

The Smell of the Cage¹

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for Slava Ivanov on the occasion of his 80th birthday

§1.1. It may seem less than remarkable to many observers of the advancing civil rights movement in the United States that, in November of 2008, citizens of this country elected a black man to the office of President. Barack Obama is not personally descended from African slaves; still, his ascension to the highest elective US office, despite the lingering liability of his skin color, represents a true benchmark in a sordid history of abuse that is intimately related to the European pillage of the New World. The history of European enslavement of Africans for the purpose of forced labor in transatlantic colonies describes a cultural atrocity whose flames burned brightly in the American South, but, we might note, longest in Brazil, where, beginning in the 16th century, hard labor in sugar cane production and mining operations was transferred by the Portuguese from the deteriorating indigenous slave populations into the hands of imported Africans. Here as in other New World colonies, slavery well outlived its abolishment in Europe—in 1761 in Portugal,² or with the Slave Trade

Act effectively frozen in the British Empire in 1807 until its eventual prohibition in 1834.³

§1.2. The US followed Britain in the abolition of the slave trade in the early 19th century,⁴ but retained legal

¹ The following is the revised version of a paper presented at the conference *Origins of Early Writing Systems*, held in Beijing, PRC, in October of 2007. *Origins* was funded by the CAENO Foundation, New York, and organized by the Department of Near Eastern Languages and Civilizations of Peking University. I am grateful to Henry Zemel, Yushu Gong and Yiyi Chen for their kind support before and during that meeting. Otherwise unpublished (proto-)cuneiform texts will be cited in the article according to persistent URLs assigned the texts upon entry to the Cuneiform Digital Library Initiative, in the short form <<http://cdli.ucla.edu/P005573>>. Publication of the texts will thus not alter this pathway. Abbreviations of text publications follow <http://cdli.ucla.edu/wiki/doku.php/abbreviations_for_assyriology>.

² 12 February 1761, signed by ‘Minister of the Kingdom’ Sebastião José de Carvalho e Melo. Slavery was abolished in Brazil with adoption of the Lei Áurea (“Golden Law”) signed in 1888 by Princess Isabel. As elsewhere, a strong incentive to commit to this act of manumission was that slavery was simply *not profitable* compared to the depressed wages paid poor European immigrants whose labor resulted in no collateral costs—housing, clothing, rationing while sick or during off seasons—whatsoever. Cf. conveniently Schwartz 1996; Pang 1979; Conrad 1972. In an act of “national reconciliation,” many of Brazil’s slavery records were burnt following a 14 December 1890 order of the then Minister of Finance, Rui Barbosa.

³ The parliamentary “Act for the Abolition of the Slave Trade” prohibited slave *trade* in the British Empire, but not slavery, that would remain legal for another 27 years, in some parts of the kingdom longer. The act levied fines of £100 for each offence, that is, for each slave found to be in transport by British-owned ships. Ingenious captains did not simply transfer their flags to those of Spain, but, when cornered by the Royal Navy, were reported to have dumped their “cargo” at sea (P. S. Foner 1975: 120-122).

⁴ The law passed on 2 March 1807 in the US went into effect on 1 January 1808, but was rarely enforced (cf. Franklin and Moss 1994: 90-92). It has been conjectured that the prohibition of the slave trade by the UK, and then other European nations and the US, led to the institution of slave “breeding stations” in Virginia and elsewhere in the South. The breeding of slaves, however, was already attested in the late 18th century, due to the

ownership of slaves, in the Confederate states until Lincoln's famous Emancipation Proclamations of 22 September 1862 and 1 January 1863, finally banning all forms of slavery with adoption of the 13th Amendment in December of 1865. Approximately four million black slaves were freed by July of 1865,⁵ but, as post-war federalism would play out, freed into the very uncertain future of Reconstruction that eventually failed them, and rewarded the intransigence of secessionist Southern states. By 1877, with the final withdrawal of federal troops in a kowtow by the US president, Hayes, to advocates of "states rights," all Republican state governments were replaced by Democrats who instituted a system of segregation and poll taxing that effectively disenfranchised recently freed black men. This was, however, as the history of southern paramilitary organizations comprised of former Confederate soldiers demonstrated, not the most pressing existential distress of blacks in the post-war United States; still, poll taxes and other means of intimidating blacks, including the Jim Crow laws passed by the Democratic state legislatures, were an infection of the US body politic that held through the freedom marches of the 1960's and beyond—the 24th Amendment, ratified in January of 1964, finally abolished poll taxes, and the Civil Rights Act was passed in July over the Senate filibuster led by Southern Democrats, one month before Obama's third birthday. The best chronicler of the Southern experience with Reconstruction and the succeeding Confederate resurgence is William Faulkner, from whose *Go Down, Moses* this paper's title is borrowed:

The Sam Fathers whom the boy knew was already sixty—a man not tall, squat rather, almost sedentary, flabby-looking though he actually was not, with hair like a horse's mane

rapid expansion of slavery in southern plantations, and to the limited stocks of African slaves entering American ports (Franklin and Moss 1994: 114-120). This chapter of abuse is not well understood and based for the most part on anecdotal histories. But certainly the rapid expansion of slave populations in the US, easily seen in the US census reports beginning in 1790, demonstrates that owners were not repressing pregnancies, and were probably actively promoting them.

⁵ The 1860 census counted 3,953,760 slaves in the Union. At this time, the slave populations of Mississippi and South Carolina easily surpassed those of free men (434,696 vs. 354,699 and 402,541 vs. 301,271, respectively), though with Virginia in the lead throughout the 19th century in total numbers (1860: 490,887 slaves). Though an abbreviated report due to political turmoil, the 1860 cartographic representations of the Census bu-

*which even at seventy showed no trace of white and a face which showed no age until he smiled, whose only visible trace of negro blood was a slight dullness of the hair and the fingernails, and something else which you did notice about the eyes, which you noticed because it was not always there, only in repose and not always then—something not in their shape nor pigment but in their expression, and the boy's cousin McCaslin told him what that was: not the heritage of Ham, not the mark of servitude but of bondage; the knowledge that for a while that part of his blood had been the blood of slaves. "Like an old lion or a bear in a cage," McCaslin said. "He was born in the cage and has been in it all his life; he knows nothing else. Then he smells something. It might be anything, any breeze blowing past anything and then into his nostrils. But there for a second was the hot sand or the cane-brake that he never even saw himself, might not even know it if he did see it and probably does know he couldn't hold his own with it if he got back to it. But that's not what he smells then. It was the cage he smelled. He hadn't smelled the cage until that minute. Then the hot sand or the brake blew into his nostrils and blew away, and all he could smell was the cage. That's what makes his eyes look like that."*⁶

§1.3. Many questions still surround Fathers' almost mystical role in this classic novel. The reader is, though, informed of where he got his name. He was described as part Chickasaw (his biological father), part African and part European (his quadroon mother), but his name derived from "Sam (Had-Two-)Fathers," since his mother had been married off to a black slave before his birth. Such personal name etymologies ("anthroponomastics") can form a vital part of social and linguistic research where source material is scarce. Genealogical research has always enjoyed a high degree of interest among informal learners in the United States, in particular of late among descendents of more recent European immigrants whose family records, though now much better searchable online, often end with the Ellis Island Online Database of New York passenger lists.⁷

reau did serve Union commanders with vital information concerning the populations—white and black—they would expect to encounter, the location of transportation routes, and even the crops they could count on to feed invading troops. See the historical resources of the US Census Bureau at <<http://www.census.gov/prod/www/abs/decennial/>>.

⁶ "The Old People," in: *Go Down, Moses* (Modern Library 1942, pp. 166-167).

⁷ <<http://www.ellislandrecords.org/>>. Online genealogical resources are growing, with *Ancestry.com* (<<http://www.ancestry.com/>>), *GenealogyBank* (<<http://www.genealogybank.com/>>), and the Mormon site *Family*

With increasing digitization and networking of birth, marriage and death records from foreign organizations, including most importantly churches, we may expect in the near future to enjoy the capability of tracing, from our home computers, the lives of ancestors reaching back several centuries, and thus add dimensions to our family histories we had imagined long lost. Onomastic resources that might assist in charting the history of the African slaves imported into the Americas, however, are very meager indeed, and not likely to ever be recovered in substantial form. For another indignity imposed on slaves arriving in the harbors of the New World was the stripping of their names, and the assigning of new ones by their masters. Recent research conducted on ship rosters has shown us that transatlantic slaves' names were not included, but rather just numbers, age, and gender of individuals, much as we might expect in the stock car transportation of cattle to market.⁸

§1.4. And in no less dehumanizing a fashion, slaves sold into the chattel possession of plantation owners of the South were renamed willy-nilly, with no reference to practice in their African homeland (as fragile as this practice may have already been in African communities, where names often changed following important events in the individuals' lives). Many black Americans

Search (<<http://www.familysearch.org/>>) among the better known current services.

⁸ Curtin 1969 is the first attempt at a more systematic compilation of data documenting this trade from both East and West Africa via European ships to the Americas ("triangular trade"). Curtin concludes that the bulk of the trade went to the tropical Americas (from Brazil up through the Caribbean) and that relatively few slaves (ca. 5% of the total from Africa) entered North America. The ambitious *Trans-Atlantic Slave Trade Database* sponsored by Emory University and directed by David Eltis and Martin Halbert (<<http://slavevoyages.org/>>) combines ship manifests with historical annotation and the market accounts, often anecdotal, available to earlier historians, and will fill in many of the gaps noted by commentators on Curtin, including testing Curtin's hypothesis that slaves in the US enjoyed a much higher rate of survival than did their counterparts to the south, given census numbers of the mid-20th century. African names of these slaves remain hard to come by. Only in the case of repatriation or legal challenge following the British Slave Trade Act of 1807 were slave cargoes recorded according to African names. These name rosters are the subject of further research by the Emory-led team and others (see <<http://slavevoyages.org/tast/resources/slaves.faces>> and Nwokeji & Eltis 2002).

thus today carry the European names of or assigned by their ancestors' owners, their plantation trades, or of any of a number of other associations from their past in the Americas, including new names chosen by emancipated slaves, but very rarely the names of their African past.⁹ Aside from the educational and social value a full

⁹ A helpful general overview of naming practices, as is to be anticipated highly dependent on the particular language and culture of the naming owners, is offered by Miller and Smith 1997 *s.v.* "Names;" see, further, the illuminating description of Jamaican slave onomastics in Burnard 2001. Thus, slaves imported to the US from Spanish or Portuguese speaking colonies in the Caribbean often retained (first, but seldom sur-)names drawn from those languages, where slaves from Jamaica or Barbados carried common English names. In many cases, owners drew names from ancient history or the Bible, evidently trying to keep individuals identifiable. See Berlin 2003: 73; he cites, pp. 57-58, Chesapeake plantation owner Robert Carter, writing to his overseer in 1727: "I name'd them here & by their names we can always know what sizes they are of & I am sure we repeated them so often to them that every one knew their names & would readily answer to them." The correspondence and papers of "King" Carter dating from 1701-1732, including transcribed inventories of slaves, have been made available by the University of Virginia at <<http://etext.lib.virginia.edu/users/berkeley/>>. For instance, Falls Quarter, located in King George County, listed 24 slaves, among them "Negroes: Sam Foreman, Grace his Wife, Gowin a boy, about 7 years old, Tomboy, about 3, ditto; Bristo a Man, Beck his Wife, Robin, about 6 Ditto, Ben, about 3 Ditto," etc., going on to record horses, hogs and cattle in precisely the same format, though without personal names. In similar fashion, Ball 1999: 98 describes the 18th century purchase of three slaves in Charleston, South Carolina, with succinct records: "1721 – Bought: Fatima, Hampshire, Plymouth." While the motivation for naming one of them "Fatima" is open to discussion, the names of the second and third slaves in this record surely derived from favored place names of locales (county, city) near the native Devon of the buyer, Elias Ball. This is not the place for a full discussion of terminology employed by slave owners in the South to qualify their chattel work force according to labor capacity; but I mention in passing that we have ample description of the "hand" terms applied to African slaves. As F. L. Olmstead 1862: 246 has described this system, "The field-hands are all divided into four classes, according to their physical capacities. The children beginning as "quarter-hands," advancing to "half-hands," and then to "three-quarter hands;" and, finally, when mature, and able-bodied, healthy and strong, to "full hands." As they decline in strength, from age, sickness, or other cause, they retrograde in the scale, and proportionately less la-

reckoning of displaced Africans in the Americas would represent to the descendents of slaves, it is not difficult to imagine the geo-linguistic value such rosters would bring to research on the African diaspora.

§1.5. The destinies of slaves and the recording of slave names can be followed back much further in recorded history than many would suspect. While debates among historians concerning the role of slavery in classical Greece and Rome can grow uncomfortably heated (see conveniently the survey of research in McKeown 2007), more sober discussions of early state development in 3rd millennium Mesopotamia led, in particu-

bor is required of them. Many, of naturally weak frame, never are put among the full hands. Finally, the aged are left out at the annual classification, and no more regular field-work is required of them, although they are generally provided with some light, sedentary occupation” (cf. further Blackburn 1997: 467). Olmstead goes on to describe labor production norms employed, in plantations of eastern Georgia and South Carolina, to chart tasks of field gangs, for instance foreseeing the excavation of 1000 cubic feet of clear meadow soil per full-hand workday, etc.—in uncommon parallel to worker categories and workday norms already recorded in ancient Babylonian labor accounts (the Gullah scholar L. Turner 1949: 283 offers the following: “They have three class: whole hand, and three-quarter, and half hand. The task-row length is thirty-five feet long. That’s thirty-five feet long-task-row length. The breadth of the task—that the widest of the task cross and cross—is twenty-four bed. This carry twelve row each side. [They] call that one task. Now, these whole hand have to do two task of that one day for day’s work. That’s the whole hand, now. Not a row must [be] left. The three-quarter hand must do one of those whole task and a half. That’s his day’s work. The half hand shall do one of those whole task, and that is his day’s work. That was the way they had them fix” [and see there Appendix H for a Gullah transcription of the Wadmalaw Island, South Carolina, informant’s text]; cp. the parallels to 21st century BC accounts described, for instance, in Englund 1991). How slaves named their *own* children, so far as they retained some control of them in an American market heated by increasing values, is often unclear, but was also customarily tied to the naming practices of previous owners, or of the owners of their ancestors. Creoles did retain some vestiges of their African past, though as a rule in names reserved for private, not public and thus not documented use. See generally Turner 1949, and Burnard 2001: 329-338 and the more recent literature cited there, p. 328 fn. 7. As has been amply noted, the name “Barack Obama” bears clear witness to the Kenyan Luo heritage of his father.

lar, by scholars from the former Soviet Union and its Eastern European allies, helped to build a theoretical foundation for a *longue durée* analysis of this abuse and its effects on social progress.¹⁰ I am honored, as a sign of my gratitude for his intellectual generosity and his genuine personal warmth, to dedicate my paper to a close colleague of those discussants, Vyacheslav Ivanov, whom I discovered at UCLA later than I would have wished, but to whom I have stuck like glue since. Slava celebrates his 80th birthday on the 21st of August of this year. While the two of us have had occasion to discuss Babylonian onomastics, I have never compiled for his consideration a list of designations of slaves from early Mesopotamian texts. I hope that the personal names offered here, while, at least to my understanding, not credibly to be connected to any known Babylonian lan-

¹⁰ Dandamaev 1984: 30-35 and 67-80, offers a review of the history of philological and social-historical research of Babylonian slavery. The difficult terminology of slave trade and exploitation played a central role in debates conducted mostly in the 1930s and 1960s, debates as to the social status of dependent laborers known in 3rd millennium cuneiform texts as *guruš* (males) and *geme₂* (females), and organized in labor troops under the strict control of state foremen. See Struve 1947 and 1969 (engl. translation of a 1949 article). In the 1960s, I. M. Diakonoff and I. J. Gelb opposed the more stringently ideological views of Struve in his application of Marxist formation theory to the particularly Mesopotamian variant of state and empire evolution (“Asiatic mode of production”), including his presumption that Ur III laborers were chattel slaves. In a series of articles, they proposed a more pluralistic model of late 3rd millennium social structure in Babylonia, with only slightly varying opinions about the status of the large numbers of laborers organized in Ur III labor gangs. See, for instance, Diakonoff 1969 and 1976; and Gelb 1965 (particularly pp. 238-241), 1967, 1971, 1972, 1973, 1979, 1982a. Further, Pecirková 1979; V. Afanasieva et al. 1968; Melekišvili 1974; Komoróczy 1978; Brentjes 1987, 175-180; and Westbrook 1995. Englund 1990: 63-68, basing his argument above all on accounting practice, comes down on the side of Diakonoff that there was little difference in practice between the state-organized system of labor (characterized by the terms *guruš* and *geme₂*) and household chattel slavery, in which male slaves were designated with the sign ARAD₂ (in lead lines of contracts of sale often *sag nita₂*, literally “male head”), female slaves with the same *geme₂* (in contracts of sale often *sag munus*, “female head”). The chief difference would be that chattel slaves in 3rd millennium Mesopotamia were freely marketable, while laborers in state servitude were not. See more recently B. Studevent-Hickman 2006; Koslova 2008.

guages, will serve as a basis for further discussions with him.

§2.1. It is understandable that earlier research on slavery in ancient Mesopotamia has concentrated on those periods best reflected in the inscriptional record. While most popular histories cite references to slaves and slave prices culled from the famous Babylonian law codes, certainly it is the documentation from legal contracts on the one hand, and from administrative accounts on the other, that offers the best evidence of the day-to-day existence of slave populations and their overlords. Historians are not entirely clear as to what constitutes chattel slave property, nor in many cases what the social, political or military environments were within, and beyond Babylonian borders that led to the enslavement of often large numbers of individuals. I would like to present here what little I have been able to gather from recent work on what appear to be personal names of slaves in proto-cuneiform documents dating to the Late Uruk period, ca. 3350-3000 BC, many of which derive from irregular excavations and are thus unprovenanced. Indeed, without the rich resources of the Norwegian Schøyen Collection made readily available for study by its owner, our current harvest of, at minimum, 440 personal names, would be reduced to a statistically insignificant 38.¹¹



Figure 1: Map of Mesopotamia, early settlements

§2.2. We should be clear that much that has been proposed in the identification of laborers in the eras prior to the fully historical Early Dynastic IIIb period (pre-

¹¹ Assyriologists have taken a lot of flak recently, above all from members of the archaeological community, for their determination to publish and discuss all ancient cuneiform texts, with no regard to their immediate provenience. Thus the American Schools of Oriental Research, and the German Archaeological Institute, are currently restricting the publication of inscriptions that derive from recent antiquities market activity. Despite these roadblocks in scholarly communication and very possibly worse, most will agree that it is incumbent upon researchers to seek and exploit all avenues of evidence relevant to their work, but to condition the information derived from sources of varying reliability (s. for instance Owen 2009: 125-142). Regardless of the irregular origin of many, indeed most cuneiform tablets in public and private collections, specialists are, based on a number of factors, well able to date, and even place in rough geographical locale, these unprovenanced documents, and are therefore able to judge their value in their own research. In the matter of the decipherment, or we should say the description and interpretation of proto-cuneiform, archival locus of text artifacts has in fact played no more than a passing role, insofar as the great bulk of texts derive from regular excavations of Uruk, and as these texts came exclusively from secondary, even tertiary *ancient* context. They had been dis-

carded in antiquity and, together with the other detritus of administrative households, used to level depressions in underfloors, to fill mud-brick-faced walls, and so on. The private Schøyen cuneiform collection consists of a very substantial number of artifacts, with an over-representation of Old Babylonian and of Late Uruk period texts. The owner was fairly decided in his purchases in acquiring high-impact texts, with a representation of literary, epistolary and mathematical documents that far outweighs their percentage of a normal set of excavated texts. Four volumes of these texts have appeared as of August 2009 (Friberg 2007; Alster 2007; Dalley 2009; George 2009). Together with a small number of Ur III administrative texts published in Owen and Mayr 2007 (nos. 1514-1526), two Gilgamesh witnesses published in George 2003 (vol. 2, p. 7, MS 2652/5 and pp. 8-9, MS 3025) and various other texts published before they were purchased by Schøyen, these editions amount to over 700 published exemplars, a growing fraction of the full collection. The remainder, including my own volume of the Late Uruk collection, are being prepared for publication under the general editorial supervision of Andrew George of the University of London. There can be little doubt but that the historical and linguistic content of this collection rivals that of most national

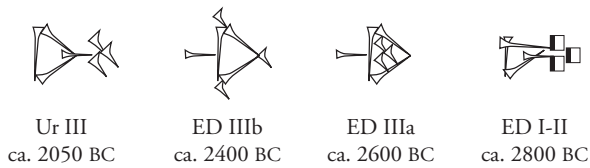


Figure 2: Paleography of *geme*₂

Sargonic Lagash, ca. 2500-2340 BC) is highly speculative, necessarily based as it is on analogies drawn from later periods. Thus it seemed reasonable, in the absence of countervailing evidence, to attach the semantic field of “slave” or “dependent laborer” to graphic precursors of characters known from Ur III and ED IIIb accounts to represent slaves or dependent laborers. The sign *geme*₂ (“female slave”) appears in ED IIIa texts (Fara period, ca. 2600 BC) in a form slightly different from that known in the pre-Sargonic Lagash texts (“SAL×KUR” vs. SAL with the three Winkelhakens of the KUR sign spread out to its corners; see figure 2), itself the precursor of our conventional form of *geme*₂ composed of the element SAL followed by KUR.¹² This component KUR of the compound sign has in all discussion of *geme*₂ been considered a geographical qualifier, thus literally “mountain-woman,” where, with ample textual justification, the chattel slaves of early Babylonia were

collections on earth. But even if it consisted entirely of mundane copies of long-known literary compositions, it seems to me the ethical imperative of specialists to fully document the texts’ content, and to communicate their findings to the scholarly community as well as to the general public. Those who are *not* prepared to utilize all sources in their research, including texts available to us through private collections, and certainly those who would presume to limit the access or use in scholarly communications of unproven sources, as has begun to happen with submissions even to such politically neutral editorial boards as those that oversee the publication of papers on the *history of mathematics*, may want to reconsider the professional choices they have made in their lives.

¹² Cf. the forms a-c in the paleographical table compiled by Gelb 1982a: 98. Only the text *WF* 93 obv. ii 1 attests the sign in clear semantic relationship with the male counterparts *guruš* in the ED IIIa period. This ED IIIa period sign form was retained in Nippur into the Old Akkadian period (see, for instance, *TMH* 5, 28 i 7-8 and rev. i 2; 44 rev. ii 4; *OSP* 1, 23 vii 5; 1, 139 ii; but also the conventional form of other Old Akkadian sites, with exceptions in Nippur [cp. *OSP* 1, 41 obv. ii 1, and s. *OSP* 1, 25, 26, 27; *OSP* 2, 84 [onion archive] i 2), in Isin (*BIN* 8, 39 obv. ii 9 [and 66 obv. 8?]) and Adab (*OIP* 14, 56 obv. ii 7) through ED IIIb. The ED IIIb form cited here (figure 2) is a peculiarity of Girsu.

believed to have been purchased, or taken, by force or threat of force, from the mountains, or more generally foreign lands, to the east or north of the Mesopotamian alluvium. The corresponding male designation ARAD₂ derived from the grapheme representing males (NITA) in combination with the same KUR sign.¹³

§2.3. Successive publications of excavated text artifacts attesting to earlier and earlier phases of cuneiform led, in the mid-1920’s, to the most ancient examples of the writing system. Conventionally known as “proto-cuneiform,” the sign forms found on texts from Jemdet Nasr and Uruk invited comparison, both graphic and semantic, with characters found on later texts. Included with these earliest cuneiform signs was the sign combination SAL.KUR_a interpreted by Langdon, and following him all other Assyriologists who dealt with these texts, to represent the precursor of *geme*₂ and thus “female slaves.”

§2.4. As with so much of note in researching early Mesopotamian administration, the first systematic discussion of 4th millennium slave designations was published by the Russian scholar A. Vaiman. In a 1974 article, Vaiman reviewed the then available textual evidence and concluded, correctly, that SAL and KUR_a (KUR_{b-d} are graphic variants of this sign) in the archaic texts in fact represented female and male humans, respectively, and that these were recorded much as were the stock of herding accounts, including, in the case of Uruk IV period texts, the qualification of children with a special numerical sign that was otherwise employed to designate fractions of some whole unit.¹⁴ The next discus-

¹³ The earliest clear attestations of both ARAD₂ and GEME₂ are found in the ED I-II (ca. 2800 BC) text *UET* 2, 259 (with possibly contemporaneous *OIP* 104, no. 7 obv. i 1; a search for “IR₁₁” in CDLI will list instances of ARAD₂, of unclear meaning, in the proto-cuneiform texts). Though this text is beyond the scope of the current paper, it should be noted that it contains on its obverse lists of 23 male and then 12 female personal names, totaled in two cases on the reverse that are qualified with UŠ.KUR and SAL.KUR, respectively. The clear break of the latter sign form from the highly standardized use of its individual components to represent female and male laborers, respectively, in the preceding Uruk phases is another indication of the disruption in proto-cuneiform brought on by the break between Uruk III/Jemdet Nasr and ED I.

¹⁴ Vaiman 1974a, in Russian; German translation available in Vaiman 1989. See also Vaiman 1981 (Russian) = Vaiman 1990 (German). The interpretation of the nu-

sion of proto-cuneiform designations of archaic laborers was offered by Englund and Damerow in an edition of proto-Elamite texts from Tepe Yahya,¹⁵ followed by a re-interpretation of texts from the Langdon Jemdet Nasr publications by Englund/Grégoire, and by Nissen, Damerow and Englund in a catalogue prepared for an exhibition in Berlin's Charlottenburg Palace in 1990.¹⁶ Englund provides an overview of previous research on this matter in a 1998 publication.¹⁷ As this research has shown, the accounting for apparent slaves in the Late Uruk period reflected the same degrading abuse of fellow humans as was the defining flaw of the American South, but it collaterally resulted in lists of personal names, names that, in the tradition of Mesopotamia, should bear much linguistic, or at least orthographic information. With the infusion of large numbers of recently available proto-cuneiform texts, we have been able to add very substantially to the list of clear personal names ascribed to humans in the Late Uruk period, and can begin to investigate these names for elements that may support, or by their absence tend to hamper an identification of the language of our earliest cuneiform scribes.

§2.5. The discussion about the "Sumerian question," that addresses the linguistic affiliation of these archaic scribes, continues, at least in my mind, and has taken a rough edge of late, the more so with publication of the 2003 Leiden Rencontre volume that made no credible advances in the now fairly stale list of "proofs" that Sumerian phoneticisms, or even number words, were a clear element in Late Uruk documents.¹⁸ The lines of sign analysis that have accompanied this research are

merical sign N₈ as a sign qualifying young animals and children also goes back to the two works by Vaiman.

- 15 Damerow and Englund 1989, ³2003: 24 and 53-57.
- 16 Englund and Grégoire 1991; Nissen, Damerow, and Englund 2004: 111-120 (English translation published by the University of Chicago Press as Nissen, Damerow, and Englund 1993).
- 17 Bauer, Englund, and Krebernik 1998 (=OBO 160/1): 176-181.
- 18 The RAI section organized by G. Whittaker in Leiden and published in van Soldt 2005 (*Ethnicity in Ancient Mesopotamia*; s. the Tuesday, July 2nd program, p. 452), was ostensibly devoted to the debate concerning phonetic glosses and other language clues in Late Uruk texts (thus not to be confused with the "Sumerian problem" debate that, at the turn of the 20th century, addressed the question of whether Sumerian represented a real lan-

fairly straightforward. In the first instance, a rebus use

guage at all). Two papers, one by the organizer (van Soldt 2005: 409-429) and one by G. Steiner (van Soldt 2005: 340-355; Steiner's statement p. 345 that "all words transmitted in a "Sumerian" context are, independent of their structure, to be understood as "Sumerian" until they have been unambiguously assigned another language" [translation mine], does place skeptics at a distinct disadvantage!) were informed, and informative. (An important third paper offered by J. C. Johnson ["Complex graphemes in the proto-cuneiform corpus and the problem of phonological reconstruction"] unfortunately did not make it to press in this volume, and will be published elsewhere.) However, the papers by G. Rubio (van Soldt 2005: 316-332) and C. Wilcke (van Soldt 2005: 430-445) remind us that contributions to conference volumes are often not subject to the scrutiny of peer review. To be clear, and since both authors expended some effort in responding to points I and others have made in the past concerning the all too marked willingness of Assyriologists to declare the question of the linguistic affiliation of Late Uruk scribes resolved in favor of Sumerian, I have always professed simple agnosticism in the matter and have attempted to keep a running tally of lines of evidence that may be cited on one side or the other. To satisfy Rubio's uncommon sensibilities, I am happy to retract my modest spoof equating Sumerian culture with Early Dynastic plano-convex bricks (van Soldt 2005: 321-322 and 325; I have otherwise restricted mention of this matter to my classes, where I make clear to those who do not know their history of cuneiform studies that the butt of the half-jest is the long-deceased Stephen Langdon, who, in Langdon 1931: 595, remarked that plano-convex builders of the ED periods may have represented the "recrudescence of the indigenous [=pre-Indo-Sumerian] civilization" of Mesopotamia). Even a passing remark in Bauer, Englund, and Krebernik 1998: 81 n. 170 about qualifier-noun sequences in archaic lexical lists that seemed inconsonant with Sumerian led to an extended discussion by Rubio of ambivalent word order in a list, the pig list, that may be no lexical list at all—with no mention whatsoever of the pertinent compositions I was referring to, especially "Animals" (Englund and Nissen 1993: 89-93) and "Vessels" (Englund and Nissen 1993: 123-134) with a high level of consistency in the use of qualifier-noun sequences. Rubio states that I argue "the so-called "Pig List" constitutes the best example of this word order" (van Soldt 2005: 322), and directs the reader to n. 350 (about color qualifications in archaic lists) of my publication instead of n. 349, which is the only reference I make to a possibly qualifier-noun word order in Late Uruk texts, citing specifically textile entries of the "Vessels" list. But that comment was only offered as a footnote remark recommending a possibly rewarding

of discrete signs (for instance, the words for “arrow” and “life” are homophones in Sumerian, where as in the example below, if correct, the arrow pictogram is more likely to represent “life” than “arrow” or some other ho-

review of sign sequence in pre-ED IIIb texts that has in my opinion too facily been described as “unordered.” The apparently consistent order GAL-NOUN and NOUN-TUR in both scholastic and administrative archaic texts (for instance, Lu₂ A ll. 35-36 [Englund and Nissen 1993: 76], and Nissen, Damerow, and Englund 2004: 74 to nos. 6 and 11), quite aside from a number of other considerations about Uruk order of ideograms and numerical signs, might further interest those who are curious about such things. Such research as is demonstrated by Rubio in this volume is not rigorous, is in part misleading, and added nothing new to the debate. In his contribution to *Ethnicity*, Wilcke, on the other hand, appears to want to enter a discussion, in this case of numerical notations and number words (“das Sexagesimalsystem als sprachliches Phänomen,” roughly van Soldt 2005: 431-439), that he enlivens in a fashion that may be entertaining to some, but bothersome to others, and that in no way contributes to the question of Sumerian origins. We may leave aside the fact that he demonstrates limited command of the terminology of numeracy, to give a kind turn to some of his comments; and that he adds little to, and may rather subtract from previous analyses of the numerical notations in the 3rd millennium texts he cites (to his unique reference of an n-final reading of 7(geš₂) in Ukg 4 vi 6 etc.), we add the multiple instances of 2(geš₂)-am₃ from administrative Ur III texts, and we note such potential anomalies as 1(geš₂u) = /nur/ or even /šar₂u/ in *MVN* 13, 343 obv. 3). For instance, the ED IIIb royal inscription Ent 35 iv 4 (cited by Wilcke in van Soldt 2005: 436) is of unclear, possibly brick metrology, certainly followed by bitumen capacity (//Ukg 7 ii' 3-4; what is geš₂.d'ušu?); and his interpretations of Ent 28-29 A ii 25 and iv 11 are conventional and certainly incorrect (p. 436, and including the Lagash II text Gudea Stat B [p. 437, corrected in addendum, p. 444]) and best viewed as simple šar₂ gur = guru₇ on the one hand, as 4 šar₂u gur = 40 guru₇ on the other. He should, further, withdraw most of the comments dealing with early numerical sign paleography, for instance van Soldt 2005: 437, n. 23 and n. 25, that are either wrong or hackneyed; an article by an expert on the subject of sexagesimal notations, J. Friberg (Friberg 2005 with very substantial literature), should be substituted for his remarks, van Soldt 2005: 438-439, on ED IIIa-Old Akkadian mathematical texts. When in all of this the author gathers up a bundle of large 3rd millennium numerical notations, and assiduously assigns Sumerian readings to each, thus “proving” their Sumerian origins, we are left to wonder what lines of logic are being proposed. Such reasoning is, in the

mophonetic word). There are precious few proposed pairs in this vein of attack, although we would hope that, with improved access to all Late Uruk texts, interested scholars would perform more systematic searches.¹⁹

end, no more credible than is the now standard means of demonstrating phonetic glosses in proto-cuneiform by attaching Sumerian readings to elements in complex signs, derivatively assigning semantic meanings to the base sign, and then citing the semantic root to justify use of the gloss. The prime example of this practice is the ubiquitously cited ama < GA₂×AN (AN = am₆), for which no evidence whatsoever has been cited from texts that this complex sign refers to “mother,” Sumerian ama. We would most expect this use to show up in personal names, but the sign's rare occurrences in the appendix below (IM 134762 i 2': AMA_a ZATU628_b N₄, <<http://cdli.ucla.edu/P005573>> obv. ii 1.b9: AMA_a AN EN_a; *MSVO* 1, 212 obv. i 4.b3: 「AMA_a」 ERIM_a MUŠEN MAŠ, ii 1.b: 「AMA_a MUŠEN MAŠ KI ZATU694_c GI」) give no indication of meaning “mother,” nor is the sign AMA_a the variant (AMA_b = GIŠ×AN) that does appear to represent “mother” in the succeeding ED I and later periods (a search through CDLI files will demonstrate that these are independent syntactical entities, and not just orthographic variants, with a significant shift in context and frequency across the period from Uruk III to ED I-II; for the record, I note one potential instance of AMA_a = “adult woman” in <<http://cdli.ucla.edu/P387752>> obv. 1b1a; collation needed of a notation that appears to read 2(N₁₄) GI₆ AMA_a, “20 black AMAs”[?]). Instead of citing elsewhere in the paper various correct interpretations, or justifiable speculations by Friberg, Wilcke should rather defer to him entirely. It is difficult to locate anything in the rest that deserves our attention, perhaps excepting the fanciful notion that we might attach number words to Uruk V period clay tokens (van Soldt 2005: 439; the author, pp. 441-443, trumps all earlier speculation by transporting *Akkadian* glosses back to the Uruk IV period Lu₂ A list, and in a short excursus pp. 434-436 resolves, to his own satisfaction, a half century of theoretical discussions among historians of science on what constitutes abstract number in Mesopotamia). We must leave to Wilcke and M. Krebernick the determination of the ultimate source of Late Uruk GAL = /gal/ referred to in our list below (under NUN.ME = abgal), for which see van Soldt 2005: 444, with n. 56 citing Krebernick in Gerber, Ehlich and Müller 2002: 64 n. 4 (and cp. Krebernick in Streck and Wenginger 2002: 1-2, n. 1; Krebernick 2007: 43 n. 19). In a startling sign of polygenesis, this identification even landed in Glassner 2000 (s. Englund 2005: 114).

¹⁹ I have been thinking about the apparent use of the SLEDGE sign GURUŠ to represent workmen (op-

Second, we might expect to discover the use of phonetic rather than semantic values of signs (see the instance of “su_x-pa” below). Third, and most often seen, specialists will attempt to isolate use of phonetic glosses attached to logograms in some way (best known are instances of such phonetic glosses inscribed within sign frames, but also simply near to the sign of reference). This strategy considers the possible combinations in complex graphemes to include semantic element + semantic element (uninteresting for language identification), semantic element + phonetic element (interesting but difficult to identify), or phonetic element + phonetic element (very interesting, and very difficult to identify). I list below a selection of the multivalency proposals made heretofore on Sumerian phonetic signs,²⁰ together with possible

posed to SAL) in the text *MSVO* 1,1, with which one of the participants of the University of Peking conference, Jerry Cooper, has confronted me in past, and, as we shall see, of the sign AL to represent apparent adult humans, consonant with later Sumerian AL = ma_h₂ (it should be noted that the sign MAH in the archaic texts was identified in Green and Nissen 1987 only according to graphic similarity with the sign ma_h of later periods, following Falkenstein 1936: sign no. 649, and that the sign ma_h is attested first in the ED IIIa period with both readings ma_h and al₆. MAH has not been identified in texts from the periods ED I-II, and AL in those texts does not occur in the same context as in the archaic texts). We might imagine a language in both cases with homonym pairs SLEDGE = FIELD HAND and HOE = ADULT SLAVE (unless this means simply “hoer”). The remarks of Steinkeller 1990: 22, based on the differentiation of KAL/GURUŠ in the ED IIIa corpus (GURUŠ a strict rectangle, KAL a rectangle with an angled line at the right, thus more graphically similar to the rounding of archaic GURUŠ and the graphic precursor of later kal/guruš), may not have accounted for the application field of GURUŠ in Uruk III, where it combines with SAL in parallel to KUR_a (cp. in particular *MSVO* 1, 1, and *ATU* 5, pl. 66, W 9579,ac), thus demonstrating a good fit with later GURUŠ/GEME₂ and ARAD₂/GEME₂). Since “KAL_a” occurs only in the archaic Tribute List as a qualifier of cows, and given its graphic similarity to archaic GURUŠ, it may be that this “KAL_a” is in fact GURUŠ, that the ED IIIa correspondence of the lexical line (see the images provided at <<http://cdli.ucla.edu/P010581>> of *SF* 12 and cf. the duplicates *SF* 13 and *MVN* 3, 15) is to be read ab₂ GURUŠ in the Fara period, and thus that the second sign is to be interpreted as a failed attempt by Fara scribes to understand the original “sledge cow.”

²⁰ See Bauer, Englund, and Krebernik 1998: 77 n. 158, with reference in particular to the reviews of Green and

instances of iteration common to Sumerian orthography, and the proposal of M. Powell²¹ that the uniquely sexagesimal structure of Sumerian number words offers proof that Sumerians invented proto-cuneiform, where sexagesimal notations are amply attested in the earliest texts. In this regard, we should note the examples of multivalent sign use cited from the other pristine writing systems, Egyptian (with its key example of proposed b3-st for the place name (per)-bastet, “(house) of the goddess Bastet”²²), Chinese and Mayan. I have set off in bold those candidates for Sumerian in the archaic texts that appear strong, although of these only the very poorly attested *šabu* carries real conviction.

1) Multivalence?

<i>archaic sign(s)</i>	<i>proposed Sumerian interpretation</i>
EN-E ₂ -TI	en-lil ₂ -ti, “Enlil (gives) life” (Langdon 1928: VII; Falkenstein 1936: 37-38; etc.)
PA-NAM ₂ -RAD/ZA(A)	nam ₂ -su _x -pa, /nam-sipa(d)/ (van Dijk 1989: 446)
DARA ₄ /PIRIG+MA	alima with MA = /ma/ (Green in Nissen and Green 1987 <i>s.v.</i>)
GA ₂ ×AN	ama with AN = /am/ (Green, <i>op.cit.</i> , and see above, n. 18)
GA ₂ ×EN	men with EN = /en/ or /men/ (Green, <i>op.cit.</i>)
EN-ME-MU	endub, with /en/ of EN (Krebernik 2007: 43)
EN-ME-GI	engiz suggests /en/ of EN and /gi/ of GI (Krebernik 2007: 43)
E ₂ -BAHAR _{2b} -NUNUZ	zilulu with NUNUZ = /za/ (Krebernik 2007: 43)
GIR ₂ -SU	gir ₂ -su (Krebernik 2007: 43)
ZI // SI ₄	with both = /si/ (Englund 1994: 38, W 9123,a1)
PIRIG+NUNUZ	az(a) with NUNUZ = /za/ (Green, <i>op.cit.</i>)
URI₃-NA	nanna with NA = /na/ (passim)
GI	gi (gi ₄) “return” (Vaiman 1974b: 16)
NUN-ME	abgal among “gal-words” in the Lu ₂ A list, with GAL = /gal/

Nissen 1987 (the revised Uruk sign list) by M. Krebernik and P. Steinkeller. The most powerful example of this list would have been the first, en-lil₂-ti; it was, however, already shown in Englund 1988: 131-132 n. 9, to be fallacious.

²¹ Powell 1972: 172.

²² Dreyer 1998: nos. 103-104.

(see above, n. 18)

ŠA₃-BU

š_a₃-bu // ED LAK50/š_a-bu-nun, OAKk š_a-ab-bu-nu-um (Krebernik 2007: 43)²³

2) Possible Sumerian verbal iteration?

ŠU+ŠU, GI+GI

3) Sumerian sexagesimal system?

As is evident from this list, classical graphotactics have played only a minor role in such research, based on strong, though by no means overwhelming evidence that sign sequences in this largely logographic, or even saccades-based²⁴ ancient orthography were fluid, and not dependable indicators of word or phoneme flow within textual sub-units (“words,” cases or lines).

§3.1. To this discussion I would like to add some material concerning Late Uruk personal names that have often been cited in literature generated by the Berlin-based project “Archaic Texts from Uruk,” but never gathered systematically, and that I have only ordered in a preliminary way. The major difficulty in isolating clear instances of personal names, where we must expect that the accounts and perhaps sections of the lexical lists were replete with such designations, is that the text formats do not explicitly identify what is what once you leave the realm of numerical notations, object designations and signs or sign combinations of thematic meaning derived from the lexical lists. Of course, we have

²³ Note the potential correspondence of the personal names A ŠA TAK_{4a} and A ŠA_{3a1} TAK_{4a} in the appendix below (MS 3887 obv. i 4 // MS 3035 obv. i 1b27, MS 2436 obv. i 4b1 and MS 2431 obv. i 4b2; cp. *MSVO* 1, 212 obv. ii 8a, MS 2998 obv. ii 6, and IM 134954 rev. ii 4b2).

²⁴ J. C. Johnson and A. Johnson (private communication) are investigating the sign clustering of selected ED IIIa period UD.GAL.NUN texts with an eye to understanding how scribes were overcoming the challenges they faced in representing texts through syntactical rather than formally text structural means as was the case in the preceding ED I-II and Late Uruk periods. Their working hypothesis is that a cognitive reading strategy of harvesting sign clusters for interpretation, rather than a strict linearization, is not only at work in early cuneiform orthography, but is a more natural and efficient means of reading. The “saccade” refers to a rapid movement of both eyes in the same direction, the natural way that humans gather visual information; “saccade generation” to such movements in lexical processing. See for instance Rayner 1998; Reichle et al. 1998; Engbert, Longtin and Kliegl 2002.

been unable to identify, nor should we expect to find, any semantic glosses of personal names—aside from the simple number sign representing “one unit,” these were a millennium off. Frankly, one of the more dissatisfying discussions that I had with Peter Damerow and Hans Nissen in preparation of the Berlin Erlenmeyer exhibition catalogue²⁵ was in fact having to admit that we could not state whether the sign combination “KU ŠIM,” central though it was to understanding the archival meaning of the core texts in this collection, referred to a human, to a profession, or to a household. We agreed to an individual “human” (brewery foreman), but only as an expedient convention.²⁶

§3.2. The same frustrations can be applied down the line to any number of signs or sign combinations that can, due to considerations of tablet format, or as part of a procedure that eliminates from consideration other spatially associated signs whose semantics are identifiable, be isolated. Since we cannot know how many variables are at play in these residual sign combinations, it would be less than prudent to simply assign to them all the role of personal names. There may be though other strategies to increase the likelihood that we are looking at names of specific persons. For instance, you can imagine an automatic text parser that searches all instances of sign combinations from the lexical lists “Professions” (Lu₂ A) and “Officials” from all sign strings found in discrete tablet cases (corresponding to “lines”), removes from the resulting list first these lexical notations, then eventual identifiable signs or sign combinations (numerical notations, object designations and so on) from the remainder, and writes a list of all still remaining signs and sign combinations. Aside from possible functional terms, including for instance verbal forms, we would anticipate that these entries represent the personal names of cited household officials. We might also look for parallels in the text formats that isolate distinct personal names for us—for instance, some designation of personnel inventories as was well known in later periods, or, say, a format like later table accounts with some global qualification followed by strings of individual cases, each with signs or sign combinations with no further qualifications.

§3.3. Isolating these names would help to satisfy our curiosity about the conceptual organization of its members that archaic household accountants imposed

²⁵ Nissen, Damerow, and Englund 2004.

²⁶ Nissen, Damerow, and Englund 2004: 66-70.

on their books, but more importantly, since cultural continuity is regularly cited as one of the lynch pins of Sumero-Babylonian civilization, and since personal names as a conservative cultural trait should be discoverable in texts that code, or are coded by Sumerians, this prosopographic material from the Late Uruk texts could play a prominent role in discussions of archaic linguistics. For despite all the caveats offered by specialists in early cuneiform, it has, since my time as a student in Dietz Edzard's seminars in Munich, reading 3rd millennium texts and examining, as was his wont, earliest sign etymologies, seemed to me curious that if these should be texts written by Sumerians, we did not immediately recognize a substantial number of forms that could at least plausibly be interpreted to represent elements of the Sumerian language—quite aside from the seemingly missing references to the Sumerian pantheon. And in the first instance, I would have expected language, or if you wish, culture-specific patterns to show up in personal names. Still, neither the list Lu₂ A, nor the so-called list of officials, gave any clear indication of sign patterns that would comport with later, often predicative formulations in personal names such as “servant of Enlil,” “he is my lord,” or “lady of Inanna.”

§3.4. It turns out that the Late Uruk accounts of herds of animals led us to the sorts of texts that clearly included personal names.²⁷ Records of such herds, first edited by M. Green,²⁸ contained data much like that known to specialists working on texts from later periods, including numbers and designations of animals, of their ages and gender, as well of course as identification of their owners, herders, and whereabouts, and the real or anticipated dairy and textile products associated with these animals. As is the case with other types of accounts, these texts detail conceptually important terminological categorizations, for instance qualifying x ewes (sign U₈) and y rams (UDUNITA) as x+y small cattle (UDU). Just as with small and large cattle, and, as we are seeing with a substantial recent influx of ar-

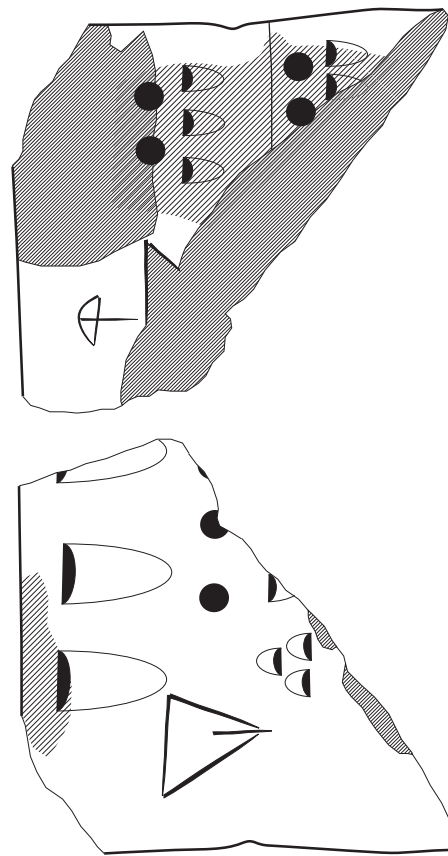


Figure 3: W 9827 contains an apparent account of a number of groups of male and female laborers, listed individually on the obverse (23+ in the first column, 22+ in the second) and totaled on the reverse (preserved is a notation representing in the sexagesimal system 211+ female and male laborers, in proto-cuneiform SAL KUR_a).

chaic herding accounts, with donkeys,²⁹ pig herds were also differentiated according to animal age and use, in the case of cattle also according to gender. The text W 23948³⁰ records the distribution of animals from a large herd of 95 pigs into two groups of adults associated with large household units in Uruk, and a third comprised of juvenile animals. The juveniles were qualified with a designation borrowed from time accounting me-

²⁷ Bauer, Englund, and Krebernik 1998: 143-175.

²⁸ Green 1980; cf. Nissen, Damerow, and Englund 2004: 131-138, with further reference to contemporary herding texts from neighboring Iran.

²⁹ There are currently 68 administrative attestations of “KIS” in the CDLI corpus (excluding attestations from the Tribute List that exhibit a different sign form, and appear to refer to a different object). See, for instance, the numerous donkey texts edited by Monaco 2007 (CUSAS 1): nos. 31-40, with examples of complex qualifications of animals divided into sub-totals and sub-

sub-totals. A number of archaic Schøyen texts contain comparable accounts, but including records of donkeys qualified SAL and KUR_a, that is, as jennies and jacks (cf. the CDLI entries to MS 2863/9, 2963 and 4494). CUSAS 1, 40, lists groups of animals qualified as one and two-year-olds; as we might expect, the one-year-old animals are further qualified as AMAR—though specifically referring to “calves,” this sign acted as a general designation of young animals in later cuneiform tradition.

³⁰ Cavigneaux 1991: 57; Englund 1995: 125-128.

tology to represent animals that had reached the age of one year; one porker, together with ten mature animals, were then, according to this text, possibly slaughtered for the household kitchen.³¹

§3.5.1. During our work on the Uruk III period texts from Jemdet Nasr, Grégoire, Damerow and I noticed that a similar terminology and syntactically motivated text format were visible in accounts of what were, in totals of the texts, qualified as SAL KUR_a ERIM_a and SAL KUR_a SAG×MA, that is, what we speculated to be “yoked” and “noosed” female and male slaves, following Vaiman’s interpretation of SAL and KUR_a.³² With the series of three Jemdet Nasr texts *MSVO* 1, 212-214, we were able to demonstrate several things. First, that the numbers of individuals qualified as SAL or KUR_a in archaic texts were not large—at most 211+ recorded on the reverse of the account W 9827, doubtless representing the summation of smaller groups recorded on the obverse (see figure 3).³³ Second, we saw that the accounting procedure of text consolidation, so well attested for later periods of Mesopotamian history, was employed already by household bookkeepers at the dawn of writing. *MSVO* 1, 213 and 214, were in fact entered, sign for sign, into the larger account *MSVO* 1, 212. But then third and most significantly, we could see that the accounting format of these texts was very complex, but foresaw the division of individual records into sub-cases with formal differentiations. The first sub-case of one entry contained a numerical notation, an object designation (as we believe, “slave of quality x”) and one or more signs apparently referring to persons

or offices. There followed one or more sub-cases, with one exception³⁴ never with a numerical notation, containing signs that we interpreted to represent the personal names of the designated slaves. Where the initial numerical notation was 1, there were one or two such associated sub-cases; where 2, there were at least two.

§3.5.2. Thus the initial entries of *MSVO* 1, 212, are (reconstructions according to *MSVO* 1, 213 obv. i):

- 1a 1N₁ [SAL KUR_a SAG×MA ŠA E_{2a} MUŠEN×2N₅₇
- 1b1 [ZATU751_a ERIM_a
- 1b2 [...] X
- 2a [1N₁] [SAL KUR_a SAG×MA ŠA¹ [...]
- 2b1 [DUR₂ 3N₅₇ ZATU751_a]
- 2b2 [AB_a TUR² N₂] KU_{3a}
- 3a 1N₁ KUR_a E_{2a} ŠA [MUŠEN×2N₅₇]
- 3b1 SI [MA² EN_a X]
- 3b2 [GI×KU_{b1} BAR]
- 4a 1N₁ [KUR_a MUŠEN×2N₅₇ [E_{2a} ŠA]
- 4b1 1N₁₄ [UDU_a]
- 4b2 1N₁ [KIŠ KUR_a]
- 4b3 [AMA_a ERIM_a MUŠEN MAŠ]
- 5a [1N₁ SAG×MA GEŠTU_{c5} MUŠEN×2N₅₇]
- 5b1 [GI ŠA E_{2a} AMA_a]
- 5b2 [TAK_{4a} NI_a] [SAG ERIM_a [MUŠ_{3a} UR₂ DUR₂]

and the summation of all entries on the reverse:

- col. ii
- 1 1N₁₄ 7N₁ SAL KUR_a SAG×MA
- 2 1N₁₄ SAL KUR_a ERIM_a X [...]
- col. iii
- 1 [2N₁₄] [7N₁ SAL KUR_a UB [PA_a SAG×MA SANGA_a X EN_a N₄]

§3.5.3. Unfortunately, the complexity of the individual entries in this account makes it very difficult to understand the syntactical relationships among those entities represented by individual sub-cases, and the text would furthermore appear to contradict, with its combination in initial sub-cases of SAL, KUR_a and 1N₁, our belief that SAL denotes a single female, and KUR_a a single male. I have no convincing explanation for this seeming contradiction. Similar accounts from Uruk with less complex accounting format, however, do help to fill out this picture with terminology more reflective of that known from herding accounts. Where herding texts recorded domesticated animals according to

³¹ This is a provisional interpretation of numerical signs from the derived system S' where it is employed to qualify herded animals, and possibly humans. See Green and Nissen 1987: p. 131.

³² Above, n. 14. The justification of MA = “noose” in SAG+MA was based on the associated yoke pictogram ERIM_a, on the combination of this sign with animal head signs (and thus in those instances not to be understood as a phonetic gloss), and on a consideration of the pictographic referent of MA. This sign, later peš₃, is interpreted to reflect the “string of fruit” that Gelb 1982b convincingly explained, and thus “tied-back cord” generally—in our case, tied round the neck of the slaves, thus qualifying them in some way other than the pictographic ERIM_a, “yoke.”

³³ *ATU* 5, pl. 118, W 9827; cf. Falkenstein 1936: no. 577 (and see p. 22); Vaiman 1974a: 141, no. 24; Nissen, Damerow, and Englund 2004: 112, no. 13.2; Bauer, Englund, and Krebernik 1998: 178 fig. 66.

³⁴ And this exception, *MSVO* 1, 212 obv. i 4b1-2 = *MSVO* 1, 213 obv. i 4.b1-2, recorded ten sheep and one male donkey, KIŠ KUR_a, probably purchased together with the recorded slave AMA_a MUŠEN MAŠ.

species, gender and age of breeding significance—we expect also qualifying the males as to whether and when they had been castrated—the archaic accounts of groups of humans added new levels of qualification, with clearer differentiation of the terms SAL and KUR_a, and with designations of slaves that contained greater terminological texture.

§3.6.1 The two Uruk texts in figure 4 are good examples of this accounting procedure. Each has in the left column a total, eight individuals in both texts, corresponding to numerical entries to the right. Clearly enough, the first text³⁵ lists 1 + 1 + 2 + 2 + 1 + 1 for a total of 8, while the second has (4+1=) 5 + (1+2=) 3 = 8. The latter text demonstrates that SAL and KUR_a qualify different objects, probably female and male slaves, that are themselves in the accounting terminology further divided into apparent age qualifications. Thus, in the former text we have, viewed syntactically, the qualifications AL, EN_a TUR, 1N₅₇×U₄ TUR, BULUG₃, U_{2a} A and ŠU; in the second text, SAL, KUR_a and ŠA_{3a} TUR. Several of these designations are terms well known to Sumerologists. TUR (a presumed pictogram of human breasts) representing young children (Sumerian *dumu*), 1N₅₇×U₄ representing “one year,”³⁶ and AL (picture of a type of hoe) representing “adult” (with later Sumerian reading *mah₂*, this sign usually qualifies sexually mature domestic animals, but is also possibly an element of two personal names in the ED IIIa period, and is even a qualifier of the capacity unit *gur* [WF 76 rev. x 3]). Finally, ŠU will be associated by some with later

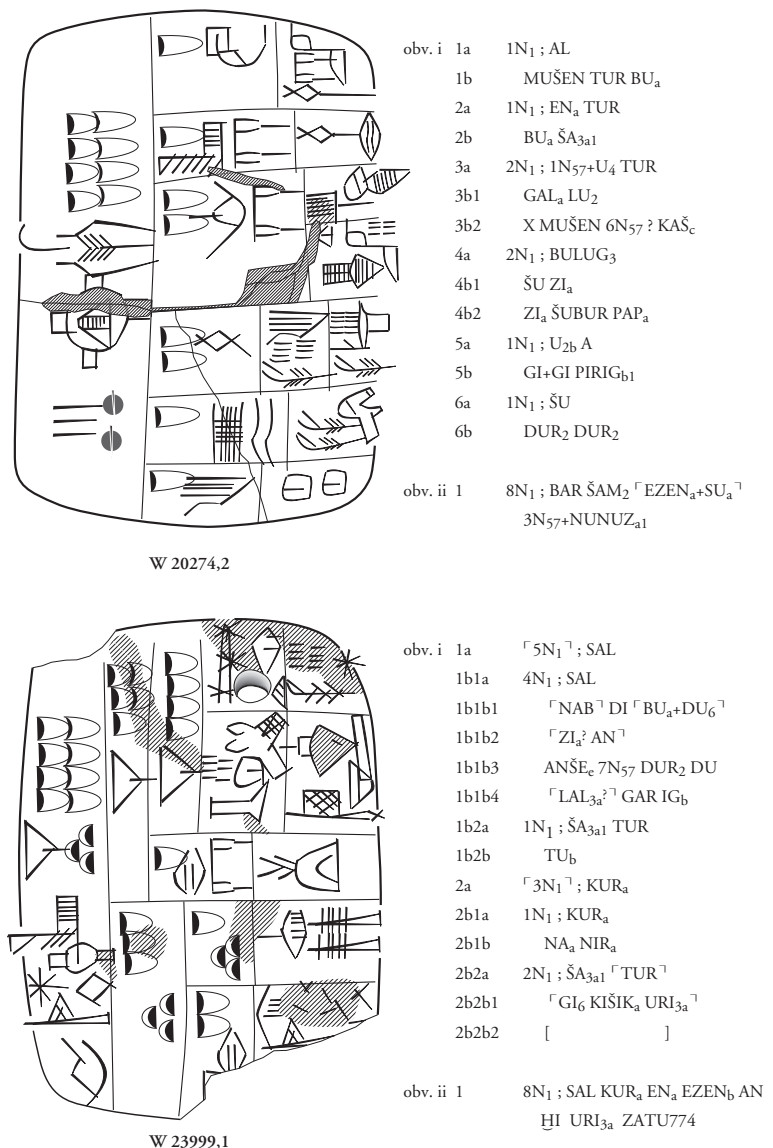


Figure 4: The Uruk texts W 20274,2 and W 23999,1 (reverse surfaces are not inscribed)

šu(-gi₄), “old one,” found in many herding accounts and laborer inventories.

³⁵ Note that “LUGAL” in W 20274,2 obv. i 3b1 probably refers to a one-year-old slave child, and thus is not likely to represent anything like “king” of later tradition. The sign combination LU₂ GAL is attested 10 times in Uruk texts [from a total of 36,448 lines], never in a context of any social consequence, based on the value of commodities registered in proximate tablet cases, and 55 times in ED I-II texts [from a total of 4004 lines] in personal names of a form that is largely consonant with later usage. These figures would reflect a level of usage of “LUGAL” in the ED I-II period about 50 times that of Uruk IV-III, of course given these numbers to be understood with a grain of salt.

§3.6.2. The most compelling accounting practice that emerged from the analysis of these two proto-cuneiform accounts from Uruk was the clear practice of associating numerical notations and general slave designations with sub-cases of signs and sign combinations that corresponded exactly to the numerical notations. Thus, in the first text of figure 4, 1 AL (i 1a) is followed by one sub-case with non-numerical signs; 2 1N₅₇×U₄ TUR (i 3a) by two sub-cases, each with non-numerical signs. The case with 4 SAL in the second text (i 1b1a) is followed by four sub-cases, each, again, with non-numerical signs. It appears reasonable to conclude that

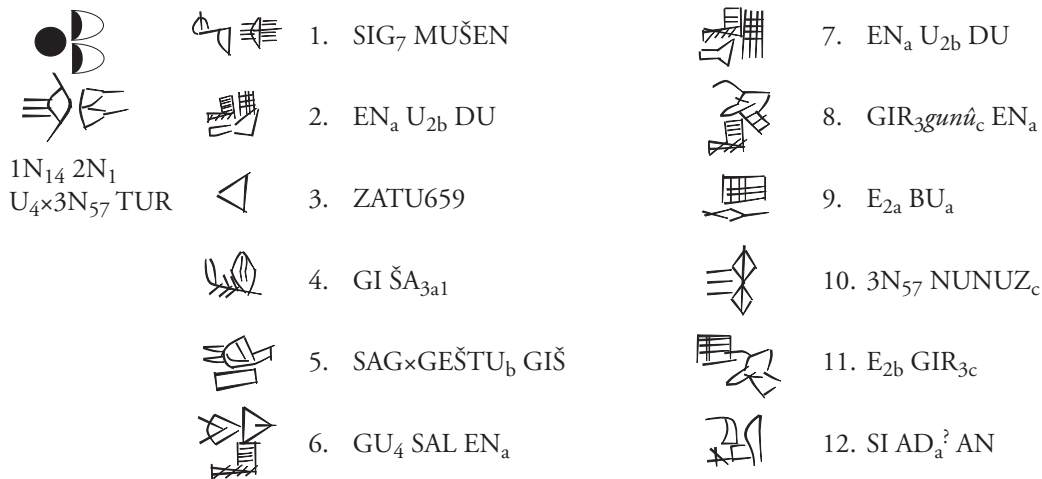


Figure 5: The section in the lower left of the obverse of the Schøyen text MS 3035 (figure 6) demonstrates the numerical relationship between the initial notation (sexagesimal “12” qualifying a notation that may be interpreted to mean “three-year-old children”) and the number of sub-cases to the right with ideograms that in all likelihood represent personal names. Note the occurrence of the same names in sub-cases 2 and 7 (as well as 1b7 of the same column), and the possibility that sub-case 10 is to be interpreted as (KUR_x ZA₇=) “ZAGIN_x” = “Lapis,” “Blue(-eyed one).”

these sub-cases contain personal names associated with individuals recorded in numerical sub-totals to their left (leaving aside a discussion of the true orientation of the proto-cuneiform texts), and that signs or sign combinations associated with these sub-totals qualified the named individuals in very much the same way as herding and dairy accountants recorded gender and age-specific sub-groups of agricultural units.

§4.1. This format was then the “tracer” to locate further instances of the same phenomenon, which differs from accounting formats of herding accounts chiefly in the inclusion of these non-numerical sub-cases.³⁷ Due in part to the poor state of preservation of most Uruk texts, only about a dozen comparable accounts have been isolated among the more than 5000 tablets

and tablet fragments unearthed there in regular excavations, and some few others from other sites.³⁸ These numbers have been significantly increased with nearly 40 new reference texts that form part of the Norwegian Schøyen collection.³⁹ One of these artifacts, first observed in Brussels by Philippe Talon, who recognized its significance and kindly posted to me his carefully done copy and transliteration before it entered the Oslo collection with the manuscript no. MS 3035 (figures 5-6), is of particular note.⁴⁰

§4.2. The large account exhibits the same correspondence between cases with numerical notations and associated sub-cases with non-numerical notations that we have seen in smaller texts above. For instance, the section in the lower left of the tablet’s obverse surface (figure 5) contains a numerical notation representing

³⁶ Englund 1988: 121-185, especially 156-160.

³⁷ Vaiman 1974a: 140 (=Vaiman 1989: 123), to no. 20, drew attention to the likelihood that ATU 1, 92 (=ATU 5, pl. 81, W 9655,t) with its notation obv. 1: 3N₁ 2N₈, referred to three adult slaves and two slave children, parallel to the use of N₈ (N₁ rotated 90° clockwise) to designate young animals (cp. ATU 5, pl. 66, W 9579,ai, pl. 92, W 9656,ba, and pl. 109, W 9656,fx).

³⁸ Aside from MSVO 1, 212-214, see, for instance, ATU 6, pl. 64, W 15772,p; pl. 65, W 15772,z; pl. 74, W 15860,a4; ATU 7, pl. 86, W 22104,3; BagM 22, 60, W 23972,2; W 17729,bp+bx, W 20593,11, <<http://cdli.ucla.edu/P006390>> and <<http://cdli.ucla.edu/P006426>> (unpub.); MSVO 1, 217-222; MSVO 4, 58; CUSAS 1, 36 and 174. We might wonder, further,

whether the archaic “tags” discussed in Bauer, Englund, and Krebernik 1998: 57-60, as well as a large number of recent additions to CDLI (nos. P387483-P387593, P387698-P387725), recorded names of persons.

³⁹ Above, fn. 11.

⁴⁰ See <<http://cdli.ucla.edu/P006268>>. A second, wholly parallel text has not reemerged since it went through Belgium, but was copied by Talon and posted to CDLI under <<http://cdli.ucla.edu/P005573>>. A third, though poorly preserved parallel text is MS 2863/18 (<<http://cdli.ucla.edu/P006184>>). We may note that many of these texts give clear indication of gender distinctions in names, for instance the young girls named SAL SAL and TUR_{3a} BALA_b vs. young boys named EN_a GAL_a

“12” in the sexagesimal system, qualified by $3N_{57} \times U_4$ TUR, probably “three-year-old children.” Exactly 12 sub-cases follow, each with one or more signs representing as many personal names of the individuals summarized in the left-most case.

§4.3. The account at a higher structural level employs procedures that are well known from the grain accounting office of Jemdet Nasr.⁴¹ The double dividing line down the middle of the text indicates that it is the compilation of two still quite significant accounts, each beginning with the most valuable objects (here AL, presumably adult slaves) and continuing through numbers of less valuable items. The first sub-account appears to be globally qualified by the sign $2N_{57} \text{MUN}_{a1}$, the second $1N_{57} \text{MUN}_{a1}$. This MUN_{a1} is likely to represent some sort of accounting (rationing?) period, possibly connected to the sign combination $\text{PAP}_a \text{SU}_a$ discussed below, note 43.

§5.1. Using this, and the 50 other accounts registering numbers of humans in this way, we may compile a list of general qualifications for what we interpret to be archaic slaves:

general terms

KUR_a	male
SAL	female
SAG	head, human ⁴²
$\text{SAG} \times \text{MA}$	noosed head
ERIM_a	yoked one
$\text{PAP}_a \text{SU}_a$? ⁴³

adults

AL	of working age (“hoer” ?)
----	---------------------------

AK_a , $U_4 \text{NIM}_a$ and ŠU TUR in <<http://cdli.ucla.edu/P387752>>, obv. ll. 3.b1-2 and 4.b1-3.

⁴¹ See Englund 2001, especially pp. 26-27 to *MSVO* 1, 95-96.

⁴² See the SAG inventory MS 2437, comprising columns of lines, each with one sub-case containing a numerical notation and sign combinations representing presumably personal names, followed by a second sub-case with only counted SAL. The text, including particularly the summation rev. col. iii, is unclear to me.

⁴³ The total of the account MS 3035 (figs. 5-6 and cf. <<http://cdli.ucla.edu/P005573>> and MS 2863/18, bottom of second column) contains this sign combination where we might expect a general designation of the humans recorded in the text; MS 2498 would tend to support the notion that $\text{PAP}_a \text{SU}_a$ qualifies slaves in some general way, with the first cases containing numerical

youths

$\text{EN}_a \text{TUR}$	four years old and older up to AL?
$\text{KUR}_a \text{TUR}$	boy, younger than $\text{EN}_a \text{TUR}$?
$\text{KUR}_a \text{ŠA}_{3a1}$	boy, very young?
SAL TUR	girl, younger than $\text{EN}_a \text{TUR}$?
SAL ŠA_{3a1}	girl, very young?
$\text{ŠA}_{3a1} \text{TUR}$	= $\text{KUR}_a / \text{SAL} \text{ŠA}_3$
$3N_{57} \times U_4$ (TUR)	three-year-old (or: child in 3 rd year)
$2N_{57} \times U_4$ (TUR)	two-year-old (or: child in 2 nd year)
$1N_{57} \times U_4$ (TUR)	one-year-old (or: child in 1 st year)

§5.2. These then are the higher-level qualifications of persons in proto-cuneiform accounts, quite possibly chattel slaves, or humans in some form of servitude to Late Uruk households. While I must admit to some doubt about the interpretation of the complex signs including “ U_4 ” (“day,” but a general anchor for time metrology notations in this period), it may be relevant to mention the analyses by I. Gelb, H. Waetzoldt and others that children of state-dependent laborers will have been assigned full work loads by the age of six or shortly thereafter. If our designation $\text{EN}_a \text{TUR}$ encompasses a period of several years, AL might indeed qualify workers of an age that would appear young to us, but certainly not to many sweatshop owners around the world, and certainly not to the industrialized West prior to such legislation as the British Factory Act of 1833 aimed at curbing abusive child labor in British textile manufacturing. According to this at the time heralded advance in labor rights, children aged nine to thirteen could not be forced to work more than nine hours a day. Nevertheless, why did archaic accountants so exactly record the ages of children from their first through their third years? This system of dating bears an uncanny resemblance to herding accounts of large cattle and of pigs of later periods, or even of the initial lines of the so-called archaic Pig List.⁴⁴ The age designations of domestic animals employed in those accounts are explicit tools known to any dairy or pig farmer; they track age to know when to wean the young, to judge weight gain, and to prepare sexually mature animals for breeding, or to train oxen for the plough. It is difficult to recognize a comparable need in accounting for young children, aside possibly from the intent of accountants to retain strict control of juveniles as they grew to working age. As slave laborers, after all, they would have represented a substantial chattel asset to ancient households.

notations qualified with $\text{PAP}_a \text{SU}_a$ in parallel to AL on our larger accounts. Cp. in particular MS 2439.

⁴⁴ Englund and Nissen 1993: 22-23, 100-103; Englund 1995; Bauer, Englund, and Krebernik 1998: 169-175.

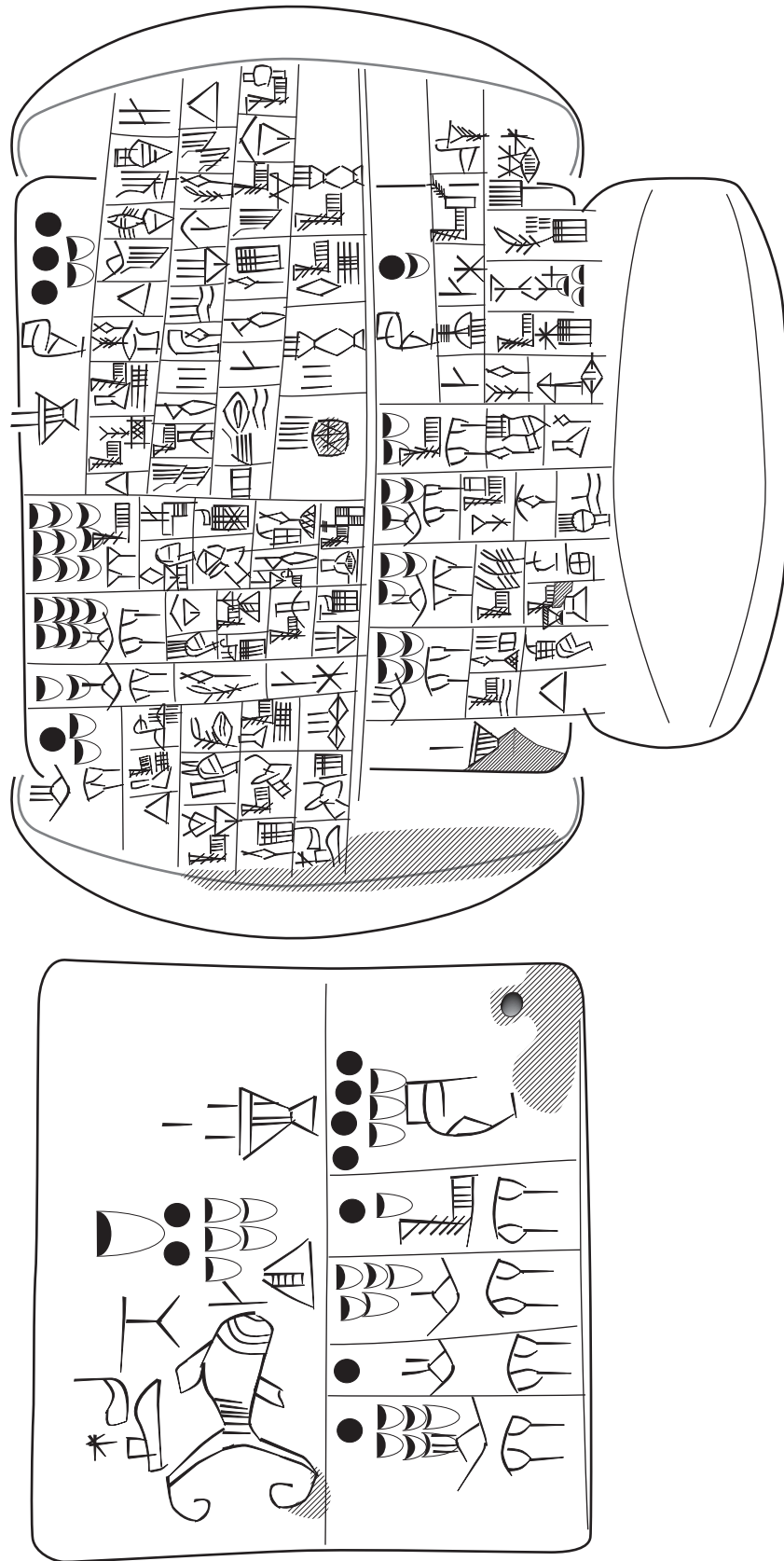


Figure 6: MS 3035, a complex account in the Schøyen collection, contains notations representing numbers of apparent slaves qualified according to age, though not (visibly) gender.

Transliteration of MS 3035:

obverse i		5b6	GU ₄ SAL EN _a
1a	3N ₁₄ 2N ₁ AL 2N ₅₇	5b7	EN _a U _{2b} DU
	MUN _{a1}	5b8	GIR ₃ gunû _c EN _a
1b1	PA _a	5b9	E _{2a} BU _a
1b2	KAŠ _c DA _a	5b10	3N ₅₇ NUNUZ _c
1b3	SUKUDgunû _d NI _a	5b11	E _{2b} GIR _{3c}
1b4	U ₄ ŠU	5b12	SI AD _a ? AN
1b5	ZATU659		
1b6	BU _a ŠE _a ŠUBUR	obverse ii	
1b7	EN _a U _{2b} DU	1a	1N ₁₄ 1N ₁ AL
1b8	EZINU _a EN _a	1b1	ŠE _a MUŠEN
1b9	ZATU659	1b2	IN _b EN _a
1b10	ZATU659	1b3	HAL PAP _a
1b11	ŠU ŠU	1b4	TUR _{3a} 5N ₅₇
1b12	BU _a GI	1b5	PAP _a
1b13	ŠU ₂ PAP _a	1b6	AN TE KI GAL _a
1b14	3N ₅₇ SAL	1b7	ZI _a E _{2a}
1b15	3N ₅₇ A	1b8	ZATU773 _a MAŠ
1b16	BU _a UR _a		KUR _a
1b17	3N ₅₇	1b9	EN _a AN E _{2a}
1b18	DIM _a	1b10	BU _a ŠE _a
1b19	EN _a GIŠxŠU _{2a}	1b11	MUŠ _{3a} NU ₁₁ tenû
1b20	ŠU ŠU	2a	2N ₁ EN _a TUR
1b21	EZEN _b EN _a	2b1	BAHAR _{2a} BU _a
1b22	ŠU ₂ SAL	2b2	BU _a DU
1b23	EN _a AMAR ŠU	3a	3N ₁ U ₄ x1N ₅₇ TUR
1b24	E _{2a} BU _a	3b1	GA _{2a1} EN _a GU
1b25	DIM _a	3b2	ŠU ₂ BU _a
1b26	PAP _a	3b3	1N ₅₇ A NE _a
1b27	ŠA _{3a1} A TAK _{4a}	4a	3N ₁ U ₄ x2N ₅₇ TUR
1b28	NAM ₂	4b1	GI/GI/GI EN _a
1b29	BAHAR _{2a} EN _a	4b2	NU (UDU _a xTAR) _a
1b30	EN _a U _{2b} HI	4b3	EN _a ŠITAgunû _a
1b31	BAHAR _{2a} 3N ₅₇		AB _a
1b32	6N ₅₇ U ₈ U ₈ U ₈	5a	4N ₁ U ₄ x3N ₅₇ TUR
2a	9N ₁ EN _a TUR	5b1	3N ₅₇ DUR2
2b1	PA _a TUN _{3a}		BU _a +DU _{6a}
2b2	SAG HI NIN	5b2	EN _a A
2b3	SI BARA ₃	5b3	GUL SAG
2b4	NI _a GIR _{3c}	5b4	ZATU659
2b5	BU _a +DU _{6a} GUL	6	1N ₅₇ U ₈ MUN _{a1} U ₈
2b6	DIM _a		
2b7	PAP _a SAL DAR _a	reverse i	
2b8	KID _c NUN _a EN _a	1	4N ₁₄ 3N ₁ AL
2b9	MAH _b xNA _a	2	1N ₁₄ 1N ₁ EN _a TUR
3a	7N ₁ U ₄ x2N ₅₇ TUR	3	5N ₁ U ₄ x1N ₅₇ TUR
3b1	ŠU ₂ SAL	4	1N ₁₄ U ₄ x2N ₅₇ TUR
3b2	ŠUR _{2b}	5	1N ₁₄ 6N ₁ U ₄ x3N ₅₇ TUR
3b3	TI SU _a EN _a		
3b4	DAR _b E _{2a}		
3b5	GIŠxŠU _{2a} EN _a	reverse ii	
3b6	SI E _{2a} ME _a	1	1N ₃₄ 2N ₁₄ 5N ₁ 1N ₅₇
3b7	3N ₅₇ SAL		2N ₅₇ MUN _{a1} SU _a
4a	2N ₁ U ₄ x1N ₅₇ TUR		PAP _a 1N ₅₈ BAD _a SI
4b1	BU _a GI		AN AD _a GIR _a
4b2	PAP _a HAL		
5a	1N ₁₄ 2N ₁ U ₄ x3N ₁ TUR		
5b1	SIG ₇ MUŠEN		
5b2	EN _a U _{2b} DU		
5b3	ZATU659		
5b4	GI ŠA _{3a1}		
5b5	SAGxGEŠTU _b		
	GIŠ		

§5.3. Doubtless, tagging all proto-cuneiform accounts that contain the format for personal names described above will result in a list that is, for a number of reasons, by no means complete. In the first place, H. J. Nissen and his research collaborators have stated again and again that we must understand the nature of the texts taken from Uruk excavations. To make historical, occasionally just aesthetic points, often the best preserved of those accounts are cited and put in illustrative graphics or on book jackets, but these are the tablets that survived more than 5000 years of deposition in Uruk, after having been rudely gathered and tipped, as detritus of a burgeoning administration, into construction projects of the ancients. Most artifacts could not survive such ill treatment intact.⁴⁵ Thus the very fragmentary nature of the great majority of our texts gives fair warning that we are missing much of the original depositions, certainly most of the original text material, and that those exemplars we do have are so incomplete as to make a measured judgment of their contents very difficult. In the second place, the state of decipherment of proto-cuneiform approached a natural barrier with publication, in *ATU 2* (1987),⁴⁶ of the results of research conducted by H. J. Nissen and M. Green on the interpretation of non-numerical signs in the proto-cuneiform texts, and of research conducted by P. Damerow, R. K. Englund and J. Friberg on the numerical signs and sign systems. Advances in the understanding of Late Uruk texts from Mesopotamia have, since that publication, been modest.⁴⁷ Particularly the interpretation of much of the source material that is not directly associated with numerical notations, with counted or measured objects, or with signs or sign combinations found attested in the thematically ordered archaic lexical lists whose un-

⁴⁵ The attractive state of preservation of many archaic collections gathered from the antiquities markets notwithstanding, since these tablets are what remained after a rigorous sifting process that selected “preserved” and left behind “fragmentary” at the site of plunder, and this sifting continues through the markets down to end-buyer. Though now exposed to the elements, we may hope that future regular excavations will gather in the many thousands of fragments of texts that must well litter the edges of illegal excavations of post-Kuwait war Iraq.

⁴⁶ Green and Nissen 1987.

⁴⁷ Research conducted above all by the Oxford Sumerologist J. L. Dahl on the approximately contemporaneous, proto-Elamite accounts from ancient Iran has led to substantive gains in accessing that related writing system. See Dahl 2005a, 2005b and nd.

interrupted history of transmission resulted in sign-for-sign copies well into the 3rd millennium, and even into the Old Babylonian period, remains highly problematic. These remaining sets of signs will include personal names.⁴⁸

§5.4. Nevertheless, the limited method of sign and sign string isolation used here has resulted in a list of ca. 450 discrete entries (see the appendix below), each with fair probability representing the given name of an individual. We may look at these personal names in a number of ways. The resolute decipherer will first just count and rank signs, always aware that the sample may be skewed, given that so much now derives from one private collection of inscriptions of unknown provenience. Persons whose names included the sign EN_a, possibly the ruler of archaic communities or even of regions, should not surprise us, and this may be the correspondence to lugal in later Early Dynastic personal names. This sign is attested more than twice as often as the runner-up signs BU_a (unclear meaning; pictographically “snake,” but its only contextually derived denotation points toward field surveying) and 3N₅₇ (in some and possibly most instances an abstracted form of the sign KUR_a, “male slave” or perhaps after all also “mountain,” “foreign land”).

§5.5. For comparison, it may be helpful to list the number of attestations of highest frequency signs used in all discovered personal names (left), and the most

⁴⁸ Still, public access to proto-cuneiform texts has moved to an entirely new level since the establishment of the Cuneiform Digital Library Initiative (<<http://cdli.ucla.edu/>>), dedicated to the digital capture and dissemination of all cuneiform sources, but in its initial phases focusing on corpora of the 4th and 3rd millennia. No phase of cuneiform is so well documented online currently as is the Late Uruk period, including image and text representations of nearly all available text artifacts, both edited and unedited. Thus, digital facsimiles of nearly all proto-cuneiform texts are available for free use by all networked researchers, and are being profitably exploited by specialists in their work and publications; one successful recent example is the edition of the Cornell proto-cuneiform collection (Monaco 2007). Further, the field may expect in the next years to avail itself of a federated and persistent website that will facilitate wholesale downloads of data packages and accompanying open source software to better interpret *locally* the descriptions of early cuneiform texts posted by Assyriologists, by linguists and scholars from other related fields, and by informal learners alike. We may therefore be confident that in the near future the re-

frequent signs in the proto-cuneiform texts generally (right; excluding lexical list attestations):

EN _a	91	EN _a	1470
BU _a	43	AN	811
3N ₅₇	40	GAL _a	783
PAP _a	33	SAL	683
AN	31	GI	679
ŠU	31	BA	662
E _{2a}	24	PAP _a	623
DU	21	SANGA _a	545
ŠUBUR	21	NUN _a	519
MUŠEN	19	ŠU	505
A	17	E _{2a}	463
HI	17		
SAL	17		
GI	16		
KAŠ _c	16		
SAG	14		
SI	14		
U _{2b}	14		
GIR _{3c}	12		
ZATU659	12		

§5.6. Although I cannot make out a meaningful pattern in these numbers, at least we now have a basis for comparing the frequency of signs used in personal names versus those used in the texts as a whole; such frequency tables can serve, for instance, to test in Babylonian texts the hypothesis of Meriggi, Vallat and Dahl that proto-Elamite scribes developed a syllabary used exclusively to record proper nouns.⁴⁹ It might here be more instructive to consider the signs and sign combinations that are most often found in our list as those representing true names of individuals, and to compare these entries with the most frequently attested names in the texts from the “historical” ED IIIb (ca. 2400-2350 BC) and the Ur III (ca. 2050-2000 BC) periods.⁵⁰

Late Uruk, ca. 3200 BC	
<i>names</i>	<i>times attested</i>
ZATU659	10
PAP _a	7
ŠUBUR	7

sources for study of onomastics in the archaic texts will steadily improve.

⁴⁹ Meriggi 1975; F. Vallat 1986: 338-339; Dahl 2005a: §5.5, and nd.

⁵⁰ The numbers of ED IIIb and Ur III names are to be understood as very preliminary, and more relative than absolute; they are based on a count of attestations in the transliterations available to CDLI (and downloadable at <<http://cdli.ucla.edu/downloads.html>>). Our files contain ca. 8500 names in the Ur III period.

BU _a GI	6
DIM _a	5
EN_a PAP_a	4
EN_a U_{2b} DU	4
EZEN_b EN_a	4
NI _a GIR _{3c}	4
ŠU ŠU	4
3N ₅₇ SAL	3
E _{2a} DAH	3
EN_a GIŠ×ŠU_{2a}	3
KASKAL ŠUBUR	3
UB ZI _a	3

ED IIIb, ca. 2400 BC

<i>names, men</i>	<i>names with this element</i>
dDN-... (in any position)	210
lugal-...	190
ur-...	170
en-... (excluding d _{en} -ki/d _{en} -lil ₂)	82
e ₂ -...	81
a-...	68
amar-...	32
lu ₂ -...	27
me-...	24
nam-...	23
sag-...	20
<i>names, women</i>	<i>names with this element</i>
nin-...	141
geme ₂ -...	24
ama-...	24

Ur III, ca. 2000 BC

<i>names, men</i>	<i>names with this element</i>
dDN-... (in any position)	1664
ur-...	683
lu ₂ -...	589
lugal-...	585
...-mu (some = muḫaldim)	368
e ₂ -...	290
du ₁₁ /inim-...	197
dingir-...	157
ḫa/ḫe ₂ /ḫu-...	150
(en-...	94)
(amar-...	32)
<i>names, women</i>	<i>names with this element</i>
nin-...	320
geme ₂ -...	201
ama-...	85

§5.7. Comparing the list of proto-cuneiform personal names with those of the most common personal names or name elements in the Early Dynastic and Ur III pe-

riods, we see quite substantial differences. First is, our archaic personal names contain no obvious theophoric elements. Indeed, in this list, there is not one instance of a name that might plausibly be interpreted to include a Sumerian divine element, whereas such names outnumber all other examples in both ED IIIb and Ur III texts. Then also, the common elements ur, amar, a (seed) are nearly unknown in the archaic texts, and those instances of EN_a (in bold) that we might consider archaic correspondences to later lugal contain other elements that make no sense if interpreted to be Sumerian. Finally, the Sumerian names of women from later periods find no counterparts in the archaic texts.

§6.1. I have stated elsewhere⁵¹ that this search for personal names among slaves might be skewed in another telling way. We might suspect that as in later periods, and as the designations SAG+MA and ERIM_a, as well as seeming prisoner scenes on many Late Uruk seals might tend to support, the chattel slaves were above all taken from foreign populations, their names thus in some non-Babylonian language. But frankly, it would surprise me if the Uruk overlords did not rename their foreign slaves with terms comprehensible to the local population, much as did the buyers of African slaves shipped to the Americas, since it is difficult to imagine that those engaged in the exchange and exploitation of humans, of whole families judged as little better than local livestock, would have made an effort to retain their native names. I can offer only indirect evidence that this may have been true. Contracts of the sale of chattel slaves in the Ur III period followed a standard format that included the name of sold persons in the form “one (slave type), PN his/her name, his/her price n shekels of silver”

§6.2. A quick search of available documents, restricting myself for the present to only those contracts and related court records that included the phrase “PN mu-ni-im,” “PN is his/her name,”⁵² demonstrates that some of these names are clearly of foreign origin, or are

⁵¹ Bauer, Englund, and Krebernik 1998: 176 n. 407.

⁵² Searching for instances of PN1 ARAD₂ PN2 (“PN1, male slave of PN2”), PN1 sag nita₂ PN2 (“male ‘head’ of”), PN1 sag munus (“female ‘head’ of”) and PN1 dumu nita₂/munus PN2 (“male/female child of”) in our files results in a list of more than 300 occurrences, indicating the range of numbers we might expect in a full set of chattel slave names. My perusal of the names of PN1’s indicated no deviation from the general pattern observed in our list of mu-ni-im names, although the

Akkadian, but that the majority carried a plausible Sumerian pedigree.

In Nippur:

sag nita nam-dumu mu-ni-im
 ur-lugal mu-ni-im
 lugal-ur₂-ra-ni mu-ni-im
 ad-da-[...] mu-ni-im
 lu₂-^den-lil₂-la₂ mu-ni-im
 šar-ru-a mu-ni-im
 nu-^hi-dingir mu-ni-im
 lu₂-^dsuen mu-ni-im
 guruš i-din-^dda-gan mu-ni-im
 dumu a-bi-ša-ru-um
 (*guruš redemption text*)
 sag munus maš-da₂-gu-la mu-ni-im
 en-ni-^dla-az mu-ni-im
 ni-za-ti-a mu-ni-im
 a-za-za mu-ni-im
 nin-mu-ba-zi-ge mu-ni-im
 geme₂-e₂-zi-da mu-ni-im

In Ur:

sag nita₂ šu-gu-bu-um mu-ni-im
 en-um-^diškur mu-ni-im
^dnin-gir₂-su-ka-i₃-sa₆ mu-ni-im
 dingir-ma-lik mu-ni-im
 sag munus ta-re-ša-am₃ mu-ni-im
 i₃-li₂-bad₃-re mu-ni-im

In Wilayah²:

sag nita₂ |PU₃.ŠA|-^ha-ia₃ mu-ni-im
 sag munus na-an-na-a mu-ni-im
 a-ga-ti-ma mu-ni-im
 eš₁₈-dar-um-mi mu-ni-im

In Umma:

sag nita a-ba-in-da-an-e₃ mu-ni-im
 dumu nita₂ a-ba-a-in-da-an-e₃ mu-ni-im
 sag munus ^dba-ba₆-lu₂-sa₆-sa₆ mu-ni-im
 nin-mu-ušur_x(LAL₂.TUG₂)-mu
 mu-ni-im

In Girsu:

sag nita a-lu₂-du₁₀ mu-ni-im
 sag munus geme₂-aga mu-ni-im

terminological differentiation of slave designations in lead lines of sale contracts (sag nita₂/munus and dumu nita₂/munus) vs. ARAD₂ and geme₂ in legal case records (di-til-la) and related legal and administrative references is notable. Such texts as *TUT* 164-12 indicate that, as is generally understood, the more formal designation of ARAD₂ and geme₂ in the context of chattel slaves is in fact sag (nita₂/munus).

§6.3. Isolating personal names in the proto-cuneiform texts represents an important beginning in our efforts to lemmatize all proto-cuneiform transliterations with an eye toward identifying the signs that we do understand, or that we believe we understand, and toward more broadly defining what the sign combinations represent that do not correspond to common entries in our lexical lists. I put these data up to underscore the lingering problems in determining the linguistic affiliation of the earliest Babylonian scribes. It may be debated whether the rough translation “male slave” and “female slave” are correct renderings of the proto-cuneiform signs SAL and KUR_a, but I think the unbiased observer will not reasonably doubt that most, perhaps all of the sign combinations discussed above in selection, and listed in the appendix below, do in fact represent personal names. They are directly, or by association categorized by Late Uruk scribes using terminology that ultimately points to SAL and KUR_a; they are found in a distinct text format that removes them from the realm of simple object designations; and they do not correspond to entries in the thematic lexical lists.

§6.4. The list of presumed slave names is by no means definitive, but I think a good indication of problems inherent in the archaic Sumerian postulate. Even under the assumption that the personal names in our texts were those of prisoners of war, or of slaves imported into Babylonian bondage from regions surrounding Mesopotamia, and thus were not of the “Uruk core,” sharing the language and culture of their overseers, it remains difficult to understand the absence of, among other linguistic clues, theophoric elements, Sumerian or otherwise. This reminds us of the fact that we have found no lexical god lists of the pantheistic form well attested in the ED IIIa period—it is in fact difficult to point to any clear evidence of anthropomorphic deities in the Late Uruk period at all, once the presumed depiction of Inanna on the Uruk Vase is put in doubt—and that such theophoric elements have not been identified in any other sign combinations that would be credible candidates for personal names. That would leave us with the common elements for males, lu₂, lugal, nin, ur, and ARAD₂, and for females nin, geme₂ and ama—all exceedingly rare, or missing here. If we exchange SAL for geme₂, and KUR_a or 3N₅₇ or, for skeptics, even ŠUBUR for, say, ur, then the corresponding names in our list are not more reflective of expected early Sumerian forms. How much more agreeable this discussion would be if Langdon, now eighty years ago, had been right and not just en-lil₂-ti, but other names in this vein had been uncovered in the proto-cuneiform archives!

Appendix. List of personal names in “slave” accounts

(signs of individual names have been force-sorted without regard to potential language-revealing sequences; an annotated archaic name glossary will appear in due time in the pages of the CDLI)

A AL MUN _{a1} TE	AN GUM _b	BU _a ŠE _a 3N ₅₇	DUR ₂ DUR ₂
A EN _a	AN IM _a KISAL _{b1}	BU _a ŠU	DUR ₂ ERIM _a MEN _a
A KI NE _a [...]	AN KAŠ _c ME _a NA _a	BU _a ŠU ₂	ZATU751 _a
A NAR	AN KI	BU _a ŠUR _{2b}	DUR ₂ ŠE ₃ ?
A NE _a 1N ₅₇	AN LU ₂ ZATU773 _a	BU _a TUR	DUR ₂ ZATU751 _a 3N ₅₇ [...]
A NUNUZ _{a1}	AN MUŠ _{3a} SIG	BU _a U _{2a}	E _{2a} BU _a
A SAG	AN NIMGIR	BU _a UR _a	E _{2a} DAḤ
A [?] SANGA _a ? [...]	AN PIRIG _{b1} 3N ₅₇	BU _a +DU _{6a}	E _{2a} EN _a AN
A ŠA TAK _{4a}	AN TAK _{4a} U _g ?	BU _a +DU _{6a} BU _a +DU _{6a}	E _{2a} LAM _b MUD
A ŠA _{3a1} TAK _{4a}	AN TE KI GAL _a	EZINU _a PAP _a	E _{2a} NE _a PAP _a
A TAK _{4a}	AN UB ḤI	BU _a +DU _{6a} DI NAB	E _{2a} PIRIG _{b1} ? UDU _a
A U _{2b}	AN URU _{a1}	BU _a +DU _{6a} DUR ₂ 3N ₅₇	E _{2a} SAG 3N ₅₇
A 3N ₅₇	AN ZI _a ?	BU _a +DU _{6a} GUL	E _{2a} SAL
AB _a EN _a U _{2b}	ANŠE _c DU DUR ₂ 7N ₅₇	DA _a E _{2a} 3N ₅₇	E _{2a} SI ME _a
AB _a EZEN _b X [...]	APIN _b	DA _a KAŠ _c	E _{2a} ŠUBUR
AB _a KAK _a ?	BA NESAG _{2b}	DA _a KAŠ _c ŠE _a /ŠE _a	E _{2a} ZI _a
AB _a KU _{6a}	BAḤAR _{2a} BU _a	DA _a KU _{6a} [...]	E _{2a} [...]
AB _a 5N ₅₇	BAḤAR _{2a} EN _a	DAḤ	E _{2b} BAR 3N ₅₇
AB _b GU ₄ EN _a	BAḤAR _{2a} ? EN _a AN	DAḤ [...]	E _{2b} BU _a
AB _b SANGA _a	BAḤAR _{2a} 3N ₅₇	DANNA KUR _a	E _{2b} GIR _{3c}
AD _a ? AN SI	BALA _b TUR _{3a}	DAR _a PAP _a SAL	E _{2b} KALAM _a
AD _a X	BAN _b PAP _a	DAR _b E _{2a}	E _{2b} SI NAGA _a
AD _c E _{2a} SAL	BAR? GUG ₂	DAR _b E _{2b} ŠA	E _{2b} 3N ₅₇
AD _c GI ḤI	BAR X [...]	DARA _{3d} ×KAR ₂	E _{2a} 3N ₅₇ [...]
AK _a EN _a GAL _a	BARA _{2a} TAK _{4a}	DARA _{4a1} SI	E _{2b} 3N ₅₈
AMA _a AN EN _a	BARA ₃ DU	DI NAB	EN _a EN ₂ .E _{2b}
AMA _a AN MA	BARA ₃ SI	DI NAB NIN	EN _a EZEN _b
AMA _a ERIM _a MUŠEN	BU ₃ A	DIM _a	EN _a EZINU _a
MAŠ	BU ₃ A DUR ₂	DIM _a DA _a	EN _a GA _{2a1} GU
AMA _a GI KI MUŠEN MAŠ	BU _a DU	DIM _a X	EN _a GA _{2a1} ? NUNUZ _{a0} ?
ZATU694 _c	BU _a EN _a KAL _{b2} MAŠ	DIN E _{2a}	EN _a GA _{2a2}
AMA _a ZATU628 _b N ₄	BU _a EN _a MAŠ	DU BA KI	EN _a GIŠ×ŠU _{2a}
AMAR EN _a ŠU	BU _a EN _a 1N ₅₇	DU E _{2a} PIRIG _{b1} 3N ₅₇	EN _a GU ₄ SAL
AN AN GAR	BU _a GI	DU EN _a KA _a	EN _a ḤI
MUŠEN×2N ₅₇ N ₂₄ ?	BU _a ḤAL ŠITA _{a3}	DU EN _a U _{2b}	EN _a ḤI KAŠ _c
AN DU ZATU735 _a ?	BU _a IŠ _b	DU ḤI TA _c	EN _a ḤI RAD _a
AN DUB _a NIN	BU _a LAL _{2a}	DU IB _a X X	EN _a ḤI ŠA _{3a1}
AN DUR ₂ EN _a ḤI 1N ₅₈	BU _a MAŠ	DU KI 3N ₅₇	EN _a ḤI U _{2b}
AN E _a ? ME _a ? [...]	BU _a MUD NA _a	DU KU _{6a}	EN _a ḤI UNUG _a
AN EN _a	BU _a MUŠEN TUR	DU PAP _a TUR _{3a}	EN _a IB _a
AN EN _a DU	BU _a PAP _a	DU TA _d	EN _a IN _b
AN EN _a MUŠ _{3a}	BU _a PAP _a BU _a	DU TUR _{3a} U _{2b} ?	EN _a KI _a
AN EN _a SAG	BU _a PAP _a [...]	DU [?] URI _{3a} [...]	EN _a KID _c NUN _a
AN EN _a UMUN ₂	BU _a SAL	DU N ₁ ? X	EN _a NA _a NIM _{b2}
AN EN _a [...]	BU _a ŠA _{3a1}	DU×DIŠ ERIM _a LAGAB _b	EN _a NA _a UDU _a X
AN EŠDA	BU _a ŠE _a	DU ₇ ZATU686 _b	EN _a NIGIN TI
AN GIŠ ZATU77 _{3a} ?	BU _a ŠE _a ŠUBUR	DUG _a ? SI X X	EN _a NIM _{b1} 1N ₅₇ ?

EN _a NUNUZ _c	GI/GI PIRIG _{b1}	KAŠ _c [...]	NE _a ZATU778
EN _a PA _a	GI/GI 3N ₅₇	KI NU U ₄	NI _a SA _c
EN _a PAP _a	GI/GI/GI EN _a	KI _a ZATU629 _a	NI _a SAG TAK _{4a}
EN _a PAP _a X	GI×KU _{b1}	KI X X	NI _a SUKUD _{gunú_d}
EN _a PAP _a [...]	GI _{4a} ŠA _{3a1}	KID _b LAGAB _a	NI _a ŠU
EN _a PIRIG _{b1}	GI _{4a} ŠA _{3a1} [...]	KISAL _{b1} PAP _a SI	NI _a ŠU ZATU811
EN _a SAG [?]	GI ₆ KIŠIK _a URI _{3a}	KISAL _{b1} X [...]	NI _a ŠU ₂ U ₄
EN _a SAG ŠE _a	GI ₆ [?] LAM _b ŠU	KISIM _a KU _{b1} KU _{6a}	NI _a ZATU713
EN _a SAL TE 3N ₅₇	GIR _{3a} NI _a	KIŠIK _a NA _a ŠUBUR	NI _a ZATU773 _a
EN _a SAR _a	GIR _{3c}	KITI 3N ₅₇	NIM _a
EN _a SI ŠAGAN	GIR _{3c} DU	KU _{3a} [...]	NIM _a U ₄
EN _a SU _a TI	GIR _{3c} NI _a	KU _{6a} RAD _a UR _a	NIMGIR
EN _a ŠITAG _{gunú_a} AB _a	GIR _{3c} PAP _a	KU _{6a} RAD _a 3N ₅₇	NIR _a ZATU773 _a
EN _a ŠU ₂ .E _{2b}	GIR _{3c} ×ŠE ₃ NUN _a [...]	KU _{6a} [?] TUM _c X	NU (UDU _a ×TAR _a) _a
EN _a TU _a [...]	GIR _{3c} N ₁	KUR _a MAŠ ZATU773 _a	NU ŠUBUR
EN _a TUR	GIR _{3gunú_b} 3N ₅₇	KUR _a .E _{2a} 3N ₅₇	NUNUZ _{a1} 3N ₅₇
EN _a U ₄	GIR _{3gunú_c} EN _a	LA ₂ [?] NA _{2a} [?] X	NUNUZ _c 3N ₅₇
EN _a URU _{a1} 2N ₅₇	GIR _{3gunú_c} SUKKAL	LA ₂ SUG ₅	PA _a
EN _a ZATU630	GIŠ SAG×GEŠTU _b	LA ₂ SUM _b	PA _a TUN _{3a}
EN _a ZATU697 _c	GIŠ×ŠU _{2a} NIMGIR	LA ₂ TE	PA _a [?] X
EN _a ZATU829	GIŠ×ŠU _{2a} SAG ŠU	LAM _b X	PAP _a
EN _a N ₄	GIŠ _{3b} UR _a	LUGAL	PAP _a SAL N ₂
EN _a X	GU _{4gunú} DIN	MA MA	PAP _a SU _a 3N ₅₇
EN _a X [...]	GUL KITI	MA SI	PAP _a ŠU
EN _a [...]	GUL SAG	MAH _b ×NA _a	PAP _a ŠU ₂
EN ₂ .E _{2b} 3N ₅₇	HAL ME _a	MAŠ MUŠEN	PAP _a ŠUBUR ZI _a
ERIM _a GI ₆ I	HAL PAP _a	MAŠ ₂ 1N ₅₇	PAP _a 3N ₅₇
ERIM _a KU _{6a}	HI KASKAL	ME _a [?] SAL SAL ZATU751 _a	PAP _a X [...]
ERIM _a SAG [...]	HI MUŠEN SAL UR _{5a}	X	PAP _a [...]
ERIM _a ZATU751 _a	ZATU628 _a	ME _a ŠU	PIRIG _{b1}
ERIM _a [...]	HI MUŠEN 1N ₅₇	ME _a ŠU X X	PIRIG _{b1} 3N ₅₇ [...]
EZEN _a ×SU _a	HI NAGA _a	ME _a U ₈	RU
ZATU651×EN _a	HI NIN SAG	ME _a X X	RU NAR
GA _{2a1} ×EN _a NUNUZ _{a1}	HI ZATU832	ME _a [?] [...]	RU ŠUBUR
GA _{2a2} ŠU	HI×1N ₅₇ GI ₆	MU TUR	RU U _{2b}
GA _{2a2} ×3N ₅₇	HI×1N ₅₇ /HI×1N ₅₇ EN _a	MUD	RU 3N ₅₇
GAL _a PU ₂	HI _{gunú_b}	MUD [...]	RU [...]
GAL _a MU SANGA _a ŠU	IL KI [?] X	MUŠ _{3a} NU ₁₁ tenú	SAG U _{2b}
GAL _a MU SANGA _a ŠU	IŠ _b KAŠ _c	MUŠEN	SAG X
ZATU651 _{gunú}	IŠ _b ZATU832	MUŠEN RAD _a	SAG [...]
GAL _a SILA _{3a} ×NI _a	KA ₂ ×LAM GA _a [...]	MUŠEN RAD _a ŠUBUR	SAG×MA
GAN ₂ HI	KAL _{b2} NIMGIR	MUŠEN SIG ₇	SAGŠU [?] GAL _a
GAN ₂ 3N ₅₇	KASKAL ŠUBUR	MUŠEN ŠE _a	SAL SAL
GAR IG _b LAL _{3a} [?]	KASKAL [...]	MUŠEN ZATU659	SAL ŠU ₂
GAR U _{2a}	KAŠ _b MUŠEN [?]	NA _a NIR _a	SAL 3N ₅₇
GI DIM _a	KAŠ _c KAŠ _c	NAGA _a	SAR _a URU _{a1}
GI KAŠ _c MUŠEN	KAŠ _c MUŠEN	NAM _a KI	SAR _a 3N ₅₇ [...]
GI MUŠEN NA _a	KAŠ _c MUŠEN 6N ₅₇ [?] X	NAM ₂	SI _{4a} U ₄ X
GI MUNŠUB _b	KAŠ _c ŠE _a /ŠE _a	NAM ₂ X [...]	ŠU U ₄
GI NA _a [...]	KAŠ _c TAK _{4a}	NAR	ŠUBUR UB
GI ŠA _{3a1}	KAŠ _c ZATU823	NAR ŠA _{3a1}	SI UR _a
GI ŠU [?] [...]	KAŠ _c X	NE _a ŠU	SI TUR _{3a} ZATU773 _a

SI N ₁	ŠU [...]	TU _b	UR _{3b2}
SI 5N ₅₇	ŠU ₂ URI _{3a}	TU _b UD _{5a} [?]	URI _{3a} [...]
SI _{4a} U ₄ X	ŠU ₂ .N ₂	TUR	URI _{3a} ZATU773 _a
SU _a U _{2b}	ŠUBUR	TUR _{3a} 5N ₅₇	ZATU659
SUKKAL X	ŠUBUR X	U _{2b} [...]	ZATU795
ŠA X	ŠUBUR ŠUM	U ₈ 6N ₅₇	ZATU811 3N ₅₇
ŠA ŠA TUM _c	ŠUBUR UB	UB ZI _a	ZATU819 [?] X
ŠU ŠU	ŠUR _{2a}	UD _{5a}	N ₁ [...]
ŠU TUR	ŠUR _{2b}	UNUG _a ZATU773 _a	3N ₅₇
ŠU U ₄	TAK _{4a} U _{2b}	UNUG _a [...]	3N ₅₇ X
ŠU ZI _a	TE UNUG _a	UR _a [?]	3N ₅₇ X [...]
ŠU 3N ₅₇	TI ZI _a [?] [...]	UR _a UR _a	3N ₅₇ [...]
ŠU X	TI ^{tenû} GIR _{3c}	UR _a [?] URI _{3a}	

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