: 45-56; IV: 59-60
 Publication: *SLT* 128
 Remarks: Nearly complete tablet. Obverse vessels (dug). Last column on the reverse is inscribed with ^{GIŠ} signs, but was then left unfinished.

- Ni II-002 CBS 11342 + 12714
Reverse: I: 673-696; II: 704-707 and 1-26
Publication: *SLT* 194
Edition: *MSL* 7, p.225f.; *MSL* 6, pp.157-159.
Remarks: Left half of a tablet. Obverse urudu. The reverse has the end of the giš list. After the subscript (^dnisaba-za₃-mi₂) and a horizontal line the tablet starts over again with the beginning of the same list.
- Ni II-003 CBS 06556
Reverse: 13-15
Publication: *SLT* 131
Remarks: Whitish clay (overfired?). Small part of the left edge is preserved. One side is preserved; almost certainly the reverse of a type II tablet. Big, irregular writing. The columns run from left to right.
- Ni II-004 CBS 12754
Reverse: I: 43-47; II: 78-79
Publication: *SLT* 119
Remarks: Chip of the reverse of a type II tablet.
- Ni II-005 CBS 08063
Obverse: 338-346
Reverse: I: traces; II: 49-52
Publication: *SLT* 157 (reverse only)
Remarks: Right edge fragment of a tablet; both sides giš. On the obverse the pupil's column has been preserved. These lines are very difficult to read, with many erasures. Columns on the reverse run from left to right.
- Ni II-006 CBS 06515
Reverse: I: 60-66; II: 79-86
Publication: *SLT* 173 (reverse only)
Remarks: Upper right corner of a tablet. On the obverse a number of student's signs are preserved. Unidentified. The reverse columns run from left to right. The text is partly weathered.
- Ni II-007 CBS 06411
Reverse: 69-79
Publication: *SLT* 163
Remarks: Lower left corner of a tablet. The obverse is anepigraphic. A fragment of the tablet copied by Chiera is now lost (the first two signs of the last two lines of reverse column 2). They are retained in the transliteration.
- Ni II-008 CBS 06416
Reverse: 92-97
Publication: *SLT* 158
Remarks: Flake of the reverse of a tablet. Part of the left edge has been preserved.
- Ni II-009 CBS 06424
Reverse: I: 54-57; II: 82-88; III: 109-112
Publication: *SLT* 164
Remarks: Bottom part of a tablet. The obverse has been erased, some horizontal lines are still visible.
- Ni II-010 CBS 05939
Reverse: 87-89
Publication: *SLT* 138 (reverse only)

- Remarks: Upper left corner of a tablet. The obverse has vessels (dug; restoring *MSL* 7, p.202: 75-77).
- Ni II-011 CBS 06600
Reverse: I: 96-98; II: 123-137
Publication: *SLT* 172
Remarks: Left edge part of a tablet. On the obverse only a few signs are left; unidentified.
- Ni II-012 CBS 06476
Reverse: 109-115
Publication: *SLT* 133 (reverse only)
Edition: *MSL* 9, p.51 S2 (obverse only)
Remarks: Upper left quarter of a tablet. The tablet was deliberately cut in two in antiquity. The right edge follows the text on the obverse. Obverse ugu-mu.
- Ni II-013 CBS 13568 + CBS 13575 + CBS 13576 + CBS 13583 + CBS 13588 + CBS 13592 + CBS 13596 + CBS 13601 + CBS 13614
Reverse: I: 4-27; II: 33-51; III: 54-71; IV: 79-81
Publication: *PBS* 11/2, 67 (obverse only)
Remarks: Large part of a tablet. The obverse has personal names in a beautiful teacher's hand on the right half of the tablet; the left half is not inscribed.
- Ni II-014 CBS 06593
Reverse: I: 14-22; II: 35-39
Remarks: Right edge fragment of a tablet. The obverse is anepigraphic.
- Ni II-015 CBS 09847 (+) CBS 12516
Reverse: I: 1-11; II: 23-36; III: 47-66; IV: 81-96
Remarks: CBS 12516 (fragment B) is a top edge fragment of which only the reverse has been preserved. CBS 9847 (fragment A) is the bottom half of the same tablet. The obverse has Old Babylonian P-Lu (*MSL* 12, p.60): 748e; 750; 753-756 (end of exercise). The two fragments do not touch, but the writing on the reverse is clearly the same, and the distribution of the items over the columns fits. The line numbers in fragment B have been computed, and a B added.
- Ni II-016 Ni 01865
Reverse: 88-99
Remarks: Lower left corner of a tablet. The obverse has containers, paralleling *MSL* 7, p.202f.: 82-84:
dug a-[
dug a-si[g-
dug a-si[g-
{end of exercise}
The text was studied from an unpublished copy by Hilprecht in the University Museum, Philadelphia.
- Ni II-017 CBS 06594
Reverse: I: 1-6b; II: 14-19
Remarks: Lower left corner of a tablet. The tablet is disintegrating. Obverse reed; illegible. The columns on the reverse run from left to right.
- Ni II-018 CBS 12515
Reverse: I: 65-68; II: 87-95
Edition: *MSL* 12, p.32: U" (obverse only)
Remarks: Upper left corner of a tablet. Obverse is Old Babylonian Proto-Lu (SAL section).

- Ni II-019 CBS 12666
Reverse: I: 56-59; II: 89-92
Remarks: Bottom part of a tablet. The obverse may be proverbs. Final two lines:
[u]g-[
ba-an-ug₅.
- Ni II-020 CBS 02260
Reverse: I: 1-21; II: 22-43; III: 55-59
Remarks: Lower right corner of a large tablet. Obverse is anepigraphic. The bottom edge has: X-
ka-tum. (X is any sign that ends as a GIŠ).
- Ni II-021 CBS 06552
Reverse: I: 7-11; II: 25-26
Remarks: Right edge fragment of a tablet. Obverse not preserved.
- Ni II-022 IM 58624 (3N-T691)
Obverse: 432-446
Edition: *MSL* 6, p.145-146.
Remarks: Very probably the obverse of a type II tablet. The piece was studied from a cast in
Chicago.
- Ni II-023 CBS 06974
Reverse: I: 1-5; II: 26-29
Remarks: Bottom part of a tablet, near the right corner. Obverse is anepigraphic.
- Ni II-024 CBS 03857
Reverse: I: 45; II: 59-65
Remarks: Lower left corner of a tablet. Obverse is lost.
- Ni II-025 CBS 03935
Reverse: 1-5
Remarks: Lower right corner of a tablet. Obverse is anepigraphic.
- Ni II-026 CBS 04801 + CBS 04802
Obverse: 270-276
Reverse: 51a-58
Publication: *SLT* 156 (partial copy)
Remarks: Large fragment of a tablet; both sides giš. The right side of the obverse is erased and is
considerably thinner than the left side. Columns on the reverse run from left to right.
Reverse column 2 was not copied in *SLT*.
- Ni II-027 CBS 04806
Reverse: I: 1-5; II: 36-39
Publication: *SLT* 149 (reverse only)
Remarks: Lower left corner of a tablet. Obverse stones (= *MSL* 10, p.55: 28-32). The fragment is
rather thin for the left side of a type II tablet (max 1.9 cm; at the edge 0.9). Both sides
are well written.
- Ni II-028 CBS 04807
Reverse: 60-63
Remarks: Upper edge fragment of a tablet. On the obverse two lines are partly preserved: a-sig-
ga; a-sig-g[a-] (restoring Proto-Kagal 377f.).
- Ni II-029 CBS 04811

- Reverse: I: traces; II: 36-38; III: 59-65
Remarks: Flake of the reverse of a tablet.
- Ni II-030 CBS 04820
Reverse: I: 1-4; II: 18
Remarks: Lower right corner of a tablet. Obverse is anepigraphic.
- Ni II-031 CBS 04824
Reverse: I: 42-48; II: 54-61
Remarks: Lower left corner of a tablet. Obverse is anepigraphic but vertical dividing lines are still visible.
- Ni II-032 CBS 04825
Obverse: 272-275
Remarks: Left edge fragment of a tablet. Reverse Syllable Alphabet B.
- Ni II-033 CBS 04827
Obverse: 622-630
Reverse: I: 520-526; II: 541-554; III: 562-573; IV: 589-599
Publication: *SLT* 171 (obverse only)
Edition: *MSL* 6, p.155 (obverse only)
Remarks: Top and right edge broken off (probably one column of the reverse is missing). Both sides giš. Right half of the obverse (not copied in *SLT*) still shows some pupil's signs.
- Ni II-034 CBS 04829
Reverse: 82-89
Publication: *SLT* 68 (obverse only)
Remarks: Upper left corner of a tablet. Obverse fish. Reverse very crude writing (giš).
- Ni II-035 CBS 04830
Reverse: I: 13-14; II: 38-52; III: traces; IV: 95-101
Publication: *SLT* 224 (obverse only)
Edition: *MSL* 12, 32 Y" (obverse only)
Remarks: Bottom half of a tablet. Obverse has Old Babylonian Proto-Lu. The right half of the obverse has two pupil's columns, with a few half-erased signs preserved.
- Ni II-036 CBS 04832
Reverse: 1-18
Remarks: Lower right corner of a tablet. Obverse is anepigraphic. There is a deep impression on the reverse, probably from a hand.
- Ni II-037 CBS 04837
Reverse: I: 9-17; II: 34-43; III: 64-67
Remarks: Upper right corner of a tablet. On the obverse a few signs are visible, not identified.
- Ni II-038 CBS 04833
Reverse: 57-62
Remarks: Flake of the reverse of a tablet.
- Ni II-039 CBS 04838
Reverse: I: 15; II: 26-47
Remarks: Lower right corner of a tablet. Obverse is anepigraphic.
- Ni II-040 CBS 04839
Reverse: I: 40-43; II: 54-63; III: 78-85

- Remarks: Large, thin, reverse part of a tablet. Various deep incisions. Part of the left edge is preserved.
- Ni II-041 N 4953
Reverse: I: traces; II: 95-109; III: 134-149
Edition: *MSL* 14, p.26: Hy (obverse only)
Remarks: Upper right corner of a tablet. Obverse has Proto-Ea.
- Ni II-042 CBS 13519
Obverse: 566-572
Remarks: Left edge fragment of a tablet. Both sides *giš*. The reverse has largish writing; only the sign *GIŠ* is preserved five times.
- Ni II-043 N 5133
Reverse: I: 99-104; II: 141-146
Edition: *MSL* 14, p.27: Jh (obverse only)
Remarks: Fragment of the upper part of a tablet, near left corner. Obverse has Proto-Ea.
- Ni II-044 N 5456
Reverse: I: 2-12; II: 28-30
Remarks: Lower right corner of a tablet. Obverse is anepigraphic.
- Ni II-045 CBS 04854
Reverse: I: 64-72; II: 95-97
Remarks: Central part of a tablet. Obverse is anepigraphic.
- Ni II-046 CBS 04856
Reverse: 28-33
Remarks: Central part of a tablet. Obverse is broken.
- Ni II-047 CBS 04865
Reverse: I: 1-5; II: 28-32; III: 54-55
Remarks: Lower right corner of a tablet. Obverse is anepigraphic. Lines 1 and 2 in the *giš* list on the reverse are interchanged.
- Ni II-048 CBS 06496
Obverse: 195-199
Reverse: 381-386
Remarks: Central part of a tablet, probably type II. The obverse has ^{giš}gu-za; reverse ^{giš}ig. The section ^{giš}ig is somewhat deviant and is edited separately in §5.5. It is not completely certain which side is the obverse; the side indicated as the reverse here is slightly more curved.
- Ni II-049 UM 29-16-586
Reverse: I: 84-96; II: 122-137
Remarks: Left edge fragment of a tablet. Remains of two lines on the obverse have not been identified. The tablet was deliberately cut in two in antiquity.
- Ni II-050 CBS 05944
Obverse: 1-4
Publication: *PBS* 11/2, 53 (reverse only)
Remarks: Lower left corner of a tablet. The reverse has personal names.
- Ni II-051 CBS 05985
Reverse: I: 1-6; II: 21-22

- Publication: *PBS* 11/1, 43 (obverse only)
 Edition: *MSL* 14, 28: Jw (obverse only)
 Remarks: Lower left corner of a tablet. The obverse has Proto-Ea. Largish writing on the reverse. The reverse columns run from left to right.
- Ni II-052 CBS 03849
 Obverse: 220-225
 Publication: *SLT* 147 (obverse) *PBS* 11/1, 34 (reverse)
 Remarks: Upper left corner of a tablet. Reverse has personal names.
- Ni II-053 CBS 06098 + N 3960 + N 5128
 Reverse: I: 99a-128; II: 130-165; III: 172-196; IV: 204-242; V: 250-284
 Remarks: Large tablet, nearly complete. The corners are missing and in several places the surface is damaged. Obverse column I has a multiplication table (base 16), column II model contracts concerning houses, repeated by a pupil in column III. The first of the contracts is a duplicate of *PBS* 12/1, 23. The model contracts are edited in §2.4.1.4.
- Ni II-054 CBS 06117
 Reverse: I: 1-12; II: 13-25a
 Remarks: Complete tablet. The obverse is illegible (erased). Reverse has very crude writing, in places hardly legible.
- Ni II-055 CBS 06370
 Reverse: 10-13
 Remarks: Right edge piece of a tablet. Obverse is broken. Reverse column II is unplaced.
- Ni II-056 CBS 06412
 Obverse: 230-248
 Publication: *SLT* 136 (obverse only)
 Edition: See *MSL* 5, p.167f. (obverse only)
 Remarks: Large left edge part of a tablet. The obverse preserves the teacher's model (giš) and part of the pupil's column. The right half of the piece is thinner than the left half, and contains detached signs and numerals, apparently without relation to the teacher's model (not copied in *SLT*). The reverse has TU-TA-TI.
- Ni II-057 CBS 06403
 Obverse: 5-9
 Remarks: Upper left corner of a tablet. Very little of the reverse remains, not identified. The tablet turns in the wrong direction.
- Ni II-058 CBS 06407
 Obverse: 59-69
 Reverse: I: 2-16; II: 17-35
 Publication: *SLT* 140
 Remarks: Left half of a tablet. Both sides have giš. The tablet turns in the wrong direction.
- Ni II-059 CBS 06409
 Reverse: I: traces; II: 52-59; III: 60-77
 Publication: *SLT* 232 (obverse only)
 Edition: *MSL* 11, p.96: X1
 Remarks: Left part of a tablet. Obverse has a geographical list (rivers). The reverse is hardly legible. There are traces of three columns, one of them completely lost.
- Ni II-060 CBS 06419
 Reverse: I: 274-279; II: 287-301; III: 304-324; IV: 324-338

- Publication: *SLT* 169
 Remarks: Large central part of a tablet, all edges lost. Model text on the obverse is badly damaged. It belongs to the section clothing and parallels *MSL* 10, p.147: 63-65, with some variants (including [tug₂-guz-za]-sag = *MSL* 10, p.151: 180). Left bottom corner of reverse has deteriorated since having been copied by Chiera.
- Ni II-061 CBS 06426
 Reverse: 515-526
 Remarks: Lower left corner of a tablet. On the obverse a few signs of the teacher's model are preserved; one line probably begins igi-zi []. Unidentified.
- Ni II-062 CBS 06455
 Reverse: I: 39-40; II: 59-61
 Remarks: Central piece of a tablet. Obverse not identified; a few signs of the teacher's model are preserved.
- Ni II-063 CBS 06468
 Reverse: I: 16-28; II: 45-54
 Remarks: Upper right edge part of a tablet. Some traces of erased signs are visible on the obverse.
- Ni II-064 CBS 03825 + CBS 04847
 Reverse: I: traces; II: 600-614; III: 619-641
 Publication: *SLT* 139 (reverse only) + *SLT* 75 (obverse only)
 Edition: *MSL* 6, p.155 and p.157 (*SLT* 139: reverse only); *MSL* 10, p.120 source J (*SLT* 75: obverse only)
 Remarks: Upper left edge part of a tablet. The obverse has plants and is copied as *SLT* 75. The joined piece adds no text to the obverse. Reverse (wooden objects) is well written.
- Ni II-065 CBS 06518
 Reverse: I: 12-21; II: 52-55
 Remarks: Upper right corner of a tablet. The obverse is erased. The reverse is almost illegible.
- Ni II-066 CBS 06531
 Reverse: I: 18-20; II: 38-39
 Remarks: Top fragment of a tablet. The obverse is anepigraphic.
- Ni II-067 CBS 06542
 Reverse: I: 47-51; II: 63-69
 Remarks: Left edge part of a tablet. The obverse has a model contract: loan of grain.
- Ni II-068 CBS 06546
 Reverse: I: 38-43; II: 52b-52d
 Remarks: Upper left corner of a tablet. The obverse has a colour sequence (babbar; gi₆); perhaps it is the section sheep (udu), but the traces are too faint to be sure.
- Ni II-069 CBS 06547
 Reverse: 88-95
 Publication: *SLT* 161
 Remarks: Lower left corner of a tablet. A double line on the obverse indicates the end of the teacher's example, of which only a few traces remain.
- Ni II-070 CBS 06854
 Reverse: I: 1-6; II: 28-30
 Remarks: Lower right corner of a tablet. On the obverse a few erased signs of the pupil's column remain, unidentified.

- Ni II-071 CBS 05865
 Obverse: 537-545
 Publication: PBS 11/3, 35
 Edition: *MSL* 6, p.152
 Remarks: Central part of a tablet. Reverse has personal names, almost completely destroyed.
- Ni II-072 CBS 06549
 Reverse: I: 62-65; II: 96-101
 Edition: *MSL* 8/1, p.81: V16 (obverse only)
 Remarks: Left edge fragment of a tablet. Obverse domesticated animals.
- Ni II-073 CBS 06554
 Obverse: 693-699
 Publication: *SLT* 167 (obverse only)
 Edition: *MSL* 6, p.159 (obverse only)
 Remarks: Upper left corner of a tablet. Reverse has TU-TA-TI.
- Ni II-074 CBS 06587
 Reverse: I: 5-12; II: 26-34
 Remarks: Central part of a tablet. The obverse is lost, vertical dividing line is still visible.
- Ni II-075 UM 29-16-294
 Reverse: I: 593-599; II: 617-627
 Remarks: Upper left edge part of a tablet. The obverse has domesticated animals (udu).
- Ni II-076 N 5346 + N 5726
 Obverse: 614-626
 Remarks: Left edge piece of a tablet. The reverse is broken.
- Ni II-077 N 5276
 Reverse: 149-156
 Edition: *MSL* 14, p.28: Ku (obverse only)
 Remarks: Left edge piece of a tablet. The obverse has Proto-Ea.
- Ni II-078 N 4917
 Reverse: 70-73
 Edition: *MSL* 14, p.26: Ip (obverse only)
 Remarks: Upper left corner of a tablet. The obverse has Proto-Ea.
- Ni II-079 CBS 06660
 Obverse: 157-158
 Remarks: Lower left corner of a tablet. The reverse has Syllable Alphabet B in a very bad hand. The tablet turns in the wrong direction.
- Ni II-080 CBS 15366
 Reverse: 97-105
 Edition: *MSL* 14, 24 Fy (obverse only).
 Remarks: Left edge part of a tablet. The obverse has Proto-Ea.
- Ni II-081 N 5847
 Reverse: I: traces; II: 326-332; III: 347-351
 Remarks: Upper left corner of a tablet. The obverse has hides: kuš-ur-gi₇ etc. (parallels *MSL* 7, p.215: 41, 38, 42a-45).

Ni II-082	N 6121
Obverse:	326-337
Reverse:	I: 225-245; II: 259-274
Remarks:	Left half of a tablet, the lower corner is missing. Both sides giš. Reverse is very difficult to read.
Ni II-083	N 5819
Reverse:	374-379
Remarks:	Lower left corner of a tablet. The obverse is anepigraphic.
Ni II-084	CBS 15081
Obverse:	81-97
Publication:	<i>SLT</i> 129 (obverse only).
Remarks:	Almost complete tablet. The pupil's side of the obverse preserves some signs duplicating the teacher's example. The reverse has TU-TA-TI in a very crude script.
Ni II-085	CBS 14156
Obverse:	65-86
Reverse:	I: 3-29; II 32-52d; III: 54-79; IV 80-86
Remarks:	Almost complete tablet with giš on both sides. The right side of the obverse is erased. A number of signs and nail impressions on the right side bear no relation to the model on the left side. The second half of the teacher's example on the obverse is erased, though still partly legible. Before the erased section two horizontal lines are drawn, indicating the end of the exercise. The reverse is occasionally difficult to read, the text is partly written over erasures. In the last column the exercise breaks off and continues with the beginning of the name list ^d Inanna-teš ₂ (= <i>PBS</i> 11/1 p.49ff.).
Ni II-086	N 1540
Reverse:	98; 86-90
Remarks:	Flake, probably from the reverse of a type II tablet. A small part of the lower edge is preserved.
Ni II-087	N 6104
Obverse:	621-628
Remarks:	Badly preserved piece of the obverse of a tablet.
Ni II-088	N 5703 (+) N 5705
Reverse:	I: 31-34; II: 52-61
Edition:	<i>MSL</i> 13, p.16 W2 (obverse only).
Remarks:	Two left edge fragments of a tablet. The obverse has Proto-Izi.
Ni II-089	N 5143
Reverse:	I: 12-17; II: 33-38; III: 53-56
Remarks:	Right edge fragment, near the upper corner of a tablet. The obverse preserves a few pupil's signs. Unidentified.
Ni II-090	N 5735
Reverse:	68-70
Remarks:	Lower left corner of a tablet. The obverse is anepigraphic.
Ni II-091	N 5880
Reverse:	I: 4-10; II: 39-45
Remarks:	Flake of the reverse of a tablet.
Ni II-092	N 5720

- Reverse: I: 39-43; II: 60-66
Remarks: Flake of the reverse of a tablet.
- Ni II-093 N 6257
Reverse: I: 374-393; II: 394-411; III: 412-429
Edition: *MSL* 10, p.120: F (obverse only); there numbered N 6527.
Remarks: Nearly complete tablet. The obverse has plants. Reverse is partly illegible.
- Ni II-094 N 5978
Reverse: 25-29
Remarks: Upper right corner of a tablet. The obverse is anepigraphic.
- Ni II-095 CBS 13525 + CBS 13527 + CBS 13528 + CBS 13570 + CBS 13621A
Reverse: I: 326-344; II: 347-365; III: 374-386; IV: 403-404
Remarks: Large right edge part of a tablet. On the obverse a few pupil's signs are preserved. Unidentified. The reverse is in a bad hand. In the catalogue published by Gerardi there is an entry CBS 13621 + 13525 + 13527 + 13528 + 13570. This is an error for CBS 13621 (= *SLT* 116), with no joins.
- Ni II-096 CBS 06386
Reverse: I: 1-24; II: 25-35
Edition: *MSL* 7, p.197: V26 (obverse only)
Remarks: Left half of a tablet. The tablet turns in the wrong direction. It was deliberately cut in two in antiquity. The obverse has reed. Reverse is in biggish writing and has corrections.
- Ni II-097 CBS 06682
Obverse: 39-41
Remarks: Upper left corner of a tablet. Reverse has personal names (parallels *PBS* 11/1, p.64: 277-281). The tablet is listed in *PBS* 11/3, p.276 as a duplicate.
- Ni II-098 CBS 02264
Obverse: 262-266
Publication: *SLT* 176
Remarks: Lower left corner of a tablet. Both sides giš; reverse is illegible.
- Ni II-099 CBS 05905 + CBS 06372
Obverse: 288-301
Publication: *SLT* 146 + *SLT* 160
Remarks: Left half of a tablet. Only one side inscribed, probably the obverse. To the right of the inscribed column there is a small piece of clay on a lower level, probably the erased pupil's column.
- Ni II-100 N 4039
Reverse: I: 270-289; II: 293-313
Remarks: Right half of a tablet. The obverse is anepigraphic.
- Ni II-101 N 5246
Reverse: I: 274-286; II: 290-306
Remarks: Right half of a tablet. The obverse is anepigraphic.
- Ni II-102 CBS 12707
Obverse: 628-638
Reverse: 69-72
Publication: *SLT* 180 (obverse only)

- Edition: *MSL* 6, p.155 (obverse only)
 Remarks: Upper left corner of a tablet. Both sides giš.
- Ni II-103 CBS 12706
 Reverse: I: 19-22; II: 46-51
 Remarks: Upper part of a tablet. The obverse has some crude incisions but is otherwise anepigraphic.
- Ni II-104 CBS 06459
 Reverse: I: 176-183; II: 412-414; 374; 385; III: 333; 337
 Publication: *SLT* 231 (obverse only).
 Edition: *MSL* 11, p.94: L (obverse only)
 Remarks: Left edge part of a tablet. The obverse has a geographical list. The surface of the reverse is partly crumbling and therefore difficult to read. The columns on the reverse run from left to right. Unlike other type II tablets it has a rounded left edge. There are many deviations from the standard text, both in individual items and in the order of the sections. The text is edited separately in §5.5.
- Ni II-105 CBS 12705
 Reverse: I: 4-10; II: 33-45; III: 69-72
 Remarks: Bottom part of a tablet, near the right corner. The obverse is anepigraphic. The reverse is well written but almost completely destroyed.
- Ni II-106 CBS 12652
 Reverse: 40-46
 Remarks: Central fragment of a tablet. The obverse is lost.
- Ni II-107 N 5706
 Reverse: 10-15
 Remarks: Right edge fragment of a tablet. The obverse has traces of pupil's signs, unidentified.
- Ni II-108 IM 58630 (3N-T697)
 Obverse: 555-569a
 Edition: *MSL* 6, p.153.
 Remarks: Almost complete tablet, now in Baghdad. Collated from a cast in Chicago. Reverse has Syllable Alphabet B. In *MSL* 6 the tablet is incorrectly cited as 3N-T692.
- Ni II-109 CBS 10793
 Reverse: I: 5-20; II: 39-43
 Remarks: Large right edge part of a tablet. The obverse is anepigraphic. It has six crudely incised lines which form a grid, most probably meant as a game board.
- Ni II-110 CBS 11322
 Obverse: 48-63
 Reverse: I: 1-22; II: 23-44; III: 45-57; 1-6
 Publication: *SLT* 141 (obverse only)
 Remarks: Almost complete tablet, with both sides giš. The tablet turns in the wrong direction. The reverse is badly damaged by the impression of a hand. The reverse exercise ends with the last entry of the obverse, then starts again with the first few lines of the list of trees. A rectangular piece of the bottom right corner is missing. It seems to have been cut off in antiquity.
- Ni II-111 N 5196
 Reverse: 30-35
 Remarks: Central part of a tablet. The obverse is anepigraphic.

Ni II-112	N 5370
Reverse: 1-7	
Remarks:	Lower right corner of a tablet. The obverse is anepigraphic.
Ni II-113	N 6073
Reverse: 21-31	
Remarks:	Upper right corner of a tablet. The obverse is anepigraphic.
Ni II-114	N 5903
Reverse: 322-326	
Remarks:	Bottom part of a tablet, near the left corner. The obverse partially preserves two signs, and the 'end of exercise' lines. The tablet was deliberately cut in two in antiquity.
Ni II-115	N 6800
Reverse: 291-293	
Remarks:	Small chip.
Ni II-116	CBS 19803
Reverse: I: 1-14; II: 30-37; III: 57-60	
Remarks:	Lower right corner of a tablet. The obverse is erased.
Ni II-117	CBS 05811 + CBS 05839 + N 6971
Obverse: 470-481	
Publication:	<i>PBS</i> 11/1, 63 (5811) and 30 (reverse of 5839)
Remarks:	Left edge fragment of a tablet. Obverse has the section ^{gis} al, followed by personal names. Reverse: personal names.
Ni II-118	CBS 19753
Reverse: 623-633	
Edition:	<i>MSL</i> 9, p.66: B1
Remarks:	Left edge fragment of a tablet. The obverse has Ugu-mu bilingual.
Ni II-119	UM 29-15-526
Reverse: 65-67	
Remarks:	Lower left corner of a tablet. On the obverse some unidentified traces of pupil's writing are preserved. The tablet turns in the wrong direction.
Ni II-120	CBS 06736
Obverse: 130-133	
Publication:	<i>SLT</i> 152 (obverse only)
Remarks:	Upper left corner of a tablet. 'Col. 2' in the copy in <i>SLT</i> is the pupil's copy. The surface of the clay is somewhat lower there than in 'Col. 1'. The reverse has personal names; it is listed as a duplicate in <i>PBS</i> 11/2, p.174.
Ni II-121	CBS 06674
Obverse: 29-31	
Remarks:	Lower left corner of a tablet. The reverse has personal names; it is listed as a duplicate in <i>PBS</i> 11/2, p.174.
Ni II-122	CBS 06659
Obverse: 117-124	
Publication:	<i>SLT</i> 162 (obverse); <i>PBS</i> 11/2, 40 (reverse)
Remarks:	Upper left corner of a tablet. The reverse has personal names.

- Ni II-123 N 6108
Reverse: I: 24-27; II: 50-53
Remarks: Upper right corner of a tablet. The obverse is anepigraphic.
- Ni II-124 N 5502
Reverse: I: 1-6; II: 25-28
Remarks: Lower right corner of a tablet. The obverse is anepigraphic.
- Ni II-125 UM 55-21-361 (3N-T629)
Obverse: 442-453
Edition: *MSL* 6, p.146 (obverse only)
Remarks: Upper left corner of a tablet. The reverse has personal names. The tablet turns in the wrong direction.
- Ni II-126 UM 55-21-409 (3N-T911r)
Obverse: 547-552
Edition: *MSL* 6, p.152 (obverse only)
Remarks: Upper left corner of a tablet. The reverse has personal names(?). The last column is left unused.
- Ni II-127 CBS 14143
Obverse: 478-512
Publication: *SLT* 126 (obverse only)
Edition: *MSL* 6, p.148f. (obverse only)
Remarks: Left edge and right edge pieces of a tablet. The central piece is missing. Both the top and bottom edges are partly preserved. The reverse has TU-TA-TI; the columns run from left to right. The writing on the obverse is rather small for this type. Obverse of the right edge fragment has some signs apparently unrelated to the example text on the left edge piece.
- Ni II-128 CBS 08164
Obverse: 599-603
Publication: *SLT* 175 (obverse only)
Edition: *MSL* 6, p.157 (obverse only)
Remarks: Lower left corner of a tablet, in *SLT* erroneously drawn as an upper left corner. Reverse has personal names beginning with a god's name. Two columns are preserved: col. I ^{id}Utu... col. II ^{id}Su'en. The piece very probably belongs to the same tablet as HS 1701 (= Ni II-169).
- Ni II-129 CBS 07153
Reverse: 14-17
Remarks: Right edge piece of a tablet. The obverse is broken but for two partial numbers. Metrological?
- Ni II-130 CBS 06574
Reverse: 439-441
Publication: *SLT* 49
Edition: *MSL* 6, p.146; *MSL* 7, p.230: V8
Remarks: Upper left corner of a tablet. The obverse has metal objects (ub₃).
- Ni II-131 CBS 06576
Reverse: I: 542-548; II: 575-582
Publication: *SLT* 181
Edition: *MSL* 6, pp.152-154
Remarks: Flake with beautiful writing. It is assumed that the piece derives from the reverse of a

type II tablet because the columns preserved run from left to right. The passages belong to the end of the giš list. In any regular type I text they appear on the reverse, with columns from right to left. Type II tablets with reverse columns from left to right are not uncommon. It is assumed that the flake comes from such a tablet.

- Ni II-132 CBS 06521
 Obverse: 652-658
 Publication: *SLT* 145 (obverse only)
 Edition: *MSL* 6, p.156
 Remarks: Lower left corner of a tablet. The reverse has Syllable Alphabet B. The columns on the reverse run from left to right.
- Ni II-133 N 5792
 Obverse: 65-82
 Remarks: Upper left corner of a tablet. The reverse is anepigraphic. To the right of the inscribed column on the obverse some blank space is preserved, which does not show traces of erasure. Was the tablet left unused after the teacher wrote the model?
- Ni II-134 N 4642
 Reverse: 123-128
 Remarks: Left edge fragment of a tablet. On the obverse only the sign KI is preserved three times. Perhaps Nigga? Some signs on the reverse are very badly written.
- Ni II-135 CBS 04877
 Obverse: 539-546
 Publication: *SLT* 177
 Edition: *MSL* 6, p.152
 Remarks: Upper right corner of a tablet. The reverse is almost completely destroyed except for a few signs. Unidentified. On the obverse the pupil's copy is partly preserved (not copied in *SLT*).
- Ni II-136 CBS 06119
 Obverse: 575-584
 Publication: *SLT* 151 (obverse only)
 Edition: *MSL* 6, pp.153-154
 Remarks: Almost complete tablet; upper left and lower right corners are missing. The reverse has personal names beginning with a god's name. The reverse is badly weathered. The copy in *SLT* is correct except for the sign preserved in line 1 which is clearly a DA.
- Ni II-137 CBS 06599 + HS 1616 + HS 1844
 Reverse: I: 374-402; II: 405-432; III: 447-459; IV: 482-489
 Publication: Veldhuis and Oelsner forthcoming.
 Remarks: The HS pieces were joined by Oelsner. The obverse has Old Babylonian Proto-Lu, lines 237-257 (omitting 242a and 256). Both the teacher's example and two pupil's columns are preserved. The right half of the obverse is covered with a new layer of clay, smoothed over old writing. In places where this new layer has chipped off the old writing is visible. It is almost certainly the same text. The columns on the reverse (wooden objects) run from left to right. The new layer of clay gives the obverse a curved surface. The original surface, however, was clearly flat. The bottom edge (on the CBS piece) seems to contain a name, of which only two signs are preserved: a-x-[].
- Ni II-138 UM 29-16-056
 Reverse: I: 1-11; II: 15-17; III: 18-30
 Remarks: Complete tablet. The obverse is illegible. The columns on the reverse (trees) run from left to right. It is almost illegible due to dirt. In tablet format and palaeography the piece

is nothing out of the ordinary. The text, however, follows an unknown tradition. In §5.5 a transcription is offered with many reservations.

- Ni II-139 N 6158
Reverse: I: 636-644; II: 662-668
Remarks: Lower right corner of a tablet. The obverse is anepigraphic.
- Ni II-140 UM 29-15-314 + UM 29-15-320
Reverse: I: 3-18; II: 21-44; III: 46-55
Remarks: Almost complete tablet. The obverse has herbs (SAR) including the items nu-luh-ha^{sar} and giš-nu-luh-ha^{sar}. The exercise ends with numun-ga-raš^{sar}. It does not correspond to any of the versions edited in *MSL* 10, pp.119-124. The reverse (wooden objects) was left unfinished. The empty columns show double vertical lines between which the giš signs were to be written.
- Ni II-141 UM 29-13-075
Reverse: I: 1-21; II: 28-44
Remarks: Right half of a tablet with most of the edge lost. On the obverse some pupil's signs preserved (including ^dUtu); unidentified.
- Ni II-142 UM 29-13-074
Reverse: 67-86
Edition: *MSL* 7, p.209: V2 (obverse only)
Remarks: Left half of a tablet. Obverse IM items. Reverse (trees) has rather large writing. The tablet was deliberately cut in two in antiquity.
- Ni II-143 CBS 14157
Reverse: I: 9-21; II: 26-43; III: 47-63; IV: 68-87
Edition: *MSL* 7, p.177: V4 (obverse only)
Remarks: Nearly complete tablet. Broken into pieces during firing and put together again (personal communication Ann Guinan). Obverse has reed objects.
- Ni II-144 N 5396
Reverse: I: 6-10; II: 25-31; III: 42-46
Remarks: Right edge fragment of a tablet. The obverse is metrological: GUR. The reverse is partly destroyed by a hand impression.
- Ni II-145 CBS 06590
Reverse: 476-485
Publication: *SLT* 153
Edition: *MSL* 6, p.148
Remarks: Lower left corner of a tablet. On the obverse a few traces of the teacher's example are preserved; unidentified.
- Ni II-146 N 5782 + N 5846
Reverse: I: 289-291; II: 313-335; III: 338-353
Remarks: Left half of a tablet. The left edge is missing. Part of the upper and lower edges are preserved. The obverse has domestic animals: the end of the section u₈ and the first line of the section uz₃.
- Ni II-147 IM 58626 (3N-T693)
Obverse: 97-105
Edition: *MSL* 5, p.124 (obverse only)
Remarks: Large bottom piece of a tablet. The reverse has personal names. The piece was studied from a cast in Chicago.

- Ni II-148 A 30274 (3N-T595)
Reverse: I: 4-11; II: 21-29; III: 40-47
Edition: *MSL* 7, p.179: V19 (obverse only)
Remarks: Bottom half of a tablet. The piece is listed in *MSL* 5, p.91. The obverse has reed objects.
- Ni II-149 3N-T911v
Reverse: I: 1-6; II: 40-45
Remarks: Upper right corner of the reverse of a tablet. The piece is in Baghdad but the IM number is unknown. Studied from cast in Chicago.
- Ni II-150 CBS 12748
Reverse: 71-83
Remarks: Bottom part of a tablet. The obverse is anepigraphic.
- Ni II-151 CBS 03875
Obverse: 557-562
Publication: *SLT* 168 (obverse); *PBS* 11/2, 50 (reverse)
Edition: *MSL* 6, p.153
Remarks: Upper left corner of a tablet. The reverse has personal names.
- Ni II-152 N 5201
Obverse: 522-525
Remarks: Upper left corner of a tablet. The reverse may also have a giš list; illegible.
- Ni II-153 CBS 12511
Reverse: 330-339
Publication: *SLT* 144 (reverse only)
Remarks: Upper left corner of a tablet. The obverse has names beginning with ama-, including ama-lal₃ (see *PBS* 11/3).
- Ni II-154 CBS 07139 + CBS 7152 + N 0330
Reverse: I: 512-516; II: 541-550; III: 571-584
Publication: *SLT* 166 + *SLT* 23 (reverse only).
Edition: *MSL* 9, p.41: V7 (obverse only)
Remarks: Upper left corner of a tablet. Obverse has meat cuts (uzu).
- Ni II-155 A 29979 (2N-T384) + IM 57976 (2N-T382)
Reverse: I: 1-17; II: 44-46
Publication: Gordon *SP* pl.74 (A 29979)
Remarks: Lower left corner of a tablet. Obverse has proverb collection 2. The columns on the reverse run from left to right. The IM piece was studied from a cast in Chicago. The cast and the Chicago tablet clearly join on the obverse.
- Ni II-156 CBS 08298
Reverse: 182-193
Publication: *SLT* 137 (reverse only)
Remarks: Left edge piece of a tablet. Obverse has Old Babylonian Proto-Lu 325-328.
- Ni II-157 CBS 04812 + CBS 06553 + CBS 06755
Reverse: 17-22
Edition: Civil 1994, p.173 (obverse only)
Remarks: Left edge piece of a tablet. The obverse has Old Babylonian Proto-lu. The columns on the reverse run from left to right. The second column has ^{gis}ma-nu items. The new join CBS 6553 is a reverse fragment and therefore does not add to the text as edited by

Civil.

- Ni II-158 CBS 06584
Reverse: 444-454
Publication: *SLT* 204 (obverse only)
Edition: *MSL* 10, p.144: B (obverse only)
Remarks: Upper left corner of a tablet. Obverse has wool. Reverse is damaged.
- Ni II-159 3N-T906,236
Reverse: 34-39
Publication: *SLFN* Plate 72
Remarks: Upper left corner of a type II tablet. Obverse has reed objects.
- Ni II-160 3N-T911t
Obverse: 19-22
Remarks: Upper left corner of a tablet. Reverse personal names? The fragment is now in Baghdad but the IM number is unknown. Studied from a cast in Chicago.
- Ni II-161 N 0673
Obverse: 551-554b
Remarks: Fragment of the upper left corner of a tablet. The reverse is lost. To the right of the preserved column a small piece of the next column is preserved. The surface seems to be somewhat lower there. Therefore it is assumed that the preserved side is the obverse, though the writing is relatively small and not as elaborate as usual.
- Ni II-162 HS 1629 + HS 1834
Reverse: I: 1-19; II: 24-44
Remarks: Join Oelsner. Right half of a tablet; the upper corner is missing. Left half broken off in antiquity, other breaks are of recent date. The obverse is anepigraphic but for some incisions. The lines on the reverse are very slanted. Probably the same tablet as HS 1665 (Ni II-167).
- Ni II-163 HS 1631
Reverse: I: 9-11; II: 35-44
Remarks: Bottom part of a tablet. The lower left corner is missing; recent break. The obverse probably has birds. The reverse is hardly legible because of a layer of dirt which cannot easily be removed. Traces of the third and fourth columns are not transliterated.
- Ni II-164 HS 1646
Reverse: I: 1-22; II: 23-43; III: 44-62; IV: 63-83
Remarks: Almost complete tablet. The obverse has stones and duplicates *MSL* 10, p.57: 83-88; 90-94; and 96. The obverse probably had three columns for pupil's copies. All of these are almost completely erased but for some traces of the vertical division lines.
- Ni II-165 HS 1647
Reverse: I: 2-25; II: 39-60; III: 81-91; IV: 102-119
Remarks: Lower part of a tablet; dirty and difficult to read. The obverse has Old Babylonian Proto-Lu, lines 223-230 probably two pupil's columns. The pupil's writing is erased but some traces of signs and vertical division lines are still visible. The reverse has some deep incisions through the text.
- Ni II-166 HS 1657
Reverse: I: 53-60; II: 72-97
Remarks: Left part of a tablet; the upper part is missing (recent break). The obverse has containers (dug), restoring *MSL* 7, p.201f. 61a-72.

- Ni II-167 HS 1665
Reverse: I: 60-65; II: 81-87
Remarks: Upper left corner of a tablet. Obverse has gi-kid items duplicating *MSL* 7, p.182: 16-23. Probably the same tablet as HS 1629+ (= Ni II-162). The reverse has the same kind of writing on slanted lines.
- Ni II-168 HS 1699
Obverse: 83-89
Remarks: Left edge part of a tablet. The reverse has Akkadian words, each preceded by a vertical wedge. The right hand column is in TU-TA-TI style: first, three individual signs, then the word: *šu-bu-ru* and *šu-bi-lam*. Left hand column has Akkadian words beginning with mu-, including *mu-ga-mil* and *mu-da-mi-iq* (one word per line; not analyzed in syllables).
- Ni II-169 HS 1701
Obverse: 589-597
Remarks: Upper left corner of a tablet. Reverse has a list of names beginning with ^{ld}Su'en and ^{ld}En-lil₂. Good, small writing. Probably the same tablet as CBS 8164 (*SLT* 175 = Ni II-128).
- Ni II-170 HS 1734
Reverse: I: 375-385; II: 402-409
Remarks: Left edge fragment of a tablet. The obverse preserves a double horizontal line (end of exercise), and a double vertical division line. The columns on the reverse run from left to right.
- Ni II-171 HS 1798
Obverse: 260-262
Remarks: Lower left corner of a tablet. Reverse has personal names of the type ur-^dX (illegible).
- Ni II-172 HS 1744
Reverse: 82-87
Remarks: Upper left corner of a tablet. The obverse has clothing (*tug₂-nig₂* and *tug₂-bar-si* items).
- Ni II-173 HS 1745 + HS 1797 + HS 2630 + HS 2902
Reverse: I: 377-408; II: 409-437; III: 438-475; IV: 476-512; V: 515-538
Remarks: Almost complete tablet put together from many small and large fragments, mostly before World War II. The separate HS numbers have been joined by Oelsner. The obverse has containers, restoring *MSL* 7, p.200: 27-33. There were probably two pupil's columns (erased). A handcopy of the tablet is reproduced in §2.3.3.2.
- Ni II-174 HS 1806
Reverse: I: 3-21; II: 25-46; III: 51-74; IV: 79-98
Remarks: Almost complete tablet; upper edge missing. The obverse has containers, restoring part of the gap in *MSL* 7, p.199 between lines 5 and 17 (including *dug-kab₂-dug₄-ga*).
- Ni II-175 N 2210 + N 6202 + HS 1845
Obverse: 326-335
Reverse: I: 67-70; II: 96-110
Remarks: Upper left corner of a tablet. Both sides *giš*. The N pieces have on the obverse the teacher's example. The HS fragment has the pupil's copy. A very small part of the teacher's side clings to the HS piece. There the surface of the tablet is higher. The pupil's copy duplicates the teacher's writing on the N fragment, including the error in line 3 (^{gis}usan₃-gigir instead of ^{gis}e₂-usan₃-gigir). Teacher's and pupil's sides are given as

one line in the transliteration.

- Ni II-176 HS 1827
Obverse: 45-51
Remarks: Upper left corner of a tablet. The reverse has TU-TA-TI.
- Ni II-177 HS 1841
Reverse: I: 82-83; II: 97-106; III: 113-125
Remarks: Upper part of a tablet. The obverse is erased. Lines on the reverse are slanted.
- Ni II-178 HS 2860
Reverse: I: 3-9; II: 23-32
Remarks: Bottom part of a tablet, near right corner. The obverse is anepigraphic.
- Ni II-179 UM 29-16-584
Reverse: 99-106
Edition: *MSL* 10, p.145: L (obverse only)
Remarks: Upper left corner of a tablet. The obverse has clothing.
- Ni II-180 N 5973
Obverse: 566-572
Reverse: 207-210
Remarks: Lower left corner of a tablet with both sides *giš*; probably type II. The identification of obverse and reverse is not completely certain. Good writing on both sides.
- Ni II-181 CBS 06573
Reverse: 95-99a
Remarks: Upper left corner of a tablet. The obverse has birds.
- Ni II-182 CBS 04876
Reverse: I: 280-288; II: 304-310
Remarks: Upper right corner of a tablet. The obverse is anepigraphic.
- Ni II-183 CBS 06598
Reverse: 92-95
Remarks: Small fragment of the lower left corner of a tablet. The obverse is anepigraphic.
- Ni II-184 CBS 04853
Reverse: I: 36-38; II: 52-54
Remarks: Lower left corner of a tablet. The obverse preserves two lines from the list of containers: *dug-ni*[*g*₂-. May duplicate *MSL* 7, p.199: 20-21 or 24-25. The reverse is badly written, in places illegible.
- Ni II-185 CBS 05887
Publication: PBS 11/2, 13 (reverse only).
Remarks: Lower left corner of a tablet. The reverse has names beginning with I e₂-a (Akkadian).
The obverse has ^{*giš*}ma₂ items:
01' ^{*giš*}[
02' ^{*giš*}ma₂-[
03' ^{*giš*}ma₂-[
{end of exercise}
Not used in the edition.
- Ni II-186 N 6106
Reverse: I: 389-396; II: 421-424

- Remarks: Upper left corner of a tablet. The obverse has plants (SAR). Columns on the reverse run from left to right. Obverse:
 1 ha-za-nu-um SAR
 2 an-dah-šum SAR
 3 za-ha-din SAR
 4 za₃?-hi-li-a SAR
 5 [numun-z]a₃?-hi-li-a SAR KU
 {break}
 The second half of the SAR sign in line 5 is reduplicated (SAR.KU).
- Ni II-187 CBS 06466
 Reverse: 322-328
 Remarks: Bottom part of a tablet. On the obverse a few signs of the teacher's example have been preserved. Unidentified. The reverse is difficult to read.
- Ni II-188 CBS 06548
 Reverse: 87-92
 Publication: *SLT* 94 (obverse only)
 Edition: *MSL* 7, p.179: V27 (obverse only)
 Remarks: Upper left corner of a tablet. The obverse has reed objects.
- Ni II-189 CBS 13621
 Reverse: 89-99
 Publication: *SLT* 116 (obverse only)
 Remarks: Left edge fragment of a tablet. The obverse has a god list.
- Ni II-190 CBS 10212
 Reverse: I: 74-75; II: 97-103
 Publication: *PBS* 5, 123 (obverse only)
 Edition: *MSL* 14, p.27: Jf (obverse only)
 Remarks: Left edge piece of a tablet. Obverse has Proto-Ea. The reverse has a deviant version of the Nippur giš list.
- Ni II-191 N 6006
 Reverse: 137-152
 Remarks: Upper left corner of a tablet. The obverse is perhaps Old Babylonian Proto-Lu:
 UG-
 KID?-UG-
 SAL-UG- (613)
 BAD- (615)
 ma-al-ga-
- Ni II-192 Ni 05256
 Reverse: 88-93
 Remarks: Upper left corner of a tablet. The obverse is probably Proto-Ea. Apart from the single verticals which introduce each line, there is only one sign left: KU₃. This sign probably belongs to the pronunciation column of Proto-Ea 10 or 11. The text was studied from a photograph in the University Museum, Philadelphia.
- Ni II-193 Ni 04931
 Reverse: 52d-55
 Remarks: Lower left corner of a tablet. The obverse has reed objects:
 gi[
^{gi}ba-an-du-
^{gi}ba-an-du-um- (perhaps end of line).

- end of exercise.
 Duplicates *MSL* 7, p.190, 96-99. The text was studied from a photograph in the University Museum, Philadelphia.
- Ni II-194 Ni 04615
 Reverse: 88-99
 Edition: *MSL* 14, p.25: Hk (obverse only)
 Remarks: Left half of a tablet. The obverse has Proto-Ea. The reverse needs cleaning and is at times hard to read. The text was studied from a photograph in the University Museum, Philadelphia.
- Ni II-195 Ni 03818
 Obverse: 319-332
 Remarks: Left half of a tablet. The reverse has personal names, including names beginning with a-ab-ba. The text was studied from a photograph in the University Museum, Philadelphia.
- Ni II-196 Ni 03615
 Reverse: I: 100-104; II: 128-129; III: 148-153
 Remarks: The obverse of this fragment is probably broken. Few lines of the reverse are legible. The text was studied from a photograph in the University Museum, Philadelphia.
- Ni II-197 N 6111
 Reverse: 26-36
 Remarks: Central part of a tablet. On the obverse a few traces of the pupil's side remain. Unidentified.
- Ni II-198 N 6148
 Reverse: 15-22
 Remarks: Right edge fragment of a tablet. The obverse is anepigraphic. The reverse is badly preserved.
- Ni II-199 N 6159
 Obverse 183-187
 Remarks: Left edge fragment of a tablet. The piece was probably cut on purpose in antiquity. The reverse is almost completely destroyed. The lines on the obverse are slanted.
- Ni II-200 N 6101
 Reverse: I: 15-17; II: 52-55; III: 92-99; IV: 123-129
 Remarks: Central part of a tablet. The obverse is anepigraphic. Parts of four columns of the reverse are preserved.
- Ni II-201 CBS 13520
 Reverse: I 31-32; 42; II: 62-65
 Remarks: Small upper right corner of a tablet. The obverse is erased.
- Ni II-202 N 6157
 Reverse: I: 146-155; II: 172-180
 Remarks: Upper right corner of a tablet. The obverse is anepigraphic.
- Ni II-203 N 5452
 Reverse: 80-83
 Edition: *MSL* 10, p.120: H (obverse only)
 Remarks: Upper left corner of a tablet. Obverse plants.

- Ni II-204 N 3435
Reverse: 99-104
Remarks: Flake; part of the left edge preserved. The columns run from right to left, therefore the piece belongs to a reverse, probably the reverse of a type II tablet.
- Ni II-205 UM 29-16-646
Reverse: I: 1-7; II: 45-53
Edition: *MSL* 13, p.15: G2 (obverse only)
Remarks: Lower right corner of a tablet. The obverse has Proto-Izi (pupil's copy).
- Ni II-206 N 5186
Reverse: I: 132-134; II: 157-161
Remarks: Upper left corner of a tablet. Obverse has wild animals (snakes):
1 muš
2 muš-gir₃
3 [muš]-^dmuš
{break}.
- Ni II-207 N 5552
Obverse: 317-324
Remarks: Upper left corner of a tablet. The reverse has personal names.
- Ni II-208 N 5039 + N 5059
Reverse: I: traces; II: 79-87; III: 99-118
Edition: *MSL* 8/1, p.82: V 60 (obverse only)
Remarks: Upper left part of a tablet. Obverse domestic animals.
- Ni II-209 N 5126
Reverse: 15-23
Remarks: Right edge fragment of a tablet. The obverse is erased.
- Ni II-210 CBS 06514
Reverse: 502-507
Publication: *SLT* 87 (obverse only)
Edition: *MSL* 7, p.180: V36 (obverse only)
Remarks: Left edge fragment of a tablet. The obverse has reed objects. The reverse is difficult to read.
- Ni II-211 N 5140 (+) N 6015
Reverse: I: 37-41; II: 46-57
Remarks: Upper (N 6015) and lower edge fragments of a tablet. The obverses preserve parts of two pupil's columns with a list of hides, duplicating *MSL* 7, p.214: 35-37 and 41. The reverse columns run from left to right. In the transliteration the line numbers of N 6015 (indicated with B) are estimated on the basis of the number of reconstructed lines missing between the two fragments.
- Ni II-212 UM 29-13-999
Reverse: 549-554
Remarks: Upper right corner of a tablet. The obverse preserves a few pupil's signs on a flattened surface. Unidentified. The tablet turns in the wrong direction.
- Ni II-213 N 4977
Obverse: 74
Remarks: Left edge part of a tablet. The obverse is nearly effaced. The reverse has the end of standard TU-TA-TI, including the subscript ^dnisaba-za₃-mi₂. The subscript is followed

by two or more lines but these are almost completely destroyed.

- Ni II-214 N 4597
Obverse: 65
Reverse: 504-505
Remarks: Small upper left corner of a tablet. Both sides giš.
- Ni II-215 N 4683
Reverse: 457-460
Remarks: Bottom fragment of a tablet. The obverse is anepigraphic.
- Ni II-216 N 4634
Reverse: I: 22-30; II: 57-61
Remarks: Upper right corner of a tablet. The obverse is anepigraphic.
- Ni II-217 CBS 02263
Reverse: I: 25-39; II: 64-72
Remarks: Upper right quarter of a tablet. The obverse is anepigraphic.
- Ni II-218 N 4062
Reverse: 55-64
Remarks: Central part of a tablet. On the obverse the ends of four lines are preserved. Legible is []-gi₄-a (2x). Unidentified.
- Ni II-219 CBS 13611
Obverse: 255-259
Publication: *PBS* 11/3, 7 (reverse only)
Remarks: Bottom part, near left corner, of a tablet. The reverse has personal names.
- Ni II-220 CBS 15418
Obverse: 88-91
Remarks: Bottom left part of a type II tablet. The more curved side has an 'obverse' extract. The reverse has the beginning of Short Ea (see §3.6). Therefore the columns on the reverse probably ran from left to right. The tablet was deliberately cut in two in antiquity.
- Ni II-221 CBS 10344
Reverse: 359-365
Remarks: Lower left corner of a tablet. The obverse is anepigraphic.
- Ni II-222 N 4973 + N 4984
Reverse: I: 4-9; II: 22-30; III: 40-49; IV: 63-67
Remarks: Large bottom part of a tablet. The obverse is empty, except for horizontal lines indicating the end of the exercise.
- Ni II-223 CBS 10259
Reverse: I: 25-26; II: 53-60
Remarks: Upper left corner of a tablet. The obverse has zabar items but differs from the text in *MSL* 7, p.235f:
1 kam-kam-ma-[tum]-zabar (43)
2 hub₂-tu-u[m]-zabar (58)
3 []-ma-zabar (room for one sign, ending in a vertical)
4 []-zabar
- Ni II-224 UM 55-21-387 (3N-T909h)
Obverse: 432-437

- Reverse: I: traces; II: 31-35; III: 44-48
Edition: *MSL* 6, p.145 (obverse only)
Remarks: Upper left corner of a tablet. Both sides giš. The obverse preserves the teacher's model and a small part of a pupil's copy (GIŠ signs only).
- Ni II-225 N 5836
Reverse: I: 45-47; II: 57-58; 1-3
Remarks: Bottom left part of a tablet. The obverse has birds. The reverse has the list of trees. The last few items of the last column repeat the beginning of this list. The tablet was cut on purpose in antiquity.
- Ni II-226 N 5614
Obverse: 511-514
Remarks: Left edge fragment of tablet. The reverse has personal names (?).
- Ni II-227 N 4981
Obverse: 388-394
Remarks: Fragment of the upper edge of a tablet, near the left corner. The obverse preserves the teacher's model and a few GIŠ signs of the pupil's copy. The reverse has names beginning with ¹a-.
- Ni II-228 N 4787
Obverse: 43-45
Remarks: Central piece of the obverse of a tablet. The line separating the teacher's example from the pupil's copy is partly visible.
- Ni II-229 N 5019
Reverse: 1-6
Remarks: Lower right corner of a tablet. The obverse is anepigraphic.
- Ni II-230 N 4557
Reverse: I: 366-368; II: 388-390
Remarks: Small fragment of a tablet, parts of two columns preserved.
- Ni II-231 N 5342
Reverse: 139-147
Remarks: Left edge fragment of a tablet. The obverse had lines beginning with SAL (six times preserved), but seems to have been destroyed on purpose. Probably Old Babylonian Proto-Lu.
- Ni II-232 UM 29-15-022
Reverse: I: 405-409; II: 429-433
Remarks: Lower right corner of a tablet. The obverse is anepigraphic.
- Ni II-233 UM 29-16-554
Obverse: 293-302
Remarks: Left edge part of a tablet with upper edge preserved. The reverse has TU-TA-TI.
- Ni II-234 N 4779
Reverse: 636-638
Remarks: Small upper edge fragment of a tablet. The obverse preserves the ends(?) of three lines:
1 []-ad
2 []-ur₂
3 []-u[r₂?]
Unidentified. The reverse has been impressed by something leaving a pattern of lines in

- a deep hole.
- Ni II-235 N 5523
Reverse: 20-27
Remarks: Right edge fragment of a tablet. The obverse is anepigraphic.
- Ni II-236 UM 29-16-150
Obverse: 235-240
Remarks: Left edge part of a tablet. The reverse has names beginning with I a-bi.
- Ni II-237 N 5564
Reverse: I: traces; II: 50-52d; III: 71-74
Remarks: Upper edge fragment of a tablet. The obverse is anepigraphic except for vertical lines, probably division lines between two pupil's columns.
- Ni II-238 UM 29-15-620
Reverse: I: 1-6a; II: 23-26
Remarks: Lower right corner of a tablet. The obverse is anepigraphic. The reverse is half effaced.
- Ni II-239 UM 29-15-645
Reverse: I: 10-14; II: 40-49; III: 81-88; IV: 113-121
Remarks: Large bottom part of a tablet. The obverse has Old Babylonian Proto-Lu, partly restoring *MSL* 12, p.52f:
[]-la₂ (3 times)
[ba]lag-la₂
[ba]lag-la₂
[]-la₂
-i]l-la₂ (553b)
]-ba₇-la₂ (556)
]-ur₂ (557)
{end of exercise}
The right side of the obverse has numerous scratches but seems to be unused. The reverse is in a bad hand.
- Ni II-240 UM 29-16-001
Reverse: I: 19-28; II: 46-58; III: 76-84; IV 99-109
Remarks: Upper half of a tablet. The left side of the obverse has a teacher's model with a list of reed objects (^{gi}ma-sa₂-ab), duplicating *MSL* 7, p.187: 63-70 (omitting 66a and 68). The right half of the obverse is re-used for a list of names. The text on the reverse is well preserved. Most signs are executed in a detailed way. At the same time there are strange errors, both in the execution of signs and in the items.
- Ni II-241 UM 29-16-013
Reverse: I: 323-350; II: 354-375; III: 381-398; IV: 408-425
Edition: *MSL* 10, p.54: V29 (obverse only)
Remarks: Large part of a tablet; the bottom part and several pieces are missing. The obverse has stones.
- Ni II-242 N 6242
Reverse: 133-137
Remarks: Left edge fragment of a tablet. The obverse has reed objects, duplicating *MSL* 7, p.181f.: 9-13.
- Ni II-243 CBS 04815
Reverse: 83-86

- Remarks: Left edge fragment of a tablet. The obverse has wild animals: the last items of the section snakes and the first item of the section ur.
- Ni II-244 Ni 10003
Reverse: I: 64-67; II: 96-98
Remarks: Left edge fragment of a tablet. The obverse has Proto-Izi, sections tukum-bi and UD, duplicating *MSL* 13, p.23f: 196ff. The text was studied from a photograph in the University Museum, Philadelphia.
- Ni II-245 CBS 06686
Obverse: 12-22
Remarks: Upper left part of a tablet. The reverse has TU-TA-TI. The tablet was deliberately cut in two in antiquity.
- Ni II-246 CBS 08470
Obverse: 568-571
Remarks: Central part of a tablet, near the left edge. The reverse has TU-TA-TI, only the passage pu-pa-pi is partly preserved. The identification of obverse and reverse is uncertain. Since the determinatives are lost, the obverse may be either giš or urudu (see *MSL* 7, p.224: 173-177).
- Ni II-248 CBS 06945
Reverse: I: 1-12; II: 62-75
Remarks: Lower right corner of a tablet. The obverse is anepigraphic.
- Ni II-249 CBS 07935
Obverse: 67-78a
Remarks: Lower right corner of a tablet. The text preserved on the obverse belongs to a pupil's column. To the right another column is left unused (with rulings to align the GIŠ signs). The reverse is almost completely erased, leaving only some traces. The surface is smoothed, apparently in preparation for the next exercise.
- Ni II-250 N 5936
Reverse: I: 455-460; II: 483-491
Remarks: Upper left corner of a tablet. The obverse has foodstuffs. This part of ur₅-ra is not standardized, compare *MSL* 11, p.123f. section 11:
1 še-sag
2 še-ESAG₂ (GA₂xŠE)
3 še-aš-te
4 še-gu-nu
5 še-zar
6 še-za[r]-tab-ba
7 še-zar-sal-l[a]
{break}.
- Ni II-251 N 5960
Reverse: I: 423-429; II: 456-463
Remarks: Right edge fragment of a tablet. On the obverse a few pupil's signs remain: []-la; []-la-ta; and traces. Unidentified. The reverse columns run from left to right.
- Ni II-252 N 6201
Reverse: 58-65
Remarks: Flake of the reverse of a tablet. The piece is badly damaged.
- Ni II-253 N 4990

- Reverse: 81-87
Remarks: Upper left corner of a tablet. The obverse has model contracts concerning silver loans.
- Ni II-254 CBS 10778
Reverse: 701-702
Remarks: Central part of a tablet. The obverse is lost. The reverse contains a passage from the very last part of the giš list. The passage ^{gis}za-na is preserved here and in Ni I-10, but the two texts can only partly be harmonized. Ni II-254 is edited separately in §5.5.
- Ni II-255 N 6140
Obverse: 191-194
Reverse: 450-454
Remarks: Fragment, near the right edge, of a tablet. Both sides giš. On the obverse the remains of two pupil's columns are preserved. The pupil's columns have been overlaid with new clay. Apparently the old clay had become too dry to allow another copy of the same exercise. The new layer is partly preserved and bears lines 4'-6' in the transcription. Lines 1'-3' are legible on the older layer and are written in a much better hand.
- Ni II-256 3N-T922z
Reverse: 94-98
Remarks: Central part of a tablet. The obverse has either wild animals or hides. The piece is now in Baghdad but its IM number is unknown. It was studied from a cast in Chicago.
- Ni II-257 3N-T922o
Reverse: I: 19-24; II: 38-39
Remarks: Left edge fragment of a tablet. The obverse is empty except for the 'end of exercise' horizontal lines. The piece is now in Baghdad but its IM number is unknown. It was studied from a cast in Chicago.
- Ni II-258 3N-T909e
Obverse: 580-586
Remarks: Upper left part of a tablet. The reverse has Syllable Alphabet B. The piece is now in Baghdad but its IM number is unknown. It was studied from a cast in Chicago.
- Ni II-259 3N-T909c
Reverse: I: traces; II: 51-57; III: 79-82
Remarks: Bottom fragment of the reverse of a tablet. The piece is now in Baghdad but its IM number is unknown. It was studied from a cast in Chicago.
- Ni II-260 3N-T914cc
Obverse: 84-88
Remarks: Left edge piece of a tablet. The reverse has personal names, including Šul-gi-dingir-mu.
- Ni II-261 3N-T921jj
Obverse: 146-148
Remarks: Left edge fragment of a tablet. Reverse personal names? The piece is now in Baghdad but its IM number is unknown. It was studied from a cast in Chicago.
- Ni II-262 3N-T920s
Reverse: 349-355
Remarks: Reverse fragment of a tablet. The piece is now in Baghdad but its IM number is unknown. It was studied from a cast in Chicago.
- Ni II-263 3N-T920ff
Reverse: I: 191-198; II: 239-242

- Edition: *MSL* 13, p.64: B (obverse only)
 Remarks: Left edge fragment of a tablet. The obverse has Proto-Kagal. The text was published as A 33516 in *MSL* 13. The tablet moved to Baghdad but its present IM number is unknown. It was studied from a cast in Chicago.
- Ni II-264 12N-562
 Obverse: 131-134
 Remarks: Lower half of a tablet. The reverse has Syllable Alphabet B. It was listed in *OIC* 23, p.117. The piece is now in Baghdad but its IM number is unknown. It was studied from a cast in Chicago.
- Ni II-265 CBS 02235
 Reverse: 1-9
 Remarks: Lower right corner of a tablet. The obverse is anepigraphic.
- Ni II-266 CBS 04800
 Reverse: I: 74-77; II: 90-99
 Publication: *SLT* 74 (obverse only)
 Remarks: Upper left corner of a tablet. The obverse has birds.
- Ni II-267 CBS 04823
 Reverse: I: 31-34; II: 48-52
 Remarks: Upper part of a tablet. On the obverse a few traces of the pupil's column remain. The reverse is in crude writing.
- Ni II-268 CBS 06390
 Obverse: 422-423
 Publication: *PBS* 11/1 Pl.37 (reverse only)
 Remarks: Upper right corner of a tablet. On the obverse two pupil's columns are partly preserved. The pupil's text is written on a new layer of clay, in places the old layer is visible. The writing on the old layer cannot be identified. The transliteration is a compilation of the two columns. The reverse has personal names.
- Ni II-269 CBS 06558
 Reverse: 55-62
 Publication: *SLT* 208 (obverse only)
 Edition: *MSL* 7, p.211: V19 (obverse only)
 Remarks: Upper part of a tablet. The obverse has a list of hides.
- Ni II-270 CBS 06578
 Obverse: 513-515
 Remarks: Small left edge fragment of a tablet; only few signs remain. The size of the writing makes it very plausible that this is a fragment from the obverse of a type II tablet.
- Ni II-271 CBS 06808A
 Reverse: I: 3-6a; II: 21-25
 Remarks: Very badly preserved piece of the reverse of a tablet. The obverse is lost.
- Ni II-272 CBS 06557
 Reverse: I: traces; II: 41-45; III: 61-62
 Publication: *SLT* 198 (obverse only)
 Edition: *MSL* 7, p.212: V30; p.229: V3 (obverse only)
 Remarks: Upper left corner of a tablet. The obverse has metal objects. Compared to the copy in *SLT* and the edition in *MSL* the lower part of the fragment is now lost (lines 7-10; lines 5 and 6 preserve the last sign only).

- Ni II-273 N 6171
 Obverse: 66-68
 Reverse: 52c-56
 Remarks: Right edge fragment of a tablet. Both sides have giš. The tablet turns in the wrong direction. Most probably the side with giš-nimbar items is the obverse. The tablet was cut in two in antiquity. The cut edge is such that the giš-nimbar items are fully preserved.
- Ni II-274 CBS 12655
 Reverse: 120-124
 Remarks: Left edge fragment of a tablet. The obverse probably has items beginning with zabar (see *MSL* 7, p.231: 1-6).
- Ni II-275 CBS 07904 + N 5220
 Reverse: I: 45-56; II: 67-75
 Remarks: Central part of a tablet. The obverse has reed items, apparently deviating from the text edited in *MSL* 7, p.188f.:
 1 []-an (74)
 2 []-sim (73)
 3 []-DI
 4 []-sur
 5 []-hal (80a)
 6 [g]i-hal-zi-ig (81)
 7 [-h]al-ku₆ (82)
 8 []-mušen (83)
 9 []-uzu (84)
 10 []-an (85)
- Ni II-276 N 5736
 Reverse: 592-595
 Remarks: Bottom fragment of a tablet. The obverse is lost.
- Ni II-277 UM 29-15-343
 Reverse: I: 299-301; II: 325-327; III: 351-357
 Remarks: Bottom part of a tablet. The obverse has Proverb Collection 14 no.21 (identified by Steve Tinney). The line preceding this proverb is unidentified but does not belong to PC 14 (personal communication by B. Alster).
- Ni II-278 UM 29-15-977
 Reverse: I: 108-118; II: 142-161
 Edition: *MSL* 10, p.144: E (obverse only)
 Remarks: Upper left corner of a tablet. The obverse has wool. The tablet was deliberately cut in two in antiquity.
- Ni II-279 CBS 13619
 Reverse: 4-6b
 Edition: *MSL* 10, p.54: V34 (obverse only)
 Remarks: Left edge part, near the upper corner, of a tablet. The obverse has stones. The columns on the reverse run from left to right.
- Ni II-280 UM 29-16-539
 Obverse: 411-415
 Remarks: Central part of a tablet. Very little of the reverse is preserved; unidentified. The tablet turns in the wrong direction.

Ni II-281	N 1564
Obverse: 517-526	
Remarks:	Upper left corner of a tablet. The reverse has personal names in groups of three.
Ni II-282	N 3359
Reverse: 17-22	
Remarks:	Flake, with part of the right edge preserved. The fragment probably comes from the reverse of a type II tablet.
Ni II-283	N 4067
Reverse: 1-9	
Remarks:	Lower right corner of a tablet. The obverse is anepigraphic.
Ni II-284	N 4624
Reverse: 74; 68	
Remarks:	Upper right corner of a tablet. On the obverse a few signs of a pupil's column remain; unidentified.
Ni II-285	N 4885
Reverse: 52-54	
Remarks:	Lower left corner of a tablet. The obverse is unidentified, it may be giš, the determinative ends in a vertical. Legible is [] TUN ₃ -s[ur?].
Ni II-286	N 4660
Obverse: 649	
Reverse: 38-40	
Remarks:	Lower left corner of a tablet. Both sides have giš. On the obverse only one line is legible, the rest of the column is erased.
Ni II-287	N 4836
Reverse: 1-5	
Remarks:	Lower right corner of a tablet. The obverse is anepigraphic.
Ni II-288	N 4880
Reverse: 69-70	
Remarks:	Upper left corner of a tablet. The obverse has hides; only the determinative kuš has been preserved several times.
Ni II-289	N 5365
Reverse: I: 82-90; II: 108-118	
Remarks:	Upper right corner of a tablet. The obverse is anepigraphic.
Ni II-290	N 5568
Obverse: 31-40	
Reverse: 25-27	
Remarks:	Middle part of a tablet, near left edge. Both sides giš.
Ni II-291	N 5598
Reverse: 78-80	
Remarks:	Left edge fragment of a tablet. The obverse is anepigraphic.
Ni II-292	N 5648
Reverse: 98-99a	
Remarks:	Left edge fragment of a tablet. The obverse has domestic animals (UZ ₃), but little

remains.

5.7.1.4 Type III Tablets

Ni III-01 CBS 06465

Obverse: 121-128

Reverse: 133-134

Publication: *SLT* 244

Remarks: Almost complete tablet. A part of the bottom is missing. The exercise continues on the reverse. A double line indicates the end. Under these lines a number of largish signs are to be seen, the meaning of which is unclear (the copy in *SLT* is not entirely reliable here):
 nig₂-lu₂
 ku₃-lugal
 še-šul
 i₃-suhur

Ni III-02 CBS 06540

Obverse: 451-461

Reverse: 462-468

Publication: *SLT* 135 (reverse only)

Edition: *MSL* 6, p.147 (reverse only)

Remarks: Nearly complete tablet. The obverse is weathered and hardly legible.

Ni III-03 UM 29-13-163

Obverse: 560-574

Remarks: Almost complete tablet. The exercise ends on the obverse with a double horizontal line. The writing is very superficial and difficult to read. The reverse preserves traces of erased signs. A handcopy of the tablet is reproduced in §2.3.3.3.

Ni III-04 CBS 06138

Obverse: 122-138

Publication: *SLT* 134

Remarks: Upper part of a tablet; part of the upper edge is probably preserved. On the reverse there are impressions of the stylus, apparently without meaning. A number of incisions are found on the obverse. Part of the text is erased, probably by a finger.

Ni III-05 UM 29-16-402

Obverse: 105-115

Reverse: 116-127

Remarks: Almost complete tablet. The surface is somewhat eroded. Four vertical wedges are drawn on the upper edge.

5.7.1.5 Type IV Tablets (Lentils)

Ni IV-01 CBS 04864

Obverse: 28-29

Edition: Falkowitz *AfO* 29/30, p.24

Remarks:	Fragmentary lentil-shaped tablet. Two lines of text repeated on the obverse. The reverse has some illegible signs.
Ni IV-02	CBS 04869
Obverse:	52-53
Publication:	<i>SLT</i> 154
Edition:	Falkowitz <i>AfO</i> 29/30, p.24
Remarks:	Complete lentil-shaped tablet. Two lines of text repeated on the obverse. The reverse is anepigraphic.
Ni IV-03	CBS 10507
Obverse:	127-128
Edition:	Falkowitz <i>AfO</i> 29/30, p.28
Remarks:	Fragment of a lentil-shaped tablet. Two lines of text repeated on the obverse. The reverse is inscribed but illegible.
Ni IV-04	UM 29-16-469
Obverse:	41-42
Edition:	Falkowitz <i>AfO</i> 29/30, p.33
Remarks:	Fragment of a lentil-shaped tablet. Two lines of text repeated on the obverse. The reverse is anepigraphic.
Ni IV-05	N 5063
Obverse:	86-87
Edition:	Falkowitz <i>AfO</i> 29/30, p.33
Remarks:	Damaged lentil-shaped tablet. Two lines of text repeated on the obverse.
Ni IV-06	N 5399
Obverse:	70-71
Edition:	Falkowitz <i>AfO</i> 29/30, p.34
Remarks:	Fragment of a lentil-shaped tablet. Two lines of text repeated on the obverse. The reverse is anepigraphic.
Ni IV-07	N 5933
Obverse:	34-35
Edition:	Falkowitz <i>AfO</i> 29/30, p.35
Remarks:	Almost complete lentil-shaped tablet. Two lines of text repeated on the obverse. The reverse is anepigraphic. The obverse is weathered.
Ni IV-08	UM 55-21-043 (2N-T207)
Obverse:	43-44
Edition:	Falkowitz <i>AfO</i> 29/30, p.37
Remarks:	Complete lentil-shaped tablet. Two lines of text repeated on the obverse. The reverse is anepigraphic. A handcopy of the tablet is reproduced in §2.3.3.4.
Ni IV-09	UM 55-21-044 (2N-T209)
Obverse:	20-21
Edition:	Falkowitz <i>AfO</i> 29/30, p.38
Remarks:	Tablet not collated. The transliteration is taken from the edition by Falkowitz.
Ni IV-10	UM 55-21-055 (2N-T258)
Obverse:	14; 16
Edition:	Falkowitz <i>AfO</i> 29/30, p.38
Remarks:	Almost complete lentil-shaped tablet. The surface is partly damaged. Two lines of text repeated on the obverse. The reverse is anepigraphic.

- Ni IV-11 2N-T459
 Obverse:unplaced
 Edition: Falkowitz *AfO* 29/30, p.39
 Remarks: Damaged lentil-shaped tablet. Two lines of text repeated on the obverse. The original is now in Baghdad but the IM number is unknown. The piece was studied from a cast in Chicago. The text as preserved does not fit any known passage in the Nippur standard text. The lentil is edited separately in §5.5.
- Ni IV-12 IM 58046 (2N-T730)
 Obverse: 130; 133
 Reverse: 1-133 (abbreviated)
 Publication: *TIM* X/1, 130 (obverse only).
 Edition: Falkowitz *AfO* 29/30, p.41 (obverse); *MSL* 5, pp.132-133 (reverse).
 Remarks: Almost complete lentil-shaped tablet. The obverse has two lines of text repeated. The reverse has three columns of text. Both obverse and reverse have an extract from the list of trees. The reverse list is a much abbreviated version of this list. The reverse ends with the two items found on the obverse. The piece was studied from a cast in Chicago. A separate transliteration of this lentil is offered in §5.5.
- Ni IV-13 A 30170 (3N-T160)
 Obverse: 139-140
 Edition: Falkowitz *AfO* 29/30, p.41
 Remarks: Damaged lentil-shaped tablet. Two lines of text repeated on the obverse.
- Ni IV-14 IM 58398 (3N-T240)
 Obverse: 110-111
 Edition: Falkowitz *AfO* 29/30, p.42
 Remarks: Lentil-shaped tablet. Two lines of text repeated on the obverse. The piece was studied from a cast in Chicago.
- Ni IV-15 CBS 06517
 Obverse: 586-587
 Publication: *SLT* 155
 Edition: *MSL* 6, p.154
 Remarks: Complete lentil-shaped tablet. Two lines of text repeated on the obverse. Not collated. Transliterated from the published copy.
- Ni IV-16 UM 55-21-054 (2N-T257)
 Obverse: 290-291
 Edition: Falkowitz *AfO* 29/30, p.38
 Remarks: Almost complete lentil-shaped tablet. Two lines of text repeated on the obverse. The reverse is anepigraphic. The museum number may be incorrect. In my collation notes and on my photograph the piece is indicated as UM 55-21-070. In Falkowitz's list the latter number is a lentil with personal names (2N-T414).
- Ni IV-17 CBS 07872
 Obverse: 153-154
 Edition: Falkowitz *AfO* 29/30, p.27
 Remarks: Almost complete lentil-shaped tablet. Two lines of text repeated on the obverse. The reverse is anepigraphic.
- Ni IV-18 CBS 10784
 Obverse: 160-161
 Edition: Falkowitz *AfO* 29/30, p.28

- Remarks: Central part of a lentil. Two lines of text repeated on the obverse. Very little of the writing is preserved. The placement of the (traces of the) gu in lines 1 and 3 shows that the item was [^{gis}g]u-[za], without further qualification. The second item is therefore [^{gis}gu]-za-s[ig_s], which fits the traces in line 2 well.
- Ni IV-19 N 5923
Obverse: 290-291
Edition: Falkowitz *AfO* 29/30, p.34
Remarks: Fragment of a lentil-shaped tablet. Two lines of text repeated on the obverse. The reverse is anepigraphic.
- Ni IV-20 A 30182 (3N-T231)
Obverse: 294-294a
Edition: Falkowitz *AfO* 29/30, p.42
Remarks: Almost complete lentil-shaped tablet. Two lines of text repeated on the obverse. The pupil's copy is clearly inferior in writing.
- Ni IV-21 IM 58397 (3N-T239)
Obverse: 293-294
Edition: Falkowitz *AfO* 29/30, p.42
Remarks: Lentil-shaped tablet. Two lines of text repeated on the obverse. The piece was studied from a cast in Chicago.
- Ni IV-22 IM 58399 (3N-T241)
Obverse: 359-360
Edition: Falkowitz *AfO* 29/30, p.42
Remarks: Lentil-shaped tablet. Two lines of text repeated on the obverse. The piece was studied from a cast in Chicago.
- Ni IV-23 HS 1662
Obverse: 63; 62
Remarks: Nearly complete lentil-shaped tablet; diameter 8 cm. Two lines of text repeated on the obverse. The error in the teacher's text (^{gis}mi-ri-iš-ra instead of ^{gis}mi-ri-iš-gar-ra) is faithfully copied by the pupil. On the reverse some lines have been incised.
- Ni IV-24 N 5527
Obverse: 639
Edition: Falkowitz *AfO* 29/30, p.34
Remarks: Fragment of the upper edge of a lentil-shaped tablet. One line of the obverse has been preserved.
- Ni IV-25 CBS 07970
Obverse: 610-611
Edition: Falkowitz *AfO* 29/30, p.27
Remarks: Fragment of a lentil-shaped tablet. Two lines of text repeated on the obverse. The reverse has something that looks like a seal impression.
- Ni IV-26 Ni 01829
Obverse: 477; 479
Remarks: Lentil-shaped tablet. Two lines of text repeated on the obverse. The text was studied from an unpublished copy by Hilprecht kept in the University Museum, Philadelphia.

5.7.1.6 Type Unidentified

- Ni U-01 CBS 04855
 Obverse?: 77-77a
 Publication: *SLT* 130
 Remarks: Left edge fragment of a tablet. Three lines preserved on one side, on the other side only traces remain. The fragment may come from a type II tablet, but whether obverse or reverse cannot be established. A hole has been pierced through the fragment from top to bottom.
- Ni U-02 CBS 07998
 Obverse: 50-56
 Reverse: 61-64
 Remarks: Right edge fragment of a tablet. The text probably continues from obverse to reverse but the tablet turns in the wrong direction. On both sides the writing is relatively large.
- Ni U-03 CBS 06399
 Obverse?: 190-192
 Remarks: Small central fragment of a tablet. On one side part of one column in good writing has been preserved. On the other side only a few traces remain. These traces include a double line, such as is commonly found under the obverse exercise of a type II tablet, but these lines are again followed by traces of a sign.
- Ni U-04 CBS 06585
 Reverse: I: 586-596; II: 625-637; III: 663-665
 Remarks: Central part, near the right edge of a tablet. The obverse is crumbling; illegible. The reverse has good writing. The piece may be either type I or type II.
- Ni U-05 N 5229
 Obverse: I: 2-12; II: 16-25
 Reverse: I: 25b-33; II: 35-42
 Remarks: Almost complete tablet; the lower corners are missing. The tablet is similar in format to Ni U-24 = IM 58729 (3N-T 809), with two columns on both sides.
- Ni U-06 CBS 03853
 Obverse?: 178-181
 Publication: *SLT* 174
 Remarks: Small flake.
- Ni U-07 CBS 08269
 Obverse: 13; 45; 12
 Remarks: Oval tablet. Only one side inscribed (three lines). The text deviates from the standard *giš* list. A transliteration is offered in §5.5.
- Ni U-08 N 6970
 Obverse?: 280-282
 Remarks: Small central fragment of a tablet. One side has ^{giš}ma₂, the other side is unidentified. The writing on both sides differs, so the piece probably comes from a type II tablet. Judging from the curvature the ^{giš}ma₂ side is probably the obverse.
- Ni U-09 CBS 10164
 Obverse: 160-171
 Publication: *SLT* 142

Remarks:	Large piece of a tablet. The obverse is divided into two columns. The left column is inscribed with a list of wooden objects, the right column with two personal names. The rest of the right column is unused. The reverse is anepigraphic.
Ni U-10	CBS 08062
Obverse?:	276
Remarks:	Small fragment of a tablet in a box with numerous chips. Parts of two columns are preserved. The left column has traces only. The fragment is too small to determine its type.
Ni U-11	CBS 13522
Obverse?:	unplaced
Remarks:	Small lower left corner piece, too small to determine its type. It may belong to the obverse of a type II tablet. Two lines preserved: ^{gis} X [^{gis} eme- A possible reading is ^{gis} s[ag-apin]; ^{gis} eme-[apin]; but too little is left to decide. The fragment is not used in the edition.
Ni U-12	N 5108
Obverse?:	375-384
Remarks:	Chip with good, but largish writing. It derives either from the obverse of a type II tablet, or from a type I tablet. The writing is similar to that of CBS 6003 + 6369 (Ni U-15). If the pieces belong together it is a type I tablet, this fragment being the obverse and CBS 6003+ the reverse.
Ni U-13	CBS 03944
Obverse?:	428-431
Remarks:	Small fragment with remainders of two columns. Perhaps a part of the upper edge is preserved.
Ni U-14	N 5283
Obverse?:	I: 25-25b; II: 44-45
Remarks:	Bottom fragment of a tablet. A few traces remain on the other side.
Ni U-15	CBS 06003 + CBS 06369
Reverse:	I: 586-591; II: 617-625
Publication:	<i>SLT</i> 127 (CBS 06369)
Remarks:	Chip of the reverse of a tablet; perhaps type I. Good but rather largish writing. The piece may belong to the same tablet as N 5108 (Ni U-12) which has a similar writing style. It cannot belong to CBS 5931+ (Ni I-10) because the width of the column differs.
Ni U-16	CBS 06433
Obverse?:	596-604
Publication:	<i>SLT</i> 182
Edition:	<i>MSL</i> 6, pp.156-157
Remarks:	Flake.
Ni U-17	N 1479
Obverse?:	380-382
Remarks:	Left edge fragment of a thin tablet. The other side is anepigraphic.
Ni U-18	CBS 10767
Obverse?:	20-25b
Remarks:	Flake with the remains of two columns. The piece may come from the reverse of a type

II tablet or from a type I tablet or prism.

- Ni U-19 N 5353
Obverse?: 444-446
Remarks: Flake.
- Ni U-20 UM 29-16-604
Obverse?: 145-149
Remarks: Tablet chip with careful writing. The columns run from left to right. The piece possibly comes from a type I tablet. Since the text deviates from the standard Nippur list, a separate transliteration is offered in §5.5.
- Ni U-21 N 4728
Obverse?: 39-44
Remarks: Flake with relatively small writing. Remains of two columns preserved.
- Ni U-22 N 5367
Obverse?: 93-97
Remarks: Flake.
- Ni U-23 CBS 06536A
Obverse?: 86-89
Remarks: Small left edge fragment.
- Ni U-24 IM 58729 (3N-T809)
Obverse:I: 12-20; II: 36-38; 53-55
Reverse: I: 56-63; II: 84-89
Edition: See *MSL* 5, p.111 and p.113
Remarks: Relatively small tablet with two columns on both sides, similar in format to N 5229 (Ni U-05). The piece was studied from a cast in Chicago. On the left side:
 šu-ur-ma-nu-um
 ma-na-an-mu-[-
- Ni U-25 3N-T911u
Obverse?: I: 3-11; II: 53-57
Remarks: Upper left corner of a tablet, with columns running from left to right. The piece may come from the reverse of a type II tablet, or from the obverse of a type I tablet. The tablet is now in Baghdad but its IM number is unknown. It was studied from a cast in Chicago.
- Ni U-26 12N-516
Obverse:I: 428-433; II: 465-468
Remarks: Fragment of a tablet with only one side preserved. The columns run from left to right. The writing is small and careful. Most probably the piece comes from a type I tablet that started with ^{gis}ig. However, it may also belong to the reverse of a type II tablet. The fragment is in Baghdad but its IM number is unknown. It was studied from a cast in Chicago. The piece is listed in *OIC* 23, p.116.
- Ni U-27 N 6475
Obverse?: unplaced
Remarks: Small chip; with only three lines ^{gis}ig-[-] preserved. Not used in the edition.
- Ni U-28 CBS 10071
Obverse?: 646-647
Remarks: Small fragment of a tablet. Traces of three columns have been preserved; of the first

and the last columns only traces remain. The text represents an alternative version of the last part of the *giš* list. The piece is edited separately in §5.5.

Ni U-29 CBS 10192

Reverse: I: 296; 293; II: 315-316; 264; 319-324

Remarks: Flake of a reverse of a tablet. Parts of two columns are preserved. The tablet is either type I or type II. The writing is similar to CBS 10071 (Ni U-28). Both texts represent a deviant tradition and are edited separately in §5.5.

5.7.1.7 Nippur Tablets not Used.

3N-T910e

Publication:

Edition:

Remarks: Fragment of a tablet. The piece is now in Baghdad but its IM number is unknown. It was studied from a cast in Chicago. Mostly illegible except for a few *GIŠ* signs.

12N-568

Publication:

Edition: Falkowitz *AfO* 29/30, p.43

Remarks: Fragment of a lentil which only preserves the *GIŠ* sign four times. Studied from a cast in Chicago. Listed in *OIC* 23, p.117.

CBS 04804 (+) CBS 19811

Publication: *SLT* 95 (obverse only)

Edition: *MSL* 7, p.179: V32 (obverse only)

Remarks: Upper left corner of type II tablet. The obverse has reed objects. The reverse has *giš*. Legible is ^{giš}zi-[(last item in first col.), and some *giš*-nimbar items in the second col.

CBS 06458

Publication:

Edition:

Remarks: Upper part of a type II tablet. The obverse has birds (parallels *SLT* 69 IV, 17-20); the reverse *giš*: illegible.

CBS 06532

Publication:

Edition:

Remarks: Small left hand fragment of a tablet with good writing. Only contains the *GIŠ* sign three times and traces.

CBS 06572

Publication:

Edition:

Remarks: Very small piece of a tablet with good writing. Only a few *GIŠ* signs and some traces of a column to the left have been preserved.

CBS 06581

Edition:

Remarks: Central fragment of a tablet. 1' *giš* []; 2' ^{giš}sa-[]; 3' ^{giš}sa-[]; 4' *giš* x []; 5' *g*[iš]. The passage may belong to the section ^{giš}sa ('net') or ^{giš}sa-ma-nu-um etc. (in the section

trees). To the left of this column some space is left unused. The reverse is broken. Tablet type is undetermined.

CBS 06586

Publication:

Edition: *MSL* 8/1, pp.81-88: V28 (obverse only).

Remarks: Large upper left corner piece of a type II tablet. The obverse has domesticated animals. The reverse has *giš.nimbar* items. Traces of three columns are preserved. Col II: *giš-nimbar*-[]; col III : [*giš*]-nimbar. The tablet is too eroded to warrant transcription.

CBS 06592

Edition:

Remarks: Central part of a type II tablet. The obverse is anepigraphic; the reverse has *giš*: illegible.

CBS 08028

Edition:

Remarks: Bottom right corner of a type II tablet. The preserved column on the obverse is a pupil's column which has been covered with a new layer of clay. This new layer is inscribed with a part of the stone list (parallels *MSL* 10, p.60f. 192-198). A few traces of writing on the old layer are still visible. The reverse has a *giš* list. Only some *GIŠ* signs have been preserved.

CBS 13524

Edition:

Remarks: Left edge fragment of a tablet. Only a few *GIŠ* signs are preserved.

IM 58631 (3N-T698)

Edition: *MSL* 11, p.112: F1 (obverse only)

Remarks: Fragment of a type II tablet. The piece was studied from a cast in Chicago. The obverse has foodstuffs. The reverse has ^{*giš*}*ma*₂ items; unidentified.

N 4704

Edition:

Remarks: Upper left corner of a tablet. The reverse is illegible. The obverse has 5 ^{*giš*}*ma*₂ items. No qualifications have been preserved.

N 4978

Edition:

Remarks: Left hand fragment, probably from the obverse of a type II tablet. Only ^{*giš*}*gu-za* preserved (5 times). Largish writing.

N 5020

Edition:

Remarks: Flake. Two ^{*giš*}*ig* items, and 5 more *giš* lines preserved. The latter five lines have blank space after the *GIŠ*, which suggests that the *GIŠ* was followed by a single sign. There is no passage in the Nippur *giš* list that fits this fragment. The piece may be post-Old Babylonian

N 5607

Edition:

Remarks: Upper left corner. Obverse illegible. The reverse has *giš* items, but is otherwise illegible.

- N 5929
Edition: *MSL* 13, p.65: M (obverse only)
Remarks: Bottom part of a type II tablet. The obverse has Proto-Kagal. The reverse is giš. It may contain the passage 'loom and related objects': ^{giš}TAG-TUG₂; ^{giš}kur-ra (col. II). Very difficult to read.
- N 6096
Edition:
Remarks: Central piece, most probably from the reverse of a type II tablet. Few remains of signs have been preserved. The right column has GIŠ signs.
- N 6578
Edition:
Remarks: Upper left corner of a type II(?) tablet. The obverse preserves partial signs; the reverse has the GIŠ sign four times and traces.
- Ni 01103
Edition:
Remarks: Fragment of a type II tablet. The obverse has Proto-ki-ulutin-bi-še₃; the reverse giš. The tablet was examined from a photograph in the University Museum, Philadelphia. The reverse could not be deciphered.
- Ni 03275
Publication: ZSN Pl. X (reverse only)
Edition:
Remarks: Type II tablet. The obverse has giš, the reverse TU-TA-TI. Listed in Cig, Kizilyay, and Landsberger (1959), p.11. Not examined.
- Ni 04776
Edition:
Remarks: Type II tablet. The obverse(!) has giš; the reverse TU-TA-TI, with columns from left to right. Listed in Cig, Kizilyay, and Landsberger (1959) p.15. Not examined.
- Ni 05055
Edition:
Remarks: Type II tablet. The obverse has giš; the reverse TU-TA-TI. Listed in Cig, Kizilyay, and Landsberger (1959), p.16. Not examined.
- UM 29-13-076
Edition: *MSL* 7, p.198: V7 (obverse only)
Remarks: Left upper quarter of a type II tablet. The obverse has containers (dug); the reverse giš(?). The reverse has largish writing but no items could be identified.
- UM 29-16-574
Edition:
Remarks: Almost complete type II tablet. The obverse has containers (parallels *MSL* 7, p.200: 41-49; and 52). The reverse has ^{giš}gu-za items: illegible. The reverse is destroyed by a hand which was pressed into the soft clay.

5.7.2 Tablets from Isin

- Is I-01 IB 1535 + IB 1606
Remarks: Large upper-left corner piece of a five- or six-column tablet. Transliterated from a copy

by Prof. C. Wilcke. See Wilcke 1987, p.103.

- Is I-02 IB 1547
Remarks: Four-column tablet, almost complete. Reverse columns run from left to right. Second half of the last column has scribbles and a date. Transliterated from a copy by Prof. C. Wilcke. See Wilcke 1987, p.103.
- Is I-03 IB 1512c + IB 1516 + IB 1550 + IB 1561 + IB 1563
Remarks: Large four-column tablet. IB 1561 and IB 1550 are physically joined. The join with IB 1516 was already suggested in annotations by Wilcke. The other joins are almost certain. IB 1512c is said to belong with the fragments of the large tablet of personal names IB 1512, but it clearly fits the present tablet. All pieces are found in NO III. IB 1566, also from NO III, may be part of the reverse of the same tablet. According to the proposed restoration col. III has 31 lines, giving a total amount of approximately 8x31=248. Transliterated from copies by Prof. C. Wilcke. See Wilcke 1987, p.102.
- Is IV-01 IB 1701
Publication: Krebern timer 1992, p.110.
Remarks: Three lines of text; repeated on the reverse.
- Is IV-02 IB 1620
Remarks: Three lines of text, repeated on the reverse. Transliterated from a copy by Prof. C. Wilcke. See Wilcke 1987, p.113.
- Is IV-03 IB 1495
Remarks: Three lines of text. The reverse probably contained the pupil's copy but is almost completely broken. Transliterated from a copy by Prof. C. Wilcke. See Wilcke 1987, p.112.
- Is IV-04 IB 1613
Remarks: Three lines of text, repeated on the reverse. Transliterated from a copy by Prof. C. Wilcke. See Wilcke 1987, p.113.
- Is IV-05 IB 1614
Remarks: Fragment. Three lines of text, repeated on the reverse. Transliterated from a copy by Prof. C. Wilcke. See Wilcke 1987, p.113.
- Is IV-06 IB 1618
Remarks: Three lines of text. Transliterated from a copy by Prof. C. Wilcke. See Wilcke 1987, p.113.
- Is IV-07 IB 1619
Remarks: Three lines of text. Transliterated from a copy by Prof. C. Wilcke. See Wilcke 1987, p.113.
- Is U-01 IB 1566
Remarks: Text type unknown but may be part of the reverse of IB 1512c+. Transliterated from a copy by Prof. C. Wilcke. See Wilcke 1987, p.102.

5.7.3 Tablets from Ur

- Ur I-01
Publication: *UET* 7, 87 + *UET* 7, 91 + *UET* 6/3, 549

- Remarks: Large multi-column tablet. Six columns of the reverse are preserved. The tablet originally contained the whole *giš* list. No field number is known. The two pieces published in *UET* 7 are now in Iraq, and have not been collated. *UET* 6/3, 549 joins the top of the middle column of *UET* 7, 87. The exact location of *UET* 7, 91 is uncertain. It is assumed that column I of this piece has the first sign(s) of *UET* 7, 87 III 7'-15', but a position of one to four lines higher or one line lower is not excluded. This particular position is chosen because lines 3' and 4' have some blank space at the beginning suggesting short lines (al-šub and al-sag).
- Ur IV-01 BM 113910 (= UR 1918-10-12, 458)
 Publication: *Archaeologia* 70 (1920), p.125 (copy) and plate VIII.
 Edition: *MSL* 6, 154
 Remarks: Lentil. In *MSL* 6 the provenance of the tablet is erroneously indicated as 'Abu Shahrein'. The text is repeated on the reverse in a rather bad hand. At the bottom of the reverse three signs are partly preserved, the first of which is PI. Perhaps a name?
- Ur IV-02 BM 113911 (= UR 1918-10-12, 459)
 Publication: *Archaeologia* 70 (1920), p.125 (copy) and plate VIII.
 Edition: *MSL* 6, 44-45 (V12)
 Remarks: Lentil. The text is repeated on reverse.
- Ur IV-03
 Publication: *UET* 6/3, 342
 Remarks: Lentil. Text repeated on the reverse. On the obverse the teacher's model is followed by a name (mu-ha-du-um). On the reverse the pupil's exercise is followed by a-^dnisaba arad-X-bal. This is hardly a name; perhaps an exclamation?
- Ur IV-04
 Publication: *UET* 6/3, 338
 Remarks: Upper half of a lentil. The text was repeated on the reverse, but almost nothing has been preserved there.
- Ur IV-05
 Publication: *UET* 6/3, 373
 Remarks: Lentil. Text repeated on reverse.

5.7.4 Tablets from Uruk

- Uk II-01 W 16603 c
 Publication: Cavigneaux 1996, no. 176
 Edition: Cavigneaux 1996, p.85
 Remarks: Right edge fragment of a tablet. The obverse preserves a part of the pupil's text. On the reverse a sign list. Transliterated from the published copy.
- Uk U-01 W 16743 dp
 Publication: Cavigneaux 1996, no 174
 Edition: Cavigneaux 1996, p.84
 Remarks: Small fragment of a tablet. Transliterated from the published copy.

5.7.5 Tablets of Unknown Provenance

Prisms

- NP P-01 KM 89542
Remarks: Kelsey Museum, Ann Arbor, Michigan. Square prism with two columns per side. Parts of columns 1, 6, 7, and 8 are preserved. The surface is crumbling. The full height and breadth of the piece are preserved on side 4 (17.5x7.5). Traces of the hole are visible. The last column ends with a double horizontal line, followed by traces of a colophon (illegible).
- NP P-02 Ash. 1923.0402
Publication: *MSL* SS1, 96 (Plate XIX-XX)
Remarks: Four-sided prism from the Weld-Blundell collection. All four sides partly preserved but very damaged. On collation Gurney's copy proved to be excellent.

Type I Tablets

- NP I-01 VAT 06588
Remarks: Upper left corner of a tablet. Reverse broken. Incorrectly listed in *MSL* 5, p.90 as VAT 6558; see p.96 (ad 30e) and 105 (ad 158-175).
- NP I-02 VAT 00658 + 663 + 665 + 685
Publication: *LTBA* I 79
Remarks: Very large tablet, probably six columns per side. Part of the right edge is preserved. Order of the sections is unlike most other versions but corresponds to NP I-05.
- NP I-03 MLC 01454 + MLC 01455
Publication: *BRM* IV, 29 + 30
Remarks: Upper part of a large tablet, 5 columns per side. The two pieces join but are at present not glued together. The text is dated Samsuiluna 28.
- NP I-04 *SMEA* 18 (1977), Plate III
Publication: *SMEA* 18 (1977), 106.
Edition: *SMEA* 18 (1977), 106.
Remarks: Fragment of a tablet belonging to the Egyptian Museum, Turin. Transliterated from the published copy.
- NP I-05 BM 080790 (Bu 91-5-9,928)
Remarks: Part of the obverse of a type I tablet. The text follows the same order as *LTBA* I, 79 (also of unknown provenance): giš-nu₂; ^{giš}gu-za; ^{giš}apin. The piece may be from Sippar. It probably belongs to the same tablet as NP I-06.
- NP I-06 BM 16653 (92-5-16, 189)
Remarks: Small fragment of a type I tablet. It probably belongs to the same piece as NP I-05. The text parallels NP I-02.

Type II Tablets

- NP II-01 MLC 01878
Publication: *BRM* IV, 31
Remarks: Upper left corner of a tablet. Both sides giš. Obverse 'Col. II' in *BRM* IV 31 is the pupil's copy. The reverse has a giš section followed by a metrological list (še ku₃-babbār).

NP II-02	Ash. 1932.0526n
Publication:	<i>MSL SS1</i> , 95 (Plate XVIII)
Remarks:	Type II tablet: obverse chairs, reverse metrological. Against the copy, no part of the left edge is preserved.

Type III Tablets

NP III-01	Ash. 1923.0417
Publication:	<i>MSL SS1</i> , 97 (Plate XXI)
NP III-02	LB 1080
Remarks:	Almost complete tablet. In the blank space on the reverse detached signs (turned 180 degrees).
NP III-03	NCBT 1891
Remarks:	Oblong tablet, largish writing. Handcopy reproduced on p.389.
NP III-04	YBC 06702
Remarks:	The reverse is anepigraphic. The exercise ends with a double line. The surface of the tablet is worn. Wedges inscribed in a sign are hardly visible, or not at all. This holds true for the verticals in U ₂ and SA, for the inscribed part of HAR (looks like HI), and for the inscribed part of ZAR/SUG in line 8. Handcopy reproduced on p.389.
NP III-05	YBC 12048
Remarks:	Upper part of an oblong tablet. The reverse is not inscribed. Handcopy reproduced on p.391.
NP III-06	YBC 06717
Remarks:	Oblong tablet, complete. The surface is weathered. The reverse is not inscribed. The exercise ends with a double line. Handcopy reproduced on p.391.
NP III-07	YBC 01991
Remarks:	Oblong tablet, upper and lower parts missing. Both sides are inscribed. Some lines are almost effaced. Handcopy reproduced on p.393.

Type IV Tablets (Lentils)

NP IV-01	Patterson Museum 13
Publication:	<i>JCS</i> 8 (1954), p.146
Remarks:	Three lines of text, repeated on the reverse. Transliterated from the published copy. The first two lines are Sumerian, the third line is the Akkadian translation of line 2.
NP IV-02	NBC 1292
Publication:	<i>BIN</i> II, 50
Remarks:	Six lines of text on the obverse. The reverse is aligned and has some erased signs. These signs are not compatible with the text on the obverse.
NP IV-03	NBC 1283
Publication:	<i>BIN</i> II, 65

Remarks:	Fragment with three lines of text, repeated on the reverse. The transliteration is a compilation of text preserved on obverse and reverse. Under the last line of the reverse some illegible signs.
NP IV-04	Crozer Theological Seminary 195
Publication:	<i>JCS</i> 8 (1954), p.146
Remarks:	Three lines of text. Republished in M. Sigrist: <i>Documents from Tablet Collections in Rochester New York</i> , no. 248. Transliterated from published copies.
NP IV-05	NBC 1293
Publication:	<i>BIN</i> II, 54
Remarks:	Fragment with three lines of text.
NP IV-06	IM 28951
Publication:	<i>TIM</i> X/1, 1
Remarks:	Three lines of text, repeated in clumsy writing on the reverse. Transliterated from published copy.
NP IV-07	IM 43864
Publication:	<i>TIM</i> X/1, 7
Remarks:	Three lines of text. Transliterated from published copy.
NP IV-08	BM 078260 (Bu 88-5-12, 116)
Publication:	<i>CT</i> 44, 43
Remarks:	Three lines of text, repeated on the reverse. Transliterated from a photograph.
NP IV-09	
Publication:	<i>SMEA</i> 18 (1977), p.106: 4
Remarks:	Lentil. The text is part of the collection of the Egyptian Museum, Turin, and was published by A. Archi in transliteration only. Not collated.
NP IV-10	YBC 08936
Remarks:	Three lines of text, repeated on the reverse. Handcopy reproduced on p.393.
NP IV-11	YBC 09907
Remarks:	Three lines of text, repeated on the reverse. Obverse has a subscript: <i>ta-ri-ba-tum</i> . Handcopy reproduced on p.395.
NP IV-12	LB 0998
Remarks:	Three lines of text. See <i>MLVS</i> III, p.66.
NP IV-13	PB 44
Publication:	Freedman 1975 no. 243
Remarks:	Three lines of text, repeated on the reverse. Transliterated from the published copy.
NP IV-14	PB 43
Publication:	Freedman 1975 no. 244
Remarks:	Three lines of text, repeated on the reverse. Transliterated from the published copy. First line was read ^{gis} SIMUG.LU ₂ by Freedman. Collation is needed.
NP IV-15	NCBT 1918
Remarks:	Three lines of text. Obverse <i>giš-nimbar</i> items? Reverse has three lines, turned 90 degrees. First line has scribbles, rest anepigraphic. Handcopy reproduced on p.395.
NP IV-16	NBC 8048

Remarks:	Three lines of text, repeated on the reverse (damaged). Handcopy reproduced on p.397.
NP IV-17	NBC 8063
Remarks:	Three lines of text; reverse anepigraphic. Handcopy reproduced on p.397.
NP IV-18	AUAM 73 3285
Publication:	<i>AUCT</i> 5 (forthcoming), 207
Remarks:	Two lines of text repeated on the same side. The text was transliterated from a copy generously made available by M. Sigrist.
Ni IV-19	AUAM 73 2578
Publication:	<i>AUCT</i> 5 (forthcoming), 234
Remarks:	Three lines of text. The text was transliterated from a copy generously made available by M. Sigrist.

5.7.6 Tablets Excluded from the Edition

For reasons explained in §5.1 the texts from Northern Babylonia are not included in this study. A few other texts, whose presence here might have been expected, have been laid aside. Most of these proved to be Middle rather than Old Babylonian.

SLT 143 (CBS 6405) is a typical cushion-shaped Kassite exercise text from Nippur. It duplicates almost exactly the Sumerian column of late *ur₅-ra* 3. For this tablet type see §2.5.2.1.

PBS 12/1, 17 (CBS 4598) is an oblong tablet from Nippur, inscribed on both sides with a list of wooden furniture. It is described in §2.5.2.1, and belongs to the Kassite period.

IM 57836 (2N-T75; Falkowitz *AfO* 29/30, p.37) is a Kassite period lentil from Nippur. On one side it has an extract from the section doors (virtually duplicating the passage in *ur₅-ra* 5), on the other side a literary extract. See §2.5.2.1 for a discussion of Kassite lentils.

LTBA I, 75 (VAT 9617) was published as a *giš* text. It was recognized in *MSL* SS1, pp.101-102 that the keyword is *E₂* rather than *giš*.

LTBA I, 78 (VAT 6667) is a fragment of a very large tablet of unknown provenance which once contained the whole *giš* chapter of *ur₅-ra*. The tradition it contains is very close to the tradition known from Ugarit and Emar. The piece either derives from this region itself or, less likely, represents the Old Babylonian tradition that was transmitted to the west. It should be studied with the western peripheral tradition rather than with the Old Babylonian.

BM 15780A (96-6-12,4a) appears in the Catalogue of the Babylonian Tablets Vol. II as a four-sided lexical prism with *giš* and *na₄*. The prism is almost complete, but its surface is crumbling and in large parts illegible. The section described as '*giš*' has *tug₂* (including *tug₂-bar-si* items) and *gada* respectively.

In addition to these published texts, a number of unpublished unilingual *giš* texts came to my attention which, upon consideration, proved to be post-Old Babylonian. They follow the known first millennium text of *ur₅-ra* more or less closely. Most of these are small, cushion-shaped exercise tablets with a literary extract on the other side, as described in §2.5.2.1. The exception is NBC 10915 which is a small tablet (3x6cm) with three columns on both sides, inscribed with the entire text of *ur₅-ra* 6 (unilingual).

Museum Number	Origin	Contents
---------------	--------	----------

A 29917 (2N-T005)	Nippur	^{giš} gir ₃ -gub ur ₅ -ra 4: 144-148
NBC 7834	Unknown	7 lines ^{giš} ma ₂ and related items, not following the text in ur ₅ -ra 4.
NBC 10915	Unknown	ur ₅ -ra 6 (entire Sumerian text)
UM 29-13-947	Nippur	duplicates ur ₅ -ra 7a 128-134 and is edited in §5.3 in the commentary to the lines 621-627.
UM 29-15-848	Nippur	ur ₅ -ra 3: 40-44
UM 29-16-383	Nippur	ur ₅ -ra 3: 85-91; handcopy and edition in §2.5.2.1.

5.7.7 Addenda

The following tablets have come to my knowledge after finishing the edition. All of them are unprovenanced. The three BM pieces are very similar, and most probably come from the same site.

AO 6701	Prof. M. Civil kindly informed me of the existence of this tablet with 9 columns of ^{giš} .
BM 30009	Upper half of a type II tablet. The obverse has a list of trees. The teacher's column and two pupil's columns are partly preserved. The reverse has a sign list.
BM 30013	Upper-right part of a type II tablet. The obverse has the beginning of the section U ₂ . Two pupil's columns are partly preserved. The reverse has a list of trees.
BM 30018	Upper edge fragment of a type II tablet. The obverse has a list of trees. The teacher's column and one pupil's column are partly preserved. On the reverse some numerical signs are visible. Metrological or mathematical?

Appendices

Appendix 1: The Catalogue of Nippur Lexical Texts: Description

The Catalogue of Nippur Lexical Texts is a database in which Old Babylonian lexical tablets from Nippur have been collected. The database has been used primarily for the analysis of the correlation between the obverse and reverse exercises on type II tablets. These data play a crucial role in the reconstruction of the Nippur curriculum, as discussed in §2.4.

In the Catalogue of Nippur Lexical Tablets each tablet receives a short description, including joins, publication, edition, period, and excavation number. In addition, for each tablet there are three numerical variables: obverse, reverse, and type. All compositions used in the first phase of Nippur education (lexical texts, mathematical and metrological lists, model contracts, proverbs) are identified by a numerical code. For instance, the six tablets of the Old Babylonian version of Nippur ur₅-ra are coded 131-136. The variable 'type' is used to distinguish between the 5 main types of Nippur lexical tablets (types I, II, III, IV, and prism respectively). A type II tablet with a list of stones on the obverse (Nippur ur₅-ra division 4) and on the reverse a list of wooden objects (division 1) receives the following codes:

OBVERSE	134
REVERSE	131
TYPE	2

Though the database was devised originally for type II tablets, lexical tablets of other types have now been entered as well.

The database grew out of an extract from the computerized catalogue of the cuneiform tablets in the University Museum in Philadelphia, generously made available by Steve Tinney. The extract contained all tablets which were indicated as 'lexical' in the Philadelphia database. For published tablets this database may be regarded as a digital version of the catalogue published by Gerardi (1984). For unpublished tablets the database mainly contains very old information, deriving from the original handwritten catalogue. However, additions and corrections by various scholars have been included. The reliability of the data is therefore difficult to assess. Moreover, being a museum catalogue the original database did not contain information on Nippur tablets in other collections.

The extract from the Philadelphia database was reformatted to include the encoded information as explained above. Moreover, the data were improved and augmented from various sources and in various ways. It is a pleasure to be able to acknowledge here my gratitude to those scholars who have contributed their private unpublished collections of data. Data have been entered and/or corrected from the following sources:

- Tablet descriptions in *MSL* 5-14, *PBS* 11, and *SLT*. The amount of information about the tablets used in the various volumes of *MSL* is not uniform. In some volumes (e.g. 6, 8/1, and 9) only the tablet numbers are indicated, and no information is given about tablet type or about other compositions found on the same piece. In volumes 13 and 14 all

relevant information is included.

- Tablet descriptions in the hypertext version of *MSL* 15 (Proto-Diri). This program was generously made available by M. Civil.
- Tablet catalogue of the proverb collections, generously made available by B. Alster. From this catalogue only the type II tablets have been entered systematically. The catalogue will be published in Alster's forthcoming edition of the proverbs.
- Catalogue of lexical tablets in Jena. This hand-written catalogue was generously made available by J. Oelsner.
- Catalogue of lentils (type IV tablets) by R. Falkowitz (1984).
- Autopsy of tablets in Philadelphia. During a three-month stay in Philadelphia a systematic search for type II tablets resulted in many improvements and additions to published tablet descriptions. Two categories of type II tablets were not systematically included: tablets with Syllable Alphabet B on both sides, and tablets of which only one side has been preserved. Both groups are particularly numerous and add little or nothing that is relevant for the curricular analysis. Permission to search the collection and to use these data for the present purposes was kindly given by the curator Prof. Å. Sjöberg.
- Autopsy of tablets in Jena. A two-week stay in Jena was used first of all for an inspection of the giš tablets. Further, a small number of other lexical tablets was inspected. Permission to inspect the tablets and use the data was kindly given by the curator of the Jena collection Prof. J. Oelsner.
- Autopsy of tablets and casts in Chicago. The Oriental Institute houses a complete collection of Nippur tablets from post-World War II campaigns, either in original or in cast. During a one-week stay in Chicago the giš tablets from this collection were examined. A limited search for type II tablets was also made. The search was restricted to those tablets of which both sides had been identified in the 2 N-T and 3 N-T catalogues. The permission to search the Chicago collection was kindly given by the curator Prof. J.A. Brinkman.
- A collection of photographs in the University Museum, Philadelphia. This collection includes photographs from various museums all over the world. The permission to inspect these photographs was kindly given by Prof. Å. Sjöberg.

In addition to the sources mentioned above, relevant information has been collected from a wide range of scattered publications. Not systematically included is the tablet catalogue in the edition of the elementary exercises Syllable Alphabet B and TU-TA-TI in Çi_, Kizilyay, and Landsberger 1959. The tablet descriptions do not always allow the tablet type to be ascertained. Moreover, the identification of obverse and reverse does not seem to be reliable. According to the catalogue, Ni 5152 has the same exercise repeated in three columns on the reverse (Çi_, Kizilyay, and Landsberger 1959, p.51). This, of course, is the obverse with a teacher's model and two pupil's copies.

From the above a few conclusions may be drawn concerning the reliability of the data as used for this study. First, the sources of information have a considerable overlap. A Philadelphia tablet with proverbs on one side and Proto-Ea on the other appears in *MSL* 14, in Alster's Proverb catalogue, and in my own collection of data based on autopsy. This overlap provides a double or triple check and raises the reliability of the data. Second, the data collection is not complete. Particularly incompletely represented are the tablets from the post-World War II campaigns, and those from the Istanbul collection. In the third place the quality of the data partly depends on the quality of the edition of a composition. Thus, in Civil's edition of Proto-Ea in *MSL* 14 we find authoritative information on tablet types, and on the combination of Proto-Ea with other school texts on type II tablets¹. The model contracts, on the other hand, have not been published or edited in a systematic way. The evidence on these texts, therefore, is less systematically collected and less reliable.

For the usefulness of the catalogue, this has the following consequences. The catalogue cannot be used, or only with due reservations, for comparisons between compositions. The number of tablets included for a single composition depends on many factors and may not be a valid indicator of the relative frequency of that composition on school tablets or its distribution over tablet types. The catalogue may be used for the analysis of obverse/reverse correlations in type II tablets. For this analysis the differences in coverage between the compositions are less important, as long as each composition is represented by a sufficient number of examples. The database contains examples of all school compositions which are frequently found on type II tablets. The systematic search for type II tablets in the Philadelphia collection guarantees the exclusion of systematic errors that might arise from the state of publication of a composition, or the degree of interest that Assyriology has shown in it. Numerous additional identifications could be made, and there is no reason to assume that any composition of importance has been omitted. The analysis in Chapter 2 has attributed a relative place in the Nippur curriculum to each composition. The reliability of each attribution depends on the number of tablets included for the composition and the reliability of the data concerning the tablets on which the composition is found. Improvements to the analysis and its results are to be expected for those compositions which are poorly represented (such as the Nippur God list) or for which the data available are poor in quality (particularly the lists of names).

The catalogue now contains 2418 tablets, distributed as follows over tablet types:

¹ It should be remembered, however, that Proto-Ea texts without glosses were omitted from the edition (*MSL* 14, p.17).

TYPE

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Type I	1	211	8.7	10.6	10.6
Type II	2	1517	62.7	76.2	86.7
Type III	3	92	3.8	4.6	91.4
Type IV	4	102	4.2	5.1	96.5
Prism or Cylinder	5	70	2.9	3.5	100.0
	.	426	17.6	Missing	
		-----	-----	-----	
	Total	2418	100.0	100.0	
Valid cases	1992	Missing cases	426		

The category 'Missing cases' includes both tiny fragments, of which the type can no longer be ascertained, and tablets for which no complete or no reliable description is available and which have not been checked by autopsy. It should be noted that type II tablets have been entered more systematically than the other tablet types. Of the 1517 type II tablets entered in the catalogue, in 887 cases, almost 60% (58.5%), both obverse and reverse could be identified. These are the tablets used for the analysis in §2.4.

Appendix 2: Concordances

Concordance 1: Museum number - Siglum

2N-T005	see A 29917
2N-T075	see IM 57836
2N-T207	see UM 55-21-043
2N-T209	see UM 55-21-044
2N-T257	see UM 55-21-054
2N-T258	see UM 55-21-055
2N-T382	see A 29979+
2N-T384	see A 29979
2N-T459	Ni IV-11
2N-T730	see IM 58046
3N-T160	see A 30170
3N-T231	see A 30182
3N-T239	see IM 58397
3N-T240	see IM 58398
3N-T241	see IM 58399
3N-T259	see A 30187
3N-T354	see UM 55-21-314
3N-T595	see A 30274
3N-T629	see UM 55-21-361
3N-T655	see IM 58599
3N-T691	see IM 58624
3N-T692	see IM 58630
3N-T693	see IM 58626
3N-T697	see IM 58630
3N-T809	see IM 58729
3N-T905,211	Ni P-02
3N-T906,236	Ni II-159
3N-T909a	see UM 55-21-314+
3N-T909c	Ni II-259
3N-T909e	Ni II-258
3N-T909h	see UM 55-21-387
3N-T910e	(see §5.7.1.7)
3N-T911r	see UM 55-21-409
3N-T911t	Ni II-160
3N-T911u	Ni U-25
3N-T911v	Ni II-149
3N-T914cc	Ni II-260
3N-T920ff	Ni II-263
3N-T920s	Ni II-262
3N-T921jj	Ni II-261
3N-T922o	Ni II-257
3N-T922z	Ni II-256
12N-516	Ni U-26
12N-562	Ni II-264
12N-568	(see §5.7.1.7)
A 29917 (2N-T005)	(see §5.7.6)
A 29979 (2N-T384) + IM 57976 (2N-T382)	Ni II-155
A 30170 (3N-T160)	Ni IV-13
A 30182 (3N-T231)	Ni IV-20

A 30187 (3N-T259)	Ni P-06
A 30274 (3N-T595)	Ni II-148
AO 6701	(see §5.7.7)
Ash. 1923.0402	NP P-02
Ash. 1923.0417	NP III-01
Ash. 1924.1776	see Ash. 1924.563
Ash. 1932.0526n	NP II-02
AUAM 73 2578	NP IV-19
AUAM 73 3285	NP IV-18
BM 015780A (96-6-12, 4A)	(see §5.7.6)
BM 016653 (92-5-16, 189)	NP I-06
BM 030009	(see §5.7.7)
BM 030013	(see §5.7.7)
BM 030018	(see §5.7.7)
BM 078260 (Bu 88-5-12, 116)	NP IV-08
BM 080790 (Bu 91-5-9, 928)	NP I-05
BM 113910 (= UR 1918-10-12, 458)	Ur IV-01
BM 113911 (= UR 1918-10-12, 459)	Ur IV-02
CBS 02235	Ni II-265
CBS 02260	Ni II-020
CBS 02263	Ni II-217
CBS 02264	Ni II-098
CBS 03825 + CBS 04847	Ni II-064
CBS 03849	Ni II-052
CBS 03853	Ni U-06
CBS 03857	Ni II-024
CBS 03875	Ni II-151
CBS 03935	Ni II-025
CBS 03944	Ni U-13
CBS 04598	(see §5.7.6)
CBS 04800	Ni II-266
CBS 04801 + CBS 04802	Ni II-026
CBS 04802	see CBS 04801
CBS 04804 (+) CBS 19811	(see §5.7.1.7)
CBS 04806	Ni II-027
CBS 04807	Ni II-028
CBS 04811	Ni II-029
CBS 04812 + CBS 06533 + CBS 06755	Ni II-157
CBS 04815	Ni II-243
CBS 04820	Ni II-030
CBS 04823	Ni II-267
CBS 04824	Ni II-031
CBS 04825	Ni II-032
CBS 04827	Ni II-033
CBS 04829	Ni II-034
CBS 04830	Ni II-035
CBS 04832	Ni II-036
CBS 04833	Ni II-038
CBS 04837	Ni II-037
CBS 04838	Ni II-039
CBS 04839	Ni II-040
CBS 04847	see CBS 03825
CBS 04853	Ni II-184
CBS 04854	Ni II-045
CBS 04855	Ni U-01

CBS 04856	Ni II-046
CBS 04864	Ni IV-01
CBS 04865	Ni II-047
CBS 04866	Ni II-001
CBS 04869	Ni IV-02
CBS 04876	Ni II-182
CBS 04877	Ni II-135
CBS 05811 + CBS 05839 + N 6971	Ni II-117
CBS 05839	see CBS 05811
CBS 05865	Ni II-071
CBS 05887	Ni II-185
CBS 05905 + CBS 06372	Ni II-099
CBS 05931 + CBS 06589 + CBS 07204 + CBS 08468	Ni I-10
CBS 05939	Ni II-010
CBS 05944	Ni II-050
CBS 05985	Ni II-051
CBS 06003 + CBS 06369	Ni U-15
CBS 06068	Ni I-01
CBS 06098 + N 3960 + N 5128	Ni II-053
CBS 06117	Ni II-054
CBS 06119	Ni II-136
CBS 06138	Ni III-04
CBS 06369	see CBS 06003
CBS 06370	Ni II-055
CBS 06372	see CBS 05905
CBS 06386	Ni II-096
CBS 06390	Ni II-268
CBS 06399	Ni U-03
CBS 06403	Ni II-057
CBS 06405	(see §5.7.6)
CBS 06407	Ni II-058
CBS 06409	Ni II-059
CBS 06411	Ni II-007
CBS 06412	Ni II-056
CBS 06416	Ni II-008
CBS 06419	Ni II-060
CBS 06424	Ni II-009
CBS 06426	Ni II-061
CBS 06433	Ni U-16
CBS 06455	Ni II-062
CBS 06458	(see §5.7.1.7)
CBS 06459	Ni II-104
CBS 06465	Ni III-01
CBS 06466	Ni II-187
CBS 06468	Ni II-063
CBS 06476	Ni II-012
CBS 06496	Ni II-048
CBS 06514	Ni II-210
CBS 06515	Ni II-006
CBS 06517	Ni IV-15
CBS 06518	Ni II-065
CBS 06521	Ni II-132
CBS 06531	Ni II-066
CBS 06532	(see §5.7.1.7)
CBS 06533	see CBS 04812

CBS 06536A	Ni U-23
CBS 06540	Ni III-02
CBS 06542	Ni II-067
CBS 06546	Ni II-068
CBS 06547	Ni II-069
CBS 06548	Ni II-188
CBS 06549	Ni II-072
CBS 06552	Ni II-021
CBS 06554	Ni II-073
CBS 06556	Ni II-003
CBS 06557	Ni II-272
CBS 06558	Ni II-269
CBS 06572	(see §5.7.1.7)
CBS 06573	Ni II-181
CBS 06574	Ni II-130
CBS 06576	Ni II-131
CBS 06578	Ni II-270
CBS 06581	(see §5.7.1.7)
CBS 06584	Ni II-158
CBS 06585	Ni U-04
CBS 06586	(see §5.7.1.7)
CBS 06587	Ni II-074
CBS 06589	see CBS 05931
CBS 06590	Ni II-145
CBS 06592	(see §5.7.1.7)
CBS 06593	Ni II-014
CBS 06594	Ni II-017
CBS 06598	Ni II-183
CBS 06599 + HS 1616 + HS 1844	Ni II-137
CBS 06600	Ni II-011
CBS 06659	Ni II-122
CBS 06660	Ni II-079
CBS 06674	Ni II-121
CBS 06682	Ni II-097
CBS 06686	Ni II-245
CBS 06736	Ni II-120
CBS 06755	see CBS 04812
CBS 06808A	Ni II-271
CBS 06854	Ni II-070
CBS 06945	Ni II-248
CBS 06974	Ni II-023
CBS 07139 + CBS 07152 + N 0330	Ni II-154
CBS 07152	see CBS 07139
CBS 07153	Ni II-129
CBS 07204	see CBS 05931
CBS 07872	Ni IV-17
CBS 07904 + N 5220	Ni II-275
CBS 07935	Ni II-249
CBS 07970	Ni IV-25
CBS 07998	Ni U-02
CBS 08028	(see §5.7.1.7)
CBS 08062	Ni U-10
CBS 08063	Ni II-005
CBS 08164	Ni II-128
CBS 08269	Ni U-07

CBS 08298	Ni II-156
CBS 08468	see CBS 05931
CBS 08470	Ni II-246
CBS 09847 (+) CBS 12516	Ni II-015
CBS 10071	Ni U-28
CBS 10164	Ni U-09
CBS 10192	Ni U-29
CBS 10212	Ni II-190
CBS 10259	Ni II-223
CBS 10344	Ni II-221
CBS 10507	Ni IV-03
CBS 10767	Ni U-18
CBS 10778	Ni II-254
CBS 10784	Ni IV-18
CBS 10793	Ni II-109
CBS 11322	Ni II-110
CBS 11342 + 12714	Ni II-002
CBS 12486	Ni P-04
CBS 12511	Ni II-153
CBS 12515	Ni II-018
CBS 12516	see CBS 09847
CBS 12652	Ni II-106
CBS 12655	Ni II-274
CBS 12666	Ni II-019
CBS 12705	Ni II-105
CBS 12706	Ni II-103
CBS 12707	Ni II-102
CBS 12714	see CBS 11342
CBS 12748	Ni II-150
CBS 12754	Ni II-004
CBS 13519	Ni II-042
CBS 13520	Ni II-201
CBS 13522	Ni U-11
CBS 13524	(see §5.7.1.7)
CBS 13525 + CBS 13527 + CBS 13528 + CBS 13570 + CBS 13621A	Ni II-095
CBS 13527	see CBS 13525
CBS 13528	see CBS 13525
CBS 13568 +	Ni II-013
CBS 13570	see CBS 13525
CBS 13575	see CBS 13568
CBS 13576	see CBS 13568
CBS 13583	see CBS 13568
CBS 13588	see CBS 13568
CBS 13592	see CBS 13568
CBS 13596	see CBS 13568
CBS 13601	see CBS 13568
CBS 13611	Ni II-219
CBS 13614	see CBS 13568
CBS 13619	Ni II-279
CBS 13621	Ni II-189
CBS 13621A	see CBS 13525
CBS 14143	Ni II-127
CBS 14156	Ni II-085
CBS 14157	Ni II-143
CBS 15081	Ni II-084

CBS 15366	Ni II-080
CBS 15418	Ni II-220
CBS 19753	Ni II-118
CBS 19803	Ni II-116
CBS 19811	see CBS 4804
Crozer Theol. Sem. 195	NP IV-04
HS 1616	see CBS 06599
HS 1629 + HS 1834	Ni II-162
HS 1631	Ni II-163
HS 1646	Ni II-164
HS 1647	Ni II-165
HS 1657	Ni II-166
HS 1662	Ni IV-23
HS 1665	Ni II-167
HS 1699	Ni II-168
HS 1701	Ni II-169
HS 1734	Ni II-170
HS 1744	Ni II-172
HS 1745 + HS 1797 + HS 2630 + HS 2902	Ni II-173
HS 1797	see HS 1745
HS 1798	Ni II-171
HS 1806	Ni II-174
HS 1823	see N 1361
HS 1827	Ni II-176
HS 1834	see HS 1629
HS 1841	Ni II-177
HS 1844	see CBS 06599
HS 2630	see HS 1745
HS 2860	Ni II-178
HS 2902	see HS 1745
IB 1495	Is IV-03
IB 1512c + IB 1516 + IB 1550 + IB 1561 + IB 1563	Is I-03
IB 1516	see IB 1512c
IB 1535 + IB 1606	Is I-01
IB 1547	Is I-02
IB 1550	see IB 1512c
IB 1561	see IB 1512c
IB 1563	see IB 1512c
IB 1566	Is U-01
IB 1606	see IB 1535
IB 1613	Is IV-04
IB 1614	Is IV-05
IB 1618	Is IV-06
IB 1619	Is IV-07
IB 1620	Is IV-02
IB 1701	Is IV-01
IM 28951	NP IV-06
IM 43864	NP IV-07
IM 57836	(see §5.7.6)
IM 57976	see A 29979
IM 58046 (2N-T730)	Ni IV-12
IM 58397 (3N-T239)	Ni IV-21
IM 58398 (3N-T240)	Ni IV-14
IM 58399 (3N-T241)	Ni IV-22
IM 58599 (3N-T655)	Ni P-05

IM 58624 (3N-T691)
 IM 58626 (3N-T693)
 IM 58630 (3N-T697)
 IM 58631 (3N-T698)
 IM 58729 (3N-T809)
 KM 89542
 LB 0998
 LB 1080
 MLC 01454 + MLC 01455
 MLC 01455
 MLC 01878
 N 0330
 N 0673
 N 1361 +
 N 1465 + N 1500 (+) N 6125
 N 1479
 N 1500
 N 1540
 N 1564
 N 2210 + N 6202 + HS 1845
 N 3359
 N 3435
 N 3960
 N 4039
 N 4062
 N 4067
 N 4098
 N 4557
 N 4597
 N 4624
 N 4634
 N 4640
 N 4642
 N 4660
 N 4683
 N 4704
 N 4728
 N 4779
 N 4787
 N 4836
 N 4880
 N 4885
 N 4917
 N 4947
 N 4953
 N 4973 + N 4984
 N 4977
 N 4978
 N 4981
 N 4983
 N 4984
 N 4990
 N 5019
 N 5020
 N 5039 + N 5059

Ni II-022
 Ni II-147
 Ni II-108
 (see §5.7.1.7)
 Ni U-24
 NP P-01
 NP IV-12
 NP III-02
 NP I-03
 see MLC 01454
 NP II-01
 see CBS 07139
 Ni II-161
 Ni I-08
 Ni I-02
 Ni U-17
 see N 1465
 Ni II-086
 Ni II-281
 Ni II-175
 Ni II-282
 Ni II-204
 see CBS 06098
 Ni II-100
 Ni II-218
 Ni II-283
 see N 1361
 Ni II-230
 Ni II-214
 Ni II-284
 Ni II-216
 Ni I-07
 Ni II-134
 Ni II-286
 Ni II-215
 (see §5.7.1.7)
 Ni U-21
 Ni II-234
 Ni II-228
 Ni II-287
 Ni II-288
 Ni II-285
 Ni II-078
 Ni I-11
 Ni II-041
 Ni II-222
 Ni II-213
 (see §5.7.1.7)
 Ni II-227
 Ni I-03
 see N 4973
 Ni II-253
 Ni II-229
 (see §5.7.1.7)
 Ni II-208

N 5059	see N 5039
N 5063	Ni IV-05
N 5108	Ni U-12
N 5126	Ni II-209
N 5128	see CBS 06098
N 5133	Ni II-043
N 5134	see N 1361
N 5140 (+) N 6015	Ni II-211
N 5143	Ni II-089
N 5147	handcopy in §2.4.1.1
N 5186	Ni II-206
N 5196	Ni II-111
N 5201	Ni II-152
N 5220	see CBS 07904
N 5223	Ni I-06
N 5229	Ni U-05
N 5246	Ni II-101
N 5260	Ni P-03
N 5276	Ni II-077
N 5283	Ni U-14
N 5342	Ni II-231
N 5346 + N 5726	Ni II-076
N 5353	Ni U-19
N 5365	Ni II-289
N 5367	Ni U-22
N 5370	Ni II-112
N 5396	Ni II-144
N 5399	Ni IV-06
N 5405	see N 1361
N 5452	Ni II-203
N 5456	Ni II-044
N 5502	Ni II-124
N 5523	Ni II-235
N 5527	Ni IV-24
N 5552	Ni II-207
N 5564	Ni II-237
N 5568	Ni II-290
N 5589	Ni I-04
N 5598	Ni II-291
N 5614	Ni II-226
N 5648	Ni II-292
N 5703 (+) N 5705	Ni II-088
N 5705	see N 5703
N 5706	Ni II-107
N 5720	Ni II-092
N 5726	see N 5346
N 5735	Ni II-090
N 5736	Ni II-276
N 5782	Ni II-146
N 5792	Ni II-133
N 5819	Ni II-083
N 5836	Ni II-225
N 5846	see N 5782
N 5847	Ni II-081
N 5880	Ni II-091

N 5881
 N 5903
 N 5907
 N 5912
 N 5923
 N 5929
 N 5933
 N 5936
 N 5957
 N 5960
 N 5973
 N 5978
 N 6006
 N 6011
 N 6015
 N 6035
 N 6053
 N 6073
 N 6087
 N 6089
 N 6096
 N 6101
 N 6104
 N 6106
 N 6108
 N 6111
 N 6121
 N 6125
 N 6140
 N 6148
 N 6157
 N 6158
 N 6159
 N 6171
 N 6201
 N 6202
 N 6207
 N 6242
 N 6257
 N 6475
 N 6578
 N 6766 + N 6960
 N 6800
 N 6960
 N 6970
 N 6971
 NBC 01283
 NBC 01292
 NBC 01293
 NBC 07834
 NBC 08048
 NBC 08063
 NBC 10951
 NCBT 1891
 NCBT 1918

Ni I-09
 Ni II-114
 see N 1361
 see N 1361
 Ni IV-19
 (see §5.7.1.7)
 Ni IV-07
 Ni II-250
 see N 1361
 Ni II-251
 Ni II-180
 Ni II-094
 Ni II-191
 see N 1361
 see N 5140
 see N 1361
 see N 1361
 Ni II-113
 see N 1361
 see N 1361
 (see §5.7.1.7)
 Ni II-200
 Ni II-087
 Ni II-186
 Ni II-123
 Ni II-197
 Ni II-082
 see N 1465
 Ni II-255
 Ni II-198
 Ni II-202
 Ni II-139
 Ni II-199
 Ni II-273
 Ni II-252
 see N 2210
 Ni I-12
 Ni II-242
 Ni II-093
 Ni U-27
 (see §5.7.1.7)
 Ni P-01
 Ni II-115
 see N 6766
 Ni U-08
 see CBS 05811
 NP IV-03
 NP IV-02
 NP IV-05
 (see §5.7.6)
 NP IV-16
 NP IV-17
 (see §5.7.6)
 NP III-03
 NP IV-15

Ni 01103	(see §5.7.1.7)
Ni 01829	Ni IV-26
Ni 01865	Ni II-016
Ni 03275	(see §5.7.1.7)
Ni 03615	Ni II-196
Ni 03818	Ni II-195
Ni 04615	Ni II-194
Ni 04776	(see §5.7.1.7)
Ni 04931	Ni II-193
Ni 05055	(see §5.7.1.7)
Ni 05256	Ni II-192
Ni 10003	Ni II-244
PB 43	NP IV-14
PB 44	NP IV-13
Patterson Museum 13	NP IV-01
UM 29-13-074	Ni II-142
UM 29-13-075	Ni II-141
UM 29-13-076	(see §5.7.1.7)
UM 29-13-163	Ni III-03
UM 29-13-947	(see §5.7.6)
UM 29-13-999	Ni II-212
UM 29-15-022	Ni II-232
UM 29-15-314 + UM 29-15-320	Ni II-140
UM 29-15-320	see UM 29-15-314
UM 29-15-343	Ni II-277
UM 29-15-526	Ni II-119
UM 29-15-620	Ni II-238
UM 29-15-645	Ni II-239
UM 29-15-848	(see §5.7.6)
UM 29-15-977	Ni II-278
UM 29-16-001	Ni II-240
UM 29-16-013	Ni II-241
UM 29-16-056	Ni II-138
UM 29-16-150	Ni II-236
UM 29-16-294	Ni II-075
UM 29-16-383	(see §5.7.6)
UM 29-16-402	Ni III-05
UM 29-16-469	Ni IV-04
UM 29-16-539	Ni II-280
UM 29-16-554	Ni II-233
UM 29-16-574	(see §5.7.1.7)
UM 29-16-584	Ni II-179
UM 29-16-586	Ni II-049
UM 29-16-604	Ni U-20
UM 29-16-646	Ni II-205
UM 55-21-043 (2N-T207)	Ni IV-08
UM 55-21-044 (2N-T209)	Ni IV-09
UM 55-21-054 (2N-T257)	Ni IV-16
UM 55-21-055 (2N-T258)	Ni IV-10
UM 55-21-314 (=3N-T354) + UM 55-21-386 (=3N-T909A)	Ni I-05
UM 55-21-361 (3N-T629)	Ni II-125
UM 55-21-386 (=3N-T909A)	see UM 55-21-314
UM 55-21-387 (3N-T909h)	Ni II-224
UM 55-21-409 (3N-T911r)	Ni II-126
VAT 0658 + 663 + 665 + 685	NP I-02

VAT 6588
 VAT 6667
 VAT 9617
 YBC 01991
 YBC 06702
 YBC 06717
 YBC 08936
 YBC 09907
 YBC 12048
 W 16743 dp
 W 16603 c

NP I-01
 (see §5.7.6)
 (see §5.7.6)
 NP III-07
 NP III-04
 NP III-06
 NP IV-10
 NP IV-11
 NP III-05
 Uk U-01
 Uk II-01

Concordance 2: Previous Publication - Siglum

Archaeologia 70 (1920), p.125 (copy) and plate VIII
 Archaeologia 70 (1920), p.125 (copy) and plate VIII
 AUCT 5 (forthcoming), no. 207
 AUCT 5 (forthcoming), no. 234
 BIN II, 50
 BIN II, 54
 BIN II, 65
 BRM IV, 31
 BRM IV, 29
 BRM IV, 30
 Cavigneaux: Uruk. Altbabylonische Texte 174
 Cavigneaux: Uruk. Altbabylonische Texte 176
 CT 44, 43
 Falkowitz AfO 29/30, pp.24-42

Freedman, R.D. The Cuneiform Tablets in St. Louis (1975) no. 243
 Freedman, R.D. The Cuneiform Tablets in St. Louis (1975) no. 244
 Gordon SP pl.74 (A 29979)
 JCS 8 (1954), p.146
 JCS 8 (1954), p.146
 Krebern timer: Isin IV (1992), p.110
 LTBA I, 75
 LTBA I, 78
 LTBA I, 79
 MSL SS1, 95 (Plate XVIII)
 MSL SS1, 96 (Plate XIX-XX)
 MSL SS1, 97 (Plate XXI)
 PBS 5, 123
 PBS 11/1, 43
 PBS 11/1, 30
 PBS 11/1, 34
 PBS 11/1, 63
 PBS 11/1 Pl.37
 PBS 11/2, 13
 PBS 11/2, 53
 PBS 11/2, 40
 PBS 11/2, 50
 PBS 11/2, 67
 PBS 11/3, 7

Ur IV-01
 Ur IV-02
 NP IV-18
 NP IV-19
 NP IV-02
 NP IV-05
 NP IV-03
 NP II-01
 NP I-03
 NP I-03
 Uk U-01
 Uk II-01
 NP IV-08
 See under the museum numbers in
 concordance 1.
 NP IV-13
 NP IV-14
 Ni II-155
 NP IV-01
 NP IV-04
 Is IV-01
 (see §5.7.6)
 (see §5.7.6)
 NP I-02
 NP II-02
 NP P-02
 NP III-01
 Ni II-190
 Ni II-051
 Ni II-117
 Ni II-052
 Ni II-117
 Ni II-268
 Ni II-185
 Ni II-050
 Ni II-122
 Ni II-151
 Ni II-013
 Ni II-219

PBS 11/3, 35
 PBS 12/1, 17
 Sigrist: Tabl. Coll. Rochester New York, no. 248
 SLFN 72 (3N-T906,236)
 SLFN 73 (3N-T905,211)
 SLT 23
 SLT 49
 SLT 68
 SLT 74
 SLT 75
 SLT 87
 SLT 94
 SLT 116
 SLT 119
 SLT 126
 SLT 127
 SLT 128
 SLT 129
 SLT 130
 SLT 131
 SLT 132
 SLT 133
 SLT 134
 SLT 135
 SLT 136
 SLT 137
 SLT 138
 SLT 139
 SLT 140
 SLT 141
 SLT 142
 SLT 143
 SLT 144
 SLT 145
 SLT 146
 SLT 147
 SLT 149
 SLT 151
 SLT 152
 SLT 153
 SLT 154
 SLT 155
 SLT 156
 SLT 157
 SLT 158
 SLT 159
 SLT 160
 SLT 161
 SLT 162
 SLT 163
 SLT 164
 SLT 165
 SLT 166
 SLT 167
 SLT 168

Ni II-071
 (see §5.7.6)
 NP IV-04
 Ni II-159
 Ni P-02
 Ni II-154
 Ni II-130
 Ni II-034
 Ni II-266
 Ni II-064
 Ni II-210
 Ni II-188
 Ni II-189
 Ni II-004
 Ni II-127
 Ni U-15
 Ni II-001
 Ni II-084
 Ni U-01
 Ni II-003
 Ni I-10
 Ni II-012
 Ni III-04
 Ni III-02
 Ni II-056
 Ni II-156
 Ni II-010
 Ni II-064
 Ni II-058
 Ni II-110
 Ni U-09
 (see §5.7.6)
 Ni II-153
 Ni II-132
 Ni II-099
 Ni II-052
 Ni II-027
 Ni II-136
 Ni II-120
 Ni II-145
 Ni IV-02
 Ni IV-15
 Ni II-026
 Ni II-005
 Ni II-008
 Ni I-10
 Ni II-099
 Ni II-069
 Ni II-122
 Ni II-007
 Ni II-009
 Ni I-10
 Ni II-154
 Ni II-073
 Ni II-151

SLT 169	Ni II-060
SLT 170	Ni I-01
SLT 171	Ni II-033
SLT 172	Ni II-011
SLT 173	Ni II-006
SLT 174	Ni U-06
SLT 175	Ni II-128
SLT 176	Ni II-098
SLT 177	Ni II-135
SLT 180	Ni II-102
SLT 181	Ni II-131
SLT 182	Ni U-16
SLT 194	Ni II-002
SLT 198	Ni II-272
SLT 204	Ni II-158
SLT 208	Ni II-269
SLT 224	Ni II-035
SLT 231	Ni II-104
SLT 232	Ni II-059
SLT 244	Ni III-01
SMEA 18 (1977), p.106: 4	NP IV-09
SMEA, 18 (1977), Plate III.	NP I-04
TIM X/1, 1	NP IV-06
TIM X/1, 7	NP IV-07
TIM X/1, 130	Ni IV-12
UET 6/3, 338	Ur IV-04
UET 6/3, 342	Ur IV-03
UET 6/3, 373	Ur IV-05
UET 6/3, 396	Ur I-01
UET 6/3, 549	Ur I-01
UET 7, 87	Ur I-01
UET 7, 91	Ur I-01
Veldhuis and Oelsner ZA (forthcoming)	Ni II-137

Bibliography

- Al-Fouadi, A.-H. A.
1969 *Enki's Journey to Nippur: The Journey of the Gods*. Ann Arbor, Michigan, 1969.
- Al-Fouadi, A.-H.
1976 'Lexical Text from Dhibāṭ.' in: B.L. Eichler (ed.): *Kramer Anniversary Volume: Cuneiform Studies in Honor of Samuel Noah Kramer*. AOAT 25. Neukirchen 1976, pp.1-12.
- Al-Rawi, F.N.H. and George, A.R.
1992 'En_ ma Anu Enlil XIV and Other Early Astronomical Tables.' in: *AfO* 38/39 (1991-1992), pp.52-73.
- Alster, B.
1990 'Sumerian Literary Dialogues and Debates and their Place in Ancient Near Eastern Literature.' in: E. Keck, S. Søndergaard, and E. Wulff (eds.) *Living Waters. Scandinavian Orientalistic Studies Presented to Professor Dr. Frede Løkkegaard on his Seventy-Fifth Birthday*. Copenhagen 1990, pp.1-16.
- Alster, B.
1993 'Some Ur 3 Literary Texts and Other Sumerian Texts in Yale and Philadelphia.' in: *ASJ* 15 (1993), pp.1-10.
- André-Salvini, B.
1991 'Les textes lexicographiques (n° 48-77).' in: Pierre Bordreuil (ed.): *Une bibliothèque au sud de la ville: les textes de la 34^e campagne (1973)*. RSO 7. Paris 1991, pp.105-198.
- Arcari, E.
1982 *La lista di professioni "Early Dynastic LU A". Esempio di metodo di analisi dei rapporti tra le scuole scribali del III millennio a. C.* Supplemento n. 32 agli Annali. Naples 1982.
- Arcari, E.
1983 'Sillabario di Ebla e ED LU A: rapporti intercorrenti tra le due liste.' in: *OrAn* 22 (1983), pp.167-178.
- Archi, A.
1992 'Transmission of the Mesopotamian Lexical and Literary Texts from Ebla.' in: P. Fronzaroli (ed.): *Literature and Literary Language at Ebla*. Quaderni di semitistica 18. Florence 1992, pp.1-39.

- Armstrong, J.A. and Brandt, M.C.
1994 'Ancient Dunes at Nippur' in: H. Gasche, M. Tanret, C. Janssen, and A. Degraeve (eds.): *Cinquante-deux réflexions sur le proche-orient ancien offertes en hommage à Léon De Meyer*. Louvain 1994, pp.255-263.
- Arnaud, D.
1982 'Les textes cunéiformes suméro-accadiens des campagnes 1979-1980 à Ras Shamra-Ougarit.' in: *Syria* 59 (1982), pp.199-222.
- Arnaud, D. and Kennedy, D.
1979 'Les textes cunéiformes syllabiques découvertes en 1977 à Ibn Hani.' in: *Syria* 56 (1979), pp.317-324.
- Artzi, P.
1992 'Nippur Elementary Schoolbooks in the "West".' in: M. de Jong-Ellis (ed.): *Nippur at the Centennial*. Philadelphia, Pennsylvania, 1992, pp.1-5.
- Artzi, P.
1990 'Studies in the Library of the Amarna Archive.' in: J. Klein and A. Skaist (eds.): *Bar-Ilan Studies in Assyriology dedicated to Pinhas Artzi*. Ramat-Gan 1990, pp.139-156.
- Atran, S.
1994 'Core Domains Versus Scientific Theories: Evidence from Systematics and Itza-Maya Folkbiology.' in: L.A. Hirschfeld and S.A. Gelman (eds.): *Mapping the Mind. Domain Specificity in Cognition and Culture*. Cambridge 1994, pp.316-340.
- Attinger, P.
1984 'Enki et Ninhursa_a.' in: *ZA* 74 (1984), pp.1-52.
- Attinger, P.
1993 *Eléments de linguistique sumérienne. La construction de du₁₁/e/di "dire"*. OBO Sonderband. Göttingen 1993.
- Barton, T.
1994 *Ancient Astrology*. London 1994.
- Bauer, J.
1992 *Altorientalistische Notizen* 45-54. Würzburg 1992.
- Beaulieu, P.-A.
1995 'An Excerpt from a Menology with Reverse Writing.' in: *ASJ* 17 (1995), pp.1-14.
- Becker, A.
1985 'Neusumerische Renaissance? Wissenschaftsgeschichtliche Untersuchungen zur Philologie und Archäologie.' in: *BaM* 16 (1985), pp.229-316.

- Beckman, G.
1983 'Mesopotamians and Mesopotamian Learning at Hattuša.' in: *JCS* 35 (1983), pp.97-114.
- Beckman, G. and Foster, B.R.
1988 'Assyrian Scholarly Texts in the Yale Babylonian Collection.' in: E. Leichty, M. de Jong-Ellis, and P. Gerardi (eds.): *A Scientific Humanist. Studies in Memory of Abraham Sachs*. Philadelphia, Pennsylvania, 1988, pp.1-26.
- Berger, P.L. and Berger, B.
1972 *Sociology: a Biographical Approach*. New York 1972.
- Biggs, R.D.
1974 *Inscriptions from Tell Abu Salabikh*. OIP 99. Chicago 1974.
- Black, J.A.
1984 *Sumerian Grammar in Babylonian Theory*. Studia Pohl: Series Major 12. Rome 1984 (Second, Revised Edition Rome 1991)
- Black, J.A. and Al-Rawi, F.N.H.
1987 'A Contribution to the Study of Akkadian Bird Names.' in: *ZA* 77 (1987), pp.117-126.
- Bonner, S.F.
1977 *Education in Ancient Rome*. Berkeley, California, 1977.
- Bottéro, J
1977 'Les Noms de Marduk, l'écriture et la "logique" en Mésopotamie ancienne.' in: M. de Jong-Ellis (ed.): *Essays on the Ancient Near East in Memory of J.J. Finkelstein*. Hamden, Connecticut, 1977, pp.5-28.
- Bourdieu, P.
1979 *La distinction. Critique sociale du jugement*. Paris 1979. English edition: *Distinction. A Social Critique of the Judgement of Taste*. London 1984.
- Bourdieu, P.
1983 'Ökonomisches Kapital, kulturelles Kapital, soziales Kapital.' in: R. Kreckel (ed.) *Soziale Ungleichheiten. Soziale Welt, Sonderheft 2*. Göttingen 1983. English version: 'The Forms of Capital.' in: J.G. Richardson (ed.): *Handbook of Theory and Research for the Sociology of Education*. New York 1986.
- Boyer, P.
1994 'Cognitive Constraints on Cultural Representations: Natural Ontologies and Religious Ideas.' in: L.A. Hirschfeld and S.A. Gelman (eds.): *Mapping the Mind. Domain Specificity in Cognition and Culture*. Cambridge 1994, pp.391-411.

- Cavigneaux, A.
1976 *Die sumerisch-akkadischen Zeichenlisten. Überlieferungsprobleme.* Munich 1976.
- Cavigneaux, A.
1981 *Textes scolaires du temple de Nabû ša Harê.* Volume 1. Baghdad 1981.
- Cavigneaux, A.
1982 'Schultexte aus Warka (W 20248).' in: *BaM* 13 (1982), pp.21-30.
- Cavigneaux, A.
1983 'Lexikalische Listen.' in: *RIA* Band VI. Berlin 1980-1983, pp.609-641. (Article in French).
- Cavigneaux, A.
1992 'LUL-bi = lib-bi.' in: *N.A.B.U.* 1992/109.
- Cavigneaux, A.
1995 'La Pariade du Scorpion dans les Formules Magiques Sumériennes (Textes de Tell Haddad V).' in: *ASJ* 17 (1995), pp.75-99.
- Cavigneaux, A.
1996 *Uruk. Altbabylonische Texte aus dem Planquadrat Pe XVI-4/5 nach Kopien von Adam Falkenstein.* Mainz 1996.
- Cavigneaux, A. and Al-Rawi, F.N.H.
1993 'New Sumerian Literary Texts from Tell Haddad (Ancient Meturan): a First Survey.' in: *Iraq* 55 (1993), pp.91-105.
- Charpin, D.
1986 *Le clergé d'Ur au siècle d'Hammurabi. (XIX^e-XVIII^e siècles av. J.-C.).* Hautes Études Orientales 22. Paris 1986.
- Charpin, D.
1989 'Un quartier de Nippur et le probleme des écoles à l'époque paléo-babylonienne.' in: *RA* 83 (1989), pp.97-112.
- Charpin, D.
1990 'Un quartier de Nippur et le probleme des écoles à l'époque paléo-babylonienne (suite).' in: *RA* 84 (1990), pp.1-16.
- Charpin, D.
1993 'Données nouvelles sur la poliorcétique à l'époque paléo-babylonienne.' in: *M.A.R.I.* 7 (1993), pp.193-197.
- Chiera, E.
1916 *Lists of Personal Names from the Temple School of Nippur. A Syllabary of*

Personal Names. PBS 11/1. Philadelphia, Pennsylvania, 1916.

Çiğ, M., Kizilyay, H., and Landsberger, B.

1959 *Zwei altbabylonische Schulbücher aus Nippur*. Ankara 1959.

Çiğ, M. and Kizilyay, H.

1965 'Additions to Series B and C of Personal Names from Old Babylonian Nippur.' in: H.G. Güterbock and T. Jacobsen (eds.): *Studies in Honor of Benno Landsberger on His Seventy-Fifth Birthday, April 21, 1965*. AS 16. Chicago 1965, pp.41-56.

Civil, M.

1960 'Prescriptions médicales sumériennes.' in: *RA* 54 (1960), pp.57-72.

Civil, M.

1961 'The Home of the Fish: A New Sumerian Literary Composition.' in: *Iraq* 23 (1961), pp.154-175.

Civil, M.

1968 'Išme-Dagan and Enlil's Chariot.' in: *JAOS* 88 (1968), pp.3-14.

Civil, M.

1973 'Notes on Sumerian Lexicography, II.' in: *JCS* 25 (1973), pp.171-178.

Civil, M.

1975 'A School Exercise from Tell Asmar.' in: *Studia Orientalia* 46 (1975), pp.39-41.

Civil, M.

1975a 'Lexicography.' in: S. Lieberman (ed.): *Sumerological Studies in Honor of Thorkild Jacobsen on his Seventieth Birthday, June 7, 1974*. AS 20. Chicago 1975, pp.123-157.

Civil, M.

1975b 'Appendix A: Cuneiform Texts.' in: McG. Gibson: *Excavations at Nippur: Eleventh Season*. Chicago 1975, pp.125-142.

Civil, M.

1976 'La tablette scolaire SMN 2559.' in: *RA* 70 (1976), pp.94-95.

Civil, M.

1976a 'The Song of the Plowing Oxen.' in: B.L. Eichler (ed.): *Kramer Anniversary Volume: Cuneiform Studies in Honor of Samuel Noah Kramer*. AOAT 25. Neukirchen 1976, pp.83-95.

Civil, M.

1976b 'Šalakdānu.' in: *RA* 70 (1976), p.94.

- Civil, M.
1976c 'Enlil, the Merchant: Notes to CT 15 10.' in: *JCS* 28 (1976), pp.72-81.
- Civil, M.
1976d 'Notes on Sumerian Lexicography III.' in: *JCS* 28 (1976), pp.183-187.
- Civil, M.
1977 'Enlil and Namzitarra.' in: *AfO* 25 (1977), pp.65-71.
- Civil, M.
1980 'Les limites de l'information textuelle.' in: T. Barrelet (ed.): *L'archéologie de l'Iraq du début de l'époque néolithique à 333 avant notre ère: Perspectives et limites de l'interprétation anthropologique des documents. Paris, 13-15 juin 1978. Colloques Internationaux du Centre Nationale de la Recherche Scientifique 580. Paris 1980, pp.225-232.*
- Civil, M.
1982 'Studies on Early Dynastic Lexicography. I.' in: *OrAn* 21 (1982), pp.1-26.
- Civil, M.
1983 'The Sign LAK 384.' in: *OrNS* 52 (1983), pp.233-240.
- Civil, M.
1983a 'Enlil and Ninlil: The Marriage of Sud.' in: *JAOS* 103, pp.43-66.
- Civil, M.
1983b 'Early Dynastic Spellings.' in: *OrAn* 22 (1983), pp.1-5.
- Civil, M.
1984 'Bilingualism in Logographically Written Languages: Sumerian in Ebla.' in: L. Cagni (ed.): *Il bilinguismo a Ebla: Atti del convegno internazionale (Napoli, 19-22 aprile 1982). Istituto Universitario Orientale, Dipartimento di Studi Asiatici, Series Minor 22. Naples 1984, pp.75-97.*
- Civil, M.
1984a 'On Some Terms for "Bat" in Mesopotamia.' in: *AuOr* 2 (1984), pp.5-9.
- Civil, M.
1985 'Sur les "livres d'écolier" à l'époque paléo-babylonienne.' in: J.-M. Durand and J.R. Kupper (eds.): *Miscellanea Babylonica. Mélanges offerts à Maurice Birot. Paris 1985, pp.67-78.*
- Civil, M.
1985a 'On Some Texts Mentioning Ur-Namma.' in: *OrNS* 54 (1985), pp.27-45 and Tab. VI.
- Civil, M.

- 1987 'Notes Brèves.' in: *RA* 81 (1987), pp.187-188.
- Civil, M.
1987a 'Feeding Dumuzi's Sheep: the Lexicon as a Source of Literary Inspiration.' in: F. Rochberg-Halton (ed.): *Language, Literature, and History: Philological and Historical Studies Presented to Erica Reiner*. AOS 67. New Haven, Connecticut, 1987, pp.37-55.
- Civil, M.
1987b 'Sumerian Riddles: A Corpus.' in: *AuOr* 5 (1987), pp.17-37.
- Civil, M.
1987c 'The *Tigidlu* Bird and a Musical Instrument.' in: *N.A.B.U.* 1987/48.
- Civil, M.
1989 'The Texts from Meskene-Emar.' in: *AuOr* 7 (1989), pp.5-25.
- Civil, M.
1989a 'The Statue of Šulgi-ki-ur₅-sag₉-kalam-ma. Part One: The Inscription.' in: H. Behrens, D. Loding, and M.T. Roth (eds.): *DUMU-E₂-DUB-BA-A. Studies in Honor of Åke W. Sjöberg*. Philadelphia, Pennsylvania, 1989, pp.49-64.
- Civil, M.
1993 'On Mesopotamian Jails and their Lady Warden.' in: M.E. Cohen, D.C. Snell, and D.B. Weisberg: *The Tablet and the Scroll. Near Eastern Studies in Honor of William W. Hallo*. Bethesda, Maryland, 1993, pp.72-78
- Civil, M.
1994 *The Farmer's Instructions. A Sumerian Agricultural Manual*. Aula Orientalis Supplementa 5. Barcelona 1994.
- Civil, M.
1994a 'Sumerian.' in: G. Lepschy (ed.): *History of Linguistics. Vol I: The Eastern Traditions*. London 1994, pp.76-87. Original Italian edition Bologna 1990.
- Civil, M.
1995 'Ancient Mesopotamian Lexicography.' in: J.M. Sasson (ed.): *Civilizations of the Ancient Near East*. Volume IV, pp.2305-2314. New York 1995.
- Civil, M. and Biggs, R.D.
1966 'Notes sur des textes sumériens archaïques.' in: *RA* 60 (1966), pp.1-16.
- Cohen, M.E.
1993 'Two Versions of a Fara-Period Name-List.' in: M.E. Cohen, D.C. Snell, and D.B. Weisberg: *The Tablet and the Scroll. Near Eastern Studies in Honor of William W. Hallo*. Bethesda, Maryland, 1993, pp.79-86.

- Cohen, S.
1973 *Enmerkar and the Lord of Aratta*. Ann Arbor, Michigan, 1973.
- Cooper, J.S.
1978 *The Return of Ninurta to Nippur*. AnOr 52. Roma 1978.
- Cooper, J.S.
1983 *The Curse of Agade*. Baltimore 1983.
- Cooper, J.S.
1991 'Posing the Sumerian Question: Race and Scholarship in the Early History of Assyriology.' in: *AuOr* 9 (1991), pp.47-66.
- Cooper, J.S.
1993 'Paradigm and Propaganda. The Dynasty of Akkade in the 21st Century.' in: M. Liverani (ed.): *Akkad. The First World Empire. Structure, Ideology, Tradition*. Padua 1993, pp.11-23.
- Cooper, J.S.
1993a 'Sumerian and Aryan. Racial Theory, Academic Politics and Parisian Assyriology.' in: *Revue de l'Histoire des Religions* 210 (1993), pp.169-205.
- Cooper, J.S. and Heimpel, W.
1983 'The Sumerian Sargon Legend.' in: *JAOS* 103 (1983), pp.67-82.
- Cribiore, R.
1996 *Writing, Teachers, and Students in Graeco-Roman Egypt*. American Studies in Papyrology 36. Atlanta, Georgia, 1996.
- Cryer, F.H.
1994 *Divination in Ancient Israel and its Near Eastern Environment. A Socio-Historical Investigation* (JSOT Supplement Series 142). Sheffield 1994.
- Dalley, S.
1979 *A Catalogue of the Akkadian Cuneiform Tablets in the Collections of the Royal Scottish Museum, Edinburgh, with Copies of the Texts*. Edinburgh 1979.
- Dalley, S.
1984 *Mari and Karana. Two Old Babylonian Cities*. London 1984.
- Demsky, A.
1990 'The Education of Canaanite Scribes in the Mesopotamian Cuneiform Tradition.' in: *Bar-Ilan Studies in Assyriology dedicated to Pinhas Artzi*. Ramat-Gan 1990, pp.157-170.
- Diakonov, I.M.
1990 *Ljudi goroda ura*. Kul'tura narodov vostoka. Materialy i issledovanija.

- Starovavilonskaja Kul'tura. Vyn. utoroj (II). Moscow 1990.
- Dietrich, M.
1996 'Altbabylonische Omina zur Sonnenfinsternis.' in: *WZKM* 86 (1996), pp.99-105.
- Dijk, J.J.A. van
1953 *La sagesse suméro-accadienne. Recherches sur les genres littéraires des textes sapientiaux. Avec choix de textes.* Leiden 1953.
- Dijk, J.J.A. van
1966 'L'hymne à Marduk avec intercession pour le roi Ab_ 'ešuh.' in: *MIO* 12 (1966), pp.57-74.
- Dijk, J.J.A. van
1983 *LUGAL UD ME-LÁM-bi NIR- ÁL.* Volumes I and II. Leiden 1983.
- Dijk, J.J.A. van
1989 'Ein spätaltbabylonischer Katalog einer Sammlung sumerischer Briefe.' in: *OrNS* 58 (1989), pp.441-452.
- Driel, G. van
1990 'Old Babylonian Nippur.' in: *BiOr* 47 (1990), pp.559-577.
- Driel, G. van
1994 'Private or Not-So-Private: Nippur Ur III Files.' in: H. Gasche, M. Tanret, C. Janssen, and A. Degraeve (eds.): *Cinquante-deux réflexions sur le proche-orient ancien offertes en hommage à Léon De Meyer.* Louvain 1994, pp.181-192.
- Durand, J.-M.
1979 'Un commentaire à *TDP* I, AO 17661.' in: *RA* 73 (1979), pp.153-170.
- Durand, J.-M.
1987 'L'organisation de l'espace dans le palais de Mari: le témoignage des textes.' in: E. Lévy (ed.) *Le système palatial en Orient, en Grèce et à Rome.* Leiden 1987, pp.39-110.
- Edzard, D.O.
1982 'Der Aufbau de Syllabars "Proto-Ea".' in: M.A. Dandamayev, I. Gershevitch, H. Klengel, G. Komoróczy, M.T. Larsen, and J.N. Postgate: *Societies and Languages of the Ancient Near East. Studies in Honour of I.M. Diakonoff.* Warminster 1982, pp.42-61.
- Edzard, D.O.
1990 'Gilgameš und Huwawa A. I. Teil.' in: *ZA* 80 (1990), pp.165-203.
- Edzard, D.O. and Wilcke, C.
1977 'Vorläufiger Bericht über die Inschriftenfunde 1973-1974.' in: B. Hrouda (ed.): *Isin-Išān Bahrīyāt I. Die Ergebnisse der Ausgrabungen 1973-1974.* Munich

1977, pp.83-91.

Ellis, M. de Jong

1986 'The Archive of the Old Babylonian Kititum Temple and other Texts from Ishchali.' in: *JAOS* 106 (1986), pp.757-786.

Ellis, M. de Jong

1987 'The Goddess Kititum Speaks to King Ibalpiel: Oracle Texts from Ishchali.' in: *M.A.R.I.* 5 (1987), pp.235-266.

Englund, R.K.

1995 'Regulating Dairy Productivity in the Ur III Period.' in: *OrNS* 64 (1995), pp.377-429.

Englund, R.K., and H.J. Nissen

1993 *Die lexikalischen Listen der archaischen Texte aus Uruk*. ATU 3. Berlin 1993.

Faivre, X.

1995 'Le recyclage des tablettes cunéiformes.' in: *RA* 89 (1995), pp.57-66.

Fales, F.M. and Krispijn, T.

1980 'An Early Ur III Copy of the Abū Sālābikh "Names and Professions" List.' in: *JEOL* 26 (1979-1980), pp.39-46.

Falkowitz, R.S.

1984 'Round Old Babylonian School Tablets from Nippur.' in: *AfO* 29/30 (1983-84), pp.18-45.

Farber, W.

1981 'Zur älteren akkadischen Beschwörungsliteratur.' in: *ZA* 71 (1981) pp.51-72.

Farber, W.

1993 "'Forerunners" and "Standard Versions": A Few Thoughts about Terminology.' in: M.E. Cohen, D.C. Snell, and D.B. Weisberg: *The Tablet and the Scroll. Near Eastern Studies in Honor of William W. Hallo*. Bethesda, Maryland, 1993, pp.95-97.

Fleischman, S.

1990 'Philology, Linguistics, and the Discourse of the Medieval Text.' in: *Speculum* 65 (1990), pp.19-37.

Foster, B.R.

1982 'Education of a Bureaucrat in Sargonic Sumer.' in: *ArOr* 50 (1982), 238-241.

Freedman, R.D.

1975 *The Cuneiform Tablets in St. Louis*. University Microfilms. Ann Arbor, Michigan, 1975.

- Freedman, R.D.
1977 'Cuneiform Texts from the Piepkorn Collection, III.' in: *JANES* 9 (1977), pp.11-25.
- Friberg, J.
1996 *Bricks and Mud in Metro-Mathematical Cuneiform Texts*. Max-Planck-Institut für Wissenschaftsgeschichte. Preprint 32. Berlin 1996.
- Frymer, T.S.
1977 'The Nungal-Hymn and the Ekur-Prison.' in: *JESHO* 20 (1977), pp.78-89.
- Gasche, H.
1989 *La Babylonie au 17^e siècle avant notre ère: approche archéologique, problèmes et perspectives*. MHEM 1. Ghent 1989.
- George, A.R.
1992 *Babylonian Topographical Texts*. OLA 40. Louvain 1992.
- George, A.R.
1993 'Ninurta-P_qid_t's Dog Bite, and Notes on other Comic Tales' in: *Iraq* 55 (1993), pp.63-75.
- Gerardi, P.
1984 *A Bibliography of the Tablet Collections of the University Museum*. Philadelphia, Pennsylvania, 1984.
- Goodnick-Westenholz, J.
1997 *Legends of the Kings of Akkade*. MC 7. Winona Lake, Indiana, 1997.
- Goody, J.
1977 *The Domestication of the Savage Mind*. Cambridge 1977.
- Goody, J.
1986 *The Logic of Writing and the Organization of Society*. Cambridge 1986.
- Goody, J.
1987 *The Interface Between the Written and the Oral*. Cambridge 1987.
- Goody, J and Watt, I.P.
1963 'The Consequences of Literacy.' in: *Comparative Studies in Society and History* 5 (1963), pp.304-345. Reprinted in: J. Goody (ed.): *Literacy in Traditional Societies*. Cambridge 1968, pp.27-68.
- Gordon, E.I.
1957 'Sumerian Proverbs: "Collection Four".' in: *JAOS* 77 (1957), pp.67-79 and Plates

I-IV.

- Gordon, E.I.
1968 *Sumerian Proverbs. Glimpses of Everyday Life in Ancient Mesopotamia.* New York 1968.
- Gragg, G.
1973 'The Fable of the Heron and the Turtle.' in: *AfO* 24 (1973), pp.51-72.
- Green, M.W.
1981 'The Construction and Implementation of the Cuneiform Writing System.' in: *Visible Language* 15 (1981), pp.345-372.
- Greengus, S.
1979 *Old Babylonian Tablets from Ishchali and Vicinity.* Leiden 1979.
- Grégoire, J.-P.
1970 *Archives Administratives Sumériennes.* Paris 1970
- Guichard, M.
1994 'Les chars et leurs carrosserie.' in: *N.A.B.U.* 1994/31.
- Guinan, A.
1979 'De houding ten aanzien van sexualiteit in Mesopotamië. Akkadische gedragsomina.' in: *Phoenix* 25 (1979), pp.68-81.
- Guinan, A.
1989 'The Perils of High Living: Divinatory Rhetoric in *Šumma Ālu*.' in: H. Behrens, D. Loding, and M.T. Roth (eds.): *DUMU-E₂-DUB-BA-A. Studies in Honor of Åke W. Sjöberg.* Philadelphia, Pennsylvania, 1989, pp.227-235.
- Guinan, A.
1990 'The Human Behavioral Omens: On the Threshold of Psychological Inquiry.' in: *BCSMS* 19 (1990), pp.9-14.
- Hallo, W.W.
1966 Review of: C.J. Gadd and S.N. Kramer *UET* 6/1. in: *JCS* 20 (1966), pp.89-93.
- Hallo, W.W.
1982 'Notes from the Babylonian Collection II: Old Babylonian HAR-ra.' in: *JCS* 34 (1982), pp.81-93.
- Hallo, W.W.
1989 'Nippur Originals.' in: H. Behrens, D. Loding, and M.T. Roth (eds.): *DUMU-E₂-DUB-BA-A. Studies in Honor of Åke W. Sjöberg.* Philadelphia, Pennsylvania, 1989, pp.237-247.

- Harris, R.
1975 *Ancient Sippar. A Demographic Study of an Old-Babylonian City (1894-1595 B.C.)*. Istanbul 1975.
- Haussperger, M.
1987 'Nordost-Abschnitt III, südlicher Bereich 1984 (8. Kampagne).' in: B. Hrouda (ed.): *Isin-Išān Bahrīyāt III. Die Ergebnisse der Ausgrabungen 1983-1984*. Munich 1987, pp.30-34.
- Heimpel, W.
1968 *Tierbilder in der sumerischen Literatur*. Studia Pohl 2. Rome 1968.
- Herrero, P and Glassner, J.J.
1996 'Haft-Tépé: choix de textes IV'. in: *Iranica Antiqua* 31 (1996), pp.51-82.
- Hilprecht, H.V.
1903 *Die Ausgrabungen der Universität von Pennsylvania im Bêl-Tempel zu Nippur*. Leipzig 1903.
- Høyrup, J.
1994 *In Measure, Number, and Weight. Studies in Mathematics and Culture*. Albany, New York, 1994.
- Høyrup, J.
1995 *As Regards the Humanities ... Part I: Institutions, Professions and Ideas*. Max-Planck-Institut für Wissenschaftsgeschichte Preprint 15. Berlin 1995.
- Hrouda, B.
1977 'Zusammenfassung und Überblick über die wichtigsten Ergebnisse.' in: B. Hrouda (ed.): *Isin-Išān Bahrīyāt I. Die Ergebnisse der Ausgrabungen 1973-1974*. Munich 1977, pp.147-148.
- Hrouda, B.
1981 'Zusammenfassung.' in: Hrouda, B. (ed.): *Isin-Išān Bahrīyāt II. Die Ergebnisse der Ausgrabungen 1975-1978*. Munich 1981, pp.199-201.
- Hruška, B.
1995 *Sumerian Agriculture: New Findings*. Max-Planck-Institut für Wissenschaftsgeschichte. Preprint 26. Berlin 1995.
- Huehnergard, J.
1987 *Ugaritic Vocabulary in Syllabic Transcription*. HSS 32. Atlanta, Georgia, 1987.

- Huehnergard, J.
1996 'New Directions in the Study of Semitic Languages.' in: J.S. Cooper and G.N. Schwartz (eds.): *The Study of the Ancient Near East in the 21st Century. The William Foxwell Albright Centennial Conference*. Winona Lake, Indiana, 1996, pp.251-272.
- Jacobsen, T.
1974 'Very Ancient Linguistics: Babylonian Grammatical Texts.' in: D. Hymes (ed.): *Studies in the History of Linguistics. Traditions and Paradigms*. Bloomington 1974, pp.41-62.
- Jacobsen, T.
1982 'Oral to Written.' in: M.A. Dandamayev, I. Gershevitch, H. Klengel, G. Komoróczy, M.T. Larsen, and J.N. Postgate: *Societies and Languages of the Ancient Near East. Studies in Honour of I.M. Diakonoff*. Warminster 1982, pp.129-137
- Jean, C.-F.
1935 'Vocabulaire de Louvre AO 6447.' in: *RA* 32 (1935), pp.161-174.
- Jeyes, U.
1989 *Old Babylonian Extispicy. Omen Texts in the British Museum*. Leiden 1989.
- Joannès, F.
1994 'Un précurseur paléo-babylonien de la série *Šumma Ālu*. in: H. Gasche, M. Tanret, C. Janssen, and A. Degraeve (eds.): *Cinquante-deux réflexions sur le proche-orient ancien offertes en hommage à Léon De Meyer*. Louvain 1994, pp.305-312.
- Jones, T.B.
1969 *The Sumerian Problem*. New York 1969.
- Kapp, A.
1955 'Ein Lied auf Enlilbāni von Isin.' in: *ZA* 51 (1955), pp.76-87.
- Kilmer, A.D.
1977 'Notes on Akkadian *uppu*.' in: M. de Jong-Ellis (ed.): *Essays on the Ancient Near East in Memory of J.J. Finkelstein*. Hamden, Connecticut, 1977, pp.129-138.
- Kilmer, A.D.
1992 'Musical Practice in Nippur' in: M. de Jong-Ellis (ed.): *Nippur at the Centennial*. Philadelphia, Pennsylvania, 1992, pp.101-112.
- Kilmer, A.D.
1995 'Musik' in: *RLA* Band 8 Heft 5/6. Berlin 1995, pp.463-480.

- Kilmer, A.D. and Civil, M.
1986 'Old Babylonian Musical Instructions Relating to Hymnody.' in: *JCS* 38 (1986), pp.94-97.
- Klein, J.
1976 'Šulgi and Gilgameš: Two Brother-Peers (Šulgi O).' in: B.L. Eichler (ed.): *Kramer Anniversary Volume: Cuneiform Studies in Honor of Samuel Noah Kramer*. AOAT 25. Neukirchen 1976, pp.271-292.
- Klein, J.
1981 *Three Šulgi Hymns. Sumerian Royal Hymns Glorifying King Šulgi of Ur*. Ramat-Gan 1981.
- Klein, J.
1989 'Building and Dedication Hymns in Sumerian Literature.' in: *ASJ* 11 (1989), pp.27-67.
- Klein, J.
1990 'Šulgi and Išmedagan: Originality and Dependence in Sumerian Royal Hymnology.' in: J. Klein and A. Skaist (eds.): *Bar-Ilan Studies in Assyriology dedicated to Pinhas Artzi*. Ramat-Gan 1990, pp.65-136.
- Klein, J.
1993 'Additional Notes to "the Marriage of Martu".' in: A. Kempinski, A. Rainey, M. Sigrist, and D. Ussishkin (eds.): *Kinatt_tu ša d_râti. Raphael Kutscher Memorial Volume*. Tel Aviv 1993, pp.93-106.
- Köcher, F. and Oppenheim, A.L.
1958 'The Old Babylonian Omen Text VAT 7525.' in: *AfO* 18 (1957-1958), pp.62-77 and Plates V-IX.
- Kramer, S.N.
1949 *Schooldays: a Sumerian Composition Relating to the Education of a Scribe*. Philadelphia, Pennsylvania, 1949. Also published in *JAOS* 69 (1949), pp.199-215.
- Kraus, F.R.
1964 'Briefschreibübungen im altbabylonischen Schulunterricht.' in: *JEOL* 16 (1964), pp.16-39.
- Krebern timer, M.
1982 'Zu Syllabar und Orthographie der lexikalischen Texte aus Ebla. Teil 1.' in: *ZA* 72 (1982), pp.178-236.
- Krebern timer, M.
1983 'Zu Syllabar und Orthographie der lexikalischen Texte aus Ebla. Teil 2 (Glossar).' in: *ZA* 73 (1983), pp.1-47.

- Krebernik, M.
1992 'Die Textfunde der 9. Kampagne (1986).' in: B. Hrouda (ed.): *Isin-Išān Bahrīyāt* IV. Die Ergebnisse der Ausgrabungen 1986-1989. Munich 1992, pp.102-144.
- Krebernik, M.
1996 'The Linguistic Classification of Eblaite: Methods, Problems, and Results.' in: J.S. Cooper and G.N. Schwartz (eds.): *The Study of the Ancient Near East in the 21st Century. The William Foxwell Albright Centennial Conference*. Winona Lake, Indiana, 1996, pp.233-249.
- Krecher, J.
1969 'Schreiberschulung in Ugarit: die Tradition von Listen und sumerischen Texten.' in: *UF* 1 (1969), pp.131-158.
- Krecher, J.
1983 'Eine unorthographische sumerische Wortliste aus Ebla.' in: *OrAn* 22 (1983), pp.179-189.
- Krispijn, T.J.H.
1982 'Die Identifikation zweier lexikalischen Texte aus Ebla *MEE* III Nr. 62 und 63.' in: *JEOL* 27 (1981-1982), pp.47-59.
- Krispijn, T.J.H.
1990 'Beiträge zur altorientalischen Musikforschung. 1. Šulgi und die Musik.' in: *Akkadica* 70 (1990), pp.1-27.
- Krispijn, T.J.H.
1992 'The Early Mesopotamian Lexical Lists and the Dawn of Linguistics.' in: *JEOL* 32 (1991-1992), pp.12-22.
- Lacheman, E.R.
1939 'Nuziana I. Tablettes scolaires.' in: *RA* 36 (1939), pp.81-95.
- Lambert, M.
1975 'Cinq textes scolaires de Suse.' in *Journal Asiatique* 263 (1975), pp.39-50.
- Lambert, W.G.
1981 'Studies in UD.GAL.NUN.' in: *OrAn* 20 (1981), pp.81-97.
- Lambert, W.G.
1985 'A list of Gods' Names found at Mari.' in: J.-M. Durand and J.R. Kupper (eds.): *Miscellanea Babylonica. Mélanges offerts à Maurice Birot*. Paris 1985, pp.181-190.
- Landsberger, B.
1933 'Die angebliche babylonische Notenschrift.' in: *AfO Beiheft* 1 (1933), pp.170-178.

- Landsberger, B.
1967 'Über Farben im Sumerisch-akkadischen.' in: *JCS* 21 (1967), pp.139-173.
- Landsberger, B.
1967a *The Date Palm Tree and its By-Products according to the Cuneiform Sources.* Archiv für Orientforschung Beiheft 17. Graz 1967.
- Larsen, M.T.
1987 'The Mesopotamian Lukewarm Mind: Reflections on Science, Divination, and Literacy.' in: F. Rochberg-Halton (ed.): *Language, Literature, and History: Philological and Historical Studies Presented to Erica Reiner.* AOS 67. New Haven, Connecticut, 1987, pp.203-225.
- Lieberman, S.J.
1980 'Of Clay Pebbles, Hollow Clay Balls, and Writing: A Sumerian View.' in: *AJA* 84 (1980), pp.339-358.
- Lieberman, S.J.
1990 'Canonical and Official Cuneiform Texts: Towards an Understanding of Assurbanipal's Personal Tablet Collection.' in: T. Abusch, J. Huehnergard, and P. Steinkeller (eds.): *Lingering over Words. Studies in Ancient Near Eastern Literature in Honor of William L. Moran.* HSS 37. Atlanta, Georgia, 1990, pp.305-336.
- Lieberman, S.J.
1992 'Nippur: City of Decisions.' in: M. de Jong-Ellis (ed.): *Nippur at the Centennial.* Philadelphia, Pennsylvania, 1992, pp.127-136.
- Limet, H.
1982 'Peuple et humanité chez les Sumériens.' in: G. van Driel, Th.J.H. Krispijn, M. Stol, and K.R. Veenhof (eds.): *Zikir Šumim. Assyriological Studies Presented to F.R. Kraus on the Occasion of his Seventieth Birthday.* Leiden 1982, pp.258-267.
- Livingstone, A.
1986 *Mystical and Mythological Explanatory Works of Assyrian and Babylonian Scholars.* Oxford 1986.
- Lloyd, G.E.R.
1979 *Magic, Reason and Experience. Studies in the Origins and Development of Greek Science.* Cambridge 1979.
- Lloyd, G.E.R.
1992 'Methods and Problems in the History of Ancient Science. The Greek Case.' in: *Isis* 83 (1992), pp.564-577.
- Ludwig, M.-C.
1990 *Untersuchungen zu den Hymnen des Išme-Dagan von Isin.* SANTAG 2.

Wiesbaden 1990.

Marrou, H.-I.

1948 *Histoire de l'éducation dans l'antiquité*. Paris 1948.

Matouš, L.

1933 *Die lexikalischen Tafelserien der Babylonier und Assyrier in den Berliner Museen I: Gegenstandslisten (Serie HAR-ra = hubullu)*. Berlin 1933.

Maul, S.M.

1991 Review of O.R. Gurney *OECT* 11. In: *BiOr* 48 (1991), pp.852-860.

Meissner, B.

1925 *Babylonien und Assyrien*. Band II. Heidelberg 1925.

Meyer, L. de, Gasche, H., and Tanret, M.

1984 'Tell ed-Der. La vie en Babylonie il y a 4000 ans.' in: *Archéologia: préhistoire et archéologie* 195 (1984), pp.8-25.

Michalowski, P.

1981 'Carminative Magic: Towards an Understanding of Sumerian Poetics.' in: *ZA* 71 (1981), pp.1-18.

Michalowski, P.

1981a 'An Old Babylonian Literary Fragment Concerning the Kassites.' in: *Annali* 41 (1981), pp.385-389 and Plate I.

Michalowski, P.

1983 Review of Luigi Cagni: *Briefe aus dem Iraq Museum. Altbabylonische Briefe* 8. Leiden 1980. In: *JCS* 35 (1983), pp.221-228.

Michalowski, P.

1983a Review of M. Civil: *MSL* 14. In: *JNES* 42 (1983), pp.151-153.

Michalowski, P.

1984 'Observations on a Sumerian Literary Catalogue from Ur.' in: *JCS* 36 (1984), pp.89-92.

Michalowski, P.

1985 'On Some Early Sumerian Magical Texts.' in: *OrNS* 54 (1985), pp.216-225.

Michalowski, P.

1987 'Language, Literature, and Writing at Ebla.' in: L. Cagni (ed.): *Ebla 1975-1985: Dieci anni di studi linguistici e filologici*. Istituto universitario orientale, dipartimento di studi asiatici, series minor 27. Naples 1987, pp.165-175.

Michalowski, P.

- 1987a 'Charisma and Control: On Continuity and Change in Early Mesopotamian Bureaucratic Systems.' in: M. Gibson and R.D. Biggs (eds.): *The Organization of Power. Aspects of Bureaucracy in the Ancient Near East*. SAOC No.46. Chicago 1987 (1991²), pp.45-57.
- Michalowski, P.
1989 *The Lamentation over the Destruction of Sumer and Ur*. MC 1. Winona Lake, Indiana, 1989.
- Michalowski, P.
1990 'Presence at the Creation.' in: T. Abusch, J. Huehnergard, and P. Steinkeller (eds.): *Lingering over Words. Studies in Ancient Near Eastern Literature in Honor of William L. Moran*. HSS 37. Atlanta, Georgia, 1990, pp.381-396.
- Michalowski, P.
1993 'On the Early Toponymy of Sumer: A Contribution to the Study of Early Mesopotamian Writing.' in: A. Kempinski, A. Rainey, M. Sigrist, and D. Ussishkin (eds.): *Kinattūtu ša dārāti. Raphael Kutscher Memorial Volume*. Tell Aviv 1993, pp.119-133.
- Michalowski, P.
1993a 'The Torch and the Censer.' in: M.E. Cohen, D.C. Snell, and D.B. Weisberg: *The Tablet and the Scroll. Near Eastern Studies in Honor of William W. Hallo*. Bethesda, Maryland, 1993, pp.152-162.
- Michalowski, P.
1994 'Writing and Literacy in Early States.' in: Deborah Keller-Cohen (ed.): *Literacy. Interdisciplinary Conversations*. Cresskill, New Jersey, 1994, pp.49-70.
- Mieroop, M. van de
1987 *Crafts in the Early Isin Period: A Study of the Isin Craft Archive from the Reigns of Išbi-Erra and Šū-Ilišu*. OLA 24. Louvain 1987.
- Mieroop, M. van de
1993 'The Reign of Rim-Sin.' in: *RA* 87 (1993), pp.47-69.
- Mieroop, M. van de
1993a Review of: E.C. Stone and D.I. Owen: *Adoption in Old Babylonian Nippur and the Archive of Mannum-mešu-lissur*. in: *JCS* 43-45 (1991-1993), pp.124-130.
- Neugebauer, O.
1937 *Mathematische Keilschrift-Texte*. Band 1-3. Berlin 1935-1937.
- Neugebauer, O.
1957 *The Exact Sciences in Antiquity*. New York 1969² (first edition 1957).
- Neugebauer, O. and Sachs, A.

- 1945 *Mathematical Cuneiform Texts*. With a Chapter by A. Goetze. AOS 29. New Haven, Connecticut, 1945 (reprint 1986).
- Nissen, H.J.
1981 'Bemerkungen zur Listenliteratur Vorderasiens im 3. Jahrtausend.' in: L. Cagni (ed.): *La Lingua di Ebla*. Naples 1981, pp.99-108.
- Nissen, H.J.
1988 'Schrift als geschriebene Sprache. (Das Beispiel der frühen Babylonien).' in: P. Vavroušek and V. Souček (eds.): *Šulmu. Papers on the Ancient Near East Presented at International Conference of Socialist Countries*. Prague 1988, pp.225-233.
- Nissen, H.J., Damerow, P., and Englund, R.K.
1990 *Frühe Schrift und Techniken der Wirtschaftsverwaltung im alten Vorderen Orient. Informationsspeicherung und -verarbeitung vor 5000 Jahren*. Berlin 1990. (Second revised edition 1991).
- Nougayrol, J.
1965 "'Vocalises" et "syllabes en liberté" à Ugarit.' in: H.G. Güterbock and T. Jacobsen (eds.): *Studies in Honor of Benno Landsberger on His Seventy-Fifth Birthday, April 21, 1965*. AS 16. Chicago 1965, pp.29-39.
- Oelsner, J.
1989 'Zu einer Schülertafel aus Mari.' in: *N.A.B.U.* 1989/33.
- Oppenheim, A.L.
1977 *Ancient Mesopotamia. Portrait of a Dead Civilization*. Revised Edition Completed by Erica Reiner. Chicago 1977² (first edition 1964).
- Oppenheim, A.L.
1978 'Man and Nature in Mesopotamian Civilization.' in: C.C. Gillipie (ed.): *Dictionary of Scientific Biography*. Volume 15. New York 1978, pp.634-666.
- Pedersén, O.
1985 *Archives and Libraries in the City of Assur. A Survey of the Material from the German Excavations. Part I*. Uppsala 1985.
- Pettinato, G.
1966 *Die Ölwahrsagung bei den Babyloniern*. Rome 1966.
- Pettinato, G.
1972 'Il commercio con l'estero della Mesopotamia meridionale nel 3. millennio av. Cr. alla luce delle fonti letterarie e lessicali sumeriche.' in: *Mesopotamia* 7 (1972), pp.43-166.
- Pettinato, G.

- 1978 'Liste presargoniche di uccelli nella documentazione di Fara ed Ebla.' in : *OrAn* 17 (1978), pp.165-178, and Tavola XIV-XVI.
- Pinker, S.
1994 *The Language Instinct. The New Science of Language and Mind*. London 1994.
- Pongratz-Leisten, B.
1994 *Ina Šulmi Īrub. Die kulttopographische und ideologische Programmatik der ak tu-Prozession in Babylonien und Assyrien im I. Jahrtausend v.Chr.* Mainz 1994.
- Pongratz-Leisten, B., Deller, K., and Bleibtreu, E.
1992 'Götterstreitwagen und Götterstandarten: Götter auf dem Feldzug und ihr Kult im Feldlager.' in: *BaM* 23 (1992), pp.291-356 and Tafeln 50-69.
- Potts, D.T.
1990 'Locky (*sic*) and Key in Ancient Mesopotamia.' in: *Mesopotamia* 25 (1990), pp.185-192.
- Powell, M.A.
1987 'The Tree Section of ur_5 (=HAR)-ra = *hubullu*.' in: *BSA* 3 (1987), pp.145-151.
- Powell, M.A.
1992 'Timber Production in Presargonic Lagaš.' in: *BSA* 6 (1992), pp.99-122.
- Prang, E.
1976 'Das Archiv des Imgûa.' in: *ZA* 66 (1976), pp.1-44.
- Probst, P.
1992 'Die Macht der Schrift. Zum ethnologischen Diskurs über eine populäre Denkfigur.' in: *Anthropos* 87 (1992), pp.167-182.
- Reiner, E.
1994 'Linguistics in the Ancient Near East: Akkadian.' in: G. Lepschy (ed.) *History of Linguistics. Vol I: The Eastern Traditions*. London 1994, pp.87-96. Original Italian edition Bologna 1990.
- Reiner, E.
1995 *Astral Magic in Babylonia*. Philadelphia, Pennsylvania, 1995.
- Robertson, J.F.
1981 *Redistributive Economies in Ancient Mesopotamian Society: A Case Study from Isin-Larsa Period Nippur*. Dissertation University of Pennsylvania (1981). Ann Arbor, Michigan, 1983.
- Robson, E.
forthcoming *Old Babylonian Coefficient Lists and the Wider Context of Mathematics in*

Ancient Mesopotamia, 2100-1600 BC.

Rochberg-Halton, F.

1984 'Canonicity in Cuneiform Texts.' in: *JCS* 36 (1984), pp.127-144.

Rochberg-Halton, F.

1988 *Aspects of Babylonian Celestial Divination: The Lunar Eclipse Tablets of En_ma Anu Enlil.* AfO Beiheft 22. Horn 1988.

Römer, W.H.Ph. and Soden, W. von

1990 *Weisheitstexte I.* TUAT III/1. Gütersloh 1990.

Römer, W.H.Ph.

1993 'Beiträge zum Lexikon des Sumerischen (4). Termini für Schiffe und Schifffahrt, Schiffsteile und Schiffszubehör - vor allem in sumerischen "literarischen" Texten - .' in: M. Dietrich and O. Loretz (eds.): *Mesopotamica - Ugaritica - Biblica. Festschrift für Kurt Bergerhof zur Vollendung seines 70. Lebensjahres am 7. Mai 1992.* Neukirchen 1993, pp.343-395.

Römer, W.H.Ph.

1994 'Beiträge zum Lexikon des Sumerischen (5).' in: *AfO* 40/41 (1993-1994), pp.24-38.

Roth, M.T.

1979 *Scholastic Tradition and Mesopotamian Law: A Study of FLP 1287, a Prism in the Collection of the Free Library of Philadelphia.* Dissertation University of Philadelphia. Ann Arbor, Michigan, 1979.

Roth, M.T.

1980 'The Scholastic Exercise "Laws about Rented Oxen".' in: *JCS* 32 (1980), pp.127-146.

Roth, M.T.

1983 'The Slave and the Scoundrel. CBS 10467, a Sumerian Morality Tale?' in: *JAOS* 103 (1983), pp.275-282.

Roth, M.T.

1995 *Law Collections from Mesopotamia and Asia Minor.* Atlanta, Georgia, 1995.

Rubin, D.C.

1995 *Memory and Oral Traditions. The Cognitive Psychology of Epic, Ballads, and Counting-out Rhymes.* Oxford 1995.

Salonen, A.

1951 *Die Landfahrzeuge des alten Mesopotamien nach sumerisch-akkadischen Quellen (mit besonderer berücksichtigung der 5. Tafel der Serie HAR-ra = hubullu).* Helsinki 1951.

- Sallaberger, W.
1993 *Der Kultische Kalender der Ur III-Zeit*. Berlin 1993.
- Sallaberger, W.
1995 'Eine reiche Bestattung in neusumerischen Ur.' in: *JCS* 47 (1995), pp.15-21.
- Sallaberger, W.
1996 *Der babylonische Töpfer und seine Gefässe. Nach Urkunden altsumerischer bis altbabylonischer Zeit sowie lexikalischen und literarischen Zeugnissen*. With a Chapter by M. Civil: 'HAR-ra = hubullu: Tablet X dug = *karpatu*.' MHEM 2. Ghent 1996.
- Schuster, H.S.
1938 'Die nach Zeichen geordneten sumerisch-akkadischen Vokabulare.' in: *ZA* 44 (1938), pp.217-270.
- Selz, G.J.
1995 'Den Fährmann bezahlen! Eine lexikalisch-kulturhistorische Skizze zu den Bedeutungen von *addir*.' in: *AoF* 22 (1995), pp.197-209.
- Selz, G.J.
1995a 'Maš-da-ri-a und Verwandtes. Ein Versuch über *da-ri* "an der Seite führen": ein zusammengesetztes Verbum und einige nominale Ableitungen.' in: *ASJ* 17 (1995), pp.251-274.
- Sjöberg, Å.W.
1973 'Nungal in the Ekur.' in: *AfO* 24 (1973), pp.19-46 and Plates IV-X.
- Sjöberg, Å.W.
1973a 'Der Vater und sein missratener Sohn.' in: *JCS* 25 (1973), pp.105-169.
- Sjöberg, Å.W.
1975 'The Old Babylonian Eduba.' in: S. Lieberman (ed.): *Sumerological Studies in Honor of Thorkild Jacobsen on his Seventieth Birthday, June 7, 1974*. AS 20. Chicago 1975, pp.159-179.
- Sjöberg, Å.W.
1977 'Miscellaneous Sumerian Texts, II.' in: *JCS* 29 (1977), pp.3-45.
- Sjöberg, Å.W.
1993 'CBS 11319+. An Old-Babylonian Schooltext from Nippur.' in: *ZA* 83 (1993), pp.1-21.
- Sjöberg, Å.W.
1996 'UET VII, 73: An Exercise Tablet Enumerating Professions.' in: Ö. Tunca and D. Deheselle (eds.): *Tablettes et images aux pays de Sumer et d'Akkad. Mélanges*

offerts à Monsieur H. Limet. Liège 1996, pp.117-139

- Soden, W. von
1936 'Leistung und Grenze sumerischer und babylonischer Wissenschaft.' in: *Die Welt als Geschichte* 2 (1936), pp.411-464 and pp.509-557. Reprinted with addenda and corrigenda in: B. Landsberger and W. von Soden *Die Eigenbegrifflichkeit der babylonischen Welt. Leistung und Grenze sumerischer und babylonischer Wissenschaft*. Darmstadt 1965 and 1974.
- Soden, W. von
1960 *Zweisprachigkeit in der geistigen Kultur Babyloniens*. Vienna 1960.
- Soden, W. von
1973 *Sprache, Denken und Begriffsbildung im Alten Orient*. Wiesbaden 1973.
- Soden, W. von
1985 *Einführung in die Altorientalistik*. Darmstadt 1985.
- Sollberger, E.
1965 'A Three-Column *Silbenvokabular A*.' in: H.G. Güterbock and T. Jacobsen (eds.): *Studies in Honor of Benno Landsberger on His Seventy-Fifth Birthday, April 21, 1965*. AS 16. Chicago 1965, pp.21-28.
- Soldt, W.H. van
1989 'An Orthographic Peculiarity in the Akkadian Letters of Tušratta.' in: O.M.C. Haex, H.H. Curvers, and P.M.M.G. Akkermans (eds.): *To the Euphrates and Beyond. Archaeological Studies in Honour of Maurits N. van Loon*. Rotterdam 1989, pp.103-115.
- Soldt, W.H. van
1991 *Studies in the Akkadian of Ugarit. Dating and Grammar*. AOAT 40. Neukirchen 1991.
- Soldt, W.H. van
1993 'The Ugarit Version of Harra-hubullu 20-21a. A New Source.' in: M. Dietrich and O. Loretz (eds.): *Mesopotamica - Ugaritica - Biblica. Festschrift für Kurt Bergerhof zur Vollendung seines 70. Lebensjahres am 7. Mai 1992*. Neukirchen 1993, pp.427-446.
- Soldt, W.H. van
1995 'Babylonian Lexical, Religious and Literary Texts and Scribal Education at Ugarit and its Implications for the Alphabetic Literary Texts.' in: M. Dietrich and O. Loretz (eds.): *Ugarit - ein ostmediterranes Kulturzentrum im Alten Orient. Ergebnisse und Perspektiven der Forschung. Band I: Ugarit und seine altorientalische Umwelt*. Münster 1995, pp.171-212.
- Soldt, W.H. van

- 1995a 'Three Tablets from Tell Hammām et-Turkmān.' in: *Studio Historiae Ardens. Ancient Near Eastern Studies Presented to Philo H.J. Houwink ten Cate on the Occasion of his 65th Birthday*. Istanbul 1995, pp.275-291.
- Soubeyran, D.
1984 'Textes mathématiques de Mari.' in: *RA* 78 (1984), pp.19-48.
- Steinkeller, P.
1978 'On the Reading and Meaning of *a-ZAR-la*. in: *RA* 72 (1978), pp.73-76.
- Steinkeller, P.
1979 'More Evidence for the Reading bul_x of LAGABxSUM.' in: *RA* 73 (1979), pp.91-92.
- Steinkeller, P.
1980 'Mattresses and Felt in Early Mesopotamia.' in: *OrAn* 19 (1980), pp.79-100.
- Steinkeller, P.
1987 'Administrative and Economic Organization of the Ur III State: The Core and the Periphery.' in: M. Gibson and R.D. Biggs (eds.): *The Organization of Power. Aspects of Bureaucracy in the Ancient Near East*. SAOC No.46. Chicago 1987 (1991²), pp.15-33.
- Steinkeller, P.
1987a 'Battering Rams and Siege Engines at Ebla.' in: *N.A.B.U.* 1987/27.
- Steinkeller, P.
1989 *Sale Documents of the Ur-III-Period*. FAOS 17. Stuttgart 1989
- Steinkeller, P.
1990 'Threshing Implements in Ancient Mesopotamia: Cuneiform Sources.' in: *Iraq* 52 (1990), pp.19-23.
- Steinkeller, P.
1990a 'The Value sur_x of ÉREN in Third Millennium Sources.' in: *N.A.B.U.* 1990/12.
- Steinkeller, P.
1991 'The Container *kabkūru*.' in: *N.A.B.U.* 1991/4.
- Steinkeller, P.
1996 Review of: R.K. Englund and H.J. Nissen: *Die lexikalischen Listen der archaischen Texte aus Uruk*. (ATU 3). Berlin 1993. in: *AfO* 42/43 (1995-1996), pp.211-214.
- Steinkeller, P. and Postgate, J.N.
1992 *Third-Millennium Legal and Administrative Texts in the Iraq Museum*. MC 4. Winona Lake, Indiana, 1992.

- Stock, B.
1990 *Listening for the Text. On the Uses of the Past.* Baltimore, Maryland, 1990.
- Stol, M.
1979 Review of S.D. Simmons: *Early Old Babylonian Documents. YOS 14.* New Haven 1978. in: *JCS* 31 (1979), pp.177-183.
- Stol, M.
1987 'Garlic, Onion, Leek.' in: *BSA* 3, pp.57-80.
- Stol, M.
1991 'Old Babylonian Personal Names.' in: *SEL* 8 (1991), pp.191-212
- Stol, M.
1994 'Milch(produkte). A. In Mesopotamien.' in: *RLA* Band 8 Heft 3/4, pp.189-201. Berlin 1994.
- Stol, M.
1994a 'Beer in Neo-Babylonian Times.' in: L. Milano (ed.): *Drinking in Ancient Societies. History and Culture of Drinks in the Ancient Near East.* Padua 1994, pp. 155-183.
- Stol, M.
1996 'Quelques nombres en écriture cunéiforme.' in: *N.A.B.U.* 1996/73.
- Stone, E.C.
1977 'Economic Crisis and Social Upheaval in Old Babylonian Nippur.' in: L.D. Levine and T.C. Young, Jr. (eds.): *Mountains and Lowlands: Essays in the Archaeology of Greater Mesopotamia.* BibMes 7. Malibu, California, 1977, pp.267-289.
- Stone, E.C.
1987 *Nippur Neighbourhoods.* SAOC 44. Chicago 1987.
- Stone, E.C. and Owen, D.I.
1991 *Adoption in Old Babylonian Nippur and the Archive of Mannum-mešu-li₂ur.* MC 3. Winona Lake, Indiana, 1991.
- Tadmor, H
1977 'A Lexicographical Text from Hazor.' in: *IEJ* 27 (1977), pp.98-102.
- Tanret, M.
1982 'Les tablettes "scolaires" découvertes à Tell ed-Dēr.' in: *Akkadica* 27 (1982), pp.46-49.
- Tanret, M.

- 1986 'Fragments de tablettes pour des fragments d'histoire.' in: L. De Meyer, H. Gasche, and F. Vallat (eds.): *Fragmenta historiae elamicae: mélanges offerts à M.J. Steve*. Paris 1986, pp.139-150.
- Tanret, M.
1989 'Une liste d'éléments de noms propres de Sippar.' in: M. Lebeau and Ph. Talon (eds.): *Reflets des deux fleuves: volume de mélanges offerts à André Finet*. Louvain 1989, pp.167-168.
- Thureau-Dangin, F.
1912 'Notes Assyriologiques XX.' in: *RA* 9 (1912), pp.73-80.
- Thureau-Dangin, F.
1931 'Vocabulaires de Ras-Shamra.' in: *Syria* 12 (1931), pp.225-266 and Plates 44-52.
- Thureau-Dangin, F.
1932 'Nouveaux fragments de vocabulaires de Ras-Shamra.' in: *Syria* 13 (1932), pp.233-241.
- Tinney, S.
1995 'On the Poetry for King Išme-Dagan.' in: *OLZ* 90 (1995), pp.5-26.
- Vanstiphout, H.L.J.
1978 'Lipit-Eštar's Praise in the Edubba.' in: *JCS* 30 (1978), pp.33-61.
- Vanstiphout, H.L.J.
1979 'How Did They Learn Sumerian?' in: *JCS* 31 (1979), pp.118-126.
- Vanstiphout, H.L.J.
1982 'An Essay on "The Home of the Fish".' in: J. Quaegebeur (ed.) *Studia Paulo Naster Oblata II. Orientalia Antiqua*, OLA 13. Louvain 1982, pp.311-319.
- Vanstiphout, H.L.J.
1984 'On the Sumerian Disputation between the Hoe and the Plough.' in: *AuOr* 2 (1984), pp.239-251.
- Vanstiphout, H.L.J.
1986 'Some Remarks on Cuneiform *écritures*.' in: H.L.J. Vanstiphout, K. Jongeling, F. Leemhuis, and G.J. Reinink (eds.): *Scripta Signa Vocis. Studies about Scripts, Scriptures, Scribes and Languages in the Near East, Presented to J.H. Hoppers by his Pupils, Colleagues and Friends*. Groningen 1986, pp.217-234.
- Vanstiphout, H.L.J.
1995 'The Matter of Aratta: An Overview.' in: *OLP* 26 (1995), pp.5-20.
- Vanstiphout, H.L.J.
1995a 'Memory and Literacy in Ancient Western Asia.' in: J.M. Sasson (ed.):

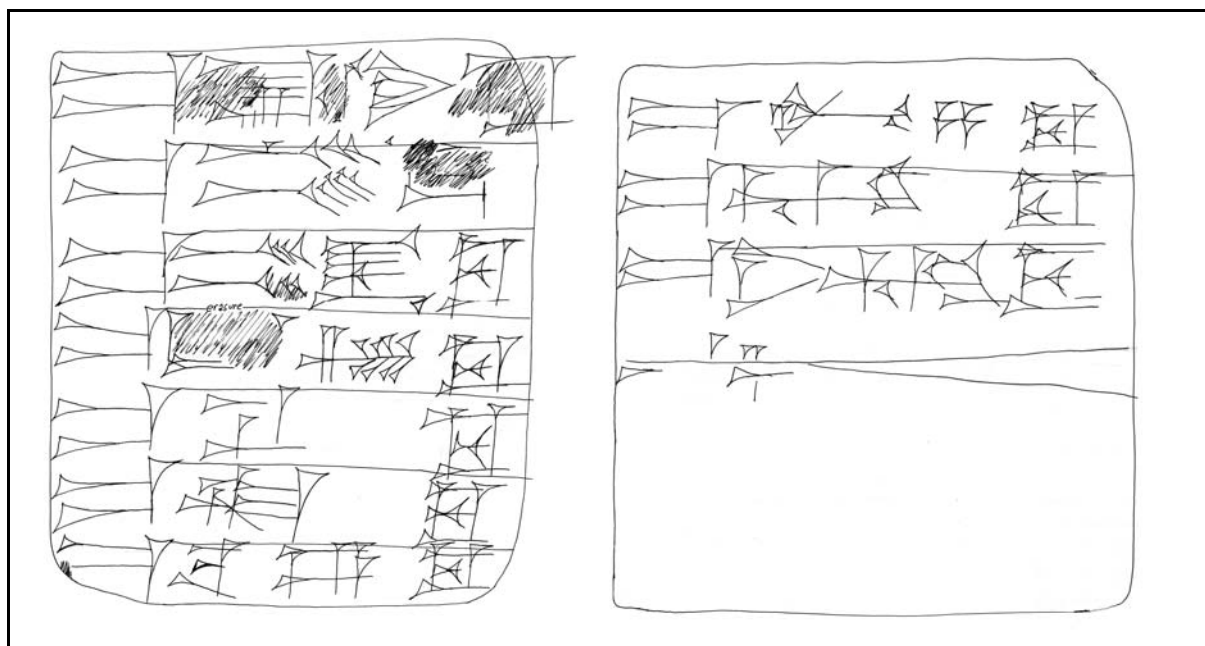
- Civilizations of the Ancient Near East*. Volume IV, pp.2181-2196. New York 1995.
- Veldhuis, N.C.
1993 'An Ur III Incantation against the Bite of a Snake, a Scorpion, or a Dog.' in: *ZA* 83 (1993), pp.161-169.
- Veldhuis, N.C.
1995 Review of: R.K. Englund and H.J. Nissen: *Die lexikalischen Listen der archaischen Texte aus Uruk*. (ATU 3). Berlin 1993. in: *BiOr* 52 (1995), pp.433-440.
- Veldhuis, N.C.
1996 'The Ugarit Lexical Text RS 13.53 (PRU III, Planche X).' in: *WdO* 27 (1996), pp.25-29.
- Veldhuis, N.C.
1996a 'A Nippur Emesal Vocabulary.' in: *ASJ* 18 (1996), pp.229-234.
- Veldhuis, N.C. and Oelsner, J.
forthcoming 'Ein keilschriftliches Palimpsest.' in: *ZA*
- Vogelzang, M.E. and Vanstiphout, H.L.J. (eds.)
1992 *Mesopotamian Epic Literature. Oral or Aural?* Lewiston 1992.
- Volk, K.
1995 *Inanna und Šukaletuda. Zur historisch-politischen Deutung eines sumerischen Literaturwerkes*. SANTAG 3. Wiesbaden 1995.
- Volk, K.
1996 'Methoden altmesopotamischer Erziehung nach Quellen der altbabylonischen Zeit.' in: *Saeculum* 47 (1996), pp.178-216.
- Waetzoldt, H.
1972 *Untersuchungen zur neusumerischen Textilindustrie*. Rome 1972.
- Waetzoldt, H.
1986 'Keilschrift und Schulen in Mesopotamien und Ebla.' in: L. Kriss-Rettenbeck and M. Liedtke (eds.): *Erziehungs- und Unterrichtsmethoden im historischen Wandel*. Schriftenreihe zum Bayerischen Schulmuseum Ichenhausen, Zweigmuseum des Bayerischen Nationalmuseums, Bd.4. Bad Heilbrunn 1986, pp.36-50.
- Waetzoldt, H.
1986a 'Ein altbabylonischer Schultext und zwei Wirtschaftstexte aus dem Vorderasiatischen Museum.' in: *AoF* 13 (1986), pp.3-9.

- Waetzoldt, H.
1988 'Die Entwicklung der Naturwissenschaften und des naturwissenschaftlichen Unterrichts in Mesopotamien.' in: J.G. Prinz von Hohenzollern and M. Liedtke (eds.): *Naturwissenschaftlicher Unterricht und Wissenskumulation. Geschichtliche Entwicklung und gesellschaftliche Auswirkungen*. Schriftenreihe zum Bayerischen Schulmuseum Ichenhausen, Zweigmuseum des Bayerischen Nationalmuseums, Bd.7. Bad Heilbrunn 1988, pp.31-49.
- Waetzoldt, H.
1989 'Der Schreiber als Lehrer in Mesopotamien.' in: J.G. Prinz von Hohenzollern and M. Liedtke (eds.): *Schreiber, Magister, Lehrer. Zur Geschichte und Funktion eines Berufsstandes*. Schriftenreihe zum Bayerischen Schulmuseum Ichenhausen, Zweigmuseum des Bayerischen Nationalmuseums, Bd.8. Bad Heilbrunn 1989, pp.33-50.
- Waetzoldt, H.
1990 'Zu einer Schülertafel aus Mari.' in: *N.A.B.U.* 1990/97.
- Watanabe, K.
1987 'Freiburger Vorläufer zu HAR-ra = *hubullu* XI und XII.' in: *ASJ* 9 (1987), pp.277-291.
- Weidner, E.F.
1914 'Sumerische Apotropaia.' in: *OLZ* 17 (1914), pp.304-308.
- Weidner, E.F.
1952 'Die Bibliothek Tiglatpileser I.' in: *AfO* 16 (1952), pp.197-215.
- Weissbach, F.H.
1898 *Die sumerische Frage*. Leipzig 1898.
- Weisberg, D.B.
1970 'An Old Babylonian Forerunner to *Šumma Ālu*.' in *HUCA* 40/41 (1969-1970), pp.87-104.
- Weitemeyer, M.
1990 'Babylonian and Assyrian Catalogues.' in: E. Keck, S. Søndergaard, and E. Wulff (eds.): *Living Waters. Scandinavian Orientalistic Studies Presented to Professor Dr. Frede Løkkegaard on his Seventy-Fifth Birthday, January 27th 1990*. Copenhagen 1990, pp.379-390.
- Westenholz, A.
1975 *Old Sumerian and Old Akkadian Texts in Philadelphia Chiefly from Nippur. Part I: Literary and Lexical Texts and the Earliest Administrative Documents from Nippur*. Bibliotheca Mesopotamica 1. Malibu 1975.
- Westenholz, A.

- 1977 'Old Akkadian Schooltexts.' in: *AfO* 25 (1974-1977), pp.95-110.
- Westenholz, A.
1993 'The World View of Sargonic Officials. Differences in Mentality Between Sumerians and Akkadians.' in: M. Liverani (ed.): *Akkad. The First World Empire. Structure, Ideology, Traditions*. Padua 1993, pp.157-169.
- Wiggermann, F.A.M.
1992 *Mesopotamian Protective Spirits. The Ritual Texts*. CM 1. Groningen 1992.
- Wilcke, C.
1975 'Formale Gesichtspunkte in der sumerischen Literatur.' in: S. Lieberman (ed.): *Sumerological Studies in Honor of Thorkild Jacobsen on his Seventieth Birthday, June 7, 1974*. AS 20. Chicago 1975, pp.205-316.
- Wilcke, C.
1976 *Kollationen zu den sumerischen literarischen Texten aus Nippur in der Hilprecht-Sammlung Jena*. Berlin 1976.
- Wilcke, C.
1987 'Die Inschriftenfunde der 7. und 8. Kampagnen (1983 und 1984).' in: B. Hrouda (ed.): *Isin-Iš_n Bahrīyāt III. Die Ergebnisse der Ausgrabungen 1983-1984*. Munich 1987, pp.83-120 and Tafel 33-44.
- Young, M.F.D.
1971 'An Approach to the Study of Curricula as Socially Organized Knowledge.' in: M.F.D. Young (ed.): *Knowledge and Control*. London 1971, pp.19-46.
- Zettler, R.L.
1991 'Nippur under the Third Dynasty of Ur: Area TB.' in: *AuOr* 9 (1991), pp.251-281.
- Zettler, R.L.
1992 *The Ur III Temple of Inanna at Nippur. The Operation and Organization of Urban Religious Institutions in Mesopotamia in the Late Third Millennium B.C.* BBVO 11. Berlin 1992.
- Zumthor, P.
1972 *Essai de poétique médiévale*. Paris 1972.

Plates

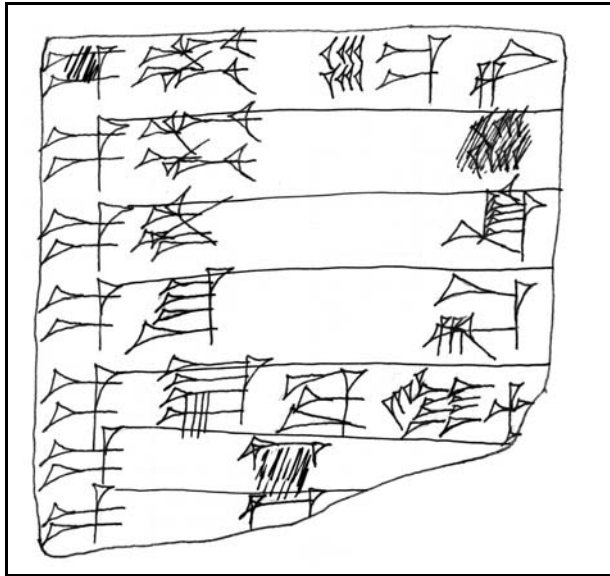
In the following plates a few of the texts edited in this volume are presented in handcopy. In accordance with the policy of the Yale Babylonian Collection this includes the relevant texts in their possession. The Nippur texts, the main body of data on which this study rests, have not been copied systematically. The added value of copies over transliterations is minimal in the case of a composition with so many duplicates. For a first impression of what the Nippur material looks like, a few tablets have been copied and included as illustrations in §2.3.3. E. Chiera's *Sumerian Lexical Texts* (Chicago 1929) provides countless additional examples. For a more thorough investigation no copy can take the place of the original.



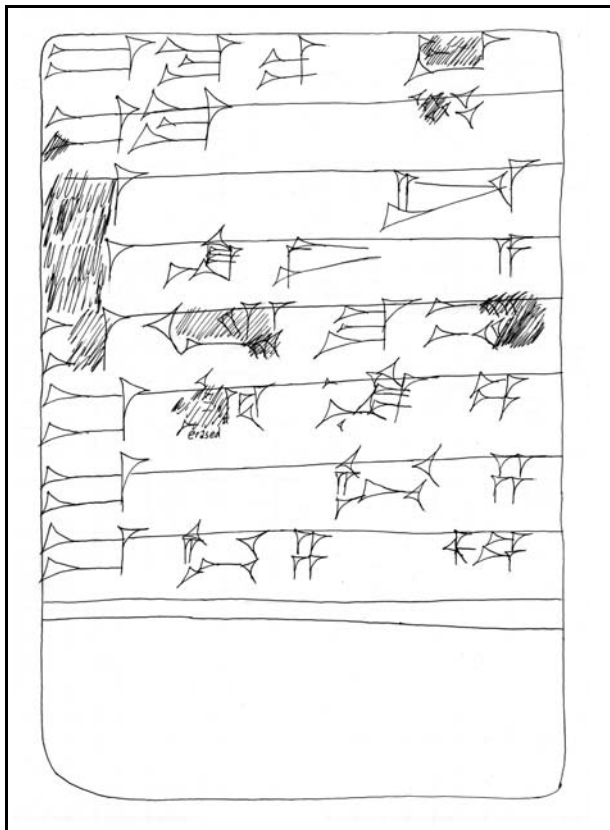
NP III-03 NCBT 1891



NP III-04 YBC 6702



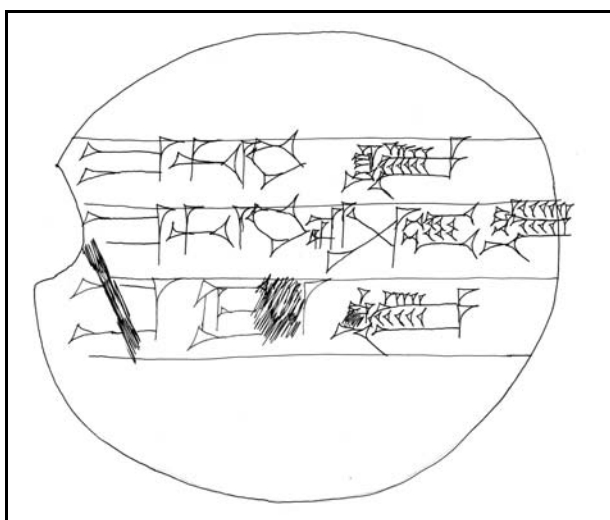
NP III-05 YBC 12048



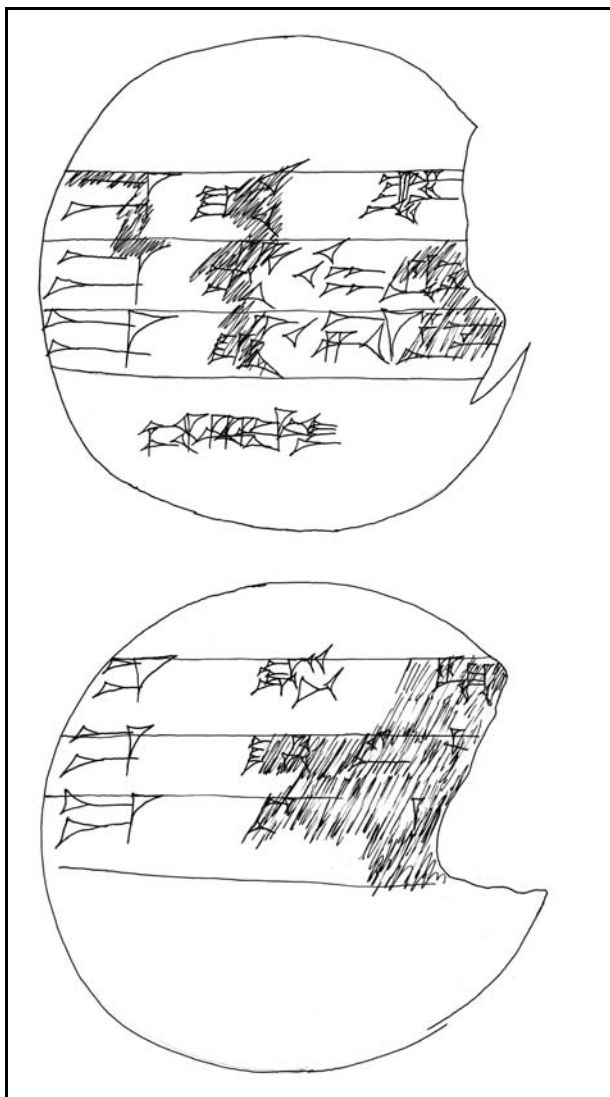
NP III-06 YBC 6717



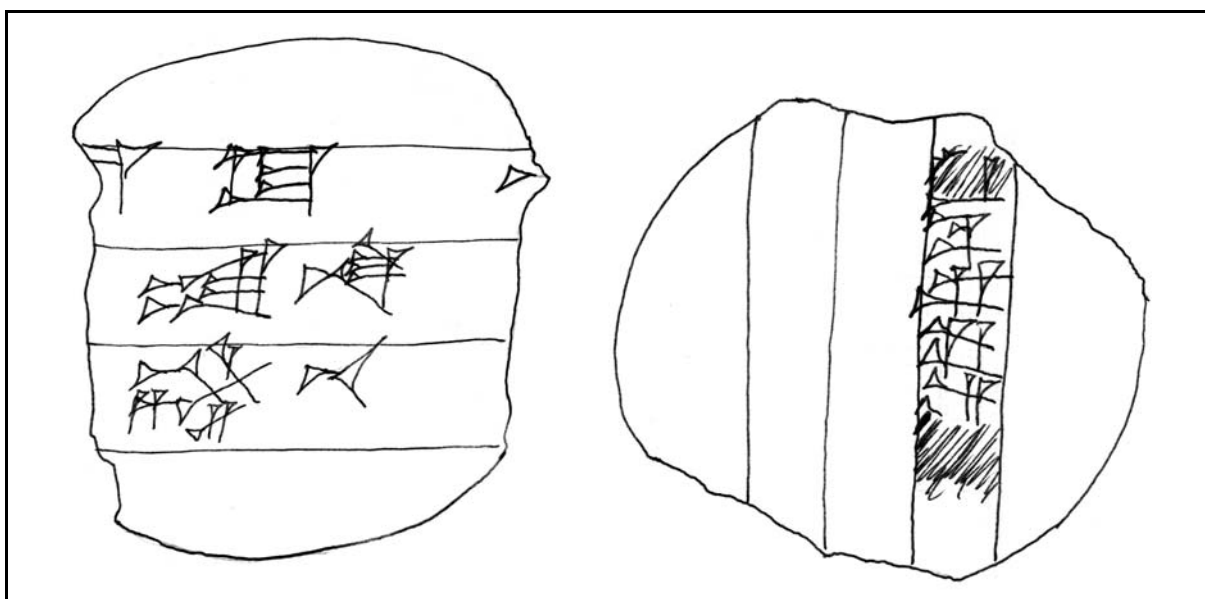
NP III-07 YBC 1991



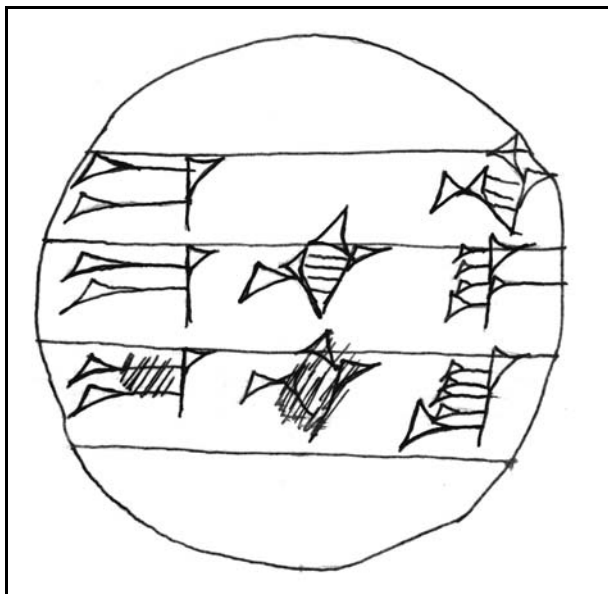
NP IV-10 YBC 8936



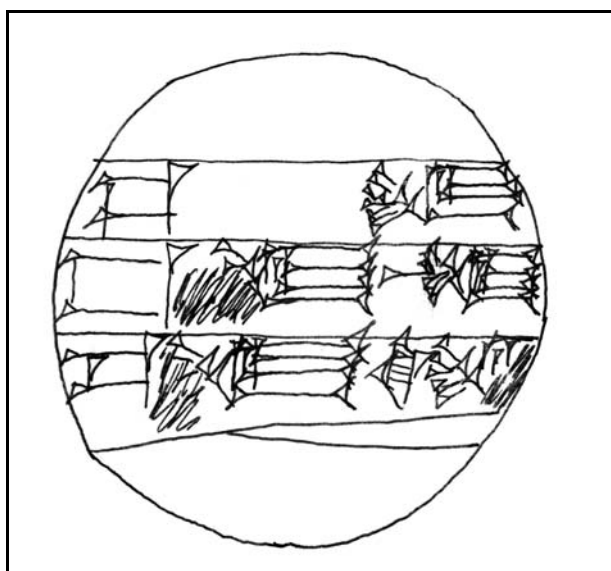
NP IV-11 YBC 9907



NP IV-15 NCBT 1918



NP IV-16 NBC 8048



NP IV-17 NBC 8063