





WORKING PAPER NO. 2

J. Cale Johnson

Late Uruk bicameral orthographies and their Early Dynastic Rezeptionsgeschichte

Sonderforschungsbereich 980 Episteme in Bewegung. Wissenstransfer von der Alten Welt bis in die Frühe Neuzeit

Collaborative Research Centre Episteme in Motion. Transfer of Knowledge from the Ancient World to the Early Modern Period

Berlin 2014 ISSN 2199-2878

SFB Episteme – Working Papers

Die Working Papers werden herausgegeben von dem an der Freien Universität Berlin angesiedelten Sonderforschungsbereich 980 Episteme in Bewegung. Wissenstransfer von der Alten Welt bis in die Frühe Neuzeit und sind auf der Website des SFB sowie dem Dokumentenserver der Freien Universität Berlin kostenfrei abrufbar:

www.sfb-episteme.de und http://edocs.fu-berlin.de

Die Veröffentlichung erfolgt nach Begutachtung durch den SFB-Vorstand. Mit Zusendung des Typoskripts überträgt die Autorin/der Autor dem Sonderforschungsbereich ein nichtexklusives Nutzungsrecht zur dauerhaften Hinterlegung des Dokuments auf der Website des SFB 980 sowie dem Dokumentenserver der Freien Universität. Die Wahrung von Sperrfristen sowie von Urheber- und Verwertungsrechten Dritter obliegt den Autorinnen und Autoren.

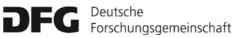
Die Veröffentlichung eines Beitrages als Preprint in den Working Papers ist kein Ausschlussgrund für eine anschließende Publikation in einem anderen Format. Das Urheberrecht verbleibt grundsätzlich bei den Autor/innen.

Johnson, J. Cale: Late Uruk bicameral orthographies and their Early Dynastic Rezeptionsgeschichte, Working Paper des SFB 980 Episteme in Bewegung, No. 2/2014, Freie Universität Berlin

Working Paper ISSN 2199 - 2878 (Internet)

Diese Publikation wurde gefördert von der Deutschen Forschungsgemeinschaft (DFG).

Sonderforschungsbereich 980 "Episteme in Bewegung" Freie Universität Berlin Schwendenerstraße 8 D – 14195 Berlin Tel: +49 (0)30 838-503 49 / -590 24 Email: info@sfb-episteme.de



To appear in: R. Dittmann/G. Selz (eds.), Zur Erforschung des Frühdynastikums, Altertumskunde des Vorderen Orients (forthcoming).

Late Uruk bicameral orthographies and their Early Dynastic Rezeptionsgeschichte

J. Cale Johnson, Berlin¹

Introduction

When we think of representative democracy, one of its surprising features is the ubiquity of bicameral representative bodies. Whether the opposition between the House of Representatives and the Senate in the US or the opposition between the House of Commons and the House of Lords in Great Britain, the idea of two distinct groups of representatives (typically representing very different interests within a particular society) seems to be an essential feature of the Western/First World political and even cultural matrix. Most of these arrangements allocate a superordinate role or a review function to one of the two bodies, often framed in terms of an aristocratic, older or at least "cool-headed" superordinate house in opposition to a lower house that more directly reflects the interests of the "common man."² And as Thorkild Jacobsen famously argued, we see a pair of institutions represented in the Sumerian literature of the Old Babylonian period (ca. 1800–1600 BCE) that are reminiscent of a bicameral legislative body: the assemblies {ukkin ĝar.ra} of the old {ab.ba} and young men {guruš} in Uruk in the literary text known as *Gilgamesh and Akka*.³ Centering as it does

¹ I would like to express my thanks to Bob Englund, Bob Biggs, Niek Veldhuis, Mark Geller, Camille Lecompte and Carolin Jauß for comments on an earlier draft. All errors of fact or judgement remain mine alone. After this paper had already been submitted, Klaus Wagensonner kindly sent me his paper from the 54th RAI at Würzburg (Wagensonner 2012), which deals with many of the same issues as this paper. I have not attempted to integrate Wagensonner's discussion into the paper at this late date, but I can heartily recommend that interested readers consult both Wagensonner 2010 and 2012. This work was funded by SFB 980: Episteme in Bewegung (research group A01) at Freie Universität Berlin.

 $^{^2}$ These two functions often intersect in complex ways with both political and legal institutions in a given society: the House of Lords, for example, reviews legislation in a way that is reminiscent of the United States Supreme Court; for a fascinating picture of similar processes in the French Conseil d'État, see Latour 2010. It is within the legal sphere, crucially, that we find the clearest evidence of assemblies of elders as a real social practice in the ancient Near East.

³ The key references for Jacobsen's theory are Jacobsen 1943 and 1957, although the proposal has been frequently discussed in the subsequent literature; for recent discussions, see Pettinato 1994; Selz 1998; Fleming 2004, 204–210; Wilcke 2007, 161–164 apud Rubio 2009, 33; Liverani 2010, 182–183. Fleming suggests that the two "assemblies" in *Gilgamesh and Akka* are actually *ad hoc* factions within a single assembly, a view that accords well with the use of {ukkin gar.ra} elsewhere in Sumerian literature. In both *The Return of Lugalbanda* 290 and *Enmerkar and En-suhkeš-ana* 128, the term {ukkin gar.ra} seems to designate a group of individuals who happen to be present, viz. an informal gathering, rather than the meeting of a formal institution. But even such a seemingly *ad hoc* bifurcation must ultimately be rooted in a literary or political tradition of some kind, as Liverani has recently reasserted (Liverani 2010, 182, see already Katz 1987 as well as the discussion of

on Gilgamesh, the period of time referenced by this Old Babylonian period composition is undoubtedly the Early Dynastic city of Uruk (ca. 2600 BCE). Thus at least for the literati of the Old Babylonian period the reality of some form of bicameralism in Early Dynastic Uruk cannot easily be denied, even if other lines of historical material offer little or no support for the existence of a bicameral decision-making body in the Early Dynastic period.⁴

Jacobsen's misstep was to see this bicameral institution as a political reality of the Early Dynastic period rather than a part of the imaginative world of the Old Babylonian scribal class and in particular the theory of Mesopotamian political and social history espoused by its literati. With the important exception of a kind of accidental bicameralism that may have arisen in trade organizations such as Karum Kanesh, however, there is actually no solid evidence for narrowly political or even advisory bicameralism in Mesopotamia.⁵ Much of the historical detail in *Gilgamesh and Akka* was clearly meant to evoke the regional network or amphictyony that Uruk was once a part of, namely the so-called Hexapolis of Shuruppak (Uruk, Adab, Nippur, Lagash, Umma, Shuruppak), but again the materials that can be directly linked to the activities of the Hexapolis offer no evidence of specifically political bicameralism.⁶ Thus it is all the more surprising to see the author of *Gilgamesh and Akka* imagining the existence of such an institutional arrangement in the Early Dynastic period of Gilgamesh and his contemporaries in Uruk. Rather than seeing the opposition between the {ab.ba iri.na} "the elders of his city" and the {ĝuruš iri.na} "the young men of

generational conflict in Harris 1992, reprinted in Harris 2000, 67–79). Given that Gilgamesh was likely a usurper, the author of *Gilgamesh and Akka* may have used the contrast between a bicameral *literary* tradition and the social reality of a single institution made up of the {ab-ba iri} to portray Gilgamesh's appeal to the assembly of the {guruš} as a return to tradition rather than the demagoguery that it probably was.

⁴ We can be fairly certain that the particular wording used to describe the two groups ({ab-ba iri} vs. {guruš iri}) is based on the widespread use of {ab-ba iri} 'city elder' within the Ur III legal sphere, where elders often act as semi-official witnesses to legal procedures; for a good example of this, see Veenker / Johnson 2009. The parallel expression {guruš iri} was probably created as a simple antithesis of {ab-ba iri}, as Katz (1987, 107–108 apud Selz 1998, 317–318) and others have suggested. The existence of a traditional figure of speech that contrasts 'the young men' {guruš} with the 'assembly' {ukkin} in *Lugalbanda in the Wilderness* 230–231 suggests that a categorical opposition between young men and elders existed prior to the composition of *Gilgamesh and Akka* and that only the parallel terminology of {guruš iri} was new. Whether the opposition between {guruš} and {ukkin} in this literary idiom was based on the political structure of Early Dynastic amphictyonies must remain an open question for now.

⁵ In Jacobsen's original presentation, the referral of an issue to the *sahir rabi* (lit. "small and big") assembly in Old Assyrian Karum Kanesh and in particular the rules concerning its convocation by the leaders of the colony constituted the only really good evidence for bicameralism, and even then only for a weak committee-of-the-whole type of bicameralism. Durand and more recently Fleming have discussed a similar form of governance in early second millennium Emar, Tuttul and Urkesh, known as the *tahtamu* in Emar and Tuttul (Durand 1989, apud Selz 1998, 301–302; Fleming 2004, 197, 211–218). This tradition of municipal bicameralism ties in nicely with Milano's discussion (1998) of *The Poor Man of Nippur*, a literary text in which the exclusion of the protagonist from the sumptuous feast of the big guys (*rabi*) – if we adopt the terminology of Karum Kanesh – definitively marks him as merely a member of the general assembly (*sahir rabi*) and thus only entitled to gristle and bone.

⁶ For a clear idea of the texts generated by these amphictyonies, see the corvée lists in Nissen, Damerow / Englund 1993, 77, 80–81. Two standard descriptions of the Hexapolis are Steible / Yildiz 1993 and Pomponio / Visicato 1994, 10–20, but see now Foster's overview of the research history (2005). As Selz has emphasized (Selz 1998, 308–312), however, the Hexapolis was only one in a long-running series of early Mesopotamian amphictyonies.

his city" as a pure invention of the Ur III or Old Babylonian littérateur who composed *Gilgamesh and Akka*, however, I would like to suggest that there may be a plausible historical referent for the two assemblies portrayed in *Gilgamesh and Akka*: at minimum, the two major lists of professional titles from the Late Uruk period (Archaic Lú A and *Officials*, which I will refer to here as the NAMEŠDA List and UKKIN List respectively) could easily have served as inspiration for the bicameral model in *Gilgamesh and Akka*.⁷ We now know that both of these lists survived into the Old Babylonian period and were recopied in Old Babylonian editions.⁸ Since the first term in the UKKIN List is the standard logogram for 'assembly,' while the first term in the NAMEŠDA List was typically equated with a weapon of some kind in the later lexical tradition, it would have been fairly easy for the Old Babylonian literati to imagine that these two archaic lists were blueprints for two distinct, yet contemporary institutions that still existed in the time of heroic figures such as Gilgamesh. Lest we forget, it is the young men of Uruk who favor "smiting the enemy with weapons ({^{ĝiš}tukul} rather than {^{ĝiš}šita})," while the "assembly" is associated with the "elders" elsewhere in Sumerian literature.⁹

But in addition to this minimalist hypothesis, I would also like to raise the possibility that these Late Uruk texts – even in the earlier phases of the Early Dynastic period – were not simply museum pieces, but rather were in part still being used to organize the distribution of highly valued goods to members of the elite. Due to the fact that it is exceedingly difficult to identify the historically contingent institutions within which these distributions would have taken place, I focus here on the bureaucratic terminology and notational devices that were typically used to distinguish between two moieties within early Mesopotamian society. And while it is something of a misnomer, I will refer to these indications of social or institutional bifurcation as *bicameral orthographies*. These bicameral orthographies originate as part of the elaborate system that was used to track elite rations in the proto-cuneiform and proto-Elamite materials at the end of the fourth millennium BCE, and the Late Uruk lists of professions (NAMEŠDA and UKKIN) naturally served as an overarching matrix for these practices. Which element of this notational tradition, embedded within its own manifold

⁹ See the discussion of *Lugalbanda in the Wilderness* 230–231 in n. 4 above.

⁷ See Englund / Nissen 1993, 14–22. 69–89, and 153–154, and Englund 1998, 86–90 and 103–110, for the best informed edition and discussion of these materials.

⁸ See Englund 1998, 88–89 for copies of the NAMEŠDA List from various periods, including the Old Babylonian witness SLT 112–113; Veldhuis (2010, 398 and 400) presents the first evidence for the continued transmission of the UKKIN List at the end of the third millennium BCE: N 3093 in Philadelphia and a text from Kramer's unpublished transliterations for ISET 3 (Ni 2141). Jeremiah Peterson has now made two additional joins to N 3093 in Philadelphia (CBS 2243 and CBS 11072) and the reconstructed tablet is now listed under CBS 2243 and can be seen under P227887 at CDLI. Thanks to Niek Veldhuis for making this additional information available to me (personal communication, October 2011).

historical contingency, actually sparked the literary efforts of the authors of *Gilgamesh and Akka* cannot be fully resolved here.

I must say, however, that I also have an ulterior motive for investigating the prehistory of these Late Uruk lists of professional titles. While cuneiformists have been largely preoccupied with using mythological texts as mirrors for contemporary social realities, a methodology that has been criticized in recent years, ¹⁰ ethnographers and archaeologists have increasingly emphasized the importance of feasting as a vehicle for both building solidarity among elites, while at the same time carefully differentiating the rank and status of particular roles within the upper echelon of society.¹¹ As part of this broader trend towards the recognition of feasting and in particular the distribution of cuts of meat as a key practice for delineating social categories and stratifications, Milano's "food paradigm" offers an especially fruitful approach to the elucidation of the early Mesopotamian textual record. In the same way that Woodward and Bernstein were famously told to "follow the money" so as to unravel the Watergate Scandal, Milano's food paradigm suggests that we "follow the cuts of meat" that were distributed to elites at major festivals. And as Pollock has emphasized, it was probably within the context of these feasts that the vast majority of "political" activity took place in early Mesopotamian societies. If I am correct in linking certain uses of the Late Uruk lists of professional offices to the distribution of cuts of meat and fish, this would represent a straightforward logical extension of the approach to the NAMESDA List that Nissen has championed throughout his career, namely an insistence on the interdependency between the textual record as a precipitation of institutional practices and the evidence for macrosocial structures drawn from archaeological techniques such as surface survey.¹² This paradigm has other salutary effects (its demand for a clear articulation of the interdependencies between the textual record and its archaeological correlates as well as its emphasis on the semiotic mediation of social relationships), but for my purposes here its chief advantage is that it puts the documents that were actually used to organize elite social institutions in early Mesopotamia at the heart of our efforts to reconstruct these same institutions.

 ¹⁰ See in particular Cooper's critique of this line of thought (Cooper 2001 and references therein). Wilcke, one of the standard-bearers for this approach has acknowledged that it represents one of the key "problems of method" in the field (Wilcke 2007, 161, apud Rubio 2009, 33, citing Cooper 2001, 134).
 ¹¹ For the broader trends in this area, see Hayden / Villeneuve 2011 as well as the papers collected in Dietler / Hayden 2001

¹¹ For the broader trends in this area, see Hayden / Villeneuve 2011 as well as the papers collected in Dietler / Hayden 2001 and Bray 2003. Pollock's contribution to Bray 2003, her 2007 discussion of the cemetery in Archaic Ur and the recent volume in eTopoi (2012) now offer a broad and detailed survey of the archaeology of feasting in the ancient Near East.

¹² Nissen's juxtaposition of the textual materials with the survey evidence is already a central theme in some of his earliest papers such as 1974 and 1981; themes continued in Nissen 1993 and 2011. Algaze's recent work on "technologies of the intellect" in the Late Uruk period (Algaze 2008, 127–139) largely overlooks these long-running discussions.

Two Major Templates in the Late Uruk Period (NAMEŠDA and UKKIN)

Philological discoveries have a funny way of being directly mapped into social and historical realities, so we must be especially cautious with lists of office titles and their relationship to real institutions. Many discussions of the well-known NAMEŠDA List (also known as Archaic Lú A), for example, invoke a social institution named after the first entry in the list and speak of the NAMEŠDA institution or agency.¹³ That there is a certain amount of truth in doing so is made clear by the fact that the professional terms found in the NAMEŠDA List do regularly occur in the "colophon" or better metadata of Late Uruk administrative documents, indicating that the officials named in the NAMEŠDA List were responsible for managing certain parts of the Late Uruk economy.¹⁴ But any kind of one-to-one mapping of the NAMEŠDA List into a monolithic NAMEŠDA institution should give us pause: if it is a living and breathing social institution (encompassing anywhere between 50 and 100 different offices), why is the list essentially frozen at the end of the Uruk III period, never to be further emended in later historical periods? Why do the vast majority of the professional names in the standard version quickly go out of use soon after the end of the Late Uruk period? More problematically, if the NAMEŠDA institution is the stable institutional core of the Late Uruk state apparatus, as it is often portrayed, why does it seem to undergo a major reconfiguration between its earliest attestations in the Uruk IV period and the standard version from the Uruk III period?

There is also, however, a second major list of professional designations or offices in the Late Uruk period, known as *Beamte* or the Officials List, that has garnered far less attention, and our reconstruction of Late Uruk officialdom is substantially impoverished if we do not include it in our reconstructions. Just as I refer to the NAMEŠDA List using the standard rendering of its first term, I will do likewise with the Officials List, whose first entry is UKKIN. Unlike the NAMEŠDA List, we have no good evidence of an Uruk writing phase IV precursor to the UKKIN List and perhaps more importantly the UKKIN List is not frozen at the end of the Late Uruk period, but rather continues a slow evolution: new orthographies replacing archaic ones, and as we will see later on, parts of the UKKIN List seem to have

¹³ This line of thought finds it origin in Nissen's suggestion that the NAMEŠDA List "reflects in its internal structure the administrative hierarchy of archaic Uruk" (Englund 1998, 105, characterizing a number of Nissen's publications). Nissen's clearest statement was published in his 1993 paper on the emergence of writing in Mesopotamia and Iran: "the layout of the list mirrors the actual structure of part of the society" (Nissen 1993, 63). Nissen's avoidance of terms like *institution* or *agency* should not go unnoticed. Charvát has occasionally spoken informally of a NAMEŠDA agency, an approach that he continues to pursue in his most recent paper (Charvát 2012).

¹⁴ Englund has demonstrated links between list entries and the metadata in administrative documents on several occasions (Nissen / Damerow / Englund 1993, 115; Englund 1998, 108–109).

served as the basis for subordinate staff lists that were used to either organize or audit the distribution of cuts of meat and fish to mid-level elites at the end of the Late Uruk period as well.¹⁵ The mere existence of a second list of professional designations also raises a host of questions. Does each list represent a distinct institution? If so, were these institutions contemporary with each other? Can such contemporaneity be located within a particular historical phase of the Late Uruk period? All of these questions call for a careful reexamination of the different versions of these two lists as well as their reception and elaboration in the subordinate staff lists during both the Late Uruk and the Early Dynastic periods.

THE URUK IV VERSION OF THE NAMEŠDA LIST

Although Nissen and Englund were well aware of the important differences between the handful of Uruk IV forerunners to the NAMEŠDA List and the numerous exemplars of the Uruk III version, Englund's synthetic copy of the Uruk III version has taken on a kind of iconic resonance in the field, often distracting researchers from the earlier history of the NAMEŠDA List in the Uruk IV period.¹⁶ If we limit ourselves to the five or six known exemplars from the Uruk IV period, only one of these witnesses (W 9656,h1 = ATU 3, pl. 23) provides us with substantial evidence for the structure of the Uruk IV version of the list.¹⁷ The most prominent feature of W 9656,h1 is the organization of three of its bureaus into a tripartite hierarchy, where a series of three proto-cuneiform signs (GAL_b, GEŠTU_b and NUN_a) are used to mark the three hierarchical levels within each office.

W 9656,h1

А	ii 3.	UKKIN	$\operatorname{GAL}_{\mathrm{b}}$
	ii 4.	UKKIN	$GE\check{S}TU_b$
	ii 5.	UKKIN	NUN _a

¹⁵ Nissen and Englund attribute one extremely fragmentary witness, namely W15775, af, to Uruk writing phrase IV, but the only convincing evidence for the institution associated with the UKKIN List is a list of the same offices that appears in the Uruk IV administrative document W 20423 (unpublished, see CDLI P003706).

¹⁶ Englund / Nissen 1993, 17; Englund 1998, 104; see most recently Wagensonner 2010.

¹⁷ Among the Uruk IV witnesses, several (W 9656,gf, W 9656,di, and W 9206,k) begin with simple EŠDA (without NAM₂) rather than NAMEŠDA (including NAM₂); hence, these three tablets probably represent a slightly earlier stratum within Uruk writing phase IV than the Uruk IV text that we focus on here, namely W 9656,h1. Nonetheless, the fact that nearly all of these texts emerge from secondary deposits in the same excavation square probably suggests that the EŠDA texts are not much older than W 9656,h1. The initial sequence in W 9656,z (NAM₂, KAB, ŠITA_{a1} and EŠDA, with EŠDA following ŠITA_{a1} as it does in the later UKKIN List) may even represent a version of the NAMEŠDA List that is slightly older than the other Uruk IV witnesses.

В	ii 6.	GA	GAL_b
	ii 7.	GA	$\text{GE}\check{S}\text{TU}_b$
	ii 8.	GA	NUN _a
С		[KISAL _{b1}	GAL _b]
	iv 1'.	[KISAL _{b1}]	NUNa
	iv 2'.	KISAL _{b1}	$\text{GE}\check{S}\text{TU}_b$

Two of the three sequences follow each other directly (ii 3–8) and exhibit precisely the same hierarchy of offices (groups A and B), while a third series (group C) is partially broken and seems to invert the order of NUN_a and GEŠTU_b. At the top of column three (iii 1–3) there is yet another bureau that is tripartite (ZATU693), but the hierarchical levels within this bureau use a different terminology ($EN_a > UKKIN_a > NAGA_b$). Overall, the predominance of tripartite hierarchies in W 9656,h1 is remarkable because none of these tripartite designations survive as such into the Uruk III version of the NAMEŠDA List.¹⁸

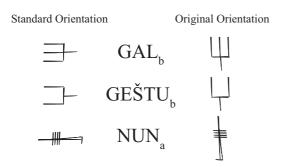


Figure 1 GAL_b , $GE\check{S}TU_b$ and NUN_a in their standard orientation and rotated ninety degrees clockwise from their original orientation

¹⁸ Already in his 1974 paper Nissen suggested that a tripartite hierarchical structure may also have been present in the Uruk III version of the NAMEŠDA List: the lowest or "basic" level (equivalent to NUN_a in the Uruk IV version) corresponding to the name of the bureau. This would mean that the pairs of offices that are listed in the Uruk III version actually correspond to the middle and high ranks within a given bureau: the middle rank typically bearing a distinctive title, while the uniformity of the top rank in each bureau (designated with GAL_a in Uruk III) emphasized the equality of the bureaus in opposition to a superordinate ruler (Nissen 1974, 14). If Nissen's inference is correct, the shift between the Uruk IV and Uruk III versions was a purely notational shift rather than a change in the hierarchical structures themselves, but the matter requires further study.

Both $GEŠTU_b$ and GAL_b , the two signs that represent the middle and high ranks within a given bureau in the Uruk IV version of NAMEŠDA List, are orthographic elaborations, in some sense, of the ME sign and there seems to be a similar mechanism for distinguishing "high-status humans" in the roughly contemporary Proto-Elamite materials from the Iranian plateau, namely M291 and its variant sign forms.¹⁹

As we can see in Figure 1 above, the use of GEŠTU_b and GAL_b as hierarchical labels is, at least in part, rooted in the Uruk IV notational system, since GAL_b consists of GEŠTU_b with an additional horizontal wedge added to it, another feather in the cap as it were of the higher ranking personage (GAL_b) as compared with his subordinate (GEŠTU_b), while GEŠTU_b itself consists of the ME sign with two horizontals (verticals in their original orientation) attached to each end of the vertical in ME. If ME had designated the "basic occupation" in our Uruk IV version of the NAMEŠDA List, namely W 9656,h1, then we could simply have argued that this was a point of commonality between the early scripts of Mesopotamia and Iran, namely that the signs ME and M291 each designate the "basic occupation" within a given field of professional activity. This usage of ME_a to designate an office certainly existed in the Early Dynastic period and may first have emerged in the Uruk III period, but the association of the ME_a sign with a bureaucratic office in the Uruk IV period is a difficult proposition, and in our only substantial witness to Uruk IV hierarchical structures (W 9656,h1), it is NUN_a (not ME_a) that occurs as the lowest office within the tripartite bureaus, so there is no straightforward parallel between all three terms in the hierarchical sequence and the orthographic form of the terms that designate each office.

The non-existence of ME_a as an office designation in Uruk IV materials, however, represents a more general phenomenon than the simple absence of the ME_a sign from the NAMEŠDA List. Interestingly enough — and here we begin to see the real gap between Uruk IV and Uruk III orthographies — the ME_a sign itself is actually a relatively rare sign in the texts assigned to the Uruk IV subcorpus as a whole, occurring less than 30 times in the

¹⁹ For an overview of the Proto-Elamite materials, see Englund 2004; in strictly formal terms, the closest parallel with GEŠTU_b in Proto-Elamite is M36 and its many variants, but as Dahl has demonstrated M36 is a cereal designation and does not refer to a human being (see Dahl 2005, 2–4). M291 only differs from GEŠTU_b in having two mirrored obliques in place of the single vertical in GEŠTU_b but more importantly, as Englund has noted, "M291 seems evidently, in the labor rationing account (Scheil 1905, no. 4997; Nissen / Damerow / Englund 1993, 77–79), to represent a foreman semantically corresponding to Sumerian ugula, a representation of two sticks" (Englund 2004, 146 n. 18). M291 therefore exhibits both orthographic and functional (human referent, marking hierarchical position) parallels with GEŠTU_b. For a nice example of the use of M291 in context, see the diagrammatic representation in Nissen / Damerow / Englund 1993, 76. Although a simple horizontal wedge only functions as a diacritic in the related sign M290 (viz. M291 without the rightmost horizontal) in Dahl's provisional signlist, there are at least three texts in which an additional diacritical element is inscribed between the "ears" of M291: MDP 6, 286; MDP 17, 129; and MDP 26, 44. A re-evaluation of these signs in the broader context of archaic standards is a desideratum, but for the time being see Szarzynska 1996.

entire Uruk IV subcorpus. Most of the attestations of ME_a in the Uruk IV period texts occur in contexts that clearly have to do with either textiles or metals. In W 9312,n2+ (= ATU 5, pl. 52), for example, ME_a occurs between well-known terms for textiles ZATU753 and ŠU₂, while in W 9578,h (= ATU 5, pl. 59), ME_a occurs next to ZATU753, GADA and ŠU₂.²⁰ The only occurrence of ME_a in a lexical tradition that can be dated with any confidence to the Uruk IV period is in the Archaic Metals List:

W 16621,a (= ATU 3, pl. 74)

2. $1(N_1)$ AN NAGAR_a

3. $1(N_1) ME_a NAGAR_a$

It is not clear what ME or AN mean as qualifications of a metal object like NAGAR (an iconic representation of a drill bit), but it is noteworthy that both occur separately as qualifications and occasionally together as in W 13946,n1, col. i, line 9, where we find a collocation of NAGAR_a $ME_a AN$.²¹

EN.ME AND NUN.ME AS DIAGNOSTIC ORTHOGRAPHIES

Although the many differences between the Uruk IV version of the NAMEŠDA List and the better known Uruk III version have often been minimized or simply overlooked, they are one of our best pieces of evidence for major social and institutional change in the Uruk III period. These differences can be tabulated in many ways, not least the abandonment of the $GAL_b > GEŠTU_b > NUN_a$ system for marking hierarchical position in the NAMEŠDA List, but perhaps the most important of these changes is the introduction of a new set of orthographies that make use of EN.ME and NUN.ME as clustered subsets of orthographic elements within a larger orthographic cluster (NUN.ME itself also functions as a stand-alone cluster for

²⁰ Much the same goes for W 10753 (= ATU 6, pl. 9) and W 19408,48 (= ATU 7, pl. 11), which are also lists of textiles that include ME_a . The same group of signs co-occur in the Late Uruk paleographical list W 9123,d (= ATU 3, pl. 81), in which ME_a and ME_b are also clearly differentiated. ²¹ Englund notes that the Late Uruk "lexical compendium of metal objects (Englund / Nissen 1993, 32) divided such objects

²¹ Englund notes that the Late Uruk "lexical compendium of metal objects (Englund / Nissen 1993, 32) divided such objects into unqualified (copper) products, and products qualified with the sign AN, assumed to represent a copper alloy, probably bronze (therefore that AN corresponds to later Sumerian an-na, tin, for which see Waetzoldt 1981 against Vaiman 1982)" (Englund 2008, 11). The occurrence of ME_a in connection with both textiles and metals also brings to mind much later Sumerian uses of {me} as a qualification of metals {ku₃} or malt {munu₃}, for instance, in contexts in which it seems to mean 'cleansed' or 'purified' (see Stol 1989, 324 and Waetzoldt 1981, 23). The TUG₂.ME discussed by Waetzoldt is now generally read as {tug₂.ba₁₃}, corresponding to the lexical materials that list /tuba/ as a reading of ME, a reading that presumably derives from {tug₂.ba₁₃} via assimilation.

{abgal} '*apkallu*-priest'). These orthographies, at least those that remained in use in the later phases of the third millennium, are nicely summarized in Diri IV (MSL 15, 152–153):

EN.ME / NUN.ME Orthographies in Diri IV

57. ú-ku-ur-rim	EN.ME. ^d INANNA	ēnu ša Ištar
58. še-en-nu	EN.ME.AD.KU ₃	ēnu ša Ea
59. mu-ru-ub	EN.ME.LAGAR	ēnu ša Nisaba
60.		abu []
61. en-si	EN.ME.LI	ensû
62.		šā `ilu
63. en-gi-iz [!]	EN.ME.GI	engișu
64.		nuhatimmu
65. en-di-ib	EN.ME.MU	endibbu
66.		nuḥatimmu
67. en-ku-um	EN.PAP.SIG7.NUN.ME.	enkummu
	EZEN×KASKAL	
68. né-en-ku-um	NIN.PAP.SIG ₇ .NUN.ME.	ninkummu
	EZEN×KASKAL	
69. kur-ku	ME. ^d NIDABA	išippu ša Nisaba
()		
72. ab-ga-al	NUN.ME	apkallu
73. ab-ri-ig	NUN.ME.DU	abriqqu
74. ga-šá-am	NUN.ME.TAG	(seven different terms
		for master craftsman)

These different lemmata are not a uniform set: certain entries, such as EN.ME.^dINANNA, EN.ME.AD.KU₃, EN.ME.LAGAR and ME.^dNIDABA, may derive in an oblique way from older designations of temple functionaries as ME + <temple name>.²² These four entries are also distinctive in that their readings ({ukurim}, {šennu}, {murub} and {kurku₂} respectively) are not phonologically transparent (contrast EN.ME.LI for /enli/ in line 61 or

²² On the particular office designations listed here, see generally Renger 1967 and 1969.

EN.ME.GI = /engiz/ in line 63), and cannot apparently be etymologized in Sumerian. The next subset of relatively simple readings extends from $\{enli_x\}$ (conventionally rendered as ensi₁) through {endib} in line 65: ME in these entries is presumably a secondary diacritic, viz. marking the preceding EN as primarily phonological rather than semantic since the phonological rendering of both names begins with /en/. The distinctive sign in {engiz}, namely GI, is presumably a phonological diacritic for the beginning of the second syllable of {engiz}, namely /giz/, while the distinctive sign in {endib}, namely MU, apparently corresponds to the standard designation for a cook {muhaldim (MU)}. The lexical entries for both {engiz} and {endib} also include the Akkadian loanword *nuhatimmu*, which is derived from the Sumerian word for 'cook' {muhaldim}, as a secondary definition of each term. Thus, it is likely that EN.ME in the first three entries (57–60) functions somewhat differently from EN.ME in the following three entries (61–66): the secondary diacritic in lines 57–60 is presumably EN (showing that these designations refer to a type of "priest" {en}), but the secondary diacritic in lines 61-66 must be ME. The list then concludes with two distinct sets of NUN.ME orthographies: {enkum} and {ninkum} in 67-68 and the {abgal} series in 72-74. Even if we cannot always be completely certain which signs are secondary diacritics in these exceedingly complex orthographies, it is clear that the phenomenon of secondary diacrisis plays a decisive role in all these orthographies.

Not only is the well-known sign complex NUN.ME (viz. {abgal}), for example, missing from the Uruk IV version of the NAMEŠDA List, but more importantly the six other complex signs that are formed using either EN.ME or NUN.ME as a subcomponent (in the Uruk III version of the list) also fail to appear in their expected forms in the Uruk IV materials.²³

²³ The sign clusters in the NAMEŠDA List 52–55 involving KAR₂.NUN/ME, for example, are not strictly speaking EN.ME or NUN.ME orthographies, but they do represent part of the same set of orthographic innovations. I hope to return to these orthographies in future, but for the time being, see Veldhuis 2010: 382.

Entries in Uruk III NAMEŠDA with EN.ME or NUN.ME subcomponent

- 63. $\{engiz\}(EN.ME.GI)$
- 64. $\{endib\}(EN.ME.MU)$
- 67. $\{enkum\}(EN.ŠE+EZEN.NUN.ME.SIG_7)$
- 68. $\{ninkum\}(NIN.ŠE+EZEN.NUN.ME.SIG_7)$
- 75. BU NUN.ME
- 76. BU NUN.ME ŠID

Simply put: NUN.ME and EN.ME orthographies represent an innovative set of diacritically enriched orthographies that only appear in the Uruk III period.²⁴

Among the unidentified Late Uruk lexical materials there is also one fragment which may represent an independent list of the professional terms or offices that are later recoded using NUN.ME and EN.ME orthographies, namely W 19668,c (Unidentified no. 33).

W 19668,c col. ii (Nissen / Englund 1993, 168)

[...] 1. [EN] [...] 2. [EN ME x] [...] 3. NUN PAP SIG₇ [...]

While it is difficult to be sure which of the particular entries in the Uruk III version of the NAMEŠDA List correspond to these three entries (these are the only entries that are preserved on the small fragment), the existence of such a fragment would seem to suggest that NUN.ME and EN.ME orthographies were recognized by Late Uruk scribes as a coherent orthographic subset. Given the layout of the Uruk III version of the NAMEŠDA List, there is no location in the text where we would expect such a sequence of orthographic forms ([EN]

²⁴ There may be some few Uruk IV precursors of these orthographies: $\{\text{engiz}_x(\text{ME.GI})\}$ in IM 81243; $\{\text{endib}_x(\text{EN.MU})\}$ in ATU 6, pl. 18, W 12123, and ATU 7, pl. 35, W 20044,51; $\text{enkum}_x\{\text{PAP.SIG}_7\}$ in ATU 5, pl. 15, W6756,c, and $\text{enkum}_x(\text{EN.ME.EZEN}_a)$ in W 19410,3 (unpublished, P003143); and BU NUN.ME in ATU 5, pl. 104, W 9656,es), but in all of these examples it is often unclear whether or not the tablets in question actually date to the Uruk IV period and even which term is actually meant in a given instance. If further evidence confirms ME.GI as an older orthography for $\{\text{engiz}\}$, for instance, it would undermine my uniform reading of ME as a secondary diacritic in lines 61–66 in Diri IV above.

[...], [EN.ME x], NUN. PAP. SIG₇), since NUN.PAP.SIG₇ must correspond to either $\{\text{enkum}\}$ or $\{\text{nunkum}\}$ and in neither case are $\{\text{enkum}\}$ nor $\{\text{ninkum}\}$ preceded by a sign that includes EN.ME. There are also, it should be noted, a few other EN.ME orthographies in the Uruk III materials that neither survive into the later lexical tradition, nor appear in the short section of EN.ME orthographies in Early Dynastic subordinate staff lists such as SF 57 and IAS 44–53.²⁵

The absence of EN.ME and NUN.ME orthographies from the Uruk IV version of NAMEŠDA suggests that there were at least two orthographic "codes" operating in the Uruk III period: an older Uruk IV orthographic tradition in which these offices were each represented by a single proto-cuneiform sign in isolation (NUN for later NUN.ME, for example), presumably differentiated from other uses of NUN by its placement within a tablet format or juxtaposition to other signs (both oral and written), and new more heavily diacritical notations (such as the EN.ME and NUN.ME orthographies) that were more easily decontextualized and could therefore be used across a wide variety of contexts. That being said, certain features of the new Uruk III NAMEŠDA List actually suggest a more general hypothesis, namely that the older orthographically mediated system for distinguishing offices within a particular bureau ($GAL_a > GE\check{S}TU_b > NUN_a$) was partially replaced by a new, phonologically driven set of office designations, and that internally complex diacritics like EN.ME and NUN.ME had to be used to keep these new phonologically mediated titles separate from the older Uruk IV titles that relied on simpler, largely logographic values of a limited repertoire of cuneiform signs, including EN, ME and NUN. The Uruk III version of NAMEŠDA was then reorganized on the basis of phonological connections between different groups of proto-cuneiform signs.²⁶ If the old system had been completely replaced by the new increasingly phonological system, there would be no reason for secondary diacritical clusters such as EN.ME and NUN.ME, so the existence of secondary diacrisis in itself already suggests that two distinct orthographic schools of thought co-existed in the Uruk III period. It is, in other words, no accident that the particular signs that required secondary diacrisis were the same signs that had been heavily used in the older Uruk IV system to designate professional offices.

 $^{^{25}}$ Other than one hapax legomenon (EN_a.ME_a ZATU686_a in ATU 3, pl. 94, W 20921), the only EN.ME orthographies with some traction are EN_a.ME_a SI (two occurrences: ATU 7, pl. 61, W 20493,7; ATU 7, pl. 68, W 20511,11); EN_a.ME_a AN.ŠU (four occurrences: ATU 7, pl. 77, W 21682; BagM 22, 111, W 24021,10; MSVO 1, 11; MSVO 1, 30); and EN_a.ME_a UR₂.RAD_a.KU_{6a} (12 occurrences in MSVO 4, namely, 1–3, 19, 22, 24–26, 28, 32, 34–35). None of these appear in the EN.ME section of the Early Dynastic subordinate staff lists: SF 57, bottom of col. vii and col. viii, IAS 45 iv', IAS 47 ii' 12'–13', and IAS 48 vi'–vii'.

²⁶ See Wagensonner's recent study of the NAMEŠDA List (2010) for an overview of its internal structure.

This reconfiguration in the Uruk III period is particularly clear for stand-alone NUN.ME in line 15 of Uruk III NAMEŠDA, although due to the major changes that the list undergoes between Uruk IV and Uruk III, it is impossible to locate the precise point of insertion for all of the other innovative orthographies. Only in the first column (again using W 9656,h as our model text for the Uruk IV period) can the changes be partially schematized.

As the lines excerpted below make clear, the reorganization of the NAMEŠDA List that took place in the Uruk III period ordered the entries – at least in some sections – in terms of *phonological values* rather than the purely orthographic structure that dominated in the Uruk IV version. The inclusion of {abgal} at this point in the list, for example, rather than in sequence with the other NUN.ME or EN.ME orthographies elsewhere in the list, is motivated by the phonological rendering of NUN.ME as /abgal/.

Uruk IV version (W9656,h ii)	Uruk III version (lines 14–17)
1. [] [ŠITA _{a1}]	14. GAL _a ŠITA _{a1}
2. TE (moved to line 17)	
Ø	15. NUN.ME (= /abgal/)
3. KINGAL	16. GAL _a UKKIN (= /kingal/)
	17. GAL _a TE

The reading of NUN.ME as {abgal} in this context makes a good deal of sense in that NUN.ME is surrounded by other entries that include the GAL_a sign, presumably functioning as a straightforward phonological diacritic in these cases.²⁷ This reading of NUN.ME as {abgal} "*apkallu*-priest" has also emerged in recent years as the best piece of evidence for a specifically Sumerian lemma in the Late Uruk corpus, but even if correct, this inference can only apply to Uruk writing phase III and by extension to the Uruk III period.²⁸

 $^{^{27}}$ See Krebernik 2002, 64–65; 2007, 42–43; Wilcke 2005. Although for GAL_a.TE a non-phonetic reading of GAL_a is known from later tradition, viz. {tiru(GAL.TE)}.

²⁸ See Krebernik 2002, 64; van Soldt 2005, 444 and n. 56; Englund 2009, 7–8, n. 18. Wilcke states (2005, 444, apud Krebernik 2007, 43, n. 19) that he made such a proposal as early as 1993 in "various lectures, presentations and discussions," but nonetheless the etymology of /abgal/ remains unclear and Wilcke's suggestion requires further study. If it were to parallel other well-known compounds formed with /gal/, literally 'big', such as {lugal} 'big man' = 'king' or {é-gal} 'big house' = 'palace' we might reasonably expect it to mean 'the big /ab/' or 'the chief of the /ab/.' Various uses of the AB sign refer to institutions of one kind or another in the Late Uruk texts, where it seems to function as a determinative for place or location analogous to later uses of KI (see Michalowski 1993), but the only reading of AB in Sumerian that refers to an architecturally meaningful location is $\{es_3\}$, 'niche'. There is, however, a well-known class of words in Sumerian that begin with /ab/ and do not easily etymologize in Sumerian, such as {abrig}(NUN.ME.DU), {abzu}(ZU.AB) and {absin₃} (APIN), so the location of NUN.ME between GAL_a.SITA_{a1} and GAL_a.UKKIN only demonstrates that GAL_a can be a diacritic with

THE UKKIN LIST AND ITS DOPPELGÄNGER

While the NAMEŠDA List, in its heavily reconfigured Uruk III form, replaces the older tripartite $GAL_b > GEŠTU_b > NUN_a$ system with a wide variety of distinct professional terminology, including a number of innovative EN.ME and NUN.ME orthographies, the UKKIN List and the texts that derive from it make no use of the EN.ME and NUN.ME orthographies, even though they are contemporary with the Uruk III version of the NAMEŠDA List.²⁹ The UKKIN List is first attested in the Uruk III period, and if we speak of it for the moment in institutional terms, it seems to have represented an institution or agency that was of roughly the same order of magnitude as the better-known NAMEŠDA organization. Unlike the NAMEŠDA List, however, UKKIN was not frozen at the end of the Late Uruk period. Instead, it looks like the UKKIN List underwent a series of continual, if minor, modifications from the Uruk III period down into the Early Dynastic period, largely in the form of the replacement of outdated orthographies with more transparent notations.

The oldest antecedent for UKKIN is probably to be found in Uruk IV administrative documents such as W 10736, which lists a distribution of some kind to a series of office holders, a list that lines up quite well with the beginning of the UKKIN List.

W 10736 (= ATU 6, pl. 8, subcases, numerals and commodities have been omitted; "Off." refers to the *editio princeps* in Nissen / Englund 1993)

1	
1. UKKIN	= Off. 1
2. []	
3. ZATU 647	= Off. 4
4. [x x]	
5. KISAL _{b1}	= Off. 5
6. SANGA	= Off. 9
7. GA	= Off. 12
ii	

the phonological value /gal/, not necessarily that {abgal} is a native Sumerian lemma. If the Uruk IV use of GAL_b for the "head of a bureau" was mapped into Uruk III uses of GAL_a as a phonological rendering of /gal/ (as seems likely), the most we can say is that {abgal} can be etymologized as "head of the AB-institution."

²⁹ NUN.ME does occur once in the Old Babylonian copy of UKKIN recently pieced together by Jeremiah Peterson (see Veldhuis 2010 and n. 8 above), but it is noteworthy that the NUN.ME entry in question seems to classify other entries in the list and does not correspond to an entry in the Early Dynastic version.

This provides some limited evidence for the social reality of the UKKIN institution in the Uruk IV period, but the best evidence for its reality is a much larger Uruk III staff list that appears in W 14804,a+ (= ATU 6, pl. 58) in Figure 2.

The obverse of W14804,a+ lists 140 or so separate bureaus as well as the number of individual workers employed in each of these small offices. The reverse, though missing one column in its entirety and dozens of lines from the other columns, corresponds quite well to the sequence of offices that we find in the standard UKKIN List.

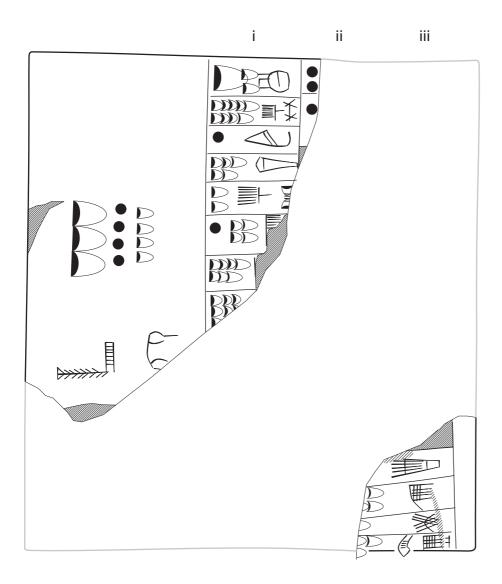


Figure 2 Reverse of W 14804,a+, vector copy courtesy of R. K. Englund

W 14804,a+, rev.		
i		
1. 1(geš ₂) 2(diš)	UKKIN	= Off. 1
2. 9(diš)	GAL TE	\simeq Off. 2
3. 1(u)	ZATU 647	= Off. 4
4. 5(diš)	NIM	= Off. 3
5. 2(diš)	GAL KISAL _{b1}	= Off. 5
6. 1(u) 2(diš)	[ZATU 753]	= Off. 8
7. 7(diš)	[x] []	
[]		
ii		
(missing)		
iii		
[]		
1′. [x]	NIMGIR	\simeq ED Off. 41
2′. [4(diš)]	SA _c [?]	\simeq ED Off. 46 (E ₂)
3′. [1(diš)	NESAG ₂]	= ED Off. 43
4′. [3(diš)	KU _{3c} E ₂]	\simeq ED Off. 47 (E ₂ KU ₃)

Total: 3(geš₂) 4(u) 4(diš) EN.TUR

The Late Uruk version of UKKIN can only be reconstructed as a continuous text through the first thirty lines, so we cannot be sure how many entries the list originally contained. Nonetheless, the Early Dynastic copies from Fara and Abu Salabikh make it clear that the reverse of W 14804,a+ originally listed the first 50 or so entries in the UKKIN List, and from the structure of the text itself we can easily infer that these 50 entries represented mid-level bureaus within the institution, each headed by a member of the senior staff.

As Englund's recent work on Late Uruk slave accounts shows, the term EN.TUR was an age-grade in the slave texts, but here in W 14804,a+, EN.TUR probably represents the total number of subordinates answerable to each of the low level bureaus listed on the obverse of the tablet.³⁰ If we assume 8–10 columns on the obverse with 18–20 entries per column, hence somewhere between 144 and 200 entries (many enumerating more than one subordinate), the 224 subordinates (EN.TUR) in the total probably only refers to the low level staff listed on the obverse of the tablet. In other words, if we had the whole tablet, we should find the same number of 224 subordinates (EN.TUR) on the obverse that we find in the summary information on the reverse of the tablet. These low-level subordinates (EN.TUR) were presumably subcategorized into mid-level bureaus using the designations drawn from the UKKIN List on the reverse.

Two features of the UKKIN List suggest that it continues institutional practices associated with the Uruk IV version of the NAMEŠDA List rather than the renovated Uruk III version: (i) the absence of EN.ME and NUN.ME orthographies from the UKKIN List as well as (ii) some traces, admittedly tenuous, of older office designations such as $GE\check{S}TU_{b}$, ZATU753 and ŠE_a.NAM₂. The equation between GEŠTU_b in the Late Uruk witnesses of the UKKIN List and AMA.ME in the Early Dynastic version is particularly interesting because it suggests that titles and offices that had gone out of use in the transformation of the NAMEŠDA List that took place between the Uruk IV and Uruk III periods were preserved to some degree in the UKKIN List.³¹ Other Uruk IV terms that later go out of use are preserved in the Uruk III version of the UKKIN List as well and these terms often correspond to distinct orthographies in the Early Dynastic version of UKKIN: ZATU753 = LAK 390 [line 8], EN_a URI NUN = EN ERIN₂.NUN [line 20], ZATU686_a.IB_a = AN.TA IB [line 67], and $\check{S}E_a$ +NAM₂ = $\check{S}u\check{S}in(MU\check{S}_3.ERIN)$. There are also other systematic changes between the Uruk III and Early Dynastic versions of the UKKIN List: the cluster NUN_a+EN_a is maintained in the Early Dynastic version (lines 14–15), but sign clusters that originally contained only EN_{a} (not in combination with NUN_a) generally replace EN_a with AN.AN or NAB in the Early Dynastic witnesses (lines 16, 18, 21, 22), and as we will see at the end of the paper, these entries are particularly important for linking Late Uruk subordinate staff lists to their Early Dynastic descendants.

³⁰ Englund 2009, 15.

³¹ There may also be a trace of the tripartite hierarchy in Uruk IV NAMEŠDA in UKKIN, lines 11–13: GEŠTU_b occurs in third position within the "UB" bureau in the Early Dynastic version (SF 59 i 10–12), and the sign UB is added to the second and third entries in this section, which originally consisted of UB, GA_a and $GEŠTU_b$ (Off. 11–13), so as to clarify that these lines refer to a single, tripartite bureau. Certain Late Uruk witnesses such as W 24006,12 (= ATU 3, pl. 25) make it rather clear that UB was not included in these entries in the Late Uruk period. There are at least two other texts (W 20708 = ATU 3, pl. 81 and W 20423 [unpublished, see CDLI P003706], the latter clearly from the Uruk IV period), in which the employees of a single bureau are enumerated and $GEŠTU_b$ occurs in second position, the same hierarchical pattern that we saw in the Uruk IV version of NAMEŠDA.

Beyond these minor transformations between the Late Uruk and Early Dynastic versions of the UKKIN List, however illuminating they may be, the surprising omission of $\check{S}ITA_{a1}$ (UKKIN line 7) from the enumeration of low-level staff that we looked at a moment ago (W 14804,a+) indicates that UKKIN may also have spawned several other enumerations of bureaus and titles that have gone largely unnoticed in the secondary literature.³² In col. iii' of W 14804,a+, the staff list we looked at earlier, $\check{S}ITA_{a1}$ does not occur between GAL KISAL_{b1} and ZATU 753 as we might have expected.³³

1. 1(geš ₂) 2(diš)	UKKIN	= Off. 1
2. 9(diš)	GAL TE	\simeq Off. 2
3. 1(u)	ZATU 647	= Off. 4
4. 5(diš)	NIM	= Off. 3/6
5. 2(diš)	GAL KISAL _{b1}	= Off. 5
6. 1(u) 2(diš)	[ZATU 753]	= Off. 8
7. 7(diš)	[x] []	
[]		

Admittedly, the broken sign in line 7 (only a single vertical wedge remains) could be left edge of $\check{S}ITA_{a1}$, but it could just as likely be the left edge of SANGA, which we would expect to follow ZATU 753. In the subordinate staff lists related to UKKIN (see below), $\check{S}ITA_{a1}$ often seems to function as a label or metapragmatic descriptor rather than an individual entry, so its absence from W 14804,a+ may be significant.

³² The only apparent reference to this type of subordinate staff list is in the *editio princeps* of UKKIN: Englund / Nissen 1993, 20.

¹⁹⁹⁵, 20. ³³ The formal similarity between NI_a, NI_b, NIM_a and ZATU647 and the quite fragmentary character of the Late Uruk witnesses make the reconstruction of this section difficult. I assume here that the first eight lines of the original form of UKKIN were 1. UKKIN, 2. GAL.TE, 3. ZATU647, 4. NIM_a, 5. GAL.KISAL_{b1}, 6. ŠITA_{a1}, 7. ZATU753 and 8. SANGA, or in other words, the order in W14804,a+ with ŠITA_{a1} added between GAL.KISAL_{b1} and ZATU753. The references in the table are to the standard edition in Englund / Nissen 1993. This basically agrees with the Early Dynastic version, but the Early Dynastic scribe seems to have inverted ZATU647 and NIM_a; the relevant lines are not preserved in the later Ur III version. The inversion of KISAL_{b1} and NIM_{b2}/NIM_a in W 15895bv+ and W 19771, f is real enough, but if it is an inversion of the ur-text postulated here, then lines 4 and 6 in the *editio princeps* belong to a single line and, more importantly, AN.TA / TA in line 6 in the Early Dynastic version should be equated with ŠITA_{a1} rather than NIM_{b2}, NIM_a or NI_a, cf. Steinkeller 1995, 706 sub no. 398 (NIM), and Lecompte 2009, 8–9. It should be kept in mind that in the *editio princeps* each of the three Late Uruk witnesses has a different sign form (NIM_{b2}, NIM_a and NI_a) and there is no line in the Early Dynastic version that otherwise parallels ŠITA_{a1}.

THE SUBORDINATE STAFF LISTS

In a limited number of lists that are derived in some sense from the UKKIN List and first appear at the end of the Late Uruk period (hereafter, termed "subordinate staff lists"), ŠITA_{a1} and UKKIN function as classificatory or more generally "meta" signs, indicating that a particular office belongs to one of these two subcategories. Although there are at least two witnesses to this practice in the Late Uruk period (MSVO 1, 112 and IM 73409,2), let me turn first to IM 73409,2 since it offers clear evidence that ŠITA_{a1} and UKKIN classify other terms rather than referring to two particular offices.³⁴

IM 73409,2 obv. i–ii

i 1a. [...] $1(N_1)$ [...] GAL_a / 1b. $1(N_1)$ ŠITA_{a1} 2a. [...] SUKKAL GADA_a / 2b. 1(N₁) ŠITA_{a1} 3a. [...] GAL_a KISAL_{b1} / 3b. 1(N₁) ŠITA_{a1} (Off. 5) 4. [...] BA 5. [...] x NIMGIR 6. [...] IB_a (double ruling) 7. [...] [UKKIN_a] 8. [...] GAL_a <u>UKKIN_a</u> (or KINGAL) 9. [...] [EN_a] UKKIN_a 10. [...] EN_a AMAR (Off. 17) 11. [...] ŠU x UKKIN_a 12. [...] [EN_a] UKKIN_a ii 1. $[1(N_1)] E_{3a}$ 2. 1(N₁) NU UDU_a×TAR

3. $1(N_1)$ GAL_a AL

³⁴ One other possible exemplar of the subordinate staff list is W 20708 (= ATU 7, pl. 81). Nearly all of the readable signs in W 20708 also appear in columns ii' or iii' of MSVO 1, 112 (the $\$ITA_{a1}$ section) and in roughly the same order as they appear in W 20708. Several other heavily damaged fragments also seem to include the basic sequence GAL_a , $GE\$TU_b$ and $NUN_a + EN_a$ such as W 10601 (= ATU 6, pl. 4), MSVO 3, 59 and possibly W 10604+ (= ATU 6, pl. 4). Although there is an obvious formal resemblance between the $GAL_a > GE\$TU_b > NUN_a + EN_a$ sequence and the $GAL_b > GE\$TU_b > NUN_a$ sequence that we looked at earlier, I have not been able to locate any text in which the $GAL_a > GE\$TU_b > NUN_a + EN_a$ sequence is demarcated as a tripartite bureau.

In these two columns from IM 73409, 2, I have put occurrences of ŠITA_{a1} in bold, while occurrences of UKKIN have been underlined. Although the role of these two signs in classifying many of the titles or offices mentioned in this text is fairly clear, it is noteworthy that the first three entries in the first column put ŠITAal in a subcase (a standard way of marking a qualification in the Late Uruk materials), while in the second column only the first entry following the double ruling (line 4) is explicitly marked with ŠITA_{a1}. The occurrence of $\check{S}ITA_{a1}$ in the last line in the second column without an accompanying "counter," viz. 1(N₁), makes it fairly clear that the entire section from the double ruling to the end of the line is classified as ŠITA_{a1}. In other words, the absence of a counter preceding ŠITA_{a1} is explicit evidence that it is functioning as a rubric in this context rather than an individual entry. The UKKIN signs are also located in a group in the second half of the first column, where each entry following the double ruling (except for EN_a AMAR) bears an additional UKKIN sign. The summary information on the reverse identifies two distinct groups of ŠITA_{a1}: ŠITA_{a1} UDU_a versus ŠITA_{a1} SUHUR, but we will have to return to these designations below.³⁵ The use of ŠITA_{a1} and UKKIN_a in this text, therefore, offers one piece of evidence in favor of interpreting ŠITA_{a1} in the standard version of the UKKIN List as a rubric or metalinguistic term that marks a subsection within the UKKIN List as a whole.

The occurrence of BA alone (the photo shows no other signs and a substantial space to the left of BA) in line 4 in the first column of IM 73409,2, immediately following the first three $\check{S}ITA_{a1}$ entries, may also be significant. Some of the professional designations that

 $^{^{35}}$ ATU 1, 613 (W 5811), which CDLI provisionally assigns to ED I-II, exhibits a somewhat similar usage of ŠITA_{a1} to classify groups of offices, but here the offices are associated with GAL_a.TE and GAL_a.GURUŠ_a and a subtotal for each section seems to precede ŠITA_{a1}. MSVO 1, 95, a garment distribution text from Uruk writing phase III, subdivides between garments for 1(N58)+BAD_a and UKKIN_a, but it is unclear whether UKKIN in this usage refers to a particular office or the UKKIN institution.

appear in the two Late Uruk examples of subordinate staff lists (IM 73409, 2 as well as MSVO 1, 112) such as EN_a AMAR, AN.ŠU₂.EN_a, EN_a AN.RU, EN_a +NUN_a and EN_a NUN_a.ERIM_a also appear in two texts that classify offices as either BA or GI, an opposition that is better known from accounts such as MSVO 1, 185, in which BA and GI subclassify amounts of DUR_b but are ultimately added together in the final summation.³⁶ W 14804,c (= ATU 6, pl. 57), for example, offers a clear demarcation between eight offices that are designated as "BA" offices in contrast to four others that are classified as "GI" offices.

```
W 14804,c (= ATU 6, pl. 57)
obv.
i
1'. [...] [EN<sub>a</sub> AMAR]
2'. 1(N<sub>1</sub>) AN.ŠU<sub>2</sub>.EN<sub>a</sub>
3'. 1(N1) AN.RU
4'. 1(N<sub>1</sub>) NUN<sub>a</sub>+EN<sub>a</sub>
5'. 1(N<sub>1</sub>) KU<sub>6a</sub> KAB (right side double ruling – end of BA section)<sup>37</sup>
ii
1′. [...]
2'. 1(N<sub>1</sub>) [NUN<sub>a</sub> \check{S}E_a?]
3'. 1(N<sub>1</sub>) [EN<sub>a</sub> ERIM<sub>a</sub> NUN<sub>a</sub>]
4'. 1(N<sub>1</sub>) KAB
5'. GI ŠUM (end of GI section)
iii
1. [...] (column probably blank)
rev.
```

```
i
```

1.8(N1) BA

2. [4(N₁)] [GI]

³⁶ See Englund 1998, 61–63 for a reconstruction of MSVO 1, 185, and further discussion the role of the BA/GI opposition as a notational system.

³⁷ From the photo (CDLI P002197) it appears that the scribe originally used a double vertical line to separate the first and second columns and then erased one of the two column markers in all of the cases except the last (i 6'). This apparently unique use of a double line at the right edge of a case was presumably an *ad hoc* indication that the last line in column i also represented the end of a significant section of text, which I take to be the BA section summarized on the reverse.

Ii 1. 1(N₁₄) [2(N₁)] [...]

Although the beginning of the tablet is missing, the double ruling that runs along the right side of the last line of the first column (the line with KU_{6a} KAB) clearly marks the end of the "BA" section, since the eight entries for BA listed on the reverse must correspond to the first column. The second section in column 2 on the obverse is explicitly marked as the "GI" section by the rubric GI ŠUM in column 2, line 5.

As comparison with both the Late Uruk subordinate staff lists and other Late Uruk administrative documents shows, four of the five offices in the "BA" section of W14804,c and two of the three offices preserved in the "GI" section are often qualified as either $\check{S}ITA_{a1}$ or UKKIN_a offices elsewhere in the Late Uruk corpus (entries drawn from the Late Uruk subordinate staff lists are in **bold**).

W 14804,c i 1: [EN_a AMAR_a]

(ŠITA _{a1})	MSVO 1, 112 ii 5	EN _a AMAR ŠITA _{a1}		
	W 15897,b2 (= ATU 6, pl. 79) i 4	EN _a AMAR ŠITA _{a1}		
(UKKIN _a)	IM 73409,2 i 10	EN _a AMAR		
		(in UKKIN _a section)		
	W 9168,v (= ATU 5, pl. 41) i 2	EN _a [AMAR UKKIN _a]		
W 14804,c i 2: AN ŠU ₂ .EN _a				
(ŠITA _{a1})	IM 73409,2 ii 8	AN ŠU2.ENa (in ŠITAa1 section)		
	MSVO 1, 112 ii 7	AN ŠU ₂ .EN _a ŠITA _{a1}		
	W 14354,a (= ATU 6, pl. 44) ii 4	AN [ŠU ₂ .EN _a] ŠITA _{a1}		
	MSVO 4, 41 ii 3	AN ŠU ₂ .EN _a ŠITA _{a1}		
	MSVO 4, 46 ii 1	[AN ŠU2.ENa ŠITAa1]		

MSVO 4, 57 ii 2	[AN ŠU2.ENa ŠITAa1]
MSVO 4, 57, rev. i 1	AN ŠU ₂ .EN _a ŠITA _{a1}
MSVO 4, 65 i 1	AN ŠU ₂ .EN _a ŠITA _{a1}

(UKKIN_a) W 19408,88 (= ATU 7, pl. 16) i 1 AN ŠU₂.EN_a UKKIN_a

W 14804,c i 3: AN RU

(ŠITA _{a1})	IM 73409,2 ii 6	EN _a AN.RU
		(in ŠITA _{a1} section)

BagM 22, 118 (W 24033,3) i 1 EN_a AN.RU ŠITA_{a1}

(UKKIN_a) (no explicit attestations of EN_a AN.RU UKKIN_a)

W 14804, c i 4: NUN_a+EN_a

(ŠITA _{a1})	MSVO 1, 112 ii 4	NUN _a +EN _a
		(in ŠITA _{a1} section)

(UKKIN_a) (no explicit attestations of NUN_a+EN_a UKKIN_a)

W 14804,c ii 3: [EN_a NUN_a ERIM_a]

 (ŠITA_{a1})
 IM 73409,2 ii 7
 EN_a NUN_a ERIM_a

 (in ŠITA_{a1} section)
 (in ŠITA_{a1} section)

(UKKIN_a) (no explicit attestations of EN_a NUN_a ERIM_a UKKIN_a)

W 14804,c ii 4: KAB

(ŠITA _{a1})	MSVO 1, 112 ii 6	NAM ₂ .KAB ŠITA _{a1}
	IM 134443 i 1	NAM ₂ .KAB ŠITA _{a1}

Other pieces of indirect evidence for a rough formal parallel between $\tilde{S}ITA_{a1}/UKKIN_{a}$ and BA/GI could also be adduced here, mostly in the form of distinctive sequences of offices that are not explicitly marked.³⁸ Some few texts such as W 14777,c (= ATU 6, pl. 56, below) offer more direct evidence of a functional equivalency between BA/GI and $\tilde{S}ITA_{a1}/UKKIN_{a}$, although explicit evidence for directly linking the individual members of these two oppositions, say, BA with $\tilde{S}ITA_{a1}$ and GI with $UKKIN_{a}$ (or vice versa) is still lacking within the Late Uruk materials. Nonetheless it is fairly clear that the offices that follow the $\tilde{S}ITA_{a1}$ entry in the UKKIN List (Off. 8) regularly occur in both the subordinate staff lists qualified as either $\tilde{S}ITA_{a1}$ or UKKIN_a and elsewhere in the proto-cuneiform corpus qualified with either BA or GI.

W 14777,c (= ATU 6, pl. 56) in Figure 3 is a key text for making sense of these secondary designations and also exhibits one of the more unusual textual structures in the entire Late Uruk corpus: originally consisting of two large columns on the obverse (only traces of a second column survive), it is clear that each "line" within the surviving column represented a mid-level bureau within the organization represented by the UKKIN List as a whole: thus the first entry in lines 3' through 8' consists of the corresponding entry in lines 13–19 of the UKKIN List (often in combination with the sign BA).

Each of these lines is then further subdivided into subcases extending to the right edge of the column and these subcases enumerate particular types of staff within each bureau such as GI, EN.PA, PAP, EN.TUR BA and EN.TUR GI, among others. Crucially, however, in three of the four lines that have a BA entry in the first subcase on the left, a GI entry follows soon thereafter. So in line 3' the first entry, $1(N_1)$ NUN_a+EN_a BA is immediately followed by $1(N_1)$ GI, while later on in the same line the BA/GI opposition is repeated in relation to the low level staffers that were designated as EN.TUR, hence $1(N_1)$ EN.TUR BA in line 3d' followed by $2(N_1)$ EN.TUR GI in line 3e'. In line 6' the first entry in 6a' is $1(N_1)$ [EN[?].AMAR] BA; this is followed by $1(N_1)$ MUNUS in 6b' and then $1(N_1)$ GI in 6c', so BA and GI are only separated by an intervening MUNUS sign in this line. And likewise in line 7'

³⁸ Other categorical oppositions such as BA vs. ŠU in an unpublished tablet listed under P231784 at the CDLI website, or BA vs. SIG₇ in the Uruk IV text W 15775, u (=ATU 6, pl. 71, W 15775, u) are probably related, but we do not take up the matter here.

AN.ŠU₂.EN is qualified by BA in the first entry in 7a', while the next entry in 7b' consists of $1(N_1)$ GI.

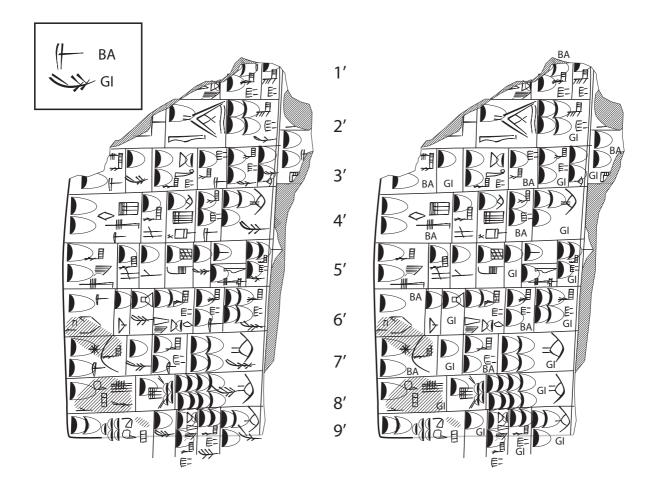


Figure 3 Obverse of W 14777,c, vector copy courtesy of R.K. Englund. In the version on the right BA and GI have been substituted for the corresponding cuneiform signs.

The correlation between the BA/GI offices in W 14777,c and the offices qualified with $\check{S}ITA_{a1}$ in the subordinate staff list MSVO 1, 112 is easier to see, if we simply juxtapose these two documents as follows:

W 14777,c i	MSVO 1, 112 ii
1′. []	1′. [GAL _a] ŠITA_{a1}
2′. [] [GEŠTU ^b [?]]	2'. [] [GEŠTU _b] ŠITA_{a1}
3′. [2(N ₁) NUN _a]+EN _a BA / GI	3'. [1(N ₁) NUN _a +EN _a] ŠITA_{a1}
4′. 2(N ₁) HI E ₂ .NUN BA	

(not followed by GI)
5′. 2(N ₁) EN ŠU NUN
6'. 1(N ₁) [EN AMAR] BA / GI
7′. 2(N1) AN ŠU2.EN BA / GI
8'. 1(N ₁) [PAP NAM ₂ .KAB U ₂ GI
9′. 2(N ₁) LAM _a SI.ME _a NAM ₂ .KAB

5'. 1(N₁) NAM₂.KAB ŠITA_{a1}

As the parallels between BA/GI in W 14777,c and ŠITA_{a1} in MSVO 1, 112 suggest, bureaus in which the first subcase includes BA such as NUN_a+EN_a, EN.AMAR and AN.ŠU₂.EN tend to be more or less immediately followed by a subcase that includes GI (only $HI.E_2$.NUN in line 4' does not have a corresponding GI subcase),³⁹ and where both a BA and a GI entry occur in a given line, we find a corresponding entry for the same bureau in the secondary staff list MSVO 1, 112.⁴⁰ Stated somewhat differently, the parallels between W 14777,c and MSVO 1, 112, suggest that a list of ŠITA_{a1} offices such as the second column of MSVO 1, 112 actually consists of a vertical cross-section of W 14777,c (corresponding to either lines 1a', 2a', 3a', 6a', 7a' and 9a' [the BA entries] or lines 1b', 2b', 3b', 6c', 7b' and 9b' [the GI entries]). Each office designation in either the BA or the GI column is extracted from the bureau in which it actually worked and then compiled into a new second-order, crosssectional list, presumably as a means of auditing distributions to mid-level officials.⁴¹

The use of $\check{S}ITA_{a1}$ as a secondary qualification probably originates from a relatively well defined group of ration texts for elite officials in which $\check{S}ITA_{a1}$, $SILA_{3a} \times KU_{6a}$ and other

³⁹ The fourth entry with BA in W 14777,c (HI E_2 .NUN) is not followed by a GI entry and only occurs in the secondary staff lists alongside UKKIN_a. This might suggest, for instance, that BA should be equated with UKKIN_a rather than ŠITA_{a1}, but a quick survey of the attested administrative documentation shows that none of the entries in column 4' of MSVO 1, 112 (all marked as UKKIN_a) are attested in administrative record as UKKIN_a offices. At the same time, both the term that precedes HI E_2 .NUN, namely GAL_a SANGA_a, and the term that follows it, viz. U₄ E_2 .NUN, are actually attested as ŠITA_{a1} designations in the administrative corpus: GAL_a SANGA_a ŠITA_{a1} occurs in two unpublished tablets in Iraq and a Schøyen Collection tablet (IM 23445, IM 45974 and MS 4542), while U₄ E_2 .NUN ŠITA_{a1} occurs in the temple ration text MSVO 1, 84.

⁴⁰ One could object that \check{SITA}_{a1} itself occurs no less than three times in W 14777,c (lines 1a', 3c', 6d' and 9c'), but it should be noted that lines 3, 6 and 9 all exemplify the BA/GI opposition (line 1 is too damaged to be sure, but probably represents as BA/GI opposition as well; note EN.TUR in the final two cases and ATU 6, pl. 49, W 14731,e). EN_a TUR KAK_a ŠU \check{SITA}_{a1} (line 6d' and probably line 1a') appears to be a third class of low level subordinates alongside EN_a.TUR BA and EN_a.TUR GI. The occurrence of KALAM_b.ŠU as a third class alongside BA and GI in the meat ration text MS 2863/28 may shed some light on these low level staffers, but further evidence is needed. ⁴¹ For a discussion of second- and higher-order administrative documents, see Cancik-Kirschbaum 2012. Much the same

⁴¹ For a discussion of second- and higher-order administrative documents, see Cancik-Kirschbaum 2012. Much the same idea is captured by Visicato's description of "phases of compilation" (see references collected in Foster 2005, 84 and n. 28) and several other discussions of early Mesopotamian accounting techniques. For our purposes here, however, the most important feature of second- and higher-order compilations of other administrative materials is that they allow for different perspectives on a single set of transactions. If W 14777, c documents the number of staffers within a series of bureaus at one point in time, its cross-sectional relationship to MSVO 1, 112 may be isolating those positions within the bureaucracy that were eligible for particular types of rations.

signs derived from SILA_{3a} are used to track the distribution of highly valued goods, in particular cuts of meat and dried fish. This function of the subordinate staff lists is already evident from the metadata in one of the two Late Uruk exemplars, namely IM 73409,2: although the reverse of IM 73409,2 is badly damaged, it gives two totals and designates these totals as $\tilde{S}ITA_{a1}$ UDU_a and $\tilde{S}ITA_{a1}$ SUHUR respectively. Subtotals calculating the total number of $\tilde{S}ITA_{a1}$ UDU_a and $\tilde{S}ITA_{a1}$ SUHUR, literally "cuts of sheep and goat (*Kleinvieh*) meat and dried fish" were a regular part of the Late Uruk texts from Jemdet Nasr such as MSVO 1, nos. 93, 108, 109, 111 and 116, texts that are better known for the central role that they played in the decipherment of the Late Uruk grain metrology system.⁴² These texts calculate the amount of baked goods and beer as well as meat, fish and garments, among other items, that were distributed to elite members of society on the occasion of a particular festival and regularly include subtotals of UDU_a and SUHUR, which must correspond to the use of $\tilde{S}ITA_{a1}$ UDU_a and $\tilde{S}ITA_{a1}$ SUHUR in IM 73409,2.

Although we return to more decisive lexical evidence below, there is some limited evidence for $\tilde{S}ITA_{a1}$ as a 'cut of meat' from a group of seven or eight Late Uruk tablets in which a number of sheep is enumerated in the first line, while the remainder of the tablet lists cuts of meat and other animal products that derive from these sheep.⁴³ The generic structure of these documents may be seen in a text like W 16731 (= ATU 6, pl. 85), in which six sheep yield 120 cuts of meat ($\tilde{S}ITA_{a1}$), or 20 portions of meat per sheep.

W 16731 (=ATU 6, pl. 85) obv. 1. 6(N₁) UDU_a "6 sheep" 2. 2(N₃₄) ŠITA_{a1} "120 cuts of meat" 3. 3(N_{39a}) ZATU714×HI*gunu*_a MU 4. ENDIB

Many of these texts include $GE\check{S}TU_b$ (rather than ENDIB) in their colophon and enumerate a number of other products whose designations are related to $\check{S}ITA_{a1}$ in one way or another such as $\check{S}ITA_{b1}$, BA.1(N₅₇). $\check{S}ITA_{a1}$ and $\check{S}A \times \check{H}Igunu_a$. A nice example of the fuller version of this type of document is W 6066,a (= ATU 5, pl. 3).

⁴² See Englund 2001 for an overview and explication of these texts, focusing in particular on the cereal products, however.

 $^{^{43}}$ The other texts that seem to belong to this administrative genre are W 6066,b (= ATU 5, pl. 3), W 6288 (= ATU5, pl. 5), W 6573,a (= ATU 5 pl. 9), W 6573,b (= ATU 5, p. 9), and W 7343,1 (= ATU 5, pl. 30).

```
W 6066,a (= ATU 5, pl. 3) obv.
i
1. 2(N<sub>14</sub>) UDU<sub>a</sub>
                                                                     "20 sheep"
2. 2(N<sub>14</sub>) ŠITA<sub>b1</sub>
                                                                     "20 …"
3. 2(N<sub>14</sub>) BA 1(N<sub>57</sub>) ŠITA<sub>a1</sub>
                                                                     "20 …"
4. 8(N<sub>1</sub>) KU<sub>3a</sub>
                                                                     (dairy fats)
5. 5(N<sub>34</sub>) 2(N<sub>14</sub>) ŠITA<sub>a1</sub>
                                                                     "320 cuts of meat"
6. 2(N<sub>14</sub>) ŠA×HIgunu<sub>b</sub>
                                                                     "20 …"
7. 2(N<sub>14</sub>) ŠA×HIgunu<sub>a</sub>
                                                                     "20 …"
ii
1a1. [1(N_1)], HIgunu_a
1a2. 1(N1) 1(N28) ZATU714
1b. 2(N<sub>1</sub>) 1(N<sub>28</sub>) ZATU714×HIgunu<sub>a</sub> MU
2. 3(N_{39a}) HIgunu<sub>a</sub> [SAG<sup>?</sup>]
3. [EN_a \check{S}E_a] [...]
4. GEŠTU<sub>h</sub>
```

Although most of the items in this document cannot be identified with any confidence, it is probably significant that the five entries in which the commodity is designated with a sign that is related to $\check{S}ITA_{a1}$ (viz. $\check{S}ITA_{b1}$, $BA.1(N_{57}).\check{S}ITA_{a1}$, $\check{S}ITA_{a1}$, $\check{S}A \times \check{H}Igunu_b$, $\check{S}A \times \check{H}Igunu_a$) amount to 400 units in the text, which given the fact that the text begins with 20 sheep, yields the same ratio of 20 cuts of meat per sheep that we saw in W 16731 (= ATU 6, pl. 85) above. Most of the other examples of this type of document are too damaged to allow for a precise reconstruction of the numbers involved, but those parts of the other texts that do survive are analogous.⁴⁴

⁴⁴ The use of $\{e_2.duru_5^{ki}\}$ at Ebla for a score of people seems to be unrelated (Milano 1990, cf. the discussion of /uzsula/ in Civil 1984a, 162), but it would also correspond to the number of people that can be fed from a single sheep. The system used at Old Babylonian Mari for calculating cuts of meat (and the corresponding method of butchering the animal) only yields ten cuts of meat from a single sheep (Durand 1983, 16–31, apud Milano 1998; see also Sasson 2004, 192, particularly in reference to ARM 21, 63). The expression ZATU714×HIgunu_a MU remains enigmatic (see Englund 2001, 12 for the most recent discussion of the term), but since it occurs at the end of the cereals section and immediately before the meat section in the large MSVO accounts and also occurs in both accounts concerned with pastries and the sheep butchering texts under discussion here, it may be analogous to the mutton stew that forms an integral part of the Ur III {kaš-de₂-a} texts from Garshana. As Brunke (2011) has emphasized, the combination of barley groats with mutton seems to be the defining feature of the stews that were made for the {kaš-de₂-a} banquets, while fish served as the key ingredient for the {ki-a-naĝ} meals. Given the frequent occurrence of a ratio of 15 UDU to 30 SUHUR in the well-preserved large accounts such as MSVO 1, 93, 103 and 108, it is interesting that the same ratio shows up in the {ki-a-naĝ} texts from Garshana such as CUSAS 3, nos.

The bureaucratic tradition that was responsible for tracking distributions of high quality foodstuffs, garments and the like to elites can only be traced with some difficulty in the earlier phases of the Late Uruk proto-cuneiform record. The earliest documents regularly locate ŠITA_{a1} or a related sign (SILA_{3a}×KU_{6a} or SILA_{3a}× ŠE*tenu*) in a subcase at the extreme right side of each case (the same location in which the Late Uruk subordinate staff lists place \tilde{S} ITA_{a1}) and typically include sign clusters that appear nowhere else in the corpus such as ZATU659×N₁ or MU.ZATU714×HI. Similar notational practices seem to have played a major role in Proto-Elamite materials as well: although Dahl rejects a direct semantic equation between Proto-Elamite M36 (graphically equivalent to GEŠTU_b) and protocuneiform SILA₃, the signs M36 and SILA₃ each serve as the orthographic basis for a number of internally complex signs that are associated with elite rations, including ŠITA_{a1} which derives from SILA_{3a}.⁴⁵ The most important difference between the use M36 and a sign like ŠITA_{a1} is that ŠITA_{a1} was regularly assigned a fixed position at the right edge of protocuneiform cases, while the linear structure of Proto-Elamite accounts did not allow for a fixed position for its ration designations and this led to the use of M36 as a general marker for elite rations.⁴⁶ An additional piece of evidence for the early history of these ration notations may also be found in a handful of proto-cuneiform texts that include the sign ZATU625, a relatively rare proto-cuneiform sign that consists of GEŠTU_b without its right horizontal (thus formally analogous to a box that is missing its left side, or in original orientation its top). In at least two texts ZATU625 co-occurs with the some of the same elements that form the secondary qualifications in the texts under discussion here: ZATU625 co-occurs with ŠE and KU_{6a} in MSVO 4, 40 i 2b and ii 6b and it also co-occurs with 1(N₈) in ATU 7, pl. 87, W 22112, notations that are structurally analogous to SILA_{3a}׊E*tenu*, SILA_{3a}×KU₆ and $\check{S}ITA_{a1}$.⁴⁷ Although these two texts seem to represent a somewhat different orthographic tradition from the other proto-cuneiform texts, they are both concerned with the distribution

^{511, 972,} and 975. CUSAS 3, 972, for example, has {15 ki.de₅.ga₂ ar-ki-[num₂] / 30 ku₆ al.dar.ra} (Brunke 2011, 43; see also Pollock 2003, 26; for the gloss ar-ki-num₂, cf. the discussion of {adkin} below). Since there is an obvious correspondence between {ku₆ al.dar.ra} and SUHUR and the overall structure of these accounts is quite similar, the possibility of generic continuity between these texts certainly warrants further investigation. If future studies can substantiate these links, one might even see ZATU714×HIgunu_a as a Late Uruk precursor to {tu₇}, the usual word for soup in texts from the ED IIIa period on.

⁴⁵ Dahl 2005, 4.

⁴⁶ The placement of the ration designation in a separate sub-case on the right edge of the designation of the office holder survives down into the ED IIIa period, as the tablet published in Krebernik / Marzahn / Selz 2006 demonstrates.

⁴⁷ Although the numerical sign that co-occurs with ZATU625 in W 22112 formally resembles N_{39a} , which if correct would indicate a finished grain product that required one N_{39a} unit as its raw material, I would like to at least raise the possibility that it is the number sign N_8 (alternatively DIŠ) used in combination with ZATU625 as a complex logogram. Both interpretations require that it designates a processed item rather than unprocessed barley, since the bundling of ten units using N_{14} on the reverse shows that it is part of either the sexigesimal or bisexigesimal system, not the capacity system.

of high value rations to elites and one (MSVO 4, 40) includes $GE\tilde{S}TU_b$ in its metadata, like the sheep butchering texts we looked at a moment ago.

The conventional point of reference for both ŠITA_{a1} and UKKIN_a is presumably lines 14 and 16 in the Uruk III version of the NAMEŠDA List, where we find the GALa ŠITAal and GAL_a UKKIN_a separated by NUN_a.ME, the designation of the *apkallu*-priest. These two signs also occur in lines 7 and 1 of the UKKIN List as we have noted above, but without GAL_a or the *apkallu*-priest and its kindred EN.ME/NUN.ME occupations. Given that ŠITA_{a1} and UKKIN_a are jointly embedded within both of the major lists of professions, it is particularly intriguing that these two secondary qualifications (as they appear in the subordinate staff lists) also "correspond" in some sense to the first entry in each of the two major lists of professions, viz. the NAMEŠDA List and the UKKIN List respectively. The correspondence between UKKIN_a and the first term of the UKKIN List is exact, while the relationship between ŠITA_{a1} and the first term in the NAMEŠDA List, viz. NAMEŠDA, must be seen as a kind of abbreviation. The orthographic form of ŠITA_{a1} in Uruk writing phase III is identical with only one of the three components that make up the contemporary form of NAMEŠDA: ŠITA_{a1} itself consists of a triangle plus an impression of the circular end of the stylus, ŠITA_{a1} in combination with GIŠ forms the EŠDA sign, and NAMEŠDA is then formed through the addition of the NAM₂ sign. It should be kept in mind, however, that the addition of NAM₂ only takes place in the latter phases of Uruk writing phase IV, and more importantly the writing phase IV version of EŠDA does not consist of GIŠ+ŠITA_{a1} but rather of an iconic representation of a mace.⁴⁸ Only once EŠDA is squared off in Uruk writing phase III can EŠDA be decomposed into GIŠ+ŠITA_{a1} and thus only in Uruk III can we begin to speak of ŠITA_{a1} as a possible abbreviation of GIŠ+ŠITA_{a1}.⁴⁹ Though not fully convincing, the only substantive evidence for such an abbreviation would seem to be the first entry in the Ebla Sign List: $\check{S}ITA_{a1} = ti-i\check{s}-ta_2-lum$.⁵⁰ But if $\check{S}ITA_{a1}$ and UKKIN_a can be seen as referring to the incipits of the two major lists of professions, the adoption of the

⁴⁸ The component of the Uruk IV version of EŠDA that corresponds to GIŠ in the Uruk III version is not rectangular, but rather tapered, as we might expect of a mace handle. The EŠDA reading itself probably stems from a re-analysis of the mace handle as a phonetic gloss, hence /(g)eš(i)ta/ or /(g)ešta/ rather than /šita/. First millennium lexical lists offer *giš-ši-ta* as a gloss for GIŠ.ŠITA_{a1}, presumably representing an intermediate phase between /(g)ešta/ and /šita/, but we should not give too much credence to these first millennium lexical speculations. ⁴⁹ Given the alternation of ŠITA_{a1} with SILA_{3a}+KU_{6a} and SILA_{3a}+ŠE*tenu* as well as parallel notational systems in Proto-

⁴⁹ Given the alternation of SITA_{a1} with SILA_{3a}+KU_{6a} and SILA_{3a}+S*Etenu* as well as parallel notational systems in Proto-Elamite and the proto-cuneiform texts that make use of ZATU625 (see above), it is likely in my view that $\tilde{S}ITA_{a1}$ derives from 1(N₈) or simply DIŠ in combination with SILA_{3a}. For the quite different orthographic history of EŠDA, see the preceding footnote.

⁵⁰ This seems to be the jumping off point for the later interpretations of ŠITA to mean "mit der Waffe erschlagen" via Akk. *šitadallu* or *šitadarru* (Selz 1998: 300, cf. Civil 1984b, 94, apud Krebernik 1998, 279), but in the absence of further early evidence for the interpretation embedded within the Eblaite Sign List, I am still hesitant to translate the term as "mace" in the early third millennium texts.

 $SITA_{a1}/UKKIN_{a}$ notation may well be evidence of an increasingly self-referential iconism within the notational system over time, viz. the replacement of *ad hoc* notations such as BA and GI with a categorical opposition that references the two major lists of professions from the Late Uruk period.⁵¹

THE EARLY DYNASTIC REZEPTIONSGESCHICHTE OF THE SUBORDINATE STAFF LISTS

We have no lexical materials in Proto-Elamite or the unusual tradition of proto-cuneiform that is represented in texts that include ZATU625 such as MSVO 4, 40 and ATU 7, pl. 87, W 22112, but the curious set of notations that were normally used to track these elite rations in proto-cuneiform were the central pre-occupation of a Late Uruk lexical list that is known variously as *Nahrung*, Grain or Word List D.⁵² Although only available in a very fragmentary form on the basis of Late Uruk exemplars, Early Dynastic witnesses from Fara and Ebla demonstrate the structure of the list: Word List D begins with a series of metrological notations for cereals, continues with various designations for cakes and bread products and concludes with a lengthy list of terms for animal carcasses and cuts of meat. These items, not incidentally, are the same objects that are typically distributed to elites during festivals in the earlier phases of Mesopotamian history.

Several complex signs made up of SILA_{3a} in combination with UZU or KU₆ appear in lines 50–53 and soon thereafter we have two parallel lists of prepared meats made from different animals: the same list of animals is repeated in lines 57–79 and 80–102 with the first iteration qualified as {su.la₂} and the second as {adkin}. As Civil first recognized in 1984, we also have a syllabically written version of one key section from Word List D in the Ebla text known as ARET 5, 23.

Word List D entry	ARET 5, 23
50. uzu sila ₃ gal	1. u ₃ šu.la ga.la
51. uzu sila ₃ dili	2. u ₃ šu.la ti.li
52. ku ₆ sila ₃ gal	3. gu ₂ šu.la ga.la

⁵¹ I am rather skeptical of most of the obvious ways of linking apparent phonological forms of BA/GI to $\check{S}ITA_{a1}/UKKIN_{a}$ and will not offer any specific proposal here. Of course only if and when BA and GI are properly deciphered and there is greater consensus in their interpretation, can we evaluate the possibility that BA/GI and $\check{S}ITA_{a1}/UKKIN_{a}$ actually represent two different orthographies for a single pair of terms in some particular language.

⁵² For the Late Uruk and later sources, see the discussion in Englund / Nissen 1993, 32–34, 142–145; Englund 1998, 98 and most recently Civil 2010, 186–188 and Ross 2011, 236–238. The lexical text W 14264 (= ATU 3, pl. 80) may also be part of this stream of lexical tradition, although the signs are somewhat deformed and difficult to identify precisely.

53. ku ₆ sila ₃ dili	4. gu ₂ šu.la ti.li
54. DIM×MAŠ / maš.DIM	5. me.si gu ₂ .[ru ₁₂].um
55. DIM׊E	6. me.za [?] .su.ma
56. $GA_2 \times A + HA$	7. [a].da.[gu ₂ .wa]
57. su.la ₂ ab_2	8. sa.la.['a] [ab]

The orthographic sequence {sila₃ dili}, which is associated with both "the carcass of an animal" (uzu) and "fish" (ku₆), probably represents a disarticulated form of the ŠITA_{a1} sign: the vertical wedge that combines with SILA_{3a} to form ŠITA_{a1} has been separated from SILA_{3a} and replaced by a horizontal wedge.⁵³ Moreover, given the opposition between {dili} and {gal}, it appears that {sila₃ dili} represents a "standard" ration of meat or fish just as ŠITA_{a1} does in the actual administrative record. GAL rations do not appear in the subordinate staff lists, but the later lexical tradition in combination with the materials from Old Babylonian Mari may suggest that {sila₃ gal} represented a double portion vis-à-vis the {sila₃ dili}.⁵⁴ Civil goes on to point out that

[i]n MEE 3 63: 33ff. s i l a is rendered as s a - a l or s a - l a, while here it is given as s u - l a. Perhaps the reason for the difference in form must be sought in a difference of meaning, since here s i l a does not designate a measure but a part of an animal or meat cut. Note the frequent use of s i l a in terms for parts of an animal body or meat cuts in Hh. XV 61–67, 71–79a, etc. Judging from the present list, s i l a must be a general term for "portion" of meat or fish.⁵⁵

⁵³ The opposite phenomenon (the replacement of archaic $A\check{S}$ /dili with DI \check{S}) is fairly common, but the re-analysis of DI \check{S} as $A\check{S}$ /dili is not. As I suggest below, however, the DI \check{S} in \check{S} ITA_{a1} does not originate as $A\check{S}$ /dili, so the interpretation of \check{S} ITA_{a1} as {sila₃ dil} is probably an innovative etymography of the Early Dynastic period. The three Fara period witnesses of Word List D cluster these elements differently: SF 15 has uzu/ku₆ dili sila₃ (with dili/A \check{S} juxtaposed to SILA₃), while SF 16 and SF 17 reorder the elements into the usual word order for an enumerated commodity, viz. quantity, type, measure phrase: 1(A \check{S}) uzu/ku₆ sila₃, cf. \check{S} ITA_{a1} NUN_a KU_{6a} in W 22103,6 and UET 2, 234 (Fish 25).

⁵⁴ Hh XV 79 (as well as Recension D line 50) draws an equation between { $uzu.sila_3.gal$ } and Akkadian term *malaku*, which is the same term that is used in Old Babylonian Mari to refer to a single cut of meat (see MSL IX, 8; CAD M/1, p. 153; Durand 1983, 16–31, *apud* Milano 1998; Civil 1984a, 162). Although more than a millennium separates the Old Babylonian practice at Mari from the Late Uruk period, it should nonetheless be noted that the use of the *malaku* portion at Mari yields only 10 cuts of meat from each sheep, while 20 units of ŠITA_{a1} can be derived from a single sheep in the Late Uruk texts. This may suggest that { $uzu.sila_3.gal$ }, which is however only attested in the lexical tradition as far as I can tell, may have been seen as twice as big as the size of the standard portion, namely { $uzu.sila_3.dili$ }.

Civil's interpretation of $\{sila_3\}$ as a general designation for "portion of meat or fish" fits very nicely with the use of ŠITA_{a1} in the subordinate staff lists, particularly since in the administrative documentation SILA_{3a} is never used by itself to designate a cut of meat or fish. In IM 73409,2 above, it should be remembered, the distributions to the ŠITA_{a1} and UKKIN_a offices are summarized as ŠITA_{a1} UDU_a and ŠITA_{a1} SUHUR, showing that ŠITA_{a1} can refer to a standard cut of either meat or dried fish.

Both ŠITA_{a1} and UKKIN_a are iconic representations of drinking vessels, but both signs also include an additional vertical wedge that distinguishes these signs from the proto-cuneiform signs that actually refer to the vessels themselves (SILA_{3a} and UKKIN_b). Both SILA_{3a} and UKKIN_b are attested as vessels in the Late Uruk administrative record,⁵⁶ and although neither sign appears in its basic form in the lexical list known as Vessels, fairly clear iconic referents for both vessels can be identified in the ceramic and iconographic record of Late Uruk and Early Dynastic Mesopotamia.⁵⁷ The addition of a single wedge to a sign that otherwise functions as the designation of the object that it iconically depicts is also known from the relationship between {mušen} "bird" and {dal}(MUŠEN+DIŠ)} "to fly" in Classical Sumerian, where the basic sign {mušen} refers to its iconic referent, while the basic sign plus an additional wedge {dal} signifies the activity that is characteristic of that object.⁵⁸ I assume here that the addition of a vertical wedge to SILA_{3a} is meant to designate "the type and amount of meat or fish that is appropriate to someone who receives a SILA_{3a} vessel of beer or dairy fats (on the occasion of a festival)" and likewise that the addition of a vertical wedge in the body of the UKKIN_b sign is meant to refer to "a portion of meat or fish that is appropriate to someone who normally drinks from the UKKIN_b vessel."

The two lists that conclude Word List D seem to represent a second bifurcation within the realm of meat preparation and distribution alongside the opposition between UZU '(animal) carcass' and KU_{6a} 'fish'. Crucially, the list of animals that is repeated in lines 57– 102 does not include fish, only animals whose butchering would yield an UZU. As Civil has recently noted, "[t]he meat is obtained from a standard list of domestic animals repeated

 $^{^{56}}$ SILA_{3a} is attested roughly three dozen times in the Late Uruk corpus, often in combination with other signs, while UKKIN_b is much harder to find with only six or so attestations. ATU 7, pl. 72, W 20517,1, is a particularly nice text for the identification of UKKIN_b as an actual vessel, since it lists 30 DUG_a alongside 120 UKKIN_b and 600 ŠITA_{a1}.

⁵⁷ Englund suggests that UKKIN_a appears as a container for dairy fats on the Ubaid Frieze (Englund 1998, 159) and that SILA_{3a} corresponds to the ubiquitous *Blumentopf* (Englund 1998, 165–167), but these equations need to be investigated in greater detail by specialists in Late Uruk ceramics; see, for instance, Pollock 2003, 28–30.

⁵⁸ This form of diacrisis should be carefully distinguished from the addition of a horizontal wedge to mark the age of a particular animal, for example, $1(N_{57})+$ ŠAH₂ to designate a one year old piglet, a notation drawn from the calendrical system (see Englund 1988; 1998, 121–127).

twice, once for each method of preparation: su-lá and adkin."⁵⁹ It is clear from Englund's discussion of fish consumption in the Late Uruk period that the numerous large fish that were available in and around the Persian Gulf and the southern marshes played a central role in the earliest phases of Late Uruk feasting.⁶⁰ As we move into northern Mesopotamia and the Jezireh, however, it is hard to imagine that similar quantities of large fish would have been available. This may well have necessitated a translation of the southern fish-versus-meat paradigm into an opposition between two different ways of preparing animal meat in the north. In other words, we should consider the possibility that the opposition between $\{su.la_2\}$ and $\{adkin\}$ represents an adaptation of the original UZU/KU_{6a} opposition to an environment in which large amounts of dried fish were difficult to come by.

The style of meat preparation known as {su.la₂} corresponds to Akkadian *muddulu*, a type of dried meat that is best known from its appearance in *The Return of Lugalbanda*, line 96, where Lugalbanda places a coil of *muddulu* meat on or near the head of the baby Anzu(d) bird.⁶¹ The identification of {adkin} meat is far less secure, although it is clear in the later lexical tradition that it is equated with several different terms in Akkadian, including *šittu* and *kirrētu* as well as *muddulu*.⁶² It is unclear what *šittu* is and *muddulu* is the same term that we saw used for {su.la₂} meat, so the connection between {adkin} and *kirrētu* is the most promising of the three equations. Nonetheless, there is no substantial use of {adkin} in any administrative tradition.⁶³ In my view, {adkin} can be etymologized as a compound made up of /ad/ 'carcass' and /kin/ 'assembly', and therefore be interpreted as "the (sheep) carcass of the assembly." This is parallel with the formation of /ukkin/ or better /uĝkin/, which Selz derives from /uĝ/ 'people' plus /kin/ 'assembly', yielding "the people of the assembly."⁶⁴ The Akkadian term *kirrētu* also refers to a type of preserved meat, and seems to derive both

⁵⁹ Civil 2010, 187.

⁶⁰ Englund 1998, 128–142.

⁶¹ The various clusterings of SU and LA₂ in {su.la₂} are perplexing to say the least: Civil notes that "[t]he older texts write LÁ×SU, but MS, G and H write SU.LÁ" (Civil 2010, 187). But it should be noted that these orthographic variants represent clear descendants of Late Uruk orthographies that combine SU_a with with $1(N_{57})$, $2(N_{57})$ or PAP_a., including the one Late Uruk witness of Word List D that includes the corresponding section, namely ATU 3, pl. 75, W 21916,1. Expressions like $1(N_{57})$, SU_a in the Late Uruk calendrical system may be using meat distributions at particular festivals as a way of mapping out the cultic calendar, but this obviously requires further study (see Englund 1988, 132–133 and n. 10). One Late Uruk witness (ATU 3, pl. 75, W 20335,8) that appears to show SU_a $1(N_{57})$ SAH₂ immediately followed by UDU_a ŠITA_{a1} is unparalleled but the CDLI photo is fairly clear. One of the unpublished Schøyen Collection tablets (MS 2439), however, offers an apparent example of the use of SU_a PAP_a to write su.la_x(PAP_a), an orthography that is otherwise mostly limited to colophons in the Late Uruk materials (cf. Englund 2009, 15 n. 43).

⁶² See in particular Hh XV 304–308 (= MSL 9, 15).

⁶³ De Maaijer / Jagersma 2004, 351–352, for example, emphasize that the term does not seem to have been used outside of the lexical tradition.

⁶⁴ Selz 1998, 301–305, cf. "gens réunis" in Durand 1989, 39, apud Glassner 2000, 43.

etymologically and etymographically from a term that refers to a large pot: *kirru* in Akkadian, itself a loanword from Sumerian { dug gir}. At the risk of drawing fire for *Schriftarchäologie*, it should also be noted that the GIR sign corresponds to KU_{6a}gunu (the basic sign for "fish" with a series of horizontals written either inside that fish or to its left) and in the Archaic Fish List GIR_a and KIN.GIR_a follow in sequence in lines 27–28.⁶⁵ If we hypothesize that those who were designated as UKKIN_a in IM 73409,2 received cuts of dried fish (SUHUR) rather than mutton (UDU_a), it might suggest that GIR in combination with KIN designated a type of "fish" that was appropriate for those offices designated as UKKIN_a.⁶⁶

It may therefore be significant that *kirrētu* meat continues to play a central role in meat distributions to elites in many different groups of material from Early Dynastic Ebla down into the first millennium distributions of meat to prebend holders on which Oppenheim based his famous description of the care and feeding of the gods.⁶⁷ One of the most illuminating discussions of this phenomenon is Milano's "Aspects of Meat Consumption in Mesopotamia and the Food Paradigm of the Poor Man of Nippur" (1998), which offers not only a survey of the evidence for both cultically and municipally centered distributions of meat (including the parody visible in the Poor Man of Nippur), but also several clear descriptions of how systems of meat distribution are embedded within the broader society such as the following.

... the allotment of cuts of meat [is] a structured system, rooted in the temple and palace economy. Meat is assigned by a royal decree as a permanent prebend to priests and to other personnel as a reward for their service. The social impact of the system exceeds its economic role. The inventory of the cuts of meat drawn up by the scribes has not a meaning per se, but it acquires

 $^{^{65}}$ These lines first appear in the version of the Fish List from Archaic Ur (UET 2, 234) and do not seem to be attested in any of the Late Uruk witnesses of the Fish List. Thus, there is good reason to suspect that the opposition between {su.la₂} and {adkin} is an Early Dynastic innovation. Likewise, the {adkin} section of Word List D does not seem to be attested in Late Uruk materials and the sign itself is only differentiated from EREN in the ED IIIa period (Krebernik 1998, 237).

⁶⁶ Both {gir^{ku6}} and {kin^{ku6}} are attested as distinct lexical entries, but only {gir^{ku6}} seems to have an Akkadian equivalent, namely $\hat{s}a\hat{h}\hat{u}$, literally the "boar" fish. In the administrative record, however, there are a number of references in the Ur III period to sheep that are qualified as {GIR.ru.um} or {GIR.ra}.

⁶⁷ For *kirrētu* in the Ebla materials, see Milano / Tonietti 2012, 39. The Oppenheim passage is Oppenheim 1977, 183–193, *apud* Sallaberger 2012, 160. For recent discussions of other types of temple offerings, see for example, Freydank 2007 and Maul 2008.

its meaning according to its recipients, according to their rank and status on the one side, and their function on the other.⁶⁸

Although Milano originally meant this statement as a description of a new state of affairs at the end of the second millennium BCE, I would like to suggest that it can be extended to the materials under discussion here. Put somewhat differently, the distribution of cuts of meat and fish serves as an ideal semiotic vehicle for the expression of subtle gradations in social and institutional status, while at the same time integrating the various offices of the Late Uruk administration within a single institutional matrix.⁶⁹

Although I will not attempt to forge a link between the Late Uruk texts under discussion here and the far more comprehensible materials from Early Dynastic Ebla or Old Babylonian Mari, I would like to take a moment to highlight some limited evidence that the ŠITA_{a1}/UKKIN_a system survived the moment of cultural discontinuity that so clearly separates the Late Uruk and Early Dynastic periods. The textual record of Archaic Ur (ca. 2800 BCE), despite it limited and fragmentary character, provides several solid pieces of evidence for the survival of the ŠITA_{a1}/UKKIN_a notational system. Instead of ŠITA_{a1}, the materials from Archaic Ur often use a sign that is transliterated as ŠITA_c due to its use of a square stylus to impress the half-circle on the right side of the sign, the same square stylus that gives most of the numerical signs from Archaic Ur their distinctive appearance.⁷⁰ Only some few texts can be positively associated with the ŠITA_{al}/UKKIN_a system: the first few lines of UET 2, 65 include GAR GAL_a **ŠITA**_c (line 1) and LI **ŠITA**_c (line 3); UET 2, 112 has URU_{a1} A **ŠITA**_c DU_{8a} in iii 18 and AN MUŠ_{3a} **ŠITA**_c in vi 19; and UET 2, 364 + 368 has [x]GAN₂ ŠITA_{a1} at the bottom of the second column on the obverse. Two other texts may be of more significance: UET 2, 40 includes in its summary $3(N14_f)$ UZU **ŠITA**₆, while UET 2, 10 has AB ŠITA_c as its summary statement at the bottom of column 2 on the obverse and as its colophon on the reverse. The mention of UZU ŠITA_c is particularly significant in that it directly corresponds to {uzu sila₃ dili} in line 51 of Word List D, while AB ŠITA_c in UET 2, 10 ties into recent discussions of the institutional structure of Ur in earlier phases of the Early Dynastic period.⁷¹ UKKIN_a is more difficult to locate in Archaic Ur, however: the obverse of

⁶⁸ Milano 1998, 20.

⁶⁹ Or as Appadurai says, in his frequently cited paper, "[w]hen human beings convert some part of their environment into food, they create a peculiarly powerful semiotic device" (Appadurai 1984, 494, apud Pollock 2003, 18).
⁷⁰ See Chambon 2003.

⁷¹ See in particular the papers published in Šaškova / Pecha / Charvát 2010 as well as Charvát 2012. Charvát's suggestion that the NAMEŠDA agency survives into ED I-II is certainly possible, but it should be remembered that the office of

UET 2, 11 ends with UKKIN_a, although its context is largely destroyed, and the title GAL_a UKKIN_a occurs in the field distribution text UET 2, 108 at the end of obv. iii and in the metadata on the reverse.⁷² The occurrence of both SITA_{a1} and UKKIN_a in two separate field distribution texts (UET 2, 364+368 and UET 2, 108) is of particular importance since it may demonstrate a linkage between the receipt of elite rations such as cuts of meat and the receipt of prebend land, one of the hallmarks of the prebend system in later periods.⁷³

These admittedly faint traces of the $\tilde{S}ITA_{a1}/UKKIN_a$ system in Archaic Ur apparently represent the last phase of Mesopotamian history in which the bicameral orthographies of the Late Uruk period were still in actual use. In subsequent periods of time, the $\tilde{S}ITA$ sign that originally classified various offices within the bicameral framework of the $\tilde{S}ITA_{a1}/UKKIN_a$ system were simply welded onto their host and made a regular component of a number of "priestly" office designations. AB $\tilde{S}ITA$, for example, no longer forms one component of a rationing system for the AB institution, but rather becomes the $\tilde{S}ITA$ -priest of the shrine $\{e\check{s}_3(AB)\}$ of Nanna.⁷⁴ And it is precisely the fragmentation of the older bicameral (or at least binary) framework for the designation of Late Uruk professional offices that leads to the kaleidoscopic variety of office subcategorizations in the subordinate staff lists from the ED IIIa period such as SF 57 and IAS 44–53. In these texts, which have never been edited in their entirety, subsections are devoted to groups of offices that all include a common sign such as LAGAR, $\tilde{S}ITA$, SANGA, EN.ME, PAP or even ME. There is no section in these

NAMEŠDA occurs in both the NAMEŠDA List and the UKKIN List and the NAMEŠDA sign does not play a particularly significant role in the administrative texts from either the Late Uruk or the Early Dynastic period, so we cannot draw any inferences from the simple occurrence of the NAMEŠDA sign in the materials from Archaic Ur.

⁷² Of course since $GAL_a UKKIN_a$ is itself an office designation rather than a secondary qualification of GAL_a as an $UKKIN_a$ office, its empirical significance vis-à-vis the survival of the $ŠITA_{a1}/UKKIN_a$ notational system is substantially diminished.

⁷³ Other texts that stem from the ED I-II period but not from the archive published in UET 2 offer even more concrete evidence of the survival of the $\tilde{S}ITA_{a1}/UKKIN_a$ system: the first column on the obverse of W 20365 concludes with UKKIN_a, the second column ends with $\tilde{S}ITA_{a1}$, and the summary on the reverse, though only partially preserved, seems to enumerate some 115 sheep and goats (UDU), while VAT 15232 consists of several subsections that include $\tilde{S}ITA_{a1}$ and a summary on the reverse that draws an opposition between $1(N_{14}) 1(N_1) \tilde{S}ITAgunu_b$ HAL and $3(N_{14}) \tilde{S}ITAgunu_b$. ⁷⁴ The $\tilde{S}ITA$ AB is one of the few offices that has been discussed in the secondary literature, including a brief discussion in

¹⁴ The SITA AB is one of the few offices that has been discussed in the secondary literature, including a brief discussion in Sollberger 1960, 87 and a much more detailed investigation in Renger 1969, 129–132, *apud* Charvát 1979, 19. In his short note, Sollberger cites an example from the Late Uruk period (now ATU 5, pl. 19, W 6882,b1), the key reference in the Archaic Ur corpus (UET 2, 10) and even an administrative reference from the ED IIIa period, namely WF 9, rev. ii 2, demonstrating a wonderful breadth of reference prior to the advent of computer searches. It should be noted however that Sollberger's second reference should be read as ŠITA GURUŠ rather than ŠITA AB (correctly read as ŠITA GURUŠ in Deimel's transliteration). The phrase ŠITA AB also occurs in NTSŠ 207 rev i 5, TSŠ 536 rev. i 4 (with GAL UKKIN in the same text), WF 25 rev. ii 19 (in the phrase ŠEŠ ŠITA.AB), and WO 8, 180, while ŠITA GURUŠ also occurs in TSŠ 93 obv. i 2, TSŠ 104 ii 1', WF 62 iii 1, WF 76 obv. iv 6 and viii 4, WF 106 obv. iv 8 and rev. iv 8. Since the two phrases only occur in proximity in WF 9 rev. ii, it is rather unlikely that they represent the basis for the opposition between {ab.ba iri} and {guruš iri} in *Gilgamesh and Akka*.

texts devoted to UKKIN, however.⁷⁵ Since the ŠITA section of SF 57 has never been published in transliteration, let me first provide a rough outline of it here.

SF 57 iv 4 – v 7

iv

- 4. AN.MUŠ $_3$ ŠITA
- 5. ME ŠITA
- 6. KU₆ ŠITA
- 7. UZU ŠITA
- 8. UTUL ŠITA
- 9. GAR HI GAR ŠEŠ ŠITA
- 10. GAR SAR ŠITA
- 11. GAR SUM ŠITA
- 12. TE ŠITA
- 13. KALAM GI ŠITA (var. IAS 49 i' 1' has ŠITA [E₂] GAL [x])
- 14. E₂.NUN ŠITA
- 15. BUR ŠITA (var. ŠITA LI in IAS 48 iii' 2')
- 16. NAB SIG₇ ŠITA
- 17. NAM2 HUB2 ŠITA (var. ŠITA NAM2.KAB in IAS 48 iii' 3')
- 18. NAB ŠU₂ ŠITA
- 19. ME DU ŠITA
- 20. [x] [x] ŠITA (IAS 48 iii' 6' has ŠITA E₂)

(two lines missing)

v

- 1. [MIR] ŠITA
- 2. GURU7 ŠITA (var. IAS 48 iii' 7' has ŠITA TUG2)
- 3. ŠE+NAM₂ ŠITA (var. ŠITA A.EREN in IAS 46 iv 3 and IAS 48 iii' 8')
- 4. ME PA PI IB ŠITA (var. IAS 46 iv 4 has ŠITA NA $\check{S}E_3)$
- 5. [GAL] SANGA ŠITA
- 6. SU AB_2 ŠITA

 $^{^{75}}$ KINGAL SANGA, viz. GAL UKKIN SANGA, appears in the following SANGA section of SF 57 vi 5, so one might imagine that the SANGA section descends from a list of UKKIN offices. There is, as far as I can tell, no solid evidence for such an interpretation other than the occurrence of GAL UKKIN itself. The only entries that the two sections have in common are AN.MUŠ₃ and NAB.SIG₇.

7. en lagas_x(BUR.NU₁₁.RU)^{su}

We have already met the first entry in the list, namely AN.MUŠ₃ ŠITA, in UET 2, 112 obv. iv 19, but the subscript at the end of the list classifies the preceding entries as en-priests or priestesses of Lagash {en lagas_x(BUR.NU₁₁.RU)^{su}},⁷⁶ so the reference of AN.MUŠ₃ ŠITA remains somewhat unclear.⁷⁷ The next two entries should be more familiar, however: KU₆ ŠITA and UZU ŠITA in iv 6–7 correspond precisely to the terms for cuts of meat and fish that occur in Word List D above and these two entries also demonstrate some limited continuity between the SITA_{al}/UKKIN_a notational system and the list of SITA offices collected here. Admittedly many of the terms cannot easily be identified in the Early Dynastic record and presumably require collation or emendation. Nonetheless, it is undoubtedly significant that many of the entries in the SITA section of SF 57 correspond to offices that occur in the UKKIN List, including ME, UTUL, NAB.SIG₇, NAM₂.HUB (NAM₂.KAB in the IAS variants), possibly NAB.[ŠU₂], ŠE+NAM₂ and GAL.SANGA. Moreover, several of these offices such as NAM₂.HUB₂/KAB and NAB.ŠU₂ play a central role in the subordinate staff lists and even appear in sequence in the BA/GI texts that we looked at earlier: NAM₂.KAB is largely unchanged, while NAB.ŠU₂ corresponds to AN.ŠU₂.EN as demonstrated by parallels in the UKKIN List. It is also noteworthy that no EN.ME or NUN.ME orthographies occur in the ŠITA section of SF 57. This would seem to confirm the association between the use of ŠITA_{a1} as a secondary qualification and the offices listed in the UKKIN List, since EN.ME and NUN.ME orthographies are also absent from the Late Uruk version of the UKKIN List.

CONCLUSION

Rather than sketching out a speculative history of institutional, if not specifically political, bicameralism in early Mesopotamia and then identifying a single usage as *the* historical kernel of the bicameralism that we see in *Gilgamesh and Akka*, I have attempted in this paper to delineate a series of orthographic bifurcations and notational oppositions within early

 ⁷⁶ Note that LA has been rotated 45 degrees clockwise, hence my transliteration of it as RU, but the reading of the cluster seems to be confirmed by the addition of SU as a phonetic gloss.
 ⁷⁷ One variant text of the Sumerian Temple Hymns, namely CBS 19767 (manuscript B in Sjöberg / Bergmann 1969), seems

¹⁷ One variant text of the Sumerian Temple Hymns, namely CBS 19767 (manuscript B in Sjöberg / Bergmann 1969), seems to have the phrase {šita-^dinanna} in line 193, a section devoted to Ningišzida of Gišbanda (Sjöberg / Bergmann 1969, 90). Since Gišbanda was located near Ur, however, this reference may represent part of the same tradition as the reference in UET 2, 112.

Mesopotamian bureaucratic practice. These notational and terminological revolutions run the gamut from the development of increasingly phonetic (and hence decontextualizable) orthographies and the phonological reordering of the NAMEŠDA List to the development of complex second- and higher-order diacritics such as BA/GI and ŠITA_{a1}/UKKIN_a that were used to manage the distribution of elite rations. Any one of the bicameral orthographies identified in this paper could have served as the historical kernel for the parliamentary debate that is often thought to have taken place in *Gilgamesh and Akka*. Failing that, even the NAMEŠDA and UKKIN Lists themselves, transmitted down into the Old Babylonian period, would have been up to the task.

The place of these bureaucratic techniques within the *longue durée* of Mesopotamian institutional history is, however, far more important than reconstructing the authorial intentions behind Gilgamesh and Akka. Whether we adopt Milano's food paradigm or the gasto-political perspective of recent work on the archaeology of feasting, the linkage between the lists of professional offices in NAMEŠDA and UKKIN and the distribution of meat and fish to the inhabitants of these offices makes a good deal of sense. And more importantly, it allows us to ask new kinds of questions, questions that may only be overcome through the collaborative effort of philologists and archaeologists. In Dietler's influential description of Luo commensal politics, for example, male elders drink from a large shared pot known as a thago using the same kind of long drinking straws that we see in Early Dynastic banquet scenes, while younger men and women generally drink from a much smaller vessel known as a *mbiru*. Can we use the opposition between the *thago* of the elder males and the *mbiru* used by everyone else as a model for the Late Uruk opposition between UKKIN_a and ŠITA_{a1}?⁷⁸ Or perhaps Dietler's "diacritical feasts" in which "the use of differentiated cuisine . . . [acts] as a symbolic device to neutralize and reify concepts of ranked differences in the status of social orders and classes" is more to the point.⁷⁹ Either way, the clarification of questions like these promises not only greater insight into the culinary habits of early Mesopotamians, but also a glimpse into the institutional structures of early Mesopotamia as well as the articulation of rank and status within these structures.⁸⁰

⁷⁸ Dietler 2001, 96–97. As Pollock has shown, however, the gender split is quite different in the Mesopotamian banquet scenes (Pollock 2003, 22).

⁷⁹ Dietler 2001, 85.

⁸⁰ Or as Pollock (2003, 25) says, "... distinctions among elites by gender, relative social position and age."

BIBLIOGRAPHY

Algaze, G. (2008): Ancient Mesopotamia at the Dawn of Civilization. University of Chicago Press: Chicago.

Bray, T. (2003): The Archaeology and Politics of Food and Feasting in Early States and Empires. Springer: Boston.

Brunke, H. (2011): Food in the Garšana Texts, in: D.I. Owen (Hg.), *Garšana Studies* (Bethesda), S. 31–65.

Cancik-Kirschbaum, E. (2012): Überlegungen zur Systematik Administrativen Schriftguts der mittelassyrischen Zeit in Dūr-Katlimmu, in: *Berichte der Ausgrabung Tell Šeh Hamad/Dūr-Katlimmu* 12 (Berlin).

Capitanio, P. (2004): Meat, Prebends and Rank: A Short Note on the Distribution of Sacrificial Meat in Seleucid Uruk, in: C. Grottanelli / L. Milano (Hg.), *Food and Identity in the Ancient World*. SARGON: Padova, S. 257–267.

Chambon, G. (2003): Archaic Metrological Systems from Ur, in: *Cuneiform Digital Library Journal* 2003/5.

Charvát, P. (1979): Early Ur, in: Archiv Orientální 47, S. 15-20.

Charvát, P. (2012): From King to God: The NAMEŠDA Title in Archaic Ur, in: G. Wilhelm (Hg.), Organization, Representation, and Symbols of Power in the Ancient Near East: Proceedings of the 54th Rencontre Assyriologique Internationale at Würzburg 20.–25. July 2008. Eisenbrauns: Winona Lake, S. 265–274.

Civil, M. (1984a): Studies in Early Dynastic Lexicography II: 3. Word List D 50–57 (ARET 5 No. 23), in: *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 74, S. 161–163.

Civil, M. (1984b): Bilingualism in Logographically Written Languages: Sumerian in Ebla, in: L. Cagni (Hg.), *Il bilinguismo a Ebla*. Istituto universitario orientale, dipartimento di studi asiatici (Series Minor): Napoli, S. 75–97.

Civil, M. (2010): *The Lexical Texts in the Schøyen Collection* (Cornell University Studies in Assyriology and Sumerology 12). CDL Press: Bethesda.

Dahl, J.L. (2005): Complex Graphemes in Proto-Elamite, in: *Cuneiform Digital Library Journal* 2005/3.

De Maaijer, R. / B. Jagersma (2004): Rezension of The Sumerian Dictionary of the University of Pennsylvania, Vol. 1: A Part III, in: *Archiv für Orientforschung* 50, S. 351–355.

Dietler, M. / B. Hayden (2001): *Feasts: Archaeological and Ethnographic Experiences on Food, Politics, and Power*. Smithsonian Books: Washington, D.C.

Durand, J.-M. (1983): *Textes administratifs des salles 134 et 160 du palais de Mari* (Archives Royales de Mari 21). Geuthner: Paris.

Durand, J.-M. (1989): L'assemblée en Syrie à l'époque Pré-Amorite, in: P. Fronzaroli (Hg.), *Miscellanea Eblaitica II*. Istituto di linguistica Università di Firenze: Florence, S. 27–44.

Englund, R.K. (1988): Administrative Timekeeping in Ancient Mesopotamia, in: *Journal of the Economic and Social History of the Orient* 31, S. 121–185.

Englund, R.K. (1998): Texts from the Late Uruk Period, in: Attinger, P. / M. Wäfler (Hg.), *Mesopotamien: Späturuk-Zeit und Frühdynastische Zeit* (Annäherungen 1, Orbis Biblicus et Orientalis 160/1). Vandenhoeck & Ruprecht: Göttingen, S. 14–233.

Englund, R.K. (2001): Grain Accounting Practices in Archaic Mesopotamia, in: J. Høyrup / P. Damerow (Hg.), *Changing Views on Ancient Near Eastern Mathematics*. Reimer: Berlin, S. 1–35.

Englund, R.K. (2004): The State of Decipherment of Proto-Elamite, in: S. Houston (Hg.), *The First Writing: Script Invention as History and Process*. Cambridge University Press: Cambridge, S. 100–149.

Englund, R.K. (2008): An Examination of the "Textual" Witnesses to Late Uruk World Systems, in: Y. Gong / Y. Chen (eds.), *A Collection of Papers on Ancient Civilizations of Western Asia, Asia Minor and North Africa*. Beijing, S. 1–38.

Englund, R.K. (2009): The Smell of the Cage, in: Cuneiform Digital Library Journal 2009/4.

Englund, R.K. / H.J. Nissen (1993): *Die lexikalischen Listen der archaischen Texte aus Uruk* (Archaische Texte aus Uruk 3). Mann: Berlin.

Fleming, D.E. (2004): *Democracy's Ancient Ancestors: Mari and Early Collective Governance*. Cambridge). Cambridge University Press: Cambridge.

Foster, B.R. (2005): Shuruppak and the Sumerian City State, in: L. Kogan (Hg.), *Babel und Bibel 2: Memoriae Igor M. Diakonoff.* Eisenbrauns: Winona Lake, S. 71–88.

Freydank, H. (2007): "Honig"-Lieferungen für den Gott Assur, in: *Altorientalische Forschungen* 34, S. 70–77.

Glassner, J.-J. (2000): Les petits Etats mésopotamiens à la fin du 4e et au cours du 3e millénaire, in: M. Hansen (Hg.), *A Comparative Study of Thirty City-State Cultures*. Kongelige Danske Videnskabernes Selskab: Copenhagen, S. 35–53.

Harris, R. (1992): The Conflict of Generations in Ancient Mesopotamian Myths, in: *Comparative Studies in Society and History* 34/4, S. 621–635.

Harris, R. (2000): Gender and Aging in Mesopotamia: The Gilgamesh Epic and Other Ancient Literature. Univ of Oklahoma Press: Norman.

Hayden, B. / S. Villeneuve (2011): A Century of Feasting Studies, in: *Annual Review of Anthropology* 40, S. 433–449.

Jacobsen, T. (1943): Primitive Democracy in Ancient Mesopotamia, in: *Journal of Near Eastern Studies* 2/3, S. 159–172.

Jacobsen, T. (1957): Early Political Development in Mesopotamia, in: Zeitschrift für Assyriologie und Vorderasiatische Archäologie 52, S. 91–140.

Katz, D. (1987): Gilgamesh and Akka: Was Uruk Ruled by Two Assemblies? *Revue d'Assyriologie et d'Archéologie Orientale* 81, S. 105–114.

Krebernik, M. (1998): Die Texte aus Fara and Tell Abu Salabikh, in: P. Attinger / M. Wäfler (Hg.), *Mesopotamien: Späturuk-Zeit und Frühdynastische Zeit* (Annäherungen 1, Orbis Biblicus et Orientalis 160/1). Vandenhoeck & Ruprecht: Göttingen, S. 237–427.

Krebernik, M. (2002): Von Zählsymbolen zur Keilschrift, in: E. Greber / K. Ehlich / J.-D. Müller (Hg.), *Materialität und Medialität von Schrift*. Aisthesis: Bielefeld, S. 51–71.

Krebernik, M. (2007): Zur Entwicklung des Sprachbewusstseins im Alten Orient, in: C. Wilcke (Hg.), *Das geistige Erfassen der Welt im Alten Orient*. Harrassowitz: Wiesbaden, S. 39–61.

Krebernik, M. / J. Marzahn / G.J. Selz (2006): Eine Fara-zeitliche "Tabelle", in: *Archiv für Orientforschung* 51, S. 45–53.

Lecompte, C. (2009): *Temps, mémoire et évolution des cultures aux époques archaïques: écriture du passé et listes lexicales.* Unpublished dissertation, Universite de Versailles St-Quentin-en-Tyvelines and Universite de Geneve.

Latour, B. (2010): *The Making of Law: An Ethnography of the Conseil d'État*. Polity Press: Cambridge.

Liverani, M. (2010): The Book of Kings and Ancient Near Eastern Historiography, in: A. Lemaire / B. Halpern (Hg.), *The Books of Kings: Sources, Composition, Historiography and Reception*. Brill: Leiden, S. 163–184.

Mander, P. (1986): Il pantheon di Abu-Salabikh. Istituto universitario orientale: Napoli.

Maul, S.M. (2008): Den Gott ernähren: Überlegungen zum regelmäßigen Opfer in altorientalischen Tempeln, in: E. Stravianopoulou / A. Michaels / C. Ambos (Hg.), *Transformations in Sacrificial Practices: From Antiquity to Modern Times*. Lit: Berlin, S. 75–86.

Michalowski, P. (1993): On the Early Toponymy of Sumer: A Contribution to the Study of Early Mesopotamian Writing, in: A. Rainey (Hg.), *kinattūtu ša dārâti: Raphael Kutscher Memorial Volume*. Institute of Archaeology of Tel Aviv University: Tel Aviv, S. 119–133.

Milano, L. (1998): Aspects of Meat Consumption in Mesopotamia and the Food Paradigm of the Poor Man of Nippur, in: *State Archives of Assyria Bulletin* 12/2, S. 111–127.

Milano, L./ M.V. Tonietti (2012): Cerimonialità alimentare ad Ebla: Offerte, pasti, sacrifice, in: L. Milano (Hg.), *Mangiare divinamente: Pratiche e simbologie alimentari nell'antico oriente*. LoGisma Editore: Vicchio, S. 33–81.

Nissen, H.J. (1974): Zur Frage der Arbeitsorganisation in Babylonien während der Späturuk-Zeit, in: *Acta Antiqua* 22, S. 5–14.

Nissen, H.J. (1981): Bemerkungen zur Listenliteratur Vorderasiens im 3. Jahrtausend (gesehen von den Archaischen Texten von Uruk), in: L. Cagni (Hg.), *La Lingua di Ebla*. Istituto Universitario Orientale: Napoli, S. 99–108.

Nissen, H.J. (1993): The Context of the Emergence of Writing in Mesopotamia and Iran, in: J. Curtis (Hg.), *Early Mesopotamia and Iran: Contact and Conflict 3500–1600 BC*. British Museum: London, S. 54–71

Nissen, H.J. (2011): Schule vor der Schrift, in: G.J. Selz (Hg.), *The Empirical Dimension of Ancient Near Eastern Studies* (Wiener Offene Orientalistik 6). Lit: Wien, S. 589–602.

Nissen, H.J. / P. Damerow / R.K. Englund (1993): Archaic Bookkeeping. University of Chicago Press: Chicago.

Oppenheim, A.L. (1977): *Ancient Mesopotamia: Portrait of a Dead Civilization*. University of Chicago Press: Chicago.

Pettinato, G. (1994) Il bicameralismo a sumer: un topos letterario assunto a realtà storica. in: *Rendiconti, Atti della accademia nazionale dei Lincei, Classe di scienze morali, storiche e filologische* Ser. 9, 5/1, S. 47–85.

Pomponio, F. / G. Visicato (1994): *Early Dynastic Administrative Tablets of Šuruppak*. Istituto universitario orientale: Naples.

Pollock, S. (2003): Feasts, Funerals, and Fast Food in Early Mesopotamian States, in: T.L. Bray (Hg.), *The Archaeology and Politics of Food and Feasting in Early States and Empires*. Springer: New York, S. 17–38.

Pollock, S. (2007): The Royal Cemetery at Ur: Ritual, Tradition, and the Creation of Subjects, in: M. Heinz / M.H. Feldman (Hg.), *Representations of Political Power: Case Histories from Times of Change and Dissolving Order in the Ancient Near East.* Eisenbrauns: Winona Lake, S. 89–110.

Pollock, S. (2012): (Hg.), Between Feasts and Daily Meals. Toward an Archaeology of Commensal Spaces (eTopoi, Special Volume 2):

<http://journal.topoi.org/ index.php/etopoi/issue/view/3>

Renger, J. (1967): Untersuchungen zum Priestertum in der altbabylonischen Zeit: 1. Teil, in: *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 58, S. 110–188.

Renger, J. (1969): Untersuchungen zum Priestertum in der altbabylonischen Zeit: 2. Teil, in: *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 59, S. 104–230.

Ross, J.C. (2011): Lost: The Missing Lexical Lists of the Archaic Period, in: W. Heimpel / W. Frantz-Szabó (Hg.), *Strings and Threads: A Celebration of the Work of Anne Draffkorn Kilmer*. Eisenbrauns: Winona Lake, S. 231–242.

Rubio, G. (2009): Sumerian Literature, in: C. Ehrlich (ed.), *From an Antique Land: An Introduction to Ancient Near Eastern Literature*. Rowman & Littlefield: New York, S. 11–75.

Sallaberger, W. (2012): Home-made Bread, Municipal Mutton, Royal Wine: Establishing Social Relations during the Preparation and Consumption of Food in Religious Festivals at Late Bronze Age Emar, in: *eTopoi Journal for Ancient Studies, Special Volume* 2, S. 157–177.

Sasson, J.M. (2004): The King's Table: Food and Fealty in Old Babylonian Mari, in: C. Grottanelli / L. Milano (Hg.), *Food and Identity in the Ancient World*. SARGON: Padua, S. 179–215.

Scheil, V. (1905): Documents en écriture proto-élamite (Mémoires de la Délégation en Perse6). Paris.

Selz, G.J. (1998): Über Mesopotamische Herrschaftskonzepte: Zu den Ursprüngen mesopotamischer Herrscherideologie im 3. Jahrtausend, in: M. Dietrich / O. Loretz (Hg.), dubsar anta-men: Studien zur Altorientalistik: Festschrift für Willem H. Ph. Römer zur Vollendung seines 70. Lebensjahres mit Beiträgen von Freunden, Schülern und Kollegen (Alter Orient und Altes Testament 253). Ugarit-Verlag: Münster), S. 281–344.

Sjöberg, A. / E. Bergmann (1969): The Collection of the Sumerian Temple Hymns, in: A. Sjöberg (Hg.), The Collection of the Sumerian Temple Hymns (Texts from Cuneiform Sources 3). J. J. Augustin: Locust Valley, S. 3–154.

van Soldt, W. (Hg.) (2005): Ethnicity in Ancient Mesopotamia: Papers Read at the 48th Rencontre Assyriologique Internationale, Leiden 1–4 July 2002. Nederlands Instituut voor het Nabije Oosten: Leiden.

Sollberger, E. (1960): Notes on the Early Inscriptions from Ur and el-'Obēd, in: *Iraq* 22, S. 69–89.

Steible, H. / F. Yildiz (1993): Ki'enki aus Sicht von Šuruppak: Eine frühdynastische Regio nach Fara-zeitlichen Urkunden, in: *Istanbuler Mitteilungen* 43, S. 17–26.

Steinkeller, P. (1995): Review of M. Green and H. Nissen, Zeichenliste der Archaischen Texte aus Uruk (Archaische Texte aus Uruk 2), in: *Bibliotheca Orientalis* 52, S. 689–713.

Steinkeller, P. (2002): More on the Archaic City Seals, in: *Nouvelles Assyriologiques Brèves et Utilitaires* 2002, no. 30.

Stol, M. (1989): Malz, in: *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* VII/5–6. De Gruyter: Berlin – Leipzig – New York, S. 322–329.

Szarzynska, K. (1996): Archaic Sumerian Standards, in: *Journal of Cuneiform Studies* 48, S. 1–15.

Šašková, K. / L. Pecha / P. Charvát (Hg.) (2010): *Shepherds of the Black-headed People: The Royal Office vis-à-vis Godhead in Ancient Mesopotamia*. Západočeská Univerzita: Plzeň.

Vaiman, A.A. (1974): Über die protosumerische Schrift, in: Acta Antiqua 22, S. 15–27.

Vaiman, A.A. (1982): Eisen in Sumer, in: *Vorträge gehalten auf der 28. Rencontre Assyriologique Internationale in Wien, 6.–10. Juli 1981* (Archiv für Orientforschung Beihefte 19). F. Berger: Graz, S. 33–38.

Veenker, R. / J.C. Johnson (2009): The appellate process in a legal record (di til-la) from Ur III Umma, in: *Altorientalische Forschungen* 36, S. 34–364.

Veldhuis, N. (2010): Guardians of Tradition: Early Dynastic Lexical Texts in Old Babylonian Copies, in: H. Baker / E. Robson / G. Zólyomi (Hg.), *Your Praise is Sweet: A Memorial Volume for Jeremy Black from Students, Colleagues and Friends*. British Institute for the Study of Iraq: London, S. 379–400.

Visicato, G. (2000): *The Power and the Writing: The Early Scribes of Mesopotamia*. CDL Press: Bethesda.

Waetzoldt, H. (1981): Kleidung. A. Philologisch, in: *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* VI. De Gruyter: Berlin – Leipzig – New York, S. 18–31.

Wagensonner, K. (2010): Early Lexical Lists Revisited: Structures and Classification as a Mnemonic Device, in: L. Kogan / N. Koslova / S. Loesov / S. Tishchenko (Hg.), *Language in the Ancient Near East, Proceedings of the 53e Rencontre Assyriologique Internationale*, Vol. 1. Part 1 (Babel und Bibel 4/1). Eisenbrauns: Winona Lake, S. 285–310.

Wagensonner, K. (2012): Early Lexical Lists and Their Impact on Economic Records: An Attempt of Correlation between Two Seemingly Different Data-Sets, in: G. Wilhelm (Hg.), *Organization, Representation, and Symbols of Power in the Ancient Near East*. Eisenbrauns: Winona Lake, S. 805–817.

Wilcke, C. (2005): ED Lú A und die Sprache(n) der archaischen Texte, in: W. van Soldt (Hg.), *Ethnicity in Ancient Mesopotamia: Papers Read at the 48th Rencontre Assyriologique International, Leiden 1–4 July 2002.* Nederlands Instituut voor het Nabije Oosten: Leiden, S. 430–445.

Wilcke, C. (2007): *Early Ancient Near Eastern Law: A History of Its Beginnings (The Early Dynastic and Sargonic Periods)*, revised edition. Eisenbrauns: Winona Lake.

J. Cale Johnson studied Assyriology, Comparative Semitics and Linguistics at UCLA, receiving his PhD in Assyriology in 2004 with a dissertation on applicative constructions in Sumerian and the role of specificity in their interpretation (a substantially revised version appeared in 2010 under the title "Unaccusativity and the double object construction in Sumerian" [Vienna: LIT]). Since coming to Berlin in 2008, he has focused on the early history of writing, particularly the decipherment of UD.GAL.NUN (encoded mythological materials from the Early Dynastic period), as well as Middle Assyrian administration and calendrics. Over the past two years he has also become involved in the reconstruction of Mesopotamian therapeutic compendia (particularly those dealing with respiratory diseases) and the comparative study of ancient medicine.