# Alter Orient und Altes Testament Band 440

# What's in a Name?

Terminology related to the Work Force and Job Categories in the Ancient Near East

> Edited by Agnès Garcia-Ventura

## Alter Orient und Altes Testament

Veröffentlichungen zur Kultur und Geschichte des Alten Orients und des Alten Testaments

## Band 440

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Agnès Garcia-Ventura

2018 Ugarit-Verlag Münster

### **Thoroughly refereed**

Agnès Garcia-Ventura

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ISBN 978-3-86835-212-2

ISSN 0931-4296

Printed on acid-free paper

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## Age, Gender and Labor

## Recording Human Resources in 3350–2500 BC Mesopotamia

Vitali Bartash<sup>1</sup>

### 1. Introduction

The earliest cuneiform texts from the Late Uruk period record a rich variety of terms designating occupations. Lexical lists "Archaic  $Lu_2$  A" and "Officials" offer thesauri of such terms.<sup>2</sup> They enumerate mostly top and middle tier officials and professionals employed or connected with the city's central communal institutions.

These lexical works do not mention low ranking laborers, however. In contrast, the synchronous administrative records include a developed terminology for human resources, probably household dependents and/or slaves. The need to invent a set of terms to classify them was evidently connected, on the one hand, with their value as labor, which had to be recorded. On the other hand, these individuals were sustained with food and other goods of varying amounts. This must be recorded too.

In this paper, I will discuss terms of low-rank household dependents and workers that appear in the earliest administrative records. Two main factors strongly influenced the terminology of workers, namely a) biological characteristics such as age and biological sex,<sup>3</sup> and b) their involvement in labor.

<sup>&</sup>lt;sup>1</sup> Ludwig-Maximilians-Universität München, Institut für Assyriologie und Hethitologie. I express my deep gratitude to Alexandra Kleinerman (Cornell University) for reading the paper and improving its English. Salvatore Monaco (Rome), Camille Lecompte (CNRS-Université Paris I), and Giuseppe Visicato (Rome) read the draft of the paper and suggested valuable corrections and additions. I am especially indebted to Robert Englund (UCLA) for his permission to cite unpublished Uruk IV/III documents. All shortcomings of the paper rest with the author. Dates of archaeological and historical periods, sometimes rounded, are according to Sallaberger / Schrakamp 2015: 55 and 136. 3350 BC as the beginning of the Uruk IVa period is according to CDLI.

<sup>&</sup>lt;sup>2</sup> See Johnson 2015 for a recent discussion of these lexical works and Lecompte (present volume) for their interpretation in the context of synchronous administrative texts.

<sup>&</sup>lt;sup>3</sup> As will be seen below, the terminology of human gender originates in the terminology to describe the sex of animals. Therefore, strictly speaking, one should speak about the sex of the recorded individuals and not their gender, which is a social classifier. However, the early administrative records do not distinguish gender and sex as separate modes of classification. The present contribution follows this practice and uses both terms synonymously.

Whereas the terminology for gender and age groups is well represented in the earliest administrative texts, there is no term for labor. The lexeme  $a_2$  "arm, strength" designating labor as an abstract notion appears later in Presargonic or Early Dynastic IIIb (ca. 2500–2300 BC) archival documents.<sup>4</sup> No graphemes or lexemes in the earliest texts have so far been identified as designating labor, a quantifiable productive activity.<sup>5</sup>

The evidence at hand strongly suggests that the original strategy employed by the ancient bureaucrats to classify humans was to arrange them into age and gender groups. It was the easiest way to calculate and evaluate labor in the earliest Late Uruk administrative records. An individual's age and gender (sex) gave ancient bureaucrats a precise idea of his or her capacity to perform a given task and was used for evaluation of one's labor efficiency. Therefore, labor was originally calculated not by "men-days" as in the Ur III period (ca. 2100–2000 BC), but by the number of human beings with their specific biological characteristics, above all age and gender. Labor as an abstract notion did not exist in the earliest written evidence.

Gradually, new terms for laborers were introduced during the Early Dynastic period. While retaining the link to age and gender categories, they also included semantic nuances such as their relation to labor (ĝuruš/geme<sub>2</sub> "young male/fe-male [laborer]") or their legal status (arad<sub>2</sub> "male slave").<sup>6</sup>

Relying on the evidence discussed in the paper alongside comparable data from later texts of the 3<sup>rd</sup> millennium BC, all low-rank laborers may be divided into two groups by the nature of their relation to central urban households such as temples and palaces. These households were political, cultic and intellectual centers, hubs of production and (re)distribution of resources and goods. They also possessed land, which was the main means of production in Ancient Mesopotamia, and executed direct or economic power over a considerable part of the urban population. Households' immediate dependents have never been numerous, however. The majority of the population was not in servitude to the temple and palace households.<sup>7</sup> Because of this, the central authorities conscripted free community members on a temporary basis to undertake massive agricultural, irrigational, military, and building projects. This corvée labor has "created Mesopotamian civilization".<sup>8</sup>

The sources for this study are administrative records. The ones most useful for investigating the terms used for describing laborers and professionals are inventories of personnel and lists that record allocation of goods. It would be a simplification to view personnel inventories as simple lists of people. They were composed for certain administrative purposes that are not always clear to us.

<sup>&</sup>lt;sup>4</sup> Steinkeller 2015a: 1.

<sup>&</sup>lt;sup>5</sup> A term for kiĝ<sub>2</sub>-ak "work performed" appears in ED IIIa documents. However, its semantic field is limited to the meaning "to perform agricultural work" and it is neither quantifiable nor is it explicitly connected to human resources to represent labor. See Pomponio / Visicato 1994: 222.

<sup>&</sup>lt;sup>6</sup> See Molina 2011 for a recent discussion of slave terminology in 3<sup>rd</sup> millennium BC texts.

<sup>&</sup>lt;sup>7</sup> Foster 2015: 16.

<sup>&</sup>lt;sup>8</sup> Steinkeller 2015b: 138.

Beyond calculating the labor value of a particular group of individuals, some might also represent working assignments.

Personnel and ration lists alike often record not only healthy adult ablebodied workers but also children, the elderly, the sick and others who could not be exploited.<sup>9</sup> However, in the eyes of a scribe an entry "*n* children" meant "labor value = 0; food to be allocated = *n*". Obviously, the reason to record all individuals who stood *sub aegis* of a household was to precisely calculate human recourses, estimate the labor they were able to expend at the time, and to estimate the labor in store for the future as children grow up.

What is more, all individuals who received support of any sort from the central households appeared in documents known as "ration lists". These lists record the amounts of goods, mostly food or clothing or wool, which was distributed as remuneration for services/labor or as sustenance. Low ranking individuals constituted only a portion of people active in the service of the central institutions. Others included dignitaries, priests, craftsmen, etc.<sup>10</sup> Lists of allocations give us a clear idea of how the labor of different categories was valued by the amount and variety of goods they received. Officials received more than craftsmen and craftsmen received more than low ranking laborers and slaves.

Tracing the development of the terminologies for laborers over several historical periods is not an easy task. The level of understanding of many of the early administrative records is far from satisfactory. Additionally, some historical periods that are covered here are less provided with pertinent data than other periods. Consequently, the present topic must rely on scraps of relevant information. Some interpretations are therefore necessarily tentative.

### 2. Uruk IV Period (ca. 3350-3250 BC)

The decision to discuss the evidence from the Uruk IV and III periods separately is not accidental. Although Uruk III texts are certainly the continuation and further development of the Uruk IV terminology and bookkeeping practices, Uruk III texts provide revolutionary innovations, especially in the accounting of humans.<sup>11</sup>

The earliest written archival records date to the Uruk V period. However, they cannot contribute to the present discussion since they contain only numerical signs and seal impressions. One cannot, of course, exclude the possibility that, similar to later periods, there are accounts of laborers among these numerical tablets. However, the absence of logograms makes it an unfeasible task to look for humans in these records.

<sup>&</sup>lt;sup>9</sup> The question of the child labor will be elaborated in detail in the research project by the present author "Between protection and exploitation: Children in temple and palace households as a socioeconomic phenomenon in Early Southern Mesopotamia (3200–2000 BC)" funded by the German Research Foundation (DFG).

<sup>&</sup>lt;sup>10</sup> See Steinkeller 2015a: 27–30 for a recent discussion of the term "ration" and its economic nature. He proposes to use the term "allotment" instead.

<sup>&</sup>lt;sup>11</sup> See also Johnson 2015: 174 ff. who accentuates the differences between Uruk IV and III versions of the lexical list "Archaic Lu A" and their possible implications for social and political spheres.

Texts from the next archaeological layer, Uruk IV, for the first time offer numbers side by side with logograms designating commodities or animated beings. They also exhibit a fully developed system of administrative terminology including alleged verbs to describe the movement of goods/beings, professional terms, geographic and personal names, and signs for time notation.<sup>12</sup> Similar to discreet objects and animals, humans were recorded using the sexagesimal system in these and later texts.

Late Uruk IV and III lexical lists are uninformative regarding the present topic. Both lexical works "Archaic Lu A" and "Archaic Officials" are essentially lists of top and mid-level "employees" of central households including various categories of officials, priests, and craftsmen. The lower stratum of household dependents remains out of their scope for some reason. It is peculiar that they completely avoid the terms that describe humans in terms of age and sex in synchronous archival documents.

Although there were and still are doubts that the language of the Uruk IV and III documents was Sumerian,<sup>13</sup> recent studies try to confirm that it was indeed.<sup>14</sup> Late Uruk documents are interpreted as Sumerian in the present contribution.

The pioneering work, that tried to elucidate the accounting of humans in the Uruk IV and III periods, was an influential article by Ajzik Vaiman.<sup>15</sup> His aim was to identify terms for slaves in these sources. He proceeds from the Early Dynastic terms for slaves, geme<sub>2</sub>(SAL×KUR) and arad<sub>2</sub>(NITA×KUR), and chooses signs SAL, KUR, and NITA to look for in the Late Uruk evidence. Vaiman rightfully criticized the assumption by Adam Falkenstein that SAL+KUR in Late Uruk accounts is a writing for "female slave". Relying on accounts of animals, he identified signs SAL and KUR as designating "female" and "male" respectively and discussed a number of texts where these signs refer to humans.<sup>16</sup> Further, Vaiman identified the sign N<sub>8</sub> as a notation of animal youth and human children.<sup>17</sup>

The evidence presented by Vaiman illustrates that Uruk IV/III texts never recorded humans in large quantities. Only a few texts document more than one hundred individuals. It appears that human resources of central households during the Late Uruk period were relatively humble compared to later periods. 22

<sup>&</sup>lt;sup>12</sup> For the latter see Vaiman 1974b and Englund 1988.

<sup>&</sup>lt;sup>13</sup> See e.g. Englund 1998: 73–81 and 2009, especially pages 19–20. However, the presence of likely Sumerian personal names in Late Uruk texts, such as E<sub>2</sub>-SAL, which is identical with Munus-e<sub>2</sub>-(ti) of Early Dynastic I–II (Lecompte 2013 no. 57 obv. iii 3') and IIIa period texts (*WF* 109 obv. I 3), may eliminate these doubts.

<sup>&</sup>lt;sup>14</sup> See Monaco 2012 and 2014 and Krebernik 2013: 189–192. See critique by Englund 2009: 7–8 fn. 18.

<sup>&</sup>lt;sup>15</sup> Vaiman 1974a; German translation: Vaiman 1989.

<sup>&</sup>lt;sup>16</sup> Vaiman 1974a: 139–142. Nevertheless in some cases he falsely identifies SAL+KUR as "female slave" thus postulating a fictive polysemy of this sign combination during the Late Uruk period (ib.: 144). See below for SAL+KUR as "dependents".

<sup>&</sup>lt;sup>17</sup> Vaiman follows the traditional view that KUR was the designation for male workers because of its Sumerian meaning kur "mountain" in later sources. According to this view, it is because they were prisoners of war (Vaiman 1974a: 143). For a critique of this opinion, see below.

texts of the Uruk IVb layer record a few individuals each, for a sum total of 58 individuals. In contrast, text no. 25,<sup>18</sup> from the Uruk IVa layer, has 231+x humans.<sup>19</sup>

Vaiman draws attention to graphemes that appear often adjacent to signs for humans, which he believed "may be interpreted as some particulars of the recorded male and female slaves".<sup>20</sup> ERIM, SAG×MA, and AL bear relevance for the present discussion and I will refer to them below.

Robert Englund offers a significant contribution to the question of registering humans in his overview of the Late Uruk texts and in an important article on slavery.<sup>21</sup> He interprets the KUR sign as a depiction of male genitalia and rejects the semantic link with mountains and captivity supposed by Vaiman.<sup>22</sup> However, since most of Englund's conclusions dwell on the Uruk III material, I will discuss them in the next section.

Uruk IV administrative accounts have three graphemes to describe human resources in the most general terms: KUR for males, SAL for females and the sign N<sub>8</sub> for children. The first two may represent Sumerian words nita<sub>x</sub> "man" and munus "woman" respectively. The fact that the same signs are used to designate the sex of animals in the Late Uruk texts, and the use of the qualifiers nita<sub>(2)</sub> (UŠ/NITA, ARAD) "male" and munus(SAL) "female" in the documents of later periods, both of humans and of animals, provides the grounds for this assumption.<sup>23</sup> However, the reading of the sign for children N<sub>8</sub> remains uncertain. It is unknown if N<sub>8</sub> in the Uruk IV texts refers to both babies and children, and if it may be compared to the sign combination ŠA<sub>3</sub>-TUR "babies (and) children" of the Uruk III accounts. No terms for the elderly have been identified so far in the Uruk IV accounts.

The fact that the terms SAL and KUR for females and males appear in contexts with both animals and humans, occasionally makes it difficult to establish the identity of the accounted beings. In most cases, however, the accounts of animals give themselves away by using additional terms such as udu "sheep", sila<sub>4</sub> "lamb" etc.<sup>24</sup> or by the appearance of animal managers and caretakers.<sup>25</sup>

Document W 9655,t<sup>26</sup> contains all three age and gender terms that appear in Uruk IV accounts of humans:

<sup>&</sup>lt;sup>18</sup> W 9827 = Englund 1998: 178 fig. 66.

<sup>&</sup>lt;sup>19</sup> Vaiman 1974a: 145. He mistakenly claims no. 23 to be an account of humans. In fact, there is no evidence that humans were recorded in the bi-sexagesimal system.

<sup>&</sup>lt;sup>20</sup> Vaiman 1974a: 146–147; translation mine.

<sup>&</sup>lt;sup>21</sup> Englund 1998 and 2009.

<sup>&</sup>lt;sup>22</sup> Englund 1998: 176. The sign SAL is a quite straightforward depiction of female genitalia and has been recognized as such long ago.

<sup>&</sup>lt;sup>23</sup> See Bartash 2015a: 132.

<sup>&</sup>lt;sup>24</sup> E.g. *ATU* 5, pl. 102 = W 9656,ef (CDLI number: P001550).

<sup>&</sup>lt;sup>25</sup> E.g. as in W 20891,1; unpublished (P004106) for GURUŠDA "animal fattener" in a context with animals.

<sup>&</sup>lt;sup>26</sup> *ATU* 5, pl. 81 = P001392.

obv. i 3N <sub>1</sub> 2N <sub>8</sub> SAL+KUR <sub>a</sub> ZATU693-KID <sub>c</sub>	3 (adults and) 2 (children):
	female and male:;
1N1 KURa ZATU693-3N57	1 (adult) male:
ii KISAL <sub>b1</sub> -GEŠTU <sub>b</sub> PAPa	The KISAL-GEŠTU official

rev. (blank)

The grapheme ZATU693, appearing in both entries concerned with people, is decisive for the understanding of the proceeding of the document. Unfortunately, its meaning remains obscure. KISAL-GEŠTU in the colophon is a title for an official.<sup>27</sup> Judging by the appearance of the grapheme PAP in numerous accounts, it was a term that described an important administrative procedure or was simply an abbreviated personal name (Pa<sub>4</sub>).

Document W 9579, $o^{28}$  has a similar format. It records one man and one woman. The sign UNUG<sub>a</sub> may be interpreted as the geographical name Uruk.<sup>29</sup> DUB, written after the man, denotes another unidentified administrative procedure appearing often in accounts of humans.<sup>30</sup> SANGA-KISAL, adjacent to the woman in the second line, is a sign combination found in several Uruk IV and III texts.<sup>31</sup>

obv. i 1N <sub>1</sub> KUR <sub>a</sub> DUB <sub>b</sub>	1 (adult) male;
1N <sub>1</sub> SAL SANGA <sub>a</sub> -KISAL <sub>a1</sub>	1 (adult) female;
ii UNUGa	(for/in the city of) Uruk.
rev. (blank)	

Besides DUB, Uruk IV accounts of humans record other administrative terms that are well-attested in Uruk III texts: BA, GI, ŠU (all likely verbs), URUDU, ERIM, PAP, and SU, all of which qualify humans in some way. An adequate understanding of Late Uruk documents is impossible without establishing the precise meaning of these terms.

The sign  $GURU\check{S}_a$ , which appears in human accounts in Late Uruk texts, deserves special attention. It is easy to yield to the temptation to look for a connection between this grapheme and the category of male workers guruš that appears for the first time in the Early Dynastic period. The Late Uruk sign GURUŠ is a pictogram of a gear to move heavy objects by inserting round logs under a plat-

<sup>&</sup>lt;sup>27</sup> See W 9656,h1 = *ATU* 3, pl. 23 = P000006 ("Archaic Lu A") obv. iv 2.

 $<sup>^{28}</sup>$  ATU 5, pl. 63 = P001262.

<sup>&</sup>lt;sup>29</sup> Alternatively, UNUG may be interpreted as iri<sub>11</sub> "city" (see Michalowski 1993: 123–124).

<sup>&</sup>lt;sup>30</sup> Cf. the term saĝ-dub "heads of the tablet" that designates regular workers in texts from ED IIIb Ĝirsu and passim in later sources.

 $<sup>^{31}</sup>$  W 9656,cy = *ATU* 5, pl. 98 = P001517 (Uruk IV from Uruk) is likely a fragment of an account of humans or animals: see the remainder of KUR "male" on the reverse. The second column of the obverse preserves the notation of one "dead" individual/animal in combination with SANGA<sub>a</sub>-KISAL<sub>a1</sub>. Uruk III texts of uncertain provenance, CUSAS 1 no. 38 obv. ii 2 and no. 149 obv. ii 2, also record the term.

form.<sup>32</sup> Englund launched this discussion by drawing attention to *MSVO* 1 no. 1, an account of fields from Jemdet Nasr. The plots are divided into three groups: "barley" parcels ( $|\check{S}E.\check{S}E|$ ) intended for five officials who also appear elsewhere in the Jemdet Nasr documents, GURUŠ<sub>a</sub>-SAL, and "irrigated land" (ki-duru<sub>5</sub>). Englund interprets GURUŠ<sub>a</sub>-SAL as fields for the subsistence of male (GURUŠ) and female (SAL) dependents of a central household.<sup>33</sup>

Based on the Uruk IV account W 9579,ac, Englund suggests that GURUŠ pairs SAL here similarly to how KUR "male" appears together with SAL "female". He draws parallels from later sources and claims that this terminology is "a good fit with later GURUŠ/GEME<sub>2</sub> and ARAD<sub>2</sub>/GEME<sub>2</sub>".<sup>34</sup> Therefore, according to Englund, GURUŠ of Late Uruk texts means "workman".<sup>35</sup>

Let us take a closer look at W 9579,ac.<sup>36</sup> It seems to testify to the parallel use of SAL and GURUŠ<sub>a</sub>:

obv.	I 1N <sub>1</sub> SAL 3N <sub>1</sub> GURUŠ <sub>a</sub>	II SUKKAL <sup>r</sup> x <sup>1</sup> UNUGa KURa MACUD	Interpretation 1 (adult) female; 3 (adult) males: ( <i>for/in</i> the city of) Uruk,
	(1-11-)	MAGUR <sub>a</sub>	

rev. (blank)

The suggestion that here graphemes SAL and GURUŠ refer to humans requires justification. In fact, the sign KUR may belong to GURUŠ<sub>a</sub>, since the border between two columns is not certain. Other Uruk IV documents record the sign combination KUR-GURUŠ: see W 9579,bm and W 9579,ch.<sup>37</sup> In this respect, the latter text is especially enlightening. It has  $1N_1$  KUR<sub>a</sub>-GURUŠ<sub>a</sub> UNUG<sub>a</sub>, thus possibly offering a parallel to W 9579,ac. It appears that KUR "male" qualifies the sign GURUŠ in these texts. This challenges Englund's interpretation of GURUŠ as a male worker.

W 9311, $a^{38}$  casts further doubt upon it. This text is an account of animals<sup>39</sup> where two females (SAL) are qualified with the sign GURUŠ<sub>a</sub>.<sup>40</sup> Since there are

<sup>&</sup>lt;sup>32</sup> See Englund 1998: 81 and 2009: 8–9 fn. 19 for the interpretation of this device as "sled" or "sledge".

<sup>&</sup>lt;sup>33</sup> See Englund 1998: 211–213 and Friberg 1997–1998: 28–30 for the edition and discussion of *MSVO* 1, 1. Friberg also argues that GURUŠ and SAL represent male and female dependents. On page 30, Friberg resorts to calculations to show that plots of "dependents" appear in other Jemdet Nasr accounts of fields as a part of the manor of the EN-official, which would imply that GURUŠ and SAL workers were dependent on the central institution headed by this dignitary.

<sup>&</sup>lt;sup>34</sup> Englund 2009: 9 fn. 19.

<sup>&</sup>lt;sup>35</sup> Englund: 1998: 69.

 $<sup>^{36}</sup>$  *ATU* 5, pl. 66 = P001276.

<sup>&</sup>lt;sup>37</sup> *ATU* 5, pl. 70 = P001310 and *ATU* 5, pl. 72 = P001331.

<sup>&</sup>lt;sup>38</sup> *ATU* 5, pl. 48 = P001156.

<sup>&</sup>lt;sup>39</sup> See terms u<sub>8</sub> "ewe" and utu'a "breeding ram" in obv. ii 5 and iii 4.

<sup>&</sup>lt;sup>40</sup> Obv. ii 1. Other terms applied to SAL in this text are NUN and ZAG.

no examples where humans are calculated together with animals in Late Uruk texts, both SAL-GURUŠ<sub>a</sub> and KUR-GURUŠ<sub>a</sub>, as in W 9579,ch, refer to females and males of an animal.<sup>41</sup> In accordance to this, GURUŠ<sub>a</sub> cannot be a writing for "male worker" in Uruk IV texts. This consideration eliminates a number of texts which Vaiman believed to be Uruk IV accounts of humans. Presently, they need to be reexamined as accounts of animals instead.

What concerns the sign combination GURUŠ<sub>a</sub>-SAL in *MSVO* 1 no. 1 and other Uruk III texts,<sup>42</sup> its interpretation requires further elaboration. In fact, the probability, that the Late Uruk sign GURUŠ<sub>a</sub> is related to the category of workers ĝuruš of Early Dynastic sources, may be ruled out by other considerations. First of all, the Late Uruk sign in question is ZATU247 and its name "GURUŠ" is not justified. Piotr Steinkeller suggests that ZATU247 was the precursor of KAL and not of GURUŠ.<sup>43</sup> Besides, it is well-known that signs GURUŠ and KAL were told apart during the Early Dynastic period<sup>44</sup> and ceased to be distinguished relatively late.<sup>45</sup> Therefore, the Late Uruk sign ZATU247 and the Early Dynastic sign GURUŠ are not related graphically and their semantic relation is even more doubtful.

Concluding the discussion of the Uruk IV data, firstly, there are three terms: "(adult) male", "(adult) female", and "children" (Figure 1). Secondly, this terminology originates in the terminology for animals. The same terms have been transferred to denote low-rank dependents by analogy. Thirdly, the presence of both sex and age classes illustrates that this was the original strategy to account dependents in central households. Finally, the numerical notation  $N_8$  for youth does not appear after the Uruk IV period and was replaced by a selection of log-ographic writings.

### 3. Uruk III Period (ca. 3250–3000 BC)

Uruk III texts witness a considerable expansion of the terminology for humans. Englund offers an important discussion and analysis of about fifty accounts of humans, mostly Uruk III (Englund 2009). He refers to individuals appearing in

<sup>&</sup>lt;sup>41</sup> See Englund 2009: 9 fn. 19 for a connection between the Late Uruk sign GURUŠ<sub>a</sub> and Early Dynastic KAL. ab<sub>2</sub>-KAL "... cow" appears in a lexical list *SF* 12 obv. i 12. I do not believe that this is a misinterpretation of the sign by the ancient scribes.

<sup>&</sup>lt;sup>42</sup> E.g. in W 20274,57 (P003555) in context with a variety of wool (DARA<sub>4c</sub>), W 21045,1 (P004205), MS 2392 (P006034), etc.

 $<sup>^{43}</sup>$  See Steinkeller 1995: 702 no. 247 with a further reference. He also suggested that one of the forms of ZATU281 is the real GURUŠ. However, the latter can hardly be correct because the form Steinkeller had in mind has an angled line at the end of the sign, which makes it a likely predecessor of KAL as already was suggested by ZATU. A fundamental difference between the real GURUŠ and KAL is that the vertical line at the end of the sign of the former consists only of one wedge which is always strictly vertical (see Krebernik 1998: 277 + fn. 471). In my opinion, the Early Dynastic sign GIŠGAL (see *UET* 2 sign no. 308 for ED I–II and LAK648 for ED IIIa) is another sign that originated in the Late Uruk ZATU247.

<sup>&</sup>lt;sup>44</sup> See Krebernik 1998: 277.

<sup>&</sup>lt;sup>45</sup> See e.g. CUSAS 23 no. 164, a Middle to Classical Sargonic text from Adab, where guruš-workmen are written with the sign KAL.

the Late Uruk human accounts as "slaves" or "dependent laborers".<sup>46</sup> Englund takes three accounts, W 20274,2, W 23999,1 and MS 3035, as examples and substantially revises and expands Vaiman's conclusions. According to Englund, the following terms appear in Uruk III accounts:<sup>47</sup>

General terms KUR <sub>a</sub> "male" SAL "female" SAG "head, human" SAG×MA "noosed head" ERIM <sub>a</sub> "yoked one" PAP <sub>a</sub> SU <sub>a</sub> "qualifies slaves in some general way"	<i>Adults</i> AL "of working age ("hoer"?)"	YouthsENa TUR "four years old and older up to AL?"KURa TUR "boy, younger than ENa TUR?"KURa ŠA <sub>3al</sub> "boy, very young?"SAL TUR "girl, younger than ENa TUR?"SAL ŠA <sub>3al</sub> "girl, very young?"ŠA <sub>3al</sub> TUR = KURa/SAL ŠA <sub>3</sub> $3N_{57} \times U_4$ (TUR) "three-year-old (or: child in 3 <sup>rd</sup> year)" $2N_{57} \times U_4$ (TUR) "one-year-old (or: child in 1 <sup>st</sup> year)"
		fitis/ 64 (1010) one year one (of ennia in 1 year)

He does not introduce the term ŠU in his list, although he makes a passing remark that this grapheme may be "associated by some with later  $su-(gi_4)$  "old one",<sup>48</sup> that is, the elderly. Englund links the term AL with its pictogram depicting a hoe and connects the meaning "hoer" and not with Sumerian mah<sub>2</sub> "high" (= grown-up) with this grapheme.<sup>49</sup>

Englund proposes that terms for youths may represent their successive life periods. He offers an explanation that the reason to account babies by years up to the third was to "retain strict control of juveniles as they grew to working age".<sup>50</sup> Relying on the evidence for child labor in Ur III times, Englund suggests that the age of children designated EN-TUR did not exceed several years. This allows him to surmise that individuals AL may have been as young as six and could have already participated in labor.<sup>51</sup>

Vitali Bartash offers a revision of the Uruk III evidence paying special attention to terminology for minors (Bartash 2015a). As a result, he identifies and discusses two sets of terms for household dependents. The terms of one set were not compatible with those of the other. This implies that two different administrative practices stood behind these strategies to record humans.

### 3.1. The Set of Terms "Gender"

The first group of accounts offer a two-leveled system of classification. The first level divides individuals according to their *gender*, munus(SAL) "female" and nita<sub>x</sub>(KUR) "male". The choice of these Sumerian equivalents for graphemes SAL and KUR rests on the fact that the same terms were used to denote the sex of animals in Uruk accounts. Since later, Early Dynastic texts qualify humans

<sup>&</sup>lt;sup>46</sup> Englund 2009: 6. See also ib.: 15: "These then are the higher-level qualifications of persons in proto-cuneiform accounts, quite possibly chattel slaves, or humans in some form of servitude to Late Uruk households".

<sup>&</sup>lt;sup>47</sup> Englund 2009: 15.

<sup>&</sup>lt;sup>48</sup> Englund 2009: 13.

<sup>&</sup>lt;sup>49</sup> Englund 2009: 9 fn. 19.

<sup>&</sup>lt;sup>50</sup> Englund 2009: 15.

<sup>&</sup>lt;sup>51</sup> Englund 2009: 15.

and animals alike by the attributes -munus "female" and -nita "male", it seems likely they were qualified in the same manner in Uruk accounts assuming that these texts were composed in Sumerian.

A different interpretation of SAL in the Late Uruk version of the lexical work *Word List C*, line 92 was suggested by Miguel Civil. He proposes that SAL is *'amtum* "female servant". This leads him to interpret the grapheme UR.UR appearing adjacent to SAL as "all the workmen" by which he joins Joachim Krecher (1987) in his interpretation of ur as "man" (Civil 2013: 48–49). However, these considerations remain hypothetical and do not find evidence in the contemporaneous administrative texts.<sup>52</sup>

The second level of classification in the first set of terms refers to three age classes: (adult) males/females, children, and babies. Babies ( $\check{S}A_3$ , reading uncertain) and children (TUR = dumu) are differentiated on the sublevel. There is no specific term for adults in this system nor is there any reference to the elderly. This means that munus(SAL) and nita<sub>x</sub> (KUR) may have included all grown-ups. See figure 2 that offers the logic of the terms of the first group.

A comparison of this set of terms with those used to describe low-rank laborers and their children in the Early Dynastic IIIb ("Pre-Sargonic") period exhibits clear parallels:

	Uruk III (ca. 3100 BC)	Early Dynastic IIIb (ca. 2400 BC)
Adults	munus(SAL)	geme <sub>2</sub>
Auuns	nita <sub>x</sub> (KUR)	ĝuruš
Children	dumu:munus	dumu-munus
Cindren	dumu:nita <sub>x</sub>	dumu-nita
Babies	ŠA <sub>3</sub> :munus	dumu-gaba/ga-munus
Dabits	ŠA <sub>3</sub> :nita <sub>x</sub>	dumu-gaba/ga-nita

The first set of terms illustrates that the Uruk III period witnessed the emergence of a developed terminology for minors differentiating them by gender and age classes.

### 3.2. The Set of Terms "Age"

The second group of terms is based on a different logic. The model is singlelevelled: there are only age classes. The set avoids any references to the gender of individuals. There are four categories: the elderly (?) ( $\check{S}U$ ),<sup>53</sup> adults (AL= mah<sub>2</sub>), dumu:EN which I identify with weaned children, and babies in their first, second or third year. Figure 3 sums up the terms and their interpretations. Contrary to SAL+KUR "females-males" in the first group, there is no term which would summarize humans.

Although some terms of both groups have clear parallels in the terminology for animals, human accounts never mix these two groups of terms. In contrast,

<sup>&</sup>lt;sup>52</sup> Besides, as pointed out by Civil himself, SAL-LA appears instead of SAL in several sources of the text, which makes the reading sal-(la) "thin, fine" much more probable.

<sup>&</sup>lt;sup>53</sup> In fact, sign ŠU may refer to an administrative procedure in these and other early texts. The matter will be addressed elsewhere by the author.

animal accounts not only mix them but also have terms that are alien to human accounts.  $^{\rm 54}$ 

### 3.3. Other Terms Qualifying Humans

Several terms, originally suggested by Vaiman and Englund, appear in accounts of humans and bear significance for the present discussion.

Graphemes SAL+KUR SAG×MA and SAL+KUR ERIM<sub>a</sub> appear in Jemdet Nasr accounts of humans *MSVO* 1 nos. 212–214 and 217.<sup>55</sup> Englund interprets them as "noosed" (SAG "head" + MA "noose")<sup>56</sup> and "yoked" (ERIM = erin<sub>2</sub> "yoke") humans. According to him, they are captives in the first case and prisoners in the second.

*MSVO* 1 no. 213 records individuals that belong to these two groups. Some of them are marked with the numerical sign N<sub>2</sub> that designates "dead" or, alternatively, "fled" individuals.<sup>57</sup> No. 214 records deceased/fugitives only. It is an interesting detail, which might imply that the treatment of these persons, and/or their working conditions, were harsh.

The term SAG×MA appears also outside of the Jemdet Nasr textual corpus. The colophon of a sealed document MS  $2727^{58}$  from Umma<sup>?</sup> mentions five individuals of this category (5N<sub>1</sub> SAG×MA). The first line records 1N<sub>1</sub> SAL+KUR meaning "1 dependent" or similar.<sup>59</sup>

A notable detail is the presence of the official NIMGIR-(GAL) = (gal):niĝir "(head) herald" in MS 2727 and other accounts recording individuals SAL+KUR SAG×MA.<sup>60</sup> This strikingly resembles the case of some ED IIIa Fara documents, where groups of individuals designated iri-gub and nu-SU are headed by heralds (niĝir).<sup>61</sup> By this, niĝir may have acted as officials in charge of groups of workers in both Uruk III and Fara texts. These "herald" officials may have been responsible for levying working troops.

The sign SAG×MA did not survive the Late Uruk period and because of that one cannot trace this category in later texts. Early Dynastic and later texts employ a sign constructed similarly to SAG×MA. This sign, šaĝa, is constructed as

<sup>&</sup>lt;sup>54</sup> See, for instance, an unpublished Uruk III account of donkeys ("KIŠ") MS 3010 = P006264. Although it offers some terms resembling those of both groups discussed above, their meaning may have been different. One finds here 1 SAL "1 female (animal)", 6 ŠA<sub>3</sub> "6 sucklings", and 1 KUR  $1N_{57}$ +U<sub>4</sub> "1 one-year-old male". If the text would be a human account, two former terms would belong into the first group whereas the second is a mixture of both: In an account of humans it would be either KUR or  $1N_{57}$ +U<sub>4</sub>-(TUR). Moreover, the text offers a term unattested in accounts of people, such as NINDA<sub>2</sub>×X.

<sup>&</sup>lt;sup>55</sup> *MSVO* 1 no. 212 is a cumulative account of nos. 213–214. See Englund 1998: 179 and 2009: 12 for its discussion.

<sup>&</sup>lt;sup>56</sup> See Englund 1998: 77 fn. 158 for this interpretation.

<sup>&</sup>lt;sup>57</sup> See Monaco 2007: 10 fn. 65 for sign N<sub>2</sub> meaning "dead" or "lost" in accounts of animals. This would correspond to "dead" (uš<sub>2</sub>/ug<sub>7</sub>) and "fled" (zah<sub>3</sub>) in later texts.

<sup>&</sup>lt;sup>58</sup> Unpublished (P006120).

<sup>59</sup> See §4 on SAL+KUR.

<sup>&</sup>lt;sup>60</sup> E.g. *MSVO* 1 no. 214 obv. ii 1, no. 217 obv. iv 1.

<sup>&</sup>lt;sup>61</sup> See Visicato 1995: 91–101.

LU<sub>2</sub> "person" with an inscribed  $E\check{S}_2$  "rope".<sup>62</sup> However, besides the alleged "rope" (sign MA), there is hardly any proof that individuals SAG×MA of the Uruk III accounts were prisoners. If the sign N<sub>2</sub> of the Jemdet Nasr accounts *MSVO* 1 nos. 213–214 refers to fugitives instead of dead people, this would be an early example of avoiding labor obligation, a practice that is well-recorded in later accounts of personnel.

While the category SAG×MA was restricted to humans, the sign ERIM<sub>a</sub>, alongside its variant ERIM<sub>b</sub>, appears in contexts with both humans and animals. The pictogram of the sign is a harness. The sign's sematic range is also related to labor: erin<sub>2</sub> means "people" and "yoke, harness" whereas another reading, sur<sub>x</sub>, denotes a working team of animals or humans.<sup>63</sup>

Uruk IV accounts illustrate that the term ERIM may be applied to almost any kind of animal.<sup>64</sup> Uruk III texts attest to the use of ERIM with animals as well.<sup>65</sup> The use of ERIM in context with humans is hard to identify in Uruk IV texts. An example might be W 9655,s<sup>.66</sup> It mentions one ERIM-man and one woman qualified by terms often appearing in accounts of humans.<sup>67</sup> Besides texts from Jemdet Nasr mentioned above, I was unable to identify other Uruk III texts where the term ERIM would occur in context with humans.

SAG, literary "head", is another term for humans in the Uruk III texts. It is neutral and has no implications either to the gender or age of individuals. Englund suggests that, contrary to later periods, SAG was a general term for humans in the Late Uruk period and did not convey the semantic "chattel slave" that is evidenced in later texts.<sup>68</sup>

An exemplary text is a list of personnel MS  $2437.^{69}$  Each entry records one to nine individuals who make up the sum of 62 SAG "62 individuals" in the colophon. SAG appears in colophons of other documents as well.<sup>70</sup>

<sup>65</sup> See e.g. ACTPC 44 obv. i 1 for one female donkey (1N<sub>1</sub> KIŠ SAL ERIM<sub>a</sub> PIRIG<sub>b</sub>).

 $^{66}ATU5$ , pl. 81 = P001391.

<sup>&</sup>lt;sup>62</sup> See Steinkeller 2013: 134.

<sup>&</sup>lt;sup>63</sup> Steinkeller 1990. See also Selz 2011: 84 n. 1, where he compares the individuals ERIM of Late Uruk texts with the category of workers šeš-bir<sub>3</sub>(correctly sur<sub>x</sub>)-ra of the ED IIIb texts from Ĝirsu.

<sup>&</sup>lt;sup>64</sup> "Female animal" (ERIM<sub>b2</sub> AMA<sub>a</sub>: W 6748,a = ATU 5, pl. 15 = P000830 obv. i 1), "oxen" (ERIM<sub>a</sub> GU<sub>4</sub>: W 9335,a = ATU 5, pl. 53 = P001203), "sheep" (UDU<sub>a</sub> ERIM<sub>a</sub>: W 9579,as = ATU 5, pl. 67 = P001291), "swine" (ERIM<sub>a</sub> ŠUBUR: W 9579,ch = ATU 5, pl. 72 = P001331), "cows" (AB<sub>2</sub> ERIM<sub>a</sub>: W 9579,cz = ATU 5, pl. 74 = P001348), etc.

<sup>&</sup>lt;sup>67</sup> 1N<sub>1</sub> KUR<sub>a</sub>:ERIM<sub>a</sub> URUDU<sub>a</sub> and 1N<sub>1</sub> SAL SU.

<sup>68</sup> Englund 1998: 165 fn. 380.

<sup>69</sup> See Englund 2009: 15 fn. 42; P006054.

<sup>&</sup>lt;sup>70</sup> W 24159 (Cavigneaux 1991: 13) records 27 individuals designated SAG ZATU753 in rev. ii. A number of Jemdet Nasr documents registering grain allocations has SAG in their colophons where it probably refers to their recipients. SAG appears in the colophon of *MSVO* 1 nos. 32 and 216, both concerned with grain. The first entry of *MSVO* 1 no. 216 has: 20 SAL+KUR ŠE ŠU "20 dependents: *accepted*? barley". SAG is found in obv. ii 5 and probably refers to all individuals recorded on the obverse. See also an account of rations *MSVO* 3 no. 68 obv. i 1, where SAG might be a category of ration recipients.

*MSVO* 4 no. 74 from Kiš deserves special attention because it records a category of humans SAG-GURUŠ<sub>a</sub>, which is reminsicient of Englund's suggestion to interpret the sign GURUŠ<sub>a</sub> as "male workers".<sup>71</sup> The text has a clear format:

0	Reverse		
Col. i ii		ii	i
1N <sub>1</sub> SAG-GURUŠ <sub>a</sub> UŠ <sub>a</sub> (PN?)	1N <sub>1</sub> UŠ <sub>a</sub> -DA <sub>a</sub> -ZATU697 <sub>a</sub> ?(PN?)	3N <sub>1</sub> SAG-GURUŠ <sub>a</sub>	$1N_1 DA_a$
	1N <sub>1</sub> EZEN <sub>b</sub> -ZATU651×EN <sub>a</sub> (PN?)		2N <sub>1</sub> DU
SAG-URUDU <sub>a</sub>	DU (=gub?)		

The colophon occupies the reverse. The second column sums up two entries of the first column. All individuals bear the designation SAG-GURUŠ<sub>a</sub>. The meaning of the last sign in the sign combination is uncertain.

One of the individuals is labeled with the sign DA whereas two others are referred to as DU, same as on the obverse. Whereas DU may mean gub "in service" in the present context, the interpretation of DA is more challenging. It is paralleled by the grapheme SAG-URUDU "...ed individual" on the obverse. This implies that URUDU and DA refer to the same administrative procedure. Other texts qualify humans and animals by the term URUDU, probably a verb. It appears also in another account of humans in combination with SAL+KUR "slaves".<sup>72</sup> Earlier texts provide similar evidence. An Uruk IV account, W 9655,s, records one "male" in combination with signs URUDU and ERIM.<sup>73</sup> Although *MSVO* 4 no. 74 remains far from being completely lucid, it presents a definite example of a document that records the management of labor.

Summing up the discussion of the Uruk III evidence, one should emphasize the appearance of a well-developed terminology for humans in comparison with the preceding period. Two independent sets of terms to describe individuals with regards to gender and age are evident. The adults of the first set of terms (SAL+ KUR) appear sometimes in combination with additional terms SAG×MA and ERIM whose connection to labor is likely. The second group of terms is concerned only with the age of humans. The very need for two patterns to classify humans in the documents of the same date and provenance is enigmatic. One of the possibilities is that individuals of different legal or social categories were accounted by different patterns.

SAG was a term devoid of any age and gender implications, although it is very probable that only adults were referred to by it. The use of terms such as DUB, URUDU, etc. appearing in both Uruk IV and III documentation, confirms the stability of the terminology to describe the administration of human resources in central households.

 $<sup>^{71}</sup>$  There are, however, no further known references to this sign combination, which makes it very unlikely that SAG-GURUŠa was a term for a certain group of laborers.

 $<sup>^{72}</sup>$  *MSVO* 4 no. 31 (probably from Tell Uqair) obv. i:  $2N_1$  SAL+KUR URUDU<sub>a</sub> "2 dependents, male and female: …".

 $<sup>7</sup>_3 ATU 5$ , pl. 81 = P001391; obv. i: 1N<sub>1</sub> KUR<sub>a</sub> URUDU<sub>a</sub> ERIM<sub>a</sub>.

# 4. Early Kudurrus and the Origins of the Graphemes for Slaves (GEME<sub>2</sub>, ARAD<sub>x,2</sub>)

The traditional hypothesis<sup>74</sup> on the origins of the signs  $GEME_2(SAL+KUR)$  and  $ARAD_2(NITA\times KUR)$  argues that slaves were mostly captives from foreign lands (Sumerian kur) which is the reason why KUR appears in both graphemes (argument 1). According to this line of logic, SAL and KUR in the Late Uruk accounts are the simplified graphemes of  $GEME_2$  and  $ARAD_2$  (argument 2). This would imply that KUR as the designation of males in the Late Uruk accounts is not a depiction of male genitalia.

Despite an almost unanimous acceptance of the "mountain theory" by the scholarly community and its alluring logicality, the data collected in the present paper puts it into doubt. Let us begin with the argument 2.

**Argument 2**. There is no evidence of the existence of the sign ARAD<sub>2</sub> in the Late Uruk texts. This is hardly accidental. Therefore, KUR could not be the simplified grapheme of ARAD<sub>2</sub>. Even if one accepts the idea that slaves were written with simplified graphemes in the Late Uruk accounts of humans, a suggestion lacking definite evidence,<sup>75</sup> and follows this line of logic, the sign for males should be UŠ and not KUR. However, the Late Uruk evidence unreservedly indicates that the sign KUR and not UŠ was set off against SAL thus producing terms "male" and "female" used in accounts of humans and animals. Besides, the Late Uruk sign depicting male genitalia is GIŠ<sub>3</sub>(ZATU228). The sign that is used in the original grapheme for male slaves, ARAD<sub>x</sub>(NITA+KUR) discussed below in connection with early *kudurrus*, employs the sign UŠ/NITA(ZATU 604) instead. Although both UŠ/NITA(ZATU604) and GIŠ<sub>3</sub>(ZATU228) could represent penises, in the first case without "testicles" and in the second with them, neither of these graphemes qualify males of any kind in the Late Uruk documentation.<sup>76</sup>

<sup>&</sup>lt;sup>74</sup> See Englund 2009: 6: "This component KUR of the compound sign has in all discussion of geme<sub>2</sub> been considered a geographical qualifier, thus literally "mountain-woman", where, with ample textual justification, the chattel slaves of early Babylonia were believed to have been purchased, or taken, by force or threat of force, from the mountains, or more generally foreign lands, to the east or north of the Mesopotamian alluvium. The corresponding male designation ARAD<sub>2</sub> derived from the grapheme representing males (NITA) in combination with the same KUR sign".

<sup>&</sup>lt;sup>75</sup> A clear example of the use of graphemes SAL, KUR and SAL-KUR with animals (donkeys "KIŠ") is an Uruk III account of donkeys *ACTPC* 44. The colophon on the reverse sums up 5 females designating them SAL whereas 10 males are labeled KUR. The grand total employs the grapheme SAL+KUR in the meaning "male and female": 15 <...> KIŠ KUR+SAL "15 ... donkeys, male and female".

The editors of ZATU believed that the grapheme SAL+KUR (ZATU201) represented geme<sub>2</sub> "female slave". However, Late Uruk contexts suggest meanings "male (and) female" or "(slave<sup>2</sup>) dependents", if taken as a generalization. This principle is clearly traceable in animal accounts where a sign combination  $AB_2+GU_4$  is not simply "cows + bulls" but "cattle"; see Englund 1998: 176.

<sup>&</sup>lt;sup>76</sup> *Contra* Charvat 2012 who unconvincingly links the grapheme UŠ with a class of male low-rank workers.

**Argument 1**. What is the origins of the sign ARAD<sub>2</sub> then, and what is the logic behind the sign ARAD<sub>2</sub> if it is the Late Uruk representation of male genitalia (KUR) inscribed into the Early Dynastic depiction of a penis (UŠ)? It is possible that the choice in favor of KUR to construct a new sign ARAD<sub>x</sub>(NITA+KUR) was made due to the likely (mis)interpretation of the Late Uruk grapheme SAL+KUR "females (and) males" as "mountain woman" by the scribes. This resulted in the meaning SAL+KUR = geme<sub>2</sub> "female slave". It is possible that the scribes were not aware of the original meaning "male" of the sign KUR anymore, the meaning that predated the signs for male and female slaves of the early *kudurrus* by centuries. Therefore, the sign GEME<sub>2</sub> is a graphic derivate from the Late Uruk grapheme for female and male dependents (SAL+KUR) and its semantic link to "mountains" is rooted in the failed attempt to interpret SAL+KUR correctly. In turn, the sign ARAD<sub>x</sub>(NITA+KUR) is a secondary development. It is both a graphic (NITA+KUR) and a semantic ("male" + "mountain") derivate from GEME<sub>2</sub>.

Besides the Late Uruk data discussed above, these considerations rest on two sources, the *Leiden Tablet* and the *Blau Plaque*. These two land acquisitions or grants, conventionally called *kudurrus*, contain the earliest certain references to slaves. By this, they offer for the first time explicit evidence for the legal status of the recorded individuals.

The *Leiden Tablet* is a land sale document of unknown provenance.<sup>77</sup> The individuals are recorded in the upper left-hand of the obverse whereas the land itself is recorded below. These people are recorded without their personal names and are designated geme<sub>2</sub>(SAL+KUR) and arad<sub>x</sub>(NITA+KUR), female and male slaves. Their presence here may be explained by the fact that they stood in some relationship to the land and by this were a "bonus" coming into the possession of the new owner together with the plot. The document records 18 individuals in total, ten women, and eight men:

18	10 geme <sub>2</sub> (SAL. <sup>r</sup> KUR <sup>1</sup> )
<sup>r</sup> geme <sub>2</sub> <sup>1</sup> (SAL.[KUR])	
	۶٦ arad <sub>x</sub> ('NITA'.KUR)

The sign NITA+KUR, transliterated here as  $arad_x$ , is clearly the precursor of the sign ARAD<sub>2</sub>(NITA×KUR), which designated male slaves in later periods.<sup>79</sup> The crucial detail is that NITA+KUR<sup>80</sup> is constructed by the analogy with that for

<sup>&</sup>lt;sup>77</sup> *ELTS* no. 7.

<sup>&</sup>lt;sup>78</sup> Two sign combinations of uncertain meaning which Steinkeller tentatively interprets as the name of the seller or that of the buyer alongside his qualification (*ELTS*: 30, 40).

<sup>&</sup>lt;sup>79</sup> Strictly speaking, the grapheme for slaves in the Early Dynastic and later times is ARAD×KUR. See *REC* no. 26. It seems that  $GI\check{S}_3 = ZATU$  228 is the ancestor of both the Early Dynastic and later UŠ/NITA on the one hand and ARAD on the other.

<sup>&</sup>lt;sup>80</sup> The sign NITA in the document, although damaged in all instances, is most likely UŠ/NITA(ZATU604) and not GIŠ<sub>3</sub>(ZATU228). It is certainly UŠ/NITA in the *Blau Plaque* below.

female slaves geme<sub>2</sub>(SAL+KUR), which also appears in the Leiden Tablet.

Here arises a problem: Why we do not find these graphemes in Uruk III texts if the *Leiden Tablet* indeed belongs to this period as suggested by Steinkeller?<sup>81</sup> There may be several possible explanations. Firstly, the *Leiden tablet* may have been composed at the end of the Uruk III or at the beginning of ED I–II periods, i.e., at around 3000 BC.

Secondly, similarly to a document discussed below, the *Leiden Tablet* may originate in Northern Babylonia, where a different political and cultural tradition, the so-called "Kish Civilization", flourished as early as the beginning of the Early Dynastic period.<sup>82</sup> Thus, if the *Leiden Tablet* comes from the north, it does not need to comply with Urukean writing habits and terminology for humans.

Thirdly, the text is of legal nature and its terminology could differ from contemporaneous administrative accounts, both from southern and northern cities, since we find the terms of the *Leiden Tablet* neither in documents from Uruk nor in those from the northern cities of Kiš and Tell Uqair.

Finally, as suggested by Steinkeller for the document discussed below, the *Leiden Tablet* may have been composed in an Early Semitic too and the writings are logograms.

All these considerations cannot dispute the obvious fact that the writing for male slaves (NITA+KUR) is a calque from the sign for female slaves (SAL+KUR). This implies that, as suggested above, SAL+KUR changed its original meaning from "female+males = dependents" into "female slaves" at a certain historical point.

In Figure 4, I offer a reconstruction of the historical development of writings for males and females which can explain the origins of the signs appearing in the *Leiden Tablet* and the *Blau Plaque*.

Explaining the figure, first, the sign combination SAL+KUR with a general meaning "dependents", "slaves", "serfs", etc. of the Late Uruk period is a combination of signs for "females" and "males". Secondly, SAL+KUR in the *Leiden Tablet* and the *Blau Plaque* for some uncertain reason, likely a misinterpretation by scribes, acquires a new meaning "female slaves". This creates a need for a new sign for males since the scribes were not aware that the Late Uruk KUR meant "male". As the result, the sign NITA+KUR is constructed in exactly the same manner as GEME<sub>2</sub>, attaching a sign KUR, now probably reinterpreted as "mountain", to the sign for "male" NITA. The reasons standing behind this innovation are not entirely clear although one may suggest that this decision was taken by scribes in order to avoid the use of SAL and KUR to designate because of their multivalence, which probably created difficulties for those who consulted the texts.

The final step in the development of the terminology for slaves takes place during the Early Dynastic I–II period. Here, the sign GEME<sub>2</sub> remains without

<sup>&</sup>lt;sup>81</sup> *ELTS*: 36. The script and the way the individuals are summed up in the left-hand column confirm this estimation. The text definitely looks older than the ED I–II texts from Ur (ca. 2800–2700 BC).

<sup>&</sup>lt;sup>82</sup> See Steinkeller 2013: 145–151 with further references.

changes.<sup>83</sup> The writing for male slaves modifies its graphic; the sign KUR is placed inside the sign for "male".

In evaluating the historical importance of the *Leiden Tablet* it is necessary to stress the fact that it records slaves in connection with land for the first time. However, it remains unclear whether the transaction was of a private nature or the previous and/or new owners of the land and slaves were representatives of a central household.

Another legal document providing similar evidence is the *Blau Plaque*.<sup>84</sup> Steinkeller dates it to the Uruk III period and attributes it to Tell Uqair, probably the ancient city of Urum. The text is a list of miscellaneous commodities and should be analyzed together with the *Blau Obelisk*.<sup>85</sup> One male slave in line 9 appears in the context of metal vessels, garments, sheep, and a considerable amount of grain and beer.<sup>86</sup> As in the *Leiden Tablet*, the term is written arad<sub>x</sub>(NITA+KUR):

The legal transaction in the *Blau Obelisk/Plaque* takes place in the context of a large institutional household. Steinkeller interprets the signs APIN AB as engar eš<sub>3</sub>, "*agronomos* of the temple household".<sup>87</sup> Another detail speaking in favor of the document's belonging to the institutional sphere is one of its images. It depicts a group of seated workers holding large pestles and laboriously crushing something, probably grain, in their mortar vessels under the supervision of another person depicted larger than the laborers signifying his high status.

The northern provenance of the *Blau Obelisk/Plaque* and several alleged loanwords of Semitic origin led Steinkeller to hypothesize that the text was composed in Early Semitic instead of Sumerian.<sup>88</sup> If this is true, the terms for slaves NITA.KUR and SAL.KUR may, in fact, represent logograms for Semitic *wardum* and *wardatum* or similar designating "male" and "female slave". This remains hypothetical, however.

No other legal texts of the Uruk III and ED I–II date in *ELTS* or elsewhere<sup>89</sup> offer definite references to slaves or other groups of laborers. Nevertheless, both the *Leiden Tablet* and the *Blau Plaque* are unique pieces of evidence delivering the earliest clear references to slaves and clarify the origins of the graphemes to record them in script. By this, they fill in the gap in the development of the terminology of humans between the Late Uruk and the Early Dynastic textual corpora.

<sup>&</sup>lt;sup>83</sup> Early Dynastic IIIa texts from Fara (and even later texts from elsewhere, e.g. Sargonic Nippur) record a graphic variant of GEME<sub>2</sub> written not SAL+KUR but SAL×KUR. However, the presence of SAL+KUR for geme<sub>2</sub> in Early Dynastic texts from Ur proves that this writing is a secondary development (see Englund 2009: 6).

<sup>&</sup>lt;sup>84</sup> ELTS no. 11, p. 39 f., especially p. 42.

 <sup>&</sup>lt;sup>85</sup> *ELTS* no. 10. Steinkeller interprets the list of commodities in the *Blau Plaque* as the price and/or additional payment for a purchased field recorded in the *Blau Obelisk*.
 <sup>86</sup> See *ELTS*: 42 for interpretation.

<sup>&</sup>lt;sup>87</sup> *ELTS*: 40. See also CUSAS 1 no. 150 and commentary to references to APIN AB in in Late Uruk texts.

<sup>&</sup>lt;sup>88</sup> ELTS: 41.

<sup>&</sup>lt;sup>89</sup> CUSAS 17 nos. 103–105.

### 5. Early Dynastic I-II Texts from Ur (ca. 2800-2700 BC)

The ED I–II is a period most poorly supplied with written evidence in the whole history of cuneiform writing.<sup>90</sup> The number of texts amounts to less than one thousand and most of them are poorly preserved. The majority of the documents, almost exclusively archival records, originates in Ur.

Despite this, several political and social structures known from later sources are clearly traceable in these texts. One of them is e<sub>2</sub>-gal, "The Big House" or, more conveniently, "palace".<sup>91</sup> This central institution, alongside other "house-holds" (e<sub>2</sub>) and "sanctuaries, shrines" (eš<sub>3</sub>), appears regularly in these sources. They were governed by the same offices as in later Early Dynastic evidence.<sup>92</sup>

Most ED I–II accounts of personnel and ration lists are largely uninformative for the present study since they record generally high or middle-rank bureaucrats, priests and craftsmen of central households. An example is *UET* 2 no. 66. The colophon of the document has a large number of "rations consumed" (rev. i 1 f.: ninda:gu<sub>7</sub>). Many among the recipients bear the title nu-banda<sub>3</sub> "supervisor".

Despite these two unfortunate distinctive features of the ED I–II corpus – the low number of texts in general and the even smaller number of those concerned with workers – there are several terms designating humans in general and laborers in particular.<sup>93</sup>

Lu<sub>2</sub> "person, individual" belongs to the former category. In contrast to the majority of the terms discussed in the present paper and similarly to the Late Uruk SAG, it does not contain any gender and age implications. The ED I–II evidence offers for the first time unambiguous examples for the use of sign LU<sub>2</sub> to denote a group of humans. For example, *UET* 2 no. 58 is a record of bread, beer and grain for a group of people: "20 breads; 3 (measures of) beer; 30 bowls of barley (?): (for) the people from Ereš (?)".<sup>94</sup>

Similarly to Early Dynastic IIIb and later texts, the construction "personal name,  $lu_2$  + personal name" records subordinates. See *UET* 2 no. 65 obv. ii 3, where a certain  $lu_2$  Gu<sub>4</sub>-si "the person of Gusi" is mentioned.<sup>95</sup>

The term lu<sub>2</sub>-RU that appears in *Nisaba* 25 no. 62 may relate to labor. Owing to the edition by Camille Lecompte (2013: 150–155), the document's details

 $<sup>^{90}</sup>$  See Lecompte 2013: 7 f. for a recent overview of ED I–II texts. See Sallaberger / Schrakamp 2015: 56–61 and Bartash 2015b for challenges connected with the dating of the earliest texts from Ur.

<sup>&</sup>lt;sup>91</sup> See now ACTPC: 5 for the term e<sub>2</sub>-gal as early as the Uruk III period.

<sup>&</sup>lt;sup>92</sup> See *UET* 2 no. 112 obv. vi 16 and rev. i 3 for nu-banda<sub>3</sub> e<sub>2</sub>-gal "supervisor of the palace". The same text mentions also GAR-saĝĝa (rev. i 2), a title for chief administrators of temple households well-attested in later Early Dynastic texts.

<sup>&</sup>lt;sup>93</sup> See also a short overview of the labor mobilization in ED I–II Ur by Benati (2015: 17– 19), which, however, is based largely on archeological data and historical and ethnographical parallels.

<sup>&</sup>lt;sup>94</sup> Transliteration: the top of the tablet: ERIM (interpretation uncertain); obv.: 20 ninda / 3 kaš / 30 še SILA<sub>3</sub> / lu<sub>2</sub> Ereš<sub>2</sub>?(NAGA); rev. blank.

 $<sup>^{95}</sup>$  In contrast, *UET* 2 no. 116 obv. ii 2 mentions just Gu<sub>4</sub>-si thus corroborating the interpretation of lu<sub>2</sub> as "person, subordinate". Another example is *UET* 2 no. 67 obv. ii 2, where a subordinate of another person is recorded.

are mostly clear. It enumerates several groups of workers with their respective supervisors. The first line of the colophon registers 204 individuals lu<sub>2</sub>-RU. Lecompte compares this term with RU-lugal of ED IIIb texts from Ĝirsu and interprets RU as šub "to fall". He explains lu<sub>2</sub>-RU as individuals to whom a working task in Uruk is assigned.<sup>96</sup> Other interpretations of the term are possible, however. For example, the sign RU in lu<sub>2</sub>-RU may refer to a brick mold or to a weapon and by this these individuals could be workers making bricks or warriors. See below for the ED IIIa evidence of ĝuruš-<sup>ĝeš</sup>RU.

### 5.1. Male and Female Slaves: arad2 and geme2

Following the early *kudurrus*, Early Dynastic I–II texts from Ur record terms for male and female slaves. The sign for the former becomes the standardized arad<sub>2</sub> (NITA×KUR) whereas geme<sub>2</sub>(SAL.KUR) remains without change.

Terms for male and female slaves appear side by side in some texts and separately in others. An example of the latter is UET 2 no. 50, an account of bread or rations in connection to geme<sub>2</sub> women. The following figure reproduces the layout of the document and offers its tentative interpretation:

Transliteration		Interpretation	
20 ninda eš <sub>3</sub>	geme <sub>2</sub>	20 breads: the temple household:97	(For?) female workers:
Kisal:si	5	Kisalsi;	5 (breads?).
5 Ama-si	eš <sub>3</sub>	5 (breads): Amasi.	The temple household.

The most illuminating document recording gender categories of slaves is *UET* 2 no. 259 from Ur. This list of personnel enumerates individuals by their personal names. The colophon sums them up as 23 arad<sub>2</sub> "male slaves" and 12 geme<sub>2</sub> "female slaves". In contrast to the Late Uruk accounts of humans, men are recorded before women. Another detail which sets it apart from the Late Uruk texts is that there are no separate sections for men and women and their personal names appear alternately without any traceable pattern.

The use of the terms arad<sub>2</sub> and geme<sub>2</sub> for slaves in the ED I–II material links this textual corpus with later Early Dynastic sources. Despite this, there is not a single definite attestation of the term ĝuruš, a category of laborers that appears regularly in the ED IIIa and floods ED IIIb and later 3<sup>rd</sup> millennium BC administrative sources.

### 5.2. Terminology for Children

Surviving ED I–II texts do not witness the presence of the Uruk III terms to designate children, neither of the first (dumu-munus/nita<sub>x</sub>, ŠA<sub>3</sub>-munus/nita<sub>x</sub>) nor of the second group (dumu:EN, dumu:N<sub>57</sub>+U<sub>4</sub>). It is probable that the absence of clear references to children in ED I–II texts is due to the small number of texts. Although the grapheme TUR can be read dumu, its meaning in all contexts never

<sup>&</sup>lt;sup>96</sup> Lecompte 2013: 152–153.

<sup>&</sup>lt;sup>97</sup> See *ELTS*: 40 for  $e\bar{s}_3$  as "temple household" with a further reference.

seems to reference a child.98

The slaves' list *UET* 2 no. 259 may in fact record the age terminology similar to the second group of the Uruk III texts. The name AZ-DA<sup>99</sup> appears twice each time with a different attribute:

obv. iii 6: AZ-DA dumu(TUR) "AZDA, the child" obv. iv 1: AZ-DA mah<sub>2</sub>(AL) "AZDA, the adult"

If the interpretation above is correct, the text distinguishes between the "adult" (mah<sub>2</sub>) and "child" (dumu) slave of the same name. This would confirm that the sign AL designating adults in the second group of evidence in the Uruk III accounts of humans continued to be used in its original meaning in the ED I–II texts. No terms for the elderly have been identified so far.

Despite the scarcity of the evidence, only very tentative conclusions on the terminology of laborers during the ED I–II period may be proposed. First, the Uruk III terminology seems to be completely absent. Second, the use of terms for slaves arad<sub>2</sub> vs. geme<sub>2</sub> shows the continuation of the practice of the early *kudurrus*. Finally, the introduction of new terms such as  $lu_2$  "individual" marks a clear-cut departure from the Late Uruk terminology. This feature becomes obvious in the following period.

### 6. Early Dynastic IIIa (ca. 2600–2500 BC)

The majority of ED IIIa administrative documents available presently originates from Fara, ancient Šuruppak.<sup>100</sup> Owing to the abundance of legal texts documenting private sales of immobility, it was considered previously that the political structures were loose in this city. However, the analysis by Giuseppe Visicato has shown that Šuruppak hardly differed from its neighbors in this respect, since almost any activity is linked to central households, e<sub>2</sub>-gal "palace" and e<sub>2</sub>-iri "the city's house(hold)".<sup>101</sup> The major groups of laborers appearing in Fara texts, dumu-dumu "dependents" (literally "children, sons"), ĝuruš "(conscripted) young men", and iri-gub "(workers) available in the city", were administered by officials of these institutions and worked for them.

To start with, similarly to the ED I–II evidence, there are cases where humans are defined simply as  $lu_2$  "persons, individuals" avoiding any gender, age or labor associations. An example is document *WF* 106 from Fara. It is a list of individuals recorded together with their professional titles and affiliations with

 $<sup>^{98}</sup>$  Those few references to the sign combination SAL-TUR, which should be possibly interpreted "daughter" (kin term) or "female child" (age and gender class), may in fact stand for a personal name Dumu-munus. See Lecompte 2013: 82–83 no. 33 and especially fn. 193. For the same name see also *UET* 2 no. 273 obv. i 3 and *UET* 2 no. 364+368 obv. ii 4.

<sup>&</sup>lt;sup>99</sup> See Mittermayer 2006: 110 for the interpretation of the sign in question as AZ. <sup>100</sup> See Krebernik 1998 for an overview of ED IIIa texts.

<sup>&</sup>lt;sup>101</sup> See Visicato 1995, especially p. 138. See also Krebernik 1998: 312 and Sallaberger 2004a: 201.

other people. The summation in rev. vi 10 has "67 individuals".<sup>102</sup>

### 6.1. Ĝuruš Workmen

ED IIIa lexical lists for the first time record terms for low rank and slave laborers. The term  $\hat{g}$ uruš appears in "ED Lu<sub>2</sub> E".<sup>103</sup> Contrary to the term for male slave, the term  $\hat{g}$ uruš appears in this composition without a female counterpart. The category geme<sub>2</sub> "young women" often accompany  $\hat{g}$ uruš workers in texts of later epochs. The situation was different in ED IIIa period. I can cite only one definite case where  $\hat{g}$ uruš and geme<sub>2</sub> appear together in a text. This fact suggests, on the one hand, that the work process was organized in a way that  $\hat{g}$ uruš and geme<sub>2</sub> worked separately and, on the other hand, that these two categories were not merely male and female "varieties" of a single socioeconomic role within central households.

A considerable number of ĝuruš workers recorded in Fara texts alongside the presence of their overseers (ugula) stresses the importance of their labor in central households. This inference is supported by the fact that nu-banda<sub>3</sub>, a high dignitary who was responsible for the management of an entire household, appears as the administrator of ĝuruš workers in the lexical evidence.<sup>104</sup>

The basic meaning of ĝuruš is "young adult male".<sup>105</sup> Although ĝuruš possessed a rich selection of semantic nuances depending on a text's genre and period, the term's original meaning inevitably connects it to the concept of labor categorization according to age and gender. By this, ĝuruš is a "man", an adult able-bodied male worker.

As already mentioned above,  $\hat{g}uru\check{s}$  were active within two socioeconomic structures or larger households, the palace (e<sub>2</sub>-gal), and the city (e<sub>2</sub>-iri).<sup>106</sup> The

<sup>105</sup> Marchesi 2004: 192; *CAD* E: 407.

<sup>&</sup>lt;sup>102</sup> See the similar document *WF* 107 rev. vii where the term  $lu_2$  is omitted although implied. For another example of the use of the term  $lu_2$  in accounts of humans see a document from Abu Salabikh published in Postgate / Biggs 1978 no. 532.

<sup>&</sup>lt;sup>103</sup> *MSL* 12: 18 line 118. See also <sup>102</sup>guruš in "ED Lu B" (*MSL* 12: line 44). Note that the lexical composition "ED Lu E" belongs to the so-called "Northern Tradition" and, therefore, was written and read in Semitic (see Veldhuis 2014: 105–112). Consequently, it is not certain to which extent this text may be used to reconstruct the social reality of the Southern Mesopotamia. Note, however, the remark by Velduis that this composition "is much more relevant for scribal practice" than the list ED Lu A (ib.: 105). The latter fully relies on the Archaic Lu. It includes professional titles that were mostly obsolete in the Early Dynastic period.

<sup>&</sup>lt;sup>104</sup> Nu-banda<sub>3</sub> ĝuruš "administrator of ĝuruš-laborers" in "ED Personal Names and Professions", line 50 (cited according to the *DCCLT*). See also an-dul<sub>3</sub> ĝuruš ak "the one who provides protection for ĝuruš-workers" (?) in "ED Officials" line 92. The important point is that this lexical list has two adjacent sections of four similar entries each, one for ĝuruš and another for saĝ "head; slave" (lines 89–96). This clearly indicates a semantic link between two. See also nu-ŠID saĝ munus nita in "ED Lu B" rev. iii 6 that is interpreted as "accountant of male and female slaves" in DCCLT.

<sup>&</sup>lt;sup>106</sup> See *TSŠ* 613 for "240 ĝuruš: in service in the city's household" (ĝuruš / ša<sub>3</sub> e<sub>2</sub>-iri gub). *TSŠ* 554 records 108 fugitive ĝuruš from both e<sub>2</sub>-gal and e<sub>2</sub>-iri. A similar text *TSŠ* 780 besides recording fugitives makes mention of an enigmatic category of laborers UN-TAR (obv. ii). I tentatively suggest to interpret the term as "people from the street" (uĝ<sub>3</sub>-sila)

tasks of ĝuruš workers were diverse and depended on the occasion and on the branch within a household to which they were attached. Ĝuruš did not stand under a single administrative office but were recorded in groups under officials and professionals of almost any kind.<sup>107</sup> For example, *TSŠ* 933 records 82 ĝuruš workmen involved in the construction of a building.<sup>108</sup> The phrasing ĝuruš <sup>geš</sup>sub(RU) "male workers of the brick mold", recorded in a document from Ĝir-su,<sup>109</sup> shows that they produced bricks for construction projects.<sup>110</sup> Ĝuruš-SI, appearing in a document from Fara,<sup>111</sup> is another term that exemplifies the work tasks that these individuals received. In this case it may be that they were employed as loaders and dockers. The most fitting interpretation of the sign SI is si.g = *šakānu* "to place". Ur III records provide examples where ĝuruš appear as dockers loading freight on ships and as loaders carrying dirt. In these instances their activities are described by the verb si.g.<sup>112</sup>

Drafting of ĝuruš for the military service is a practice well supplied with data in the Fara texts. In this case, they had a special designation ĝuruš me<sub>3</sub> "men of war".<sup>113</sup>

These examples show that ĝuruš were workers from whom physical strength was required. There are no indications that they were trained professionally in any specific sort of labor. An example illustrating this inference is a document from Abu Salabikh *OIP* 99 no. 490. It records a total of 322 ĝuruš men who work under the supervision of 55 carpenters, builders, smiths, stone-cutters, and felters. This shows that ĝuruš were unskilled laborers who could be employed in any branch of the economy providing labor under the command of skilled professionals.

The text *RTC* 1 (Ĝirsu), an inspection of labor, records ĝuruš together with several other categories of labor. An interesting detail is that the number of individuals in each group is balanced and ranges from 11 to 20. These groups include slaves (arad<sub>2</sub>), runners (kaš<sub>4</sub>), and another category in a damaged line. 14 people are marked as fugitives (lu<sub>2</sub>-zah<sub>3</sub>; rev. v). *RTC* 1 illustrates that, as already proposed by the lexical list "ED Officials" lines 89–96, ĝuruš worked shoulder to shoulder with slaves and ĝuruš and slaves alike tended to neglect their tasks by escaping.

Another category of labor that appears in Fara texts is iri-gub, literally "those who are in service in the city". This group may have been at least partly composed of ĝuruš workers. As the meaning of the term shows, these were people available to perform working tasks in Šuruppak. The monthly allowance of iri-

which possibly hints at a recruitment practice.

<sup>&</sup>lt;sup>107</sup> See Pomponio / Visicato 1994: 12.

 $<sup>^{108}</sup>$  gu<sub>2</sub>:an:še 82 / ĝuruš e<sub>2</sub>-AŠ+SAG du<sub>3</sub> "grand total: 82 / (these are) the ĝuruš workmen (who) build the ... building".

<sup>&</sup>lt;sup>109</sup> *RTC* 1 rev. v 4.

<sup>&</sup>lt;sup>110</sup> Unless this sign combination does not mean "young men (armed with) bows" (ĝešpu) or "javelins" (illar, both written with the sign RU).

<sup>&</sup>lt;sup>111</sup> *TSŠ* 775 obv. i 1.

<sup>&</sup>lt;sup>112</sup> See e.g. Snell 1987: 241 no. 20 obv. 1 and rev. 1 for ĝuruš loading flour and barley on a ship and *BPOA* 1 no. 388 rev. 5 for ĝuruš performing earthwork at a canal.

<sup>&</sup>lt;sup>113</sup> E.g. *WF* 95 rev. iv and *WF* 101 obv. i 1.

gub amounted to 2 bariga 2 ban, ca. 140 liters of barley. This was not much less than professionals such as leather workers, cooks, carpenters, stonecutters, etc. received.<sup>114</sup> This shows that these workers ranked relatively highly in the hierarchy of Šuruppak's central households.<sup>115</sup>

A group of workers closely related to iri-gub were nu-SU. Same as iri-gub, they were administrated by the officials niĝir ("heralds"). The fact that nu-SU received only half of the rations the individuals of the iri-gub category received led Pomponio and Visicato to the conclusion that they were women.<sup>116</sup> Personal names with elements gan (= geme<sub>2</sub>), ama "mother", and nin "lady"<sup>117</sup> speaks in favor of this suggestion. The matter deserves further study, however. The philological interpretation of nu-SU is uncertain.<sup>118</sup> Taken literally, nu-su probably means "the one not paid", since su(g<sub>6</sub>) is equated with Akkadian *apālu*, or "the one not replaced/repaid/given restitution", since su(g<sub>6</sub>) may be also *riābu*.<sup>119</sup>

The Fara documents record not only the workers within the city but also outside. A construction "ĝuruš + place name" appears regularly and the cities were Uruk, Adab, Nippur, Lagaš, Šuruppak, and Umma. Guruš are recorded as residing in these localities.<sup>120</sup> This important detail shows that the administration of Šuruppak took part in managing labor on the regional level for some larger labor projects which, unfortunately, remain unspecified in the extant documentation.

### 6.2. Ĝuruš in Connection with Females (Geme<sub>2</sub> and Munus)

Geme<sub>2</sub> "young woman" is a counterpart for ĝuruš in Early Dynastic IIIb and later texts. As has been pointed out above, ED IIIa lexical texts offer no evidence for their complementary use. The contemporaneous administrative documents rarely mention ĝuruš and geme<sub>2</sub> side by side. To my knowledge, geme<sub>2</sub> appears together with ĝuruš only once. *WF* 93 from Fara records three groups of individuals who receive rations, literally "people who eat bread" (lu<sub>2</sub> ninda gu<sub>7</sub>; rev. i 2). They are 1532 ĝuruš workers, 39 household dependents who are builders (dumu-dumu šitim) and 41 young women (geme<sub>2</sub>). The relationship of these women to these groups of men is unclear.

<sup>&</sup>lt;sup>114</sup> See Pomponio / Visicato 1994: 32–33.

<sup>&</sup>lt;sup>115</sup> According to Pomponio / Visicato, the lowest footstep was occupied by a class of workers called lu<sub>2</sub>-ri-ri-ga (probably, better lu<sub>2</sub>-de<sub>5</sub>-de<sub>5</sub>-ga) of which is known very little (Pomponio / Visicato 1994: 34–35).

<sup>&</sup>lt;sup>116</sup> See Pomponio / Visicato 1994: 33.

<sup>&</sup>lt;sup>117</sup> See texts *WF* nos. 70–73, 75, and 107.

<sup>&</sup>lt;sup>118</sup> It is unlikely that nu-SU is related to nu-mu-kuš(SU) "widow" appearing in the lexical list "ED Lu E" line 136 (*MSL* 12: 19). A lexical fragment from Ebla MEE 4 no. 100 records terms for female professionals. Obv. ii 4 has a writing nu-ZU which might be a mistake for SU as suggested by *DCCLT*. If correct, which I doubt, it would deliver the only lexical reference to nu-SU.

<sup>&</sup>lt;sup>119</sup> See CAD A<sup>2</sup>: 155–156 and CAD R: 53.

<sup>&</sup>lt;sup>120</sup> See e.g. *WF* 94 obv. 1–2: 140 ĝuruš / lu<sub>2</sub> Unug<sup>ki</sup> durun<sub>x</sub>(DUR<sub>2</sub>) "140 ĝuruš workmen: (these are) people who dwell in Uruk" and the colophon rev. ii: gu<sub>2</sub>-an-še<sub>3</sub> 650 ĝuruš / lu<sub>2</sub> Ki-en-gi durun<sub>x</sub>(DUR<sub>2</sub>) "grand total: 650 ĝuruš workmen: (these are) people who dwell in Sumer".

TSS 648 from Fara offers an exceptional piece of evidence. It not only registers gender categories but also offers information about age classes. The document records allocation of bread to three groups of personnel. A group of 25 guruš receives three breads each. Another group of 45 guruš receives only one bread each. The last group of 28 women (munus) also receives one loaf of bread each.

First of all, the fact that the category  $\hat{g}$ uruš is set off against munus and not geme<sub>2</sub> is unusual. Its explanation may be that the text employs both terms as gender classifiers "male" vs. "female".

Another remarkable detail is that the ĝuruš of the second group receive three times less bread than those from the first group. The most likely explanation of this is that these two groups represent different age classes, grown-up males on the one hand and children of working age on the other. Evidence from later texts supports this idea. Children of exploitable age received as much barley as women.<sup>121</sup>

Finally, the individuals recorded in the document may be Amorites since the term mar-tu appears at the end of the account (obv. ii 4). If this interpretation is correct, this would be one of the earliest historical accounts of the use of the foreign labor in southern Mesopotamian central households. As to the almost complete absence of female workforce in the context of males, it seems likely that labor was divided according to gender in the ED IIIa Fara central households and guruš and geme<sub>2</sub> worked separately.

### 6.3. Arad<sub>2</sub> "Male Slave"

Contrary to ĝuruš, the term arad<sub>2</sub> "male slave" has a female counterpart geme<sub>2</sub> "female slave" in the lexical list "ED Lu E".<sup>122</sup> However, there are no extant administrative documents where both terms appear side by side as is the case, for example, of the document *UET* 2 no. 259 from ED I–II Ur.

References to slaves are generally rare in the ED IIIa sources. The word  $arad_2$  "male slave"<sup>123</sup> appears alone in an account of barley *OIP* 99 no. 494 from Abu Salabikh. The text mentions 47 male slaves (obv. ii 6) and summarizes the account as "barley allotments for male slaves" (še-ba arad<sub>2</sub>; rev. i 3). The document cited above *RTC* 1 from Ĝirsu records 14 male slaves in the context of other males including ĝuruš workers and runners. It is uncertain whether the

<sup>&</sup>lt;sup>121</sup> See Molina 2014 no. 285.

 $<sup>^{122}</sup>$  MSL 12: 17 lines 53–54. The same composition records arad<sub>2</sub> for the second time in line 177 in the context with "house-born slave".

<sup>&</sup>lt;sup>123</sup> See Wilcke 2012: 53 and Krecher: 1987: 17. Accordding to the latter, there were possibly two Sumerian words for "male slave": ir<sub>11</sub> and urdu<sub>2</sub>.d. Krecher also suggests that the writing HAR-TU (war<sub>x</sub>-du<sub>2</sub>) may be an early writing for urdu<sub>2</sub>.d (ARAD<sub>2</sub>). However, HAR-TU appears only as an element in personal names during the ED IIIa period. Besides, HAR-TU was an umbrella term for some groups of female personnel in central households: see the contribution by Fumi Karahashi in the present volume. Selz 2011: 83–84 follows Krecher and provides an etymology for the Sumerian word hiding behind the logogram ARAD<sub>2</sub>. He connects the term with HAR-ra tu-da of the lexical list Old Babylonian Nippur Lu line 368 and interprets the latter as "born in debt(-slavery)". As a result, Selz reconstructs the form as \*ur(a)du(-d).

absence of female company in both cases may be accidental or may represent the separation of males and females and assigning them different tasks.

### 6.4. Geme2 "Female Worker" and "Female Slave"

Interpreting geme<sub>2</sub> women in socioeconomic terms is challenging despite its apparent semantic simplicity "young woman". As the correspondent to the male terms ĝuruš and arad<sub>2</sub>, the term geme<sub>2</sub> could represent at least two social identities: legally free household dependents and female slaves. However, it is difficult to determine which is which in most cases in ED IIIa texts.

To begin with, the account *WF* 93 implies that geme<sub>2</sub> was a term describing female laborers analogous to ĝuruš male workers. Although geme<sub>2</sub> women occur more rarely than ĝuruš in ED IIIa texts, they must have played a significant economic role as well. The presence of an official ugula geme<sub>2</sub> "overseer of female workers" in administrative documentation is suggestive.<sup>124</sup> We cannot say at present whether these female workers were legally free or how they were recruited by the administration.

Coming in context with the term for male slave in "ED Lu E", geme<sub>2</sub> appears also to be the term for female slaves. An example where geme<sub>2</sub> might appear as such is the account *WF* 115. Its first section deals with the management of geme<sub>2</sub> in connection with several men:<sup>125</sup>

obv. i	$4^{126}$ geme <sub>2</sub>	4 women:
	UN-u5 <sup>mušen</sup> na-gada	UNu, the herdsman;
	1 Ama-nam-da	1 (woman): Amanamda;
	[PN ba-de <sub>6</sub> ]	[Personal name took (her) away]
ii	1 Mes-ama-na	1 (woman): Mesamana;
	Aja <sub>2</sub> -ki-gal ba-de <sub>6</sub>	Ajakigal took (her) away.

Relying on this interpretation of the verbal form ba-de<sub>6</sub>,<sup>127</sup> Ajakigal takes away one woman by the name of Mesamana. The broken line obv. i 4 may have recorded another individual who took away another geme<sub>2</sub>, Amanamda. If this interpretation is correct, the herdsman appearing in the first line is a person originally responsible for these women. If so, the women were employed in animal husbandry.

CT 50 no. 13 from Fara demonstrates that geme<sub>2</sub> appear together with other categories of females and in the absence of males. The document is an account of barley, emmer and bread. Several individuals, all women, are the recipients of the grain. The category geme<sub>2</sub> appears two times. In the first case, an allocation of 2 bariga barley, the amount slightly less than of a male worker iri-gub, is described as pisag<sup>2</sup> gi<sub>4</sub> "returned to the basket", i.e. has been cancelled (?).<sup>128</sup>

<sup>&</sup>lt;sup>124</sup> See CUSAS 11 no. 8 (ED IIIa Adab) rev. i 4.

<sup>&</sup>lt;sup>125</sup> See Pomponio / Visicato 1994: 5 for the discussion of the text. Other commodities recorded in the document are barley and copper.

<sup>&</sup>lt;sup>126</sup> The number in the first line is "4" according to the photo: CDLI number P011073.

<sup>&</sup>lt;sup>127</sup> See Woods 2008: 231 ff.

<sup>&</sup>lt;sup>128</sup> Another interpretation for the sign combination in questions is ĝa<sub>2</sub>-gi<sub>4</sub> "cloister". This

The following line records the same amount for geme<sub>2</sub> libir, literally "the woman, old". However, "old" here is a reference to the previous transaction"<sup>129</sup> and is not an age indicator. The calculation of individual entries and its comparison to the sum suggest that the absence of numbers before the category geme<sub>2</sub> can be explained by the fact that the same woman is meant in both cases. The text mentions another woman, this time by her personal name. Nin-munus-zi appears elsewhere in a text recording barley allocations to female personnel of the categories nu-gig, geme<sub>2</sub>-kar-kid, etc.<sup>130</sup> These individuals belonged to the office of the "chief lamentation priest" (gala-mah).<sup>131</sup> The document has several important implications. First, it shows that geme<sub>2</sub> was a category of household personnel, Second, it demonstrates that geme<sub>2</sub> women were related in some way to the cultic personnel.

A Fara legal document A 33676 edited by Giuseppe Visicato and Aage Westenholz (2000) has geme<sub>2</sub>-en among the individuals. Contra the editors and *FTP*: 121 + fn. 36, this is not a professional title but, most likely, a personal name. For the name Geme<sub>2</sub>-en in Sargonic Nippur, see *OSP* 2 no. 81 obv. 7.

### 6.5. (The Absence of) Children and the Elderly

References to children in the extant ED IIIa texts are rare. Although the term dumu appears regularly, it is used as the kin term "son, daughter" and not as an age category of minors.<sup>132</sup> Another common meaning of dumu in administrative records is "a member of an organization". E.g. dumu-dumu in the Fara archive refers to personnel and dependents of the city's central households.<sup>133</sup> Dumu "child; son" of the grain account *IAS* 531 from Abu Salabikh<sup>134</sup> may be interpreted in the same way. Four sections of *IAS* 531 have an identical structure:

would be a singular evidence for the term in the Fara administrative corpus. Nevertheless, the terms for special precincts for females are found in all parts of the  $3^{rd}$  mill. "cuneiform world": see Sallaberger 2004b: 46 for the evidence from Ebla and Nabada with further references. Ignace Gelb suggested that an institution E<sub>2</sub>.GEME<sub>2</sub> in the textual evidence from Ešnunna was a cloister for women (Gelb 1972: 3–4). Steinkeller discussed legal texts of Sargonic date where only women occur and suggested the existence of "some sort of a religious or professional association, whose membership was restricted to women" (Steinkeller 1982: 367). See also Bartash 2014 for a recent discussion of the evidence of "women's quarters" in Southern Mesopotamia.

<sup>&</sup>lt;sup>129</sup> See Pomponio / Visicato 1994: 179. See Molina 2014 no. 285 for this use of libir "old" vs. gibil "new" in Sargonic texts.

<sup>&</sup>lt;sup>130</sup> See WF 74 rev. vii. See Pomponio / Visicato 1994: 29 and 32 on these categories.

<sup>&</sup>lt;sup>131</sup> See Visicato 1995: 91.

<sup>&</sup>lt;sup>132</sup> See WF 108 obv. ii 3 for a probable reference to dumu-munus "daughter".

<sup>&</sup>lt;sup>133</sup> See Pomponio / Visicato 1994: 6 and *passim* and Visicato 1995: 7 ff.

<sup>&</sup>lt;sup>134</sup> See Postgate / Biggs 1978: 110, 114 and plate XVIII for the publication and edition.

Section 1	Section 2	Section 3	Section 4	Interpretation
	10 ERIM (3 sila <sub>3</sub> ) ???			
	15 gur barley:			
12 dumu	9 dumu	11 dumu	13 dumu	N children, sons
7 lu <sub>2</sub> -ALIM	6 lu <sub>2</sub> -ALIM	8 lu <sub>2</sub> -ALIM	6 <lu<sub>2&gt;-ALIM</lu<sub>	N people
2 geme <sub>2</sub>	n+1 geme <sub>2</sub>	1 geme <sub>2</sub>	2 geme <sub>2</sub>	N women
<sup>r</sup> e <sub>2</sub> <sup>?</sup> <sup>1</sup> [x]- <sup>r</sup> LUM <sup>1</sup>	e <sub>2</sub> Bi <sub>2</sub> -bi <sub>2</sub> -um	$[e_2^?]$ A-la-lum	(blank)	The "house" of PN

The main challenge is to interpret the first two lines that have identical numbers. 10 ERIM under certain circumstances can mean "10 working troops" or "10 plough-teams" (ERIM = eren<sub>2</sub> or sur<sub>x</sub>). 15 gur of barley refers most probably to the amount to be sown or collected by each of the four groups of laborers. Each section but one ends with the name of a responsible person and a term "house(hold)". Visicato identifies Bibi'um in other texts and understands e<sub>2</sub> as "an administrative center".<sup>136</sup> If this is valid, the individuals represented by three terms and numbers are dependents of the respective households.

Three categories of personnel that are recorded in the text are dumu, literally "children, sons", lu<sub>2</sub>-ALIM (meaning uncertain), and geme<sub>2</sub> "women". The number of individuals in each group is almost identical in all four sections. This is hardly accidental and may imply that each group must represent approximately the same labor capacity. The number of "children" is always larger than that of lu<sub>2</sub>-ALIM whereas the number of female workers is always the lowest. "Children" cannot be an age class since as such they never precede adults in 3<sup>rd</sup> millennium BC accounts. Therefore, all three terms, dumu, lu<sub>2</sub>-ALIM and geme<sub>2</sub> represent categories of workers.

No references to the elderly have been identified so far in the ED IIIa administrative records. The term bur-šu-ma "senior", which appears in the Fara evidence, denotes a high office.<sup>137</sup>

### 7. Concluding Remarks

In this overview of the earliest cuneiform administrative texts, I aimed to compile the evidence on terms used to describe human resources in general, and workers in particular, in the earliest periods of Mesopotamian history. Another objective was to see how these terms were related. Finally, I tried to identify the strategies and concepts of accounting standing behind these relationships.

The data on the topic of terminology of low ranking laborers are often meager and fragmentary in the reviewed historical periods. The documents, even if accessible and well preserved, are frequently insufficiently intelligible. Owing to this, the analyses and interpretations presented here should be regarded as preliminary.

<sup>&</sup>lt;sup>135</sup> As mentioned by the editors of the text, the notation "3 sila<sub>3</sub>" was added after the document had been finished (Postgate / Biggs 1978: 110).

<sup>136</sup> Visicato 2000: 51.

 $<sup>^{137}</sup>$  See Pomponio / Visicato 1994: 179 fn. 58 and *WF* 100 rev. iv 3. Visicato suggests that the individual in question was a person referred to as a scribe in other texts and was "the elder (among the scribes)" (Visicato 2000: 45, 49).

To start with, the terminology of laborers in the Late Uruk and the Early Dynastic periods exhibit considerable variability. Owing to the scarcity of texts dating to the ED I–II period, it is difficult to see how the terminology gradually developed. The only example of such development is represented by the discussion on the origins of the graphemes for slaves (GEME<sub>2</sub> and ARAD<sub>2</sub>). The reconstruction shows how scribes created new graphemes in order to adjust the writing to their administrative and legal needs.

The main characteristic of the terminology for laborers in the 3350–2500 BC is their close ties to notions of age and gender. The reason that household dependents were described along the same lines as animals is undoubtedly their low social and, probably, legal rank. There was no need to provide skilled artisans, priests or officials with additional age and gender qualifiers in order to show what kind of labor they could perform. We find no evidence of a "male chief household manager" or an "old carpenter". In contrast, low ranking laborers and slaves were defined in terms of age and sex. These two biological characteristics were the way by which ancient scribes and bureaucrats evaluated their labor capacity. A large number of unskilled laborers alongside a considerably lower number of skilled workers in administrative accounts shows the importance of unskilled labor in early Mesopotamia. This was administered by skilled workers and officials.

Each period affords patterns or models in which terms are organized. For example, the Late Uruk accounts employed two different models to classify humans. One describes humans in terms of gender and age, while the other consists of age only. Similarly, the evidence from the Early Dynastic period shows the gender-based pairs of terms such as male and female slaves (arad<sub>2</sub>, geme<sub>2</sub>) and men and women (ĝuruš, munus). The discussion of male and female workers (ĝuruš, geme<sub>2</sub>) during the ED IIIa period brings one to the conclusion that, contrary to the evidence of later periods, these two terms and social roles were not corresponding and no decisive evidence produces the pair ĝuruš vs. geme<sub>2</sub>.

Although the terminology of low ranking humans originates in the Uruk IV terminology to describe the sex and age of animals, subsequent periods attest to a gradual departure from this accounting strategy. Still, human laborers have never ceased being described in terms of age and gender. For example, the innovative terms of the Early Dynastic period ĝuruš and geme2 "young man/woman" describe simultaneously both the gender *and* the age of humans. Besides marking a person's gender, they also articulate clearly that the person in question is exploitable because they are old enough to work while not being elderly.

Children and the elderly were recorded only rarely in the early accounts. This may have been due to their insignificance as a labor force in the central house-holds or, more likely, due to the factors which are not evident in textual sources.

All terms discussed in the present contribution may be divided into several groups:

- a) Gender- and age-neutral terms such as SAG (Late Uruk), lu<sup>2</sup> "person", saĝ "head; slave". Their relationship to labor is hard to trace.
- b) Terms simultaneously offering information on one's gender and age. They

are, for example, Late Uruk munus(SAL) and nita<sub>x</sub>(KUR) and Early Dynastic ĝuruš and geme<sub>2</sub>. These terms refer to adults only, implying age.

- c) Terms describing age groups such as mah<sub>2</sub>(AL) "adult", dumu "child", ŠA<sub>3</sub> "baby", ŠU "elderly" (?) etc. in the Late Uruk period. The terms for children in the Early Dynastic IIIa corpus are rare whereas those of the elderly have not been identified, although the term šu-gi<sub>(4)</sub> "elderly" regularly appearing in later texts is expected.
- d) Terms and graphemes conveying the legal status of slavery such as arad<sub>2</sub>. In most cases, it is virtually impossible to establish the legal status of the individuals in question. We do not know, for example, who were the "females" and "males" (SAL, KUR) of the Late Uruk accounts: slaves, semi-free dependents, free individuals?
- e) Additional qualifiers pertaining to the organization of labor: ERIM, URUDU, DUB, etc. (Late Uruk), -gub, -si, etc. (Early Dynastic).

Finally, the example of niĝir "herald" in charge of workers shows the continuity in the organization of labor in central households. As in later periods, it seems that the majority of laborers were legally free and participated in corvée labor for central households' or in the service of the city. Aside from these resources, central households exploited the labor of a class of individuals without their own means of production, who stood under the aegis of these institutions. Slaves, being relatively rare, were the least represented group among laborers in the earliest historical periods of ancient southern Mesopotamia.

### Figures

	Male	Female
Adults (and the elderly?)	nita <sub>x</sub> (KUR)	munus(SAL)
Children (and babies ?)	$N_8$ (linguistic realization uncertain)	

Figure 1: Terms of humans in Uruk IV accounts.

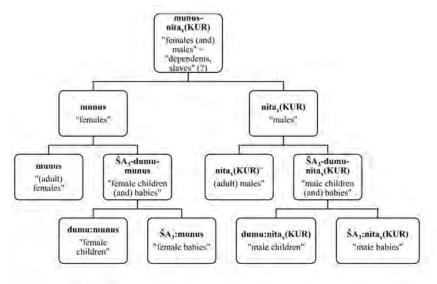


Figure 2: Terms of the first group, Uruk III (ca. 3100 BC) (following Bartash 2015a).

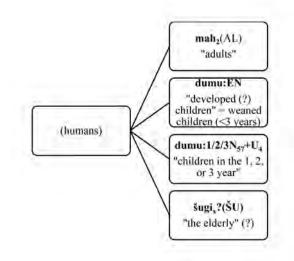


Figure 3: Terms of the second group, Uruk III (ca. 3100 BC) (following Bartash 2015a).

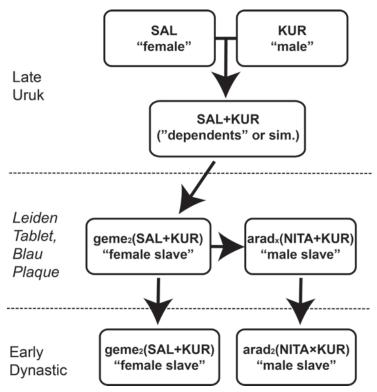


Figure 4: the Origins of the signs GEME<sub>2</sub> and ARAD<sub>2</sub>.

### Abbreviations

ACTPC	MONACO, S. F., 2016: Archaic Cuneiform Tablets From Private
	Collections, Cornell University Studies in Assyriology and Su-
	merology 31, Bethesda, Maryland: CDL Press.
ATU 5	ENGLUND, R. K., 1994: Archaic Administrative Documents from
	Uruk: The Early Campaigns, Archaische Texte aus Uruk 5, Berlin:
	Gebr. Mann.
ATU 6	ENGLUND, R. K. / NISSEN, H. J., 2005: Archaische Verwal-
	tungstexte aus Uruk: Vorderasiatisches Museum II, Archaische
	Texte aus Uruk 6, Berlin: Gebr. Mann.
BPOA 1	OZAKI, T. / SIGRIST, M., 2006: Ur III Administrative Tablets
	from the British Museum, Part One, Biblioteca del Próximo Ori-
	ente Antiguo 1, Madrid: CSIC.
CAD	OPPENHEIM, A. L. / REINER, E. (eds.), 1956-2010: The Assyri-
	an Dictionary of the University of Chicago, Chicago: The Universi-
	ty of Chicago Press.
CDLI	ENGLUND, R. K. (director), Cuneiform Digital Library Initiative
	(http://cdli.ucla.edu; accessed August 1, 2015).
CT 50	SOLLBERGER, E., 1972: Cuneiform Texts from Babylonian Tab-
	lets in the British Museum. Part L. Pre-Sargonic and Sargonic
	Economic Texts, London: The British Museum.

- CUSAS 1 MONACO, S. F., 2007: *The Cornell University Archaic Tablets*, Cornell University Studies in Assyriology and Sumerology 1, Bethesda, Maryland: CDL Press.
- CUSAS 11 VISICATO, G. / WESTENHOLZ, A., 2010: *Early Dynastic Tablets from Adab in the Cornell University Collections*, Cornell University Studies in Assyriology and Sumerology 11, Bethesda, Maryland: CDL Press.
- CUSAS 23 BARTASH, V., 2013: *Miscellaneous Early Dynastic and Sargonic Texts in the Cornell University Collections*, Cornell University Studies in Assyriology and Sumerology 23, Bethesda, Maryland: CDL Press.
- DCCLT VELDHUIS, N. (director), *Digital Corpus of Cuneiform Lexical Texts* (http://oracc.museum.upenn.edu/dcclt/pager, accessed August 1, 2015)
- ELTS GELB, I. J. / STEINKELLER, P. / WHITING, R., 1991: *Earliest land tenure systems in the Near East: Ancient Kudurrus*, Oriental Institute Publications 104, Chicago: The Oriental Institute of the University of Chicago.
- FTP MARTIN, H. / POMPONIO, F. / VISICATO, G. / WEST-ENHOLZ, Aa., 2001: The Fara Tablets in the University of Pennsylavia Museum of Archaeology and Anthropology, Bethesda, Maryland: CDL Press.
- MEE 4 PETTINATO, G., 1982: *Materiali Epigrafici di Ebla 4: Testi Lessicali Bilingui della Biblioteca L. 2769*, Napoli: Istituto Universitario Orientale.
- MSL 12 CIVIL, M., 1969: *The Series*  $lu_2 = ša$  and *Related Texts*, Materials for the Sumerian Lexicon 12, Rome: Pontificium Institutum Biblicum.
- MSVO 1 ENGLUND, R. K. / GREGOIRE, J.-P., 1991: *The Proto-Cunei-form Texts from Jemdet Nasr, I: Copies, Transliterations and Sign Glossary*, Materialien zu den frühen Schriftzeugnissen des Vorderen Orients 1, Berlin: Gebr. Mann.
- MSVO 3 ENGLUND, R. K. / DAMEROW, P. *Materialien zu den frühen Schriftzeugnissen des Vorderen Orients 3* [unpublished; available via CDLI: http://cdli.ucla.edu, accessed August 1, 2015].
- MSVO 4 ENGLUND, R. K., 1996: *Proto-Cuneiform Texts from Diverse Collections*, Materialien zu den frühen Schriftzeugnissen des Vorderen Orients IV, Berlin: Gebr. Mann.
- OIP 99 BIGGS, R. D., 1974: *Inscriptions from Tell Abū Şalābīkh*, The University of Chicago Oriental Institute publications 99, Chicago: The Oriental Institute of the University of Chicago.
- OSP 2 WESTENHOLZ, Aa., 1987: Old Sumerian and Old Akkadian Texts in Philadelphia. Part Two: The "Akkadian" Texts, the Enlilemaba Archive, and the Onion Archive, Copenhagen: Museum Tusculanum Press.
- REC THUREAU-DANGIN, F., 1898: *Recherches sur l'origine de l'écriture cunéiforme*, Paris: E. Leroux.

- SF DEIMEL, A., 1923: *Die Inschriften von Fara. 2. Schultexte aus Fara*, Wissenschaftliche Veröffentlichung der Deutschen Orient-Gesellschaft 43, Leipzig: J. C. Hinrichs.
- TSŠ JESTIN, R., 1937: *Tablettes sumériennes de Šuruppak conservées au Musée de Stamboul*, Paris: E. de Boccard.
- UET 2 BURROWS, E., 1935: *Ur Excavation Texts II. Archaic Texts*, Philadelphia: The British Museum and University Pennsylvania Press.
- WF DEIMEL, A., 1924: *Wirtschaftstexte aus Fara*, Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft 45, Leipzig: J. C. Hinrichs.
- ZATU GREEN, M. W. / NISSEN H. J., 1987: Zeichenliste der archaischen Texte aus Uruk, Archaische Texte aus Uruk 2, Berlin: Gebr. Mann.

### Bibliography

- BARTASH, V., 2014: "E<sub>2</sub>-mi<sub>2</sub> 'Women's Quarters': the Earliest Written Evidence", in F. Buccellati / T. Helms / A. Tamm (eds.), Household and Household Economies in 3<sup>rd</sup> Millennium B.C. Syro-Mesopotamia, BAR International Series 2682, Oxford: Oxbow Books, pp. 9–20.
- 2015a: "Children in Institutional Households of Late Uruk Period Mesopotamia", Zeitschrift f
  ür Assyriologie und vorderasiatische Arch
  äologie, 105, 2, pp. 131–138.
- 2015b: "New Texts From The Early Dynastic I–II Period", *Rivista degli Studi Orientali*, 88, pp. 103–111.
- BENATI, G., 2015: "Re-modeling Political Economy in Early 3<sup>rd</sup> Millennium BC Mesopotamia: Patterns of Socio-Economic Organization in Archaic Ur (Tell al-Muqayyar, Iraq)", *Cuneiform Digital Library Journal*, 2015/2, pp. 1–37.

(http://www.cdli.ucla.edu/pubs/cdlj/2015/cdlj2015\_002.html, accessed August 1, 2015)

- CAVIGNEAUX, A., 1991: "Die Inschriften der XXXII/XXXIII. Kampagne", Baghdader Mitteilungen, 22, pp. 33–163.
- CHARVAT, P., 2012: "Fortitudo, justitia, prudentia, temperantia: The Sign NITA/UŠ in Proto-Cuneiform Writing", in H. Baker / K. Kaniuth / A. Otto (eds.), Stories of long ago. Festschrift für Michael D. Roaf. Alter Orient und Altes Testament 397, Münster: Ugarit-Verlag, pp. 57–68.
- CIVIL, M., 2013: "Remarks on AD-GI<sub>4</sub> (a.k.a. "Archaic Work List C" or "Tribute")", *Journal of Cuneiform Studies*, 65, pp. 13–67.
- ENGLUND, R. K., 1988: "Administrative Timekeeping in Ancient Mesopotamia", *Journal of the Economic and Social History of the Orient*, 31, pp. 121–185.
- 1998: "Texts from the Late Uruk Period", in J. Bauer / R. K. Englund / M. Krebernik (eds.), *Mesopotamien. Späturuk-Zeit und Frühdynastische Zeit,* Orbis Biblicus et Orientalis 160/1, Göttingen: Vandenhoeck & Ruprecht, pp. 15–233.
- 2009: "The Smell of the Cage", *Cuneiform Digital Library Journal* 2004/9, pp. 1–27.

(http://cdli.ucla.edu/pubs/cdlj/2009/cdlj2009\_004.pdf, accessed August 1, 2015)

- 2012: "Versilberte Arbeit. Äquivalenzenfeststellung in der Ur-III-Zeit", in H. Neumann (ed.), Wissenskultur im Alten Orient. Weltanschauung, Wissenschaften, Techniken, Technologien. 4. Internationales Colloquium der Deutschen Orient-Gesellschaft 20.-22. Februar 2002 Münster, Wiesbaden: Harrassowitz, pp. 121–152.
- FRIBERG, J., 1997–1998: "Round and Almost Round Numbers in Proto-Literate Metro-Mathematical Field Texts", Archiv für Orientforschung, 44/45, pp. 1–58.
- FOSTER, B. R., 2015: "Akkadian Economics", *Rivista di Storia Economica*, 31, 1, pp. 7–23.
- GELB, I. J., 1972: "The Arua Institution", *Revue d'Assyriologie et d'Archéologie* Orientale, 66, pp. 1–32.
- JOHNSON, J. C., 2015: "Late Uruk Bicameral Orthographies and Their Early Dynastic Rezeptionsgeschichte", in R. Dittmann / G. J. Selz (eds.), *It's a Long Way to a Historiography of the Early Dynastic Period(s)*. Altertumskunde des Vorderen Orients 15, Münster: Ugarit-Verlag, pp. 169– 210.
- KREBERNIK, M., 1998: "Die Texte aus F\u00e5ra und Tell Ab\u00fc \u00e5al\u00e5b\u00e5h", in J. Bauer / R. K. Englund / M. Krebernik (eds.), *Mesopotamien. Sp\u00e5turuk-Zeit und Fr\u00fchdynastische Zeit*, Orbis Biblicus et Orientalis 160/1, G\u00f6ttingen: Vandenhoeck & Ruprecht, pp. 237–430.
- 2013: "Die frühe Keilschrift und ihr Verhältnis zur Sprache", in N. Crüsemann / M. v. Ess / M. Hilgert / B. Salje (eds.), Uruk: 5000 Jahre Megacity, Petersberg: Imhof, pp. 187–193.
- KRECHER, J., 1987: "/Ur/ 'Mann', /eme/ 'Frau' und die sumerische Herkunft des Wortes urdu(-d) 'Sklave'", *Die Welt des Orients*, 18, pp. 7–19.
- LECOMPTE, C., 2013: Archaic Tablets and Fragments from Ur (ATFU) from L. Woolley's Excavations at the Royal Cemetery, Nisaba, Studi Assiriologici Messinesi (NSAM) 25, Messina: DiCAM.
- MARCHESI, G., 2004: "Who Was Buried in the Royal Tombs of Ur? The Epigraphic and Textual Data", *Orientalia Nova Series*, 73, 2, pp. 153–197.
- MICHALOWSKI, P., 1993: "On the Early Toponymy of Sumer: A Contribution to the Study of Early Mesopotamian Writing", in A. F Rainey (ed.), *Kinattūtu ša dārâti: Raphael Kutscher Memorial Volume*, Tel Aviv: Tel Aviv University Press, 119–133.
- MITTERMAYER, C., 2006: *Altbabylonische Zeichenliste der sumerisch-literarischen Texte*, Orbis Biblicus et Orientalis Sonderband, Fribourg / Göttingen: Academic Press / Vandenhoeck & Ruprecht.
- MOLINA, M., 2011: "Sklave, Sklaverei (slave, slavery). A. Im 3. Jahrtausend", *Reallexikon der Assyriologie und Vorderasiatischen Archäologie*, 12, 7/8, pp. 562–564.
- 2014: Sargonic Cuneiform Tablets in the Real Academia de la Historia. The Carl L. Lippmann Collection. Catálogo del Gabinete de Antigüedades, Madrid: Real Academia de la Historia and Ministerio de Cultura de la República de Iraq.

- MONACO, S. F., 2012: "Loan and Interest in the Archaic Texts", Zeitschrift für Assyriologie und vorderasiatische Archäologie, 102, pp. 165–178.
  - 2014: "Proto-Cuneiform and Sumerians", *Rivista degli Studi Orientali*, 87, pp. 277–282.
- POMPONIO, F. / VISICATO, G., 1994: *Early Dynastic Administrative Tablets* of *Šuruppak*, Napoli: Istituto Universitario Orientale.
- POSTGATE, J. N. / BIGGS, R. D., 1978: "Inscriptions from Abu Salabikh, 1975", Iraq, 40, pp. 101–118.
- SALLABERGER, W., 2004a: "Palast A. I. Mesopotamien im III. Jahrtausend", *Reallexikon der Assyriologie und Vorderasiatischen Archäologie*, 10, 3/4, pp. 200–204.
  - 2004b: "Women at Beydar", in L. Milano / W. Sallaberger (eds.), *Third Millennium Cuneiform Texts from Tell Beydar (Seasons 1996–2002)*.
     Subartu XII, Turnhout: Brepols, pp. 43–49.
- SALLABERGER, W. / SCHRAKAMP, I., 2015: "Philological Data for a Chronology of Mesopotamia in the 3<sup>rd</sup> Millennium", in W. Sallaberger / I. Schrakamp (eds.), Associated Regional Chronologies for the Ancient Near East and the Eastern Mediterranean 3. History & Philology, Turnhout: Brepols, pp. 1–136.
- SELZ, G. J., 2011: "Zu einer frühdynastischen Bezeichnung von 'Unfreien': Ur(a)du(-d), eine Bemerkung zum 'Hausgeborenen Sklaven'", Nouvelles Assyriologiques Brèves et Utilitaires, pp. 83–85.
- SNELL, D. C., 1987: "The Ur III Tablets in the Emory University Museum", *Acta Sumerologica*, 9, pp. 203–275.
- STEINKELLER, P., 1982: "Two Sargonic Sale Documents concerning Women", Orientalia Nova Series, 51, pp. 355–368.
- 1990: "The Value sur<sub>x</sub> of EREN<sub>2</sub> in Third Millennium Sources", *NABU* 1990/1, pp. 9–10.
- 1995: "Review of GREEN, M. W. & NISSEN H. J. (1987), Zeichenliste der archaischen Texte aus Uruk. Archaische Texte aus Uruk 2, Gebr. Mann, Berlin", Bibliotheca Orientalis, 52, 5/6, pp. 689–713.
- 2013: "An Archaic Prisoner 'Plaque' From Kiš", *Revue d'Assyriologie et d'Archéologie Orientale*, 107, pp. 131–157.
- 2015a: "Labor in the Early States: An Early Mesopotamian Perspective", in P. Steinkeller / M. Hudson (eds.), *Labor in the Ancient World*, The International Scholars Conference on Ancient Near Eastern Economics 5, Dresden: Islet, pp. 1–35.
- 2015b: "The Employment of Labor in National Building Projects in the Ur III Period", in P. Steinkeller / M. Hudson (eds.), *Labor in the Ancient World*, The International Scholars Conference on Ancient Near Eastern Economics 5, Dresden: Islet, pp. 137–236.
- VAIMAN, A. A., 1974a: "The Designation of Male and Female Slaves in the Proto-Sumerian Writing System" [in Russian], *Vestnik Drevnej Istorii*, 1974/2, pp. 138–148.
- 1974b: "Über die protosumerische Schrift", *Acta Antiqua*, 22, pp. 15–27.
- 1989: "Die Bezeichnung von Sklaven und Sklavinen in der protosumerischer Schrift", *Baghdader Mitteilungen*, 20, pp. 121–133.

- VELDHUIS, N., 2014: *History of the Cuneiform Lexical Tradition*, Guides to the Mesopotamian Textual Record 6, Münster: Ugarit-Verlag.
- VISICATO, G., 1995: *The Bureaucracy of Šuruppak*. Abhandlungen zur Literatur Alt-Syrien-Palästinas und Mesopotamiens 10, Münster: Ugarit-Verlag.
  - 2000: *The Power and the Writing. The Early Scribes in Mesopotamia*, Bethesda, Maryland: CDL Press.
- VISICATO, G. / WESTENHOLZ, A., 2000: "Some Unpublished Sale Contracts from Fara", in S. Graziani (ed.), *Studi sul Vicino Oriente antico dedicati alla memoria di Luigi Cagni vol. 1*, IUO Series Minor 61, Napoli: Istituto Universitario Orientale, pp. 1107–1133.
- WOODS, C., 2008: *The Grammar of Perspective: The Sumerian Conjugation Prefixes as a System of Voice*, Cuneiform Monographs 31, Leiden / Boston: Brill.
- WILCKE, C., 2012: Early Ancient Near Eastern Law. A History of Its Beginnings: The Early Dynastic and Sargonic Periods, 2<sup>nd</sup> edition, Winona Lake: Eisenbrauns.