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REMARKABLE NEW CONTRIBUTIONS to our understanding of Ur III social history are found in the publication of the Garshana archives in CUSAS 3-4, co-edited by the honoree of this volume and by his close associates Rudolf H. Mayr and Alexandra Kleinerman in 2007. Wolfgang Heimpel (2009) has recently published the first of two planned commentary volumes dealing with the new Garshana material (cf. CUSAS 3, v-vi). His CUSAS 5 is a sovereign, if on occasion overly ambitious discussion of the records of labor management at Garshana, in which the author reviews, above all, the documentation of brick construction work at this Umma province outpost. There is much in this and other discussions of the Garshana archives that harkens back to the initial reaction to the discovery of a major archive of administrative and scholarly tablets at Tell Mardikh, ancient Ebla, by Italian excavators in the 1970s. Subsequent philological research and publications of those documents have radically changed our view of ancient Syria, and the texts from Garshana may well assume a similar role in ongoing debates about the organization of the Ur III empire, with specific focus on the development of potential labor markets within a highly centralized economy, and on the role of women among these laborers. These are big topics and deserving of the attention given them in recent publications, including a very welcome review of slavery based on the Garshana evidence by Bob Adams (2010). At the same time, the discussions of Garshana made possible by Owen's work are leading to matters, though of a less-encompassing nature, still of philological and technical interest to Ur III specialists. One such lingering issue came to my attention with Heimpel's translation of the term ĝuruš má gíd as "unskilled slaves, boat towers," 1 which resulted in a friendly email correspondence on the meaning of gid—not of guruš!—, and our communication serves as a gateway to a short discussion here of the cuneiform sign BU and its various readings, including Sumerian gid, about whose conventional interpretation of "to tow" when found in translations of Ur III barge accounts I would like to raise some concerns. I dedicate this note in friendship and respect to David Owen, whose enthusiastic participation in the CDLI and whose unstinting insistence on open access to the world's collections of cuneiform artifacts, both large and small, public and private, has deepened our contact in past years. David has dedicated much of his academic career to the often selfless publication of primary resources, as author, editor, and now curator, and has fought to ensure that all texts, published and unpublished, reach the broadest possible set of users. This latter effort deserves the field's particular gratitude.

I was reminded of the wrath that can be visited upon the Assyriologist who takes lightly the task of translating some Sumerian term according to established philological practice (Powell 1978), for instance one interested in the semantic field associated with the sign BU, when many years ago for another publication (Englund 1990: 75, 132) I first attempted to understand the word gid in texts describing the movement of water craft. As

Heimpel 2009: 7, and see pp. 45, 63-64.

we know, boat, or rather certainly barge movement in the waterways of ancient Mesopotamia, was described in the Ur III documents as either diri (=SI.A) or gíd (=BU) by most accounts dependent on whether the vessel was headed downstream or upstream, respectively. Steinkeller (2001) exploited this opposition in a strong contribution to the riverine geography of late-thirdmillennium Mesopotamia, employing a standard format n₁ ĝuruš u₄ n₂-šè / GN₁-ta / GN₂-šè / má še (ku₆, ĝeš, etc.) gíd-da, "n₁ workmen for a period of n₂ days, from GN₁ to GN₂ did gid a boat loaded with barley (fish, lumber, etc.)." Scribes registered cargo boat traffic from one settlement to another, generally indicating with the sign gid that GN₂ is upstream and thus as a rule to the northwest of GN₁. Longer itineraries of such traffic that record several towns on a gid-string can be used to generate and triangulate multiple sites that must have been connected by waterways. The same calculations apply to any movement qualified with diri and, again generally, indicat-

má diri-ga

ing movement downstream. Since the records often give the explicit number of workdays required to accomplish gid or diri movement between named towns, it is easy to imagine the power of a full analysis of such texts in establishing a credible, if still floating network of alluvial settlements that can then be mapped against physical topographies. With these and other cargo texts, there has never been any particular controversy about Sumerologists' translation of "to tow" for gid. Quite aside from the lexical evidence, we need simply imagine a crew of strong workmen with strong ropes (Sumerian éš) attached to a barge and wrapped round their shoulders, marching on one or both dikes of an alluvial canal. An excellent overview of the bookkeeping format employed to record such activity is offered, for instance, with the exacting parallels of the Ur III texts SNAT 459 (A), UTI 5, 3455 (B), UTI 4, 2896 (C) (receipts of three different foremen) and TCL 5, 5676 (D) rev. iv 11-21 (the account into which the receipts were logged).

A obv. 1 B obv. 1–2 C obv. 1–2a D rev. iv 11–12a	$ \begin{array}{l} \left[1-2(\mathrm{di}\check{s})\ \hat{\mathrm{g}}\mathrm{uru}\check{\mathrm{s}}\ \mathrm{u}_{4}\right] \ 4(\mathrm{di}\check{s})-\check{s}\grave{\mathrm{e}}\ \left[\mathrm{kar}\right.\\ \left.\mathrm{umma}\right]^{'ki'}-\mathrm{ta} \\ 1(\mathrm{di}\check{s})\ \hat{\mathrm{g}}\mathrm{uru}\check{\mathrm{s}}\ \mathrm{u}_{4}\ 4(\mathrm{di}\check{s})-\check{s}\grave{\mathrm{e}}\ \mathrm{kar}\ \mathrm{umma}^{\mathrm{ki}}-\mathrm{ta} \\ \left[1-2(\mathrm{di}\check{s})\right]\ \hat{\mathrm{g}}\mathrm{uru}\check{\mathrm{s}}\ \mathrm{u}_{4}\ 4(\mathrm{di}\check{s})-\check{s}\grave{\mathrm{e}}\ \mathrm{kar}\ \mathrm{umma}^{\mathrm{ki}}-\mathrm{ta} \\ 4(\mathrm{di}\check{s})\ \hat{\mathrm{g}}\mathrm{uru}\check{\mathrm{s}}\ \mathrm{u}_{4}\ 4(\mathrm{di}\check{s})-\check{s}\grave{\mathrm{e}}\ \mathrm{kar}-\mathrm{umma}^{\mathrm{ki}}-\mathrm{ta} \end{array} $	(Together) 4 workmen, 4 workdays, from Umma-harbor
A obv. 2 B obv. 3–4	'iri'-[sa $_{12}$]-rig $_7$ 'ii'-sè má gíd-da iri-sa $_{12}$ -rig $_x$ (PA.MUNUS.ḤÚB.DU) ki -sè / má gíd-da	"towed" boat to Irisarig;
C obv. 2b	iri-sa ₁₂ -rig _x (PA.MUNUS.ḤÚB.DU) ^{ki} -šè má gíd-da	
D rev. iv 12b	iri-sa ₁₂ -rig ₇ ^{ki} -šè má gíd-da	
A obv. 3	$[u_4]$ 1(diš)-šè še bala-a ù še má-a si-ga	1 workday, (in Irisarig) barley (transferred and) loaded in boat;
B obv. 5 C obv. 3 D rev. iv 13	$egin{aligned} &\mathbf{u_4}\ 1(\mathrm{di}\ddot{\mathbf{s}})\mbox{-}\ddot{\mathbf{s}}\dot{\mathbf{e}}\ \ddot{\mathbf{s}}\mathbf{e}\ \mbox{má-a si-ga} \\ &\mathbf{u_4}\ 1(\mathrm{di}\ddot{\mathbf{s}})\mbox{-}\ddot{\mathbf{s}}\dot{\mathbf{e}}\ \ddot{\mathbf{s}}\mathbf{e}\ \mbox{má-a si-ga} \\ &\mathbf{u_4}\ 1(\mathrm{di}\ddot{\mathbf{s}})\mbox{-}\ddot{\mathbf{s}}\dot{\mathbf{e}}\ \ddot{\mathbf{i}}\mathbf{ri}\mbox{-}\mathbf{s}\mathbf{a}_{12}\mbox{-}\mathbf{ri}\mathbf{g}_7^{\ ki}\mbox{-}\mathbf{g}\mathbf{a}\ \ddot{\mathbf{s}}\mathbf{e}\ \mbox{má-a si-ga} \end{aligned}$	
A obv. 4 B obv. 6 C obv. 4 D rev. iv 14a	$^{\text{r}}$ iri $^{\text{l}}$ -sa $_{12}$ -rig $_{7}^{\text{ki}}$ -ta iri-sa $_{12}$ -rig $_{x}$ (PA.MUNUS.ḤÚB.DU) $^{\text{ki}}$ -ta iri-sa $_{12}$ -rig $_{x}$ (PA.MUNUS.ḤÚB.DU) $^{\text{ki}}$ -ta u $_{4}$ 2(diš)!?-šè iri-sa $_{12}$ -rig $_{7}^{\text{ki}}$ -ta	from Irisarig
A obv. 5	'u ₄ ' 2(diš)-šè kun-zi-da ^{ĝeš} kiri ₆ -ĝeštin-šè má gíd-da	2 workdays to reservoir of Grape-orchard boat (D: to Uriru) "towed" (var. "floated");
B obv. 7–8	u ₄ 2(diš)-šè kun-zi-da / ^{ĝeš} kiri ₆ -ĝeštin-šè	

C obv. 5	u ₄ 2(diš)-šè kun-zi-da ^{ĝeš} kiri ₆ ĝeštin-šè má gíd-da	
D rev. iv 14b	uri ₃ -rú-a-aš má diri-ga	
A obv. 6 A obv. 7	${ m u_4~1(diš)}$ -šè é-dur ${ m u_5~uri_3}$ -rú-a-ka še bala-a ${ m u_4~7(diš)}$ -šè é-dur ${ m u_5~uri}$ -rú-a-ta kun-zi-da ${ m i_7~^d}$ amar- ${ m ^d}$ suen-ni-tum-šè	8 workdays (in Uriru-village barley transferred and) from Uriru-village to the reservoir of Amar-Suennitum canal
B obv. 9–10a	u ₄ 8(diš)-šè é-duru ₅ ùri-rú-a-ta / kun-zi-da i ₇ ^d amar- ^d suen-ni-tum-šè	
C obv. 6–7a	u ₄ '8(diš)'?-šè é-duru ₅ ùri-a še bala-a / 'kun-zi'-da i ₇ ^d amar- ^[d] rsuen'-ni-tum-šè	
D rev. iv 15–16a	u_4 1(diš)-šè še bala-a u_4 7(diš)!?-šè	
A rev. 1 B obv. 10b C obv. 7b D rev. iv 16b	še ga ₆ -ĝá še ga ₆ -ĝá še ga ₆ -ĝá še ga ₆ -ĝá	barley carried;
A rev. 2 B obv. 11 C obv. 8–9 D rev. iv 17a	kun-zi-da $i_7^{\ d}$ amar- d suen-ni-tum-ta kun-zi-da $[i_7]^{\ d}$ amar- d suen-ni-tum-ma-ta kun- r zi 1 -da $i_7^{\ /} ^d$ [amar- d] r suen 1 -ni-tum-ta $u_4^{\ 2}$ (diš)-šè kun-zi-da d amar- d suen-ni- tum-ma-ta	from reservoir of Amar-Suennitum canal
A rev. 3 B rev. 1a C rev. 1a	u_4 2(diš)-šè iri-sa ₁₂ -rig ₇ -šè u_4 2(diš)-šè iri-sa ₁₂ -rig _x (PA.MUNUS.ḤÚB.DU)? ^{ki} -šè ${}^{r}u_4$ 2(diš)-šè iri ¹ -sa ₁₂ -rig _x	2 workdays to Irisarig
D rev. iv 17b	(PA.MUNUS.ḤÚB.DU)[^{ki} -šè] iri-sa ₁₂ -rig ₇ ^{ki} -šè	
A rev. 4 B rev. 1b–2 C rev. 1b D rev. iv 17c	má gíd-da ù bala aka má gíd-da ù má bala aka 'má' gíd-da ù má bala aka má gíd-da má bala aka	boat "towed" and transferred over;
A rev. 5 B rev. 3a	u_4 2(diš)-šè iri-sa ₁₂ -rig ₇ ^{ki} -ta u_4 2(diš)-šè iri-sa ₁₂ -rig _x (PA.MUNUS.ḤÚB.DU) ^{ki} -ta	2 workdays from Irisarig
C rev. 2a	$[u_4 \ 2(di\check{s})]$ - $\check{s}\check{e}$ iri- sa_{12} - rig_x (PA.MUNUS.ḤÚB.DU) ki -ta	
D rev. iv 18a	u ₄ 2(diš)-šè iri-sa ₁₂ -rig ₇ ^{ki} -ta	
A rev. 6 B rev. 3b C rev. 2b D rev. iv 18b	ka da-mi-ma-ma-šè má gíd-da ka da-mi-ma-ma-šè má gíd-da ka da-mi-[ma]-ma-šè má gíd-da ka tab-ni-ma-ma-šè má gíd-da!?(ID)	to "mouth" of Tabnimama boat "towed";
A rev. 7 B rev. 4 C rev. 3 D rev. iv 19	u_4 2(diš)-šè umma ^{ki} -šè 'má' diri-ga!(DA) u_4 2(diš)-šè umma[^{ki} -šè] má diri-ga ' u_4 ' 2(diš)-šè umma ^{ki} -šè má diri-ga u_4 2(diš)-šè má diri-ga	2 workdays to Umma boat "floated"

A rev. 8 B rev. 5 C rev. 4 D rev. iv 20a	u_4 1(diš)-šè má ba-ral¹-[la] u_4 1(diš)-šè má ba-al-la u_4 1(diš)-šè má ba-al-la u_4 2(diš)-šè má ba-al-la	1 workday boat unloaded,
A rev. 9 B rev. 5 C rev. 5 D rev. iv 20a	u_4 1(diš)-šè še bala-[a] u_4 1(diš)-šè še bala-a u_4 1(diš)-šè še bala-[a] še bala-a	1 workday barley transferred (D: 2 workdays boat unloaded and barley transferred);
A rev. 10 B rev. 7 C rev. 6	ugula lugal-é- ^r maḫ¹-[e] ugula i ₇ -pa-è ugula ur-mes	(A-C:) foreman: PN1–3;
A rev. 11 B rev. 8 C rev. 7 D rev. iv 21	kìšib a-du-'mu' kìšib a-du-mu kìšib a-du-mu kìšib a-du-mu []	sealed (document): Adumu;
B rev. 9	iti ^d dumu-zi	month: "Dumuzi,"
A rev. 12 B rev. 10 C rev. 8 D rev. vii 6	mu má ^d en-ki ^r ba¹-[ab]-du ₈ mu má ^d en-ki ba-ab-du ₈ mu má ^d en-ki ba-ab-du ₈ mu má ^d en-ki ba-ab-du ₈	year: "Boat of Enki caulked";
D rev. vii 4–5	níĝ-ka ₉ aka / ur- ^d nin-su nu-bànda gu ₄	(D:) account of Ur-Ninsu, plow-oxen manager
A seal 1 B seal 1 C seal 1	ur- ^d [suen] ur- ^d suen ur- ^d suen	Ur-Suen,
A seal 2 B seal 2 C seal 2	dub-[sar] dub-sar dub-sar	scribe,
A seal 3 B seal 3 C seal 3	dumu ur- ^{ĝeš} gigir dumu ur- ^{ĝeš} [gigir] dumu ur- ^{ĝeš} gigir	son of Ur-gigir;
A seal 4 B seal 4 C seal 4	šà-[tam] šà-[tam] šà-tam	official (seal)

The more than 500 Ur III accounts that record workmen, workdays, and the activity of má–gíd refer to anywhere from one² to as many as 20 to 24 workmen,³ rarely more, tasked with this job. *Georgica* 7.2 records 24 workmen assisting in a two-day

gíd transport; *ITT* 3, 5102, has 30 involved in cereal transport to Girsu, and *DAS* 34 attests a group of 33 gíd-workmen bringing a barge loaded with wood to the same city, though, as with other such transport records, the crew was charged with all

HLC 3, 384 (pl. 145) obv. i 7'; BAOM 2, 30 55 obv. 1; CST 623 obv. 1.

³ ITT 3, 5176; MVN 14, 360; MVN 16, 785; SNAT 280; Syracuse 6; TÉL 8; etc.

aspects of transportation, including loading,⁴ tying up (kéš), unloading (ba-al, literally "digging"), and, in some cases, with the term bala(-ak), apparently repositioning the boat itself into an adjoining canal, lifting it past some installation in the canal, or, since often in association with ka i₇da, just hoisting the bow up and into the "mouth" of a forking canal. ⁵ The verb bala refers to crossing some natural feature and corresponds on the high seas to gíd/diri inland.⁶ Anything above these numbers will invariably refer to workdays in general (with n ĝuruš u₄ 1-šè), and the texts usually do not record the numbers or sizes of barges used in one task unless their rental fees are included. Still, we may imagine an average crew of four to ten workmen involved in the transportation of boats and cargo that can have weighed upward of 13 tons. Such numbers are neither unrealistic nor unprecedented, as records from other regions attest. While prior to the use of steam engines draft animals were the main source of propulsion for canal transportation, a team of eleven Volga barge haulers of the 1870s was captured in a wellknown oil painting housed in the Russian Museum, St. Petersburg, and visitors to Papenburg in northwest Germany bordering Ostfriesland can admire the cast bronze statue of a workman towing a peat barge (so-called "Torfmuttje" without sail) on the Splitting Canalthese workmen kept up towing paths on either side of the canals and were replaced by horses only in the 1930s (figure 1). Where towing paths, without which this form of barge propulsion would be unthinkable, have been overgrown in past decades, civic clubs in Germany are beginning to reconstitute what, as part of the general maintenance of river banks and canal dikes, were once vital elements of transportation, including paths often laid out in sandstone to fulfill the requirements of the various navigation and toll agreements that followed upon the 1815 Act of the Congress of Vienna.

But the primary argument for understanding gíd = "to tow" is philological, albeit weighted to the lexical sources gathered by and for Akkadian specialists. Sumerologists have traditionally been at a distinct disadvantage in consulting reference works to understand their texts. Once their Akkadian correspondences are known, the dictionaries Akkadisches Handwörterbuch (AHw) and The Chicago Assyrian Dictionary (CAD) have for many decades been the initial source of information for the meanings of Sumerian words, followed by Anton Deimel's still informative Šumerisches Lexikon (SL), published in four volumes from 1928– 1950 and, since 1937, the volumes of the series Materials for the Sumerian Lexicon (MSL) conceived by Benno Landsberger and continued by Miguel Civil and other faculty members of the Oriental Institute of the University of Chicago, as well as their many collaborators. These four reference works can unfortunately represent substantial hurdles for specialists, let alone for interested researchers from other disciplines. The user of the dictionaries must know their citation idiosyncrasies, for instance that AHw cites sources according to publication, whereas CAD usually cites compositions. And although both dictionaries generally give specific text references in chronological order, the often much more important chronology of the lexical attestations (above all "Listenliteratur") is missing, so that the non-specialist will simply be unable to form an overview of the lexical development of targeted lemmata. Even more catered to specialist use, SL and MSL remain crucial tools in making an initial assessment about the context of Sumerian words. The older of the two must be approached with great caution, of course, having been the result of limited access to cuneiform corpora in the early 1930s and the result of the work

⁴ Sumerian si(g) as a rule qualifies the loading of cereals and flour; gar refers to textiles, lumber, animal carcasses, etc.; and gub to livestock or humans (*BPOA* 1, 1309).

See Foxvog 1986: 66 to má bala a₅[=ak] "transferring of a boat from one watercourse to another"; Georgica 7.11 with 40! workmen may be considered atypical, since this crew is attached to what is called the má énsi, "boat of the governor."

See in the references under *PSD* B, pp. 52–53, and in the Akkadian dictionaries the similar uses of the Akkadian correspondence *ebēru*, "to cross (a waterway; S-stem: to send across)."

Assuming a common 60-gur barge weighed no more than one ton; see below.







Figure 1

Top: Barge Haulers on the Volga.

Oil on canvas. 131.5×281 cm. The Russian Museum, St. Petersburg (image under fair use in Europe and the US;).

Bottom, statues depicting the towing of a peat barge on Splitting Canal in Papenburg (from Arnold Plesse, GNU Free Documentation License, http://de,wikipedia.org/w/index.php?title=datei:Treidelschiff_papenburg.jpg&filetimestamp=20091101004054).

of an individual instead of the powerful team of scholars that produced the more recent MSL. Thus, if we peruse $\check{S}L$ II/3, no. 371 = BU, we find first "The original form of this sign could be a 'rudder'; this would offer a simple explanation for the meanings 'to remove (from),' 'to be distant or long," etc., with 109 entries over six pages deriving from both the then known record of lexical compendia, as well as from the other genres of Sumerian texts. Lexical readings and translations of BU include here, among many other entries, buu = ba-qa-mu, "to pull out, tear apart" (and // nasāḥum, "uproot," for which see Civil 1984: 293; Geller 1998: 93); sír = $gaṣ\bar{a}ṣum$ "to tear apart, cut off"; and gid = $ar\bar{a}kum$. Similarly, ŠL II/3, 373, describes the derived sign sud as "a decorated rudder," but the next sign, 374: muš, is the "head of a snake with tongue" (for which cp. LAK 232-236). Still, this is a starting point for an investigation of the meaning of Sumerian words, but no more. For the practice of Akkadian translations of Sumerian terms is fraught with the dangers of facile, often chronologically doubtful derivations due to the fact that the lexicon of Akkadian will not be a perfect match with that of Sumerian; that the Semitic etymologies of Akkadian words are still debated; and that meanings of words in both Akkadian and Sumerian change in time. We may compare many non-specialist translations of Sumerian terms drawn from lexical texts, from bilinguals, and so on with the use of shards of the topmost layer at some Mesopotamian site. This layer, through a myriad of forces, contains artifacts from all preceding strata, so that the archaeologist would not speak of a late Babylonian rationing system in Uruk that was based on the use of the beveled-rim bowl, because he knows that, though found on the surface of the mound, those vessels were a part of a much earlier assemblage that went out of use before 3000 BC. In like manner, the injudicious use of some neo-Babylonian interpretation of a Sumerian word can trip up the best of intentions in translations of thirdmillennium texts.

The first task in interpreting the sign BU in nautical terminology is to recognize the unambivalent correspondence of gid with both arākum and šadādum, and indeed that the two are semantically related. Where the former means to be or make long, šadādum describes the action of pulling taut, and then pulling forward, that is performed, according to Akkadian texts, on boats, on wagons, on yokes, on a measuring rope, on the cow's teat at milking time—you may šadādum your lip or your tongue if you like, but usually that will end, in a Babylonian text, with your losing it to an unkind knife. The active participle šaddidum (byform of šādidum, Sumerian lú gíd-gíd-da) attested in MSL 12, 139, l. 356, and in the late Babylonian texts TMH 2, 202 1 (eleppētu u lú-gíd-da-meš), and *Cyr.* 180, 14 (*šá-di-de-e eleppi*), further supports the pulling of boats for this term. The Akkadian equivalence of diri in water transportation, the final weak quadriliteral N-stem verb negelpûm, appears no less unambivalent in its designation of boat navigation downstream⁸ as is the Sumerian equivalence of šadādum, gíd, for movement upstream, and in the instance of Akkadian texts the verb negelpûm describes, as the current a boat, the parallel effect on clouds by the wind. Thus the sense of diri/*negelpûm* seems to be "carried by the current/wind," so far as we trust our transfer of Akkadian nuance to the late-third-millennium Sumerian administrative lexicon. At the same time, the gid movement from Umma to Ur registered in the text TCL 5, 5674 rev. iv 17–19, acts as fair warning to view these interpretations with some caution—we might hope that this and similar irregularities derive from a practice of choosing one or the other term to describe a longer boat itinerary that involved both.

In the case of the signs BU and DIRI, the lexical record is as complex as most other Sumerian signs. To give a sense of the resources now available for research, I offer below a selection of the many attestations found in the major series published in MSL, above all Ea / Aa, HAR-ra = hubullu (Hh), Sig_7 -alan, Erimhuš, and Antagal (for which see conveniently Cavigneaux 1980–1983).

⁸ Confer, for example, *JEOL* 2, 136, 8: *ištu eliš iqqalpu'a*.

⁹ ACh Spl. 66, 6; RMA 139, 8, etc.; OECT 6, 9, 62 // LSS 1/6, 34, 22: (the word, like the wind) ina negelpīša.

Instances of BU (excluding secondary instances of arākum):

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Proto-Ea (MSL 14, 50)
        473 bu-ú
                                                  BU
        474 gi-id
                                                  BU
        475 si-ir
                                                  BU
        476 sú(-ú)
                                                  SUD
Secondary Proto-Ea / Aa no. 22 i' (MSL 14, 143)
       2'-5' 'bu'
                                                                               = [...], [...], x-[...]
                                                  BU
      6'-7' gi-di
8'-10' 'su'
                                                  BU
                                                                               = 'sa-na-qu'?, ša-da-du
                                                                               = ra-a-q\acute{u}, sa-la-h\acute{u}, te-bu-u
                                                  SUD
Aa 6/1 (MSL 14, 438–439)
  184-193 [bu]-ru?1
                                                  BU
                                                                               = nu-ú-rum, na-ma-rum, nu-um-mu-rum, i-
                                                                               na, a-na, gít-ma-lu, šup-šu-hu, ma-a, na-sa-
                                                                               hu, ka-ka-si-ga
        194 <sup>r</sup>pi ¹-i
                                                  BU
                                                                               = ka-ka-si-ga
        195 bur
                                                                               = na-sa-^{r}hu^{1}
                                                  BU
  196-198 še-er
                                                                               = ka-ka-<sup>r</sup>si-ga<sup>1</sup>, na-ma-ru, šá-<sup>r</sup>ru<sup>1</sup>-[ru]
                                                  BU
        199 pu-u
                                                                               = a-ba-^{r}lum^{1} [šá x]
                                                  BU
  200-201 gi-id
                                                                               = a-[ra-ku], \lceil ur \rceil - [ru-ku]
                                                  BU
  202–206 [...]
Sb Voc. 1 (MSL 3, 106)
                                                  BU]
                                                                               = s\acute{a}-da-du
       120a [gi-id
antagal 3 (MSL 17, 155)
        137 gi-idBU
                                                  = e-le-pu
antagal 8 (MSL 17, 175)
                                                  = e-le-pu
        141 gíd-da
antagal D (MSL 17, 207)
        233 BU<sup>gi-id-min</sup>BU
                                                  = \dot{s}i-ta-du-du
antagal G (MSL 17, 225)
        162 BUgi-da
                                                  = \check{s}\acute{a}-[da]-^{r}du^{1}
erimhuš 4 (MSL 17, 59)
         49 BUgi-id-minBU
                                                  = \check{s}\acute{a}-pu-[u]
ana ittišu 1 iii (MSL 1, 8)
                                                  = i §!-du-ud
         54 in-gíd
erimhuš 2 (MSL 17, 38)
        215 [šu]-rgíd¹
                                                  = qa-ta-pu
        216 šu-gíd-gíd
                                                  = šá-ma-tu
sig<sub>7</sub>-alan 16 (= K) (MSL 16, 142)
           1 [\check{s}u-te-\hat{g}e_{26}]
                                                  = [ma-ha-ru šá še u kù-babbar]
           4 [šu-gíd]
                                                  = [\min(ma-ha-ru) \check{s} \acute{a} \acute{q} \acute{i} \check{s}]^{-r} t i^{-r}
Hh 2 (MSL 5, 66)
        199 máš-[šu-gíd-gíd]
                                                  = {}^{\mathsf{r}}ba^{\mathsf{l}} - [ru - u]
                                                  = a-kil\ ba-ri-^{r}i
        200 ugula máš-šu-gíd-gíd
sig<sub>7</sub>-alan 1 (MSL 16, 57)
   in the gap of ll. 298–325
          5" [máš(-gíd)]-gíd
                                                  = \min(ba-ru-u) \check{s}\acute{a} ba-re-e
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6" [máš-šu]-rgíd -gíd
                                            = \min(ba-ru-u) šá ba-re-e
ĝeš-tablet B ii' (MSL SS 1, 99)
        14' [ĝeš]-gíd-da
                                            = ha-[...]
ĝeš-tablet B ii' (MSL SS 1, 100)
        15' 'ĝeš'-gíd-da
                                            = a-x-[...]
<u>ዛ</u>ስ 8–9 OB Forerunner (MSL 7, 187, 188)
        60 <sup>gi</sup>pisan gíd-da
        61 gipisan gud<sub>8</sub>-da
        71 gima-sá-ab gíd-da
       71a gima-sá-ab ninda gur<sub>4</sub>-ra
Hh 9 (MSL 7, 40)
        56 <sup>gi</sup>pisan na-aḥ-ba-tum
                                            = šu
         57 <sup>gi</sup>pisan guhšu
                                            = šu
        58 <sup>gi</sup>pisan gíd-da
                                            = \check{s}ad-du
        59 gipisan nu-gíd-da
                                            = gar-ru
Hh 10 (MSL 7, 90)
    gap A
       258 [dug gur] gíd-da
                                            = šad-[du]
       259 [dug] gur nu-gíd-da
                                            = gar^{-1}ru^{-1}
antagal F (MSL 17, 217)
       157 GÁN-gíd-da
                                            = muš ki-ki-it-ti
Hh 4 (MSL 5, 173–174, 179)
       269 <sup>ĝeš</sup>má-gíd-da
                                            = ma-ak-ki-tum
       270 <sup>ĝeš</sup>má-gíd-da
                                            = ma-ak-ku-[tum] (BM 55215)
       271 <sup>ĝeš</sup>má-gíd-da
                                            = šad-da-[tum]
       346 <sup>ĝeš</sup>má-gíd-da
                                            = a-rik-tum
       347 <sup>ĝeš</sup>má-sig-ga
                                            = si-iq-tum
       348 <sup>ĝeš</sup>má-diri-ga
                                            = né-bé-ru
OB lú A (MSL 12, 165, 167)
       243 lú gi-gíd
                                            ša en-[bu-bi-im]
       300 lú má-gíd
                                            ša ma-ki-it-tum
1\acute{u} = \check{s}a \text{ iv } (MSL\ 12,\ 139)
       355 éš-lá
                                            = e-be-lu (VAT 9558 rev. ii 19')
       356 lú gíd-gíd-da
                                            = šad-di-du (VAT 9558 rev. ii 20')
Instances of DIRI (excluding secondary instances of watārum):
Proto-Ea (MSL 14, 39)
      183a di-ri
                                            SI.[A]
Secondary Proto-Ea / Aa no. 22 ii' (MSL 14, 144)
        32' di-ri
                                                                      = at-[ru]
                                            SI.A
Ea 3 (MSL 14, 311)
       199 [di-ri]
                                                                      = at-ri
                                            [SI.A]
Aa 3/4 (MSL 14, 342)
       231 di-ri
                                            SI.A
                                                                      wa-at-rum
sig_7-alan 27 (= M) (MSL 16, 236)
       179 diri
                                            = né-qel-pu-ú
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      erim huš 3 (MSL 17, 51)
      = ub-bu-ru

      214 \text{ Sr}^{\text{di-ri}}A
      = ub-bu-ru

      ana ittišu 1 \text{ iv } (MSL 1, 13)
      = u*-wa-at-tar

      69 \text{ in-diri}
      = u*-[qé-el-pi]

      70 \text{ in-diri}
      = u*-[qé-el-pi]

      40 \text{ se}^{\text{es}}má-gíd-da
      = a-rik-tum

      348 \text{ se}^{\text{es}}má-diri-ga
      = né-bé-ru

      348 \text{ se}^{\text{es}}má-diri-ga ba-BAD
      = mu-qal-pi-tum
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These references, as expected, strongly support the correspondence of gid (BU) = $ar\bar{a}kum$ and šadādum, with potential outliers sanāqum? (secondary Proto-Ea, "to inspect," with gid possibly referring to the inspection, and then certainly measuring of a building), *šapûm* (*erimḥuš* 4, "to stretch out" [clouds, smoke]) and elēpum (Antagal, "to sprout"), which appear to share a common semantic field with arākum. The compound verb šu-gíd, literally "make the hand long," means idiomatically "to receive," with the extispicy officiant bārûm and his occupation qualified with (maš) šugíd-gíd, presumably a reference to the actual activity of exta inspection. We may also note that the boat described as má-gíd-da in *Ḥḫ* 4 translates the term into both a phonetic loan makki/utum (short a in /ma/) and the nominal forms of the feminine verbal adjectives šaddatum and ariktum, the "towed" and the "long" thing, respectively. Of passing interest are the further verbal adjectives šaddum, "pulled," and garrum, "wound" (in the sense of "rounded"), attached to gid-da and nugíd-da, respectively, in Hh 9 and 10, and referring to reed containers and clay vessels.

The compound sign diri (SI.A) is well attested in the cuneiform record at least since the ED IIIa period (ca. 2600 BC), but it seems exclusively with primary meaning of the lexical lists, "to be extra/in excess" (Akkadian *watārum*), for instance in the sale documents registering an "extra payment" (níĝ-diri) to family or clan members of a party selling a parcel of land (*MC* 4, 1 obv. i 4, *WF* 33 obv. i 7, etc.). It appears that the use of diri to qualify the movement of boats is first attested in the Ur III period; gíd in the ED IIIa texts *NTSS* 296 obv. i 3 with ma_x(SI) gíd, *NFT* p. 222 (AO 4397) obv. ii' 5'

with éš ma_x(SI) gíd, and the ED IIIb texts VS 27, 48 obv. ii 4 and 84 rev. i 2, does not qualify an activity, but rather boats and poles, thus is as likely to refer to their long form as to the method of their transportation. "Movement downstream" is, in any case, a confusing semantic transfer to the sign diri and may have something to do with the graphic similarity between the signs SI (horn) and MÁ (boat). Indeed, as Civil has noted (1989), SI prior to the ED IIIb period was indistinguishable from MÁ, which was formed by simply adding a short vertical wedge to the head of the upper horizontal wedge of SI. The references above, and for instance WF 11 i 3 with SI-gal-gal and NTSS 118 rev. i 3 with SI-lah, but also AAICAB 1/1, pl. 4, 1928–16 obv. ii 6 with má-laħ₅, and *OIP* 99, 69 rev. iii 2' with má-gur₈, together with other examples from the same publications, suggest that the Kish and Abu Salabikh texts described as ED IIIa represent a transition stage to ED IIIb, or a combination of chronological and geographical variation. The paleographic uncertainties with this sign are, by the way, to be noted to the Late Uruk pictographic references to a MÁ and MAGUR, none of which is contextually secure.

Beyond the Akkadian corpora, another source of lexical information on Sumerian words has been the various editions of Sumerian literary, legal, and administrative texts with their helpful, but oftentimes circular commentaries that included, next to lexical references, the bilingual literary citations of Sumerian words with Akkadian correspondences as well as a compilation of contextual references in Sumerian texts. These references were gathered together by an ambitious set of students from Yale¹⁰ and widely distributed among

Including Renee Gallery Kovacs, Marcel Sigrist, Piotr Michalowski, and others; my photocopy of the original cut-and-paste binder dates from 1973.

Sumerologists. This compilation was entered to mainframe in the 1980s, and served as the starting point for Steve Tinney's substantially more comprehensive *Index to the Secondary Literature*, ¹¹ now merged into the pages of the electronic Pennsylvania Sumerian Dictionary also directed by Tinney.¹² Other helpful compendia include Hübner-Reizammer 1984; Sallaberger 2006; and Halloran 2006. Nevertheless, the technical terminology of entirely too many semantic fields in Sumerian defies adequate translation. After more than a decade of living in Germany, before I took my car in for repairs, I would carefully study my Bilderduden ("Bildwörterbuch der deutschen Sprache") to have some sense of what the motor parts were called, and in like fashion anyone who has read the various editions of the Old Babylonian Sumerian composition known as "Šulgi and Ninlil's barge,"13 with their many faltering attempts to translate the boat parts cited in the description of Šulgi's má-gur₈, will understand the clear need for Bilderdudens in Sumerian studies.

Aside from the use of these various tools came the arduous task of gathering, on one's own, contextual references from primary Sumerian sources, until recently neatly parsed and sorted in the card catalogues that occupy the uppermost bookshelves of many established specialists. All of these sources were planned for obsolescence with the publication of the *PSD* that, unfortunately, has not progressed beyond two bound volumes (A1–3 and B), and much promise in the website of *ePSD*.

There is in all of these references no immediately compelling reason to doubt the conventional translation of gid in Ur III cargo boat texts with "to tow." Indeed, there has been no real debate in the field as to the general sense of terms that describe boat navigation within the riverine/canal network of the Mesopotamian alluvium. And the Akkadian record would appear to offer strong support for this interpretation. Yet something still seems amiss. We will often consider the potential meaning of a fairly technical term such as gid with an eye to the physical realities of the

objects and actions that it conveys, and the broader context of use in the textual and archaeological record. Fortunately, our discussions of the realities involved in the management of Mesopotamia's main means of domestic transportation have been facilitated by the quite masterful general treatment of Babylonian watercraft in Potts 1997: 122-137, and, although of limited practical use in studies on uncertain ancient riverine geography, for technical questions of channel velocity and depth, and their effects on river barge transport, by a 1962 USGS Water Supply paper from Langbein. Since, in interpreting dense third-millennium technical terminology, we are often students of the sort of syntheses that Potts delivers, and are in a sense successors to the lexical traditions of Landsberger, who, in describing his work on the wild animals list *Hh* 14 (s. Landsberger 1934: 45–46, 71–72, and MSL 8/2, pp. 84–94), stated that he lined up in one column of his research table the names of animals attested in the cuneiform records, in the other a list of species from the faunal record of Mesopotamia and modern Iraq, and tried to match the two, we should imagine that our little table on boat propulsion would provide an overview of the archaeological and art historical record, and would include Sumerian terms for the use of oars, sails, simple gliding with the stream, towing, and punting.

Many years ago, on the mundane side of things, I gave some thought to the copious records of draft animals used to tow barges along canals in Europe and the United States, records reaching back to the Roman occupation of Britain and then in full form with the unfolding of the Canal Age in the mid-eighteenth century, as the result of which the cargo capacity of horses increased fifty-fold over that of wagons on roads —you can still take a mule-drawn canal boat ride operated by the National Park Service along the Chesapeake & Ohio Canal in Washington, DC. It seemed strange, given the clear advantages of towing water craft, particularly in a region where waterways make wagon transportation very difficult, and given the thousand-year history of the

Self-published in 1993, with description, pp. iii–v, of the work's genesis.

Abbreviated as *ePSD*; see http://psd.museum.upenn.edu/epsd/>.

Cf. Hurowitz 1992: 32–67; Klein 1990: 80–136; ETCSL
 2.4.2.18, Šulgi R.

use of draft animals in Mesopotamia, that in the hundreds of Ur III texts describing the gid and diri movement of boats, not one mentioned the use of animals, but exclusively of humans in either task. Neither BPOA 1, 1061 nor Georgica 7.7 appear to qualify as potential witnesses to this practice, since they describe workmen who "towed" boats filled with donkeys, and the same applies to such texts as MVN 3, 214, and Nik 2, 106, for boats loaded with presumably perfectly capable oxen! It is as if the notion of men-as-draft animals in the Sumerian plowing records were true, 14 and, having discovered the power of laborers in this, all use of oxen and donkeys was abandoned. Such a use of human pulling power would at least make sense where animals were not available or on small plots where oxen-drawn plows, good on the long and straight run, might be cumbersome, but altogether gaba-tab sowing acreage accounted for a very small fraction of Sumerian fields, in apparent deference to the advantages of using draft animals. But why then were draft animals never—not once—recorded in the towing of

Then too, the upkeep of firm towing paths on either side of the Mesopotamian canals would have required a substantial investment of labor resources, one that is, with the exception of line 264 of the Sumerian composition "Curse of Agade," nowhere visible in the administrative accounts, unless that maintenance was merely a by-product of the reed harvesting records. A third hook that made me review the matter was the laborer designation ĝuruš ĝeš-gíd-da, which qualifies a fisheries worker tasked with a variety of jobs related to other water-bound duties. Since the ĝeš-gíd-da worker is, in particular, occupied

with waterway transport, we should take the gidpole designation seriously and consider whether the activity má-gíd might in many instances refer not to the conventional "towing," but rather "(to move a barge upstream) with a pole," "to punt (upstream),"16 despite the recording in both ED IIIb and Ur III administrative records of fairly substantial numbers of what, based again on lexical records, is considered the Sumerian designation of punting pole, namely ^{ĝeš}gi-muš. The use of ^{ĝeš}gi-muš in boat transportation is, again to the best of my knowledge, unattested in the available texts. For if punting is not visible in the administrative accounts of third-millennium Babylonia, where after all the punt itself, essentially a long and narrow box in water without a keel and thus with a very shallow draft (see below, figure 2), would seem to be the most favorable vessel to maneuver along the canals, there should be some rational explanation for it—again, merely following Landsberger.

Terminological ambiguities arise immediately with consideration of actual text references. Both *VS* 14, 186 (Old Sumerian), and *BIN* 8, 108 (Old Akkadian), deal with ĝeš-gíd-da:

VS 14, 186

obv. i

- 1. 1(aš_c) lá-a ĝeš-gíd-da
- 2. é-nam
- 3. 3(aš_c) dam-dingir-mu
- 4. 3(aš_c) šeš-tur
- 5. 2(aš_c) ú-du
- 6. 2(aš_c) sipa
- 7. ĝeš-gíd-da lá-a

obv. ii

- 1. amar-ki-kam
- 2. 1(aš_c) ur-^{d šè}šer₇-da

This is the issue of ^{ges} gaba-tab gíd-da (about 20 attestations, for instance, AnOr 7, 368+ rev. 5 and MVN 2, 37 obv. 4; s. Maekawa 1989: 117).

gú ^{§es}má gíd-da i₇-da-zu ú gíd-da hé-em-mú, "may the grass grow long on your canal banks of the má gíd-da," followed by wagon pathways becoming overgrown (Cooper 1983: 62–63). The meaning in this connection of such passages as *UTI* 4, 2892 obv. 3: 1(ĝéš) 2(diš) ĝuruš i₇-sal₄-la ku₅ gú-ba šu ùr-ra, "62 workman(-days), having cut away the Isala canal and leveled off its bank" (//*UTI* 4, 2562 obv. 4 and *UTI* 4, 2884 rev. 3) and *BPOA* 7, 1964 obv. 1–2: 1(u) 2(diš) [ĝuruš] u₄ 1(u) 5(diš)-šè / gú idigna šu-luh

[[]aka] "12 workmen over 15 days, having cleaned the Tigris bank" is unclear to me. The significance of the latter reference would in any case appear to be negated by *BPOA* 2, 2546 obv. 7–8, with gú i₇ ĝuruš-gin₇-du / šu ùr-ra ù šà i₇ ĝuruš-gin₇-du šu-luḥ aka, "(workman days,) having leveled off the Ĝuruš-gin-du canal bank and cleaned its 'stomach'?"; there are, unfortunately, no reasonable means available to specialists to collate the transliterations of the texts from Yale published in *BPOA*.

Tangentially, ^{ges}gaba-tab gíd-da would denote the "punting" of the gaba-tab by punching holes into seeding lines.

- 3. $2(a\check{s}_c)$ šeš-lú-du₁₀
- 4. 2(aš_c) inim-ma-ni-zi
- 5. 2(aš_c) ĝeš-kin-ti
- 6. 1(aš_c) lú-pà
- 7. 1(aš_c) é-ì-gára-sù

obv. iii

- 1. šu-ku₆
- 2. ĝeš-gíd-da lá-a
- 3. ur-sag-kam
- 4. 2(u) ĝeš-gíd-da lá-a

rev. uninscribed

BIN 8, 108

obv. i

- 1. 1(u_c) ĝeš-gíd-da
- 2. ugula nu-bànda é-gal
- 3. 2(u_c) 5(aš_c) ur-^dlum-ma ugula nu-bànda
- 4. $2(u_c)$ ad-da nita gal
- 5. 1(u_c) 5(aš_c) lugal-šà ugula nu-bànda

obv. ii

- 1. 1(u_c) 5(aš_c) lugal-KA ugula nu-bànda
- 2. $1(u_c)$ é- u_4 -rdi¹-pa-è Šu-ku₆
- 3. 1(ĝéš_c) lá 3(aš_t) ĝeš-gíd-da
- 4. ur-é-tur 'énsi'
- 5. 1(ĝéš_c) ur-^dx-[(x)] ugula nu-bànda AB-x

rev. i

blank

rev. ii

1. šu-níĝin 3(ĝéš_c) 2(u_c) 2(aš_c) ĝeš-gíd-da ^rérin šúm¹-ma

The first text records deficits (lá-a, corresponding to Ur III lá-ià) of "poles." Possibly the named individuals and their foremen were liable for the objects made available to them by the temple household, just as was the case with, for instance, expensive metal tools loaned to field workers. The second subsection of this text records one to two poles as arrears of six individuals qualified as fishermen (šu-ku₆), while the first section lists together eleven debited poles among a group connected with Amar-ki, who, according to *DP* 445 obv. i, and *Nik* 1, 281 rev. i and iv (contrasting ĝešgíd-da gibil and ĝeš-gíd-da kúr), was "loaned out" (e-ne-ta-si, usually from the depot é-ki-sal₄-la) large numbers of such poles by Eniggal, the

The term ĝuruš ĝeš-gíd-da clearly refers to fisheries workers in several Ur III Girsu accounts discussed in Englund 1990: chapter 4, and the pole could be interpreted as some sort of fishing spear.¹⁷ However, we may wonder, for instance, what need the workers designated guruš geš-gídda in such accounts as CT 9, pl. 46, BM 21348, would have for this wooden pole when they are simple reed harvesters. Since both fisheries workers and reed harvesters are associated with boat transportation, the designation in Ur III labor accounts seems most reasonably associated with their means of transportation. In this, "towing" would appear to make less sense than the "punting" of the transport boats and thus might imply that, at least in these and related instances, Sumerian má gíd was not "longboat" but rather a boat outfitted with a platform to facilitate the use of punting poles, as Heimpel (1987: 33 n. 38) initially suspected but has apparently reconsidered. Adam Falkenstein's translation "bowman troops" (1956: 1, 91 n. 5 and 2, 301–302) of ĝuruš ĝeš-gíd-da is, therefore, not credible in an administrative or

chief administrator of the Baba temple household in Girsu. The second text with the notation rev. ii: šu-níĝin 3.20 ĝeš-gíd-da érin šúm-ma, "together: 200 wooden poles, given the érin," records the distribution of ten "poles" to a fisherman (obv. ii 2), but also to other persons who seem connected neither with fisheries nor with ship transportation. Since the ĝeš-gíd-da in the first text occurred together with the shields E-ùr, which, as Dan Foxvog has written me, are probably the same as kuš E.ÍB-ùr, and together with dur₁₀-tab-ba axes in the second, they must be understood to be some sort of lance or spear (Akk. ariktum, mašaddum) in military contexts (this is the fourth year of UruKAgina, when violent contact with Uruk apparently commenced). The Ur III fragment ITT 5, 6789, records 12 ĝeš-gíd-da zabar 2/3!? ma-na-ta, "12 ĝešgíd-da, bronze at 3/3 mana (ca. eleven ounces) each," probably referring to a metal tip. These may relate to the ED IIIb-period designation igi ĝeš-gíd-da ("face of the wooden pole"), which, according to Nik 1, 298, had a weight of 15½ shekels or ca. five ounces, of an unnamed metal.

In the same publication and, for instance, in Salonen 1970, however, this method of fishing was shown to have been fairly improbable—with the potential ex-

ception of šu- ku_6 gi-gíd, "long-reed fishermen," recorded in the Lagash II text NFT 2, p. 184 (AO 4304) rev. i 5.

legal context. The interpretation certainly goes back to the year name of Šulgi 20 (not known from actual account dating use), mu dumu uri₅ki-ma lú ĝeš-gíd-da ka ba-ab-kéš, "year: 'The sons (citizens) of Ur were conscripted as 'bowmen'," and the use of šagina lú ĝeš-gíd-da next to šagina lú ĝeš-ti, "'general' of the 'arrowmen'" in the Maništušu Obelisk (*OIP* 104, 40) face i col. xiii 5–6, 13–14.

Perhaps there are in fact terms in the administrative record that would exclude the reinterpretation of ĝeš-gíd-da as "punting pole" and of gíd in related Ur III cargo boat documents as "to punt." These would be technical terms referring to such poles, on the one hand, and to towing ropes, on the other. Civil (1989) in his treatment of the ED IIIa stone fragment NFT p. 222 (AO 4397) noted that éš má, "boat ropes," are followed by ^{ĝeš}gi-mùš, which he identified as an early form of gi-muš, Akkadian gimuššum / parīsum, "punting pole." This ^{ĝeš}gi-mùš is already found in ED I-II texts in relatively high numbers (210 in UET 2, 25 obv. i 2, and 7 in UET 2, 230 obv. i 1'), but counted in the still confusing bisexagesimal system that Damerow and Englund 1987: 132–134 found to be exclusive to rationed comestibles in the archaic period, and that qualified numbers of ninda and gi in the ED I-II texts, but in the ED IIIa period the product sag si-NU×U, a fisheries catch delivered in ED IIIb texts together with sea turtles (DP 36).¹⁸ Civil translates NFT p. 222 ii 5': éš má-gíd as "towing rope," with reference to Ur III texts.¹⁹

ges gi-muš are common in ED IIIb and Ur III texts, and *might* have been punting poles, but, as seems more credible since they invariably show up in accounts describing boat construction, they were probably wooden parts used in some phase of this work; according to *TCL* 5, 5673 obv. iii 13 and rev. i 6, they were apportioned at three per boat (30 or 10 gur capacity). In this scenario, we must imagine that shipyard workers were expected to outfit the boats with punting poles, which were then *towed* along the canals. Indeed, the ED IIIb text *DP* 428 records explicitly the disbursement of ges gi-muš, also of the common tree ù-sub, (Powell 1992: 117–118 "pine?"), to má-lab,

má-gur₈-ra-me, "boatmen of the cargo boats." TCL 5, 6037 obv. iii 18–19 and AAICAB 1/1, pl. 67– 68, Ashm. 1924-667 rev. ii 12, give an exchange rate of 30 ù-suh, ^{ĝeš}gi-muš per shekel (SAT 2, 178 rev. 2–3 unclear), without mention of boat size, while a value of 12 per shekel is assigned in TUT 121 rev. iv 6'–7' (counted together with du₅ boxes). The early Old Babylonian text BIN 10, 96 obv. 1, states that ù-suḥ₅ ^{ĝeš}gi-muš had a length of 10 kùš = ca. 5 meters. If these were stable terms through time, it is very hard to digest the notion that the very large numbers of ^{ĝeš}gi-muš attested in Ur III accounts can have represented punting poles that then found no mention in the cargo texts. For instance, Amherst 66 rev. 8 records a total of 1.16.38 = 4,598 ^{ges}gi-muš from just two managers of the "tree farm of Gudea."

Ημ 4, 407–408 (MSL 5, 184), equates ^{ĝeš}gi-muš to gimuššum and parīsum, where parīsum is reasonably considered the Akkadian term for punting pole. The presumed punting poles that brought Gilgamesh across the waters of death to discover from Utnapishtim the secret of eternal life (cf. George 2003: I 280–281 and 688–689) were called parīsum and were 5 ninda, that is 30 meters long each. While legendary and consonant with the epic narrative, certainly they needed to be long to reach the bottom of the waters Gilgamesh wanted to traverse-the standard wooden Collars of Oxford poles sold in the UK measure 5 meters. The Gilgamesh poles were, as today to protect the wood and to ensure a better "feel" for the river bottoms, outfitted with shoes called serretum in Old Babylonian (not likely "oar lock" as in the dictionaries), in Standard Babylonian *tulûm* (literally "teat"). Hh 4, 254 (MSL 5, 172), equates this parīsum with (geš) má-rí-za, which, as a reinterpretation of ^{ĝeš}mi-rí-za in Old Babylonian Nippur *Ḥḫ* 1, 263, and in the Ur III boat-building accounts, is found next to ^{ĝeš}gi-muš in the text Amherst 66 cited above, in MVN 10, 230 rev. iv 29, and in other instances associated with boats of specified capacity (20–60 gur). RA 16, 19 obv. iv 7, appears to assign the size of 6 cubits, or about 3 meters (rev. iv 2: 8 cubits \approx 4 meters) to this, then "junior"

VAT 9052 cited LAK p. 71 is not available to me, but reported [personal communication] by Joachim Marzahn to be an incorrect reference; cf. Englund 1990: 98 n. 314.

See, for example, *RA* 16, 19 obv. ii 6, *ITT* 3, 6351 obv.
 6, 6554 obv. 3, etc., and compare *MEE* 4, 336 1431' (Ebla witness TM.75.G.10023[?]+11301 rev. iii 14–15): éš má-gíd = *a-sa-lum* (Akk. *ašlum*), "rope."

gi-muš, valued for unclear reasons at 40 per silver shekel for 40-gur boats, 60 per shekel for 30-gur boats, and 50 per shekel for 60-gur boats (*TCL* 5, 5673 obv. ii 25–26, iii 19–22); both were made of the ù-suḥ₅ tree, but in such numbers²⁰ that the term would most reasonably lend itself to a planking used in boat construction, in particular given such formulae as that of *TCL* 5, 5673 obv. i 12, which assigns 195 mi-rí-za to the construction of just one 120-gur boat²¹—until we locate the unlikely reference stating that gi-muš and mi-rí-za were but two sizes of the "long-pole" ĝeš-gíd-da.

Where though are all the ropes in the matter of Ur III towing? The easiest solution is to assume that they were, just as for instance the traps and nets of fishermen, the sole responsibility of the workers who used them and thus not recorded in the central accounting system of the households. There are, as we have seen, occasional references to éš má and even éš má-gíd, but with such infrequency, and in the context of boat construction and maintenance, that they more likely refer to the nautical ropes that any boatman will have on board or that, as we know from Egyptian boat construction, could have been an integral element of a boat hull's integrity (s. Potts 1997: 126-127). Further, one of the major tasks assigned to boatmen was the loading and securing of the freight, qualified with the verb kéš and almost certainly accomplished with ropes, and, if Heimpel is correct (2009: 203 n. 144), the common má-lá-a might designate a "boat-train" secured by ropes. But where we do see references to the distribution of ropes, they seem destined for field surveys. For instance, in the text MVN 13, 598, it seems that, if correctly interpreted, numbers of éš are distributed to various foremen, qualified in the total as éš gíd-da, and these foremen are field managers. It is disquieting that, if these are in fact ropes, they are totaled in grain metrology, with one rope =

one bán (cp. the parallel, but not well-copied text *MVN* 2, 183, which seems to have an expanded initial line of 24 éš ba-an-ta, "24 ropes?, each of ban (size)"). This would lead to the need to reconsider quite a large number of attestations of presumed zì ("flour") in the textual record, together with a consideration of potential candidates for a rope metrology that one would have imagined would have been given in length notations.²²

When lú éš gíd are recorded, the most natural designation of a "boat hauler,"²³ the term evidently refers to a high post (in ED IIIb texts assigned to the temple households of Ningirsu, Nanše, and probably Baba), and to just one man. In the Lagash II period (ca. 2200–2100 BC), these professional names designated field surveyors (*ITT* 4, 7333 rev. i 6), reflecting the use of surveying ropes amply described in the royal inscriptions of the ED IIIb and Lagash II periods.²⁴ Nonetheless, it would not be surprising if there were no particular professional designation of boat haulers who formed a work team under the supervision of the boatman called má-lah₅.

The same caveat applies to the attestations of éš má in the Ur III period. UTI 3, 2030 obv. 1 – rev. 1 has 1 éš má gíd / 5 peš-ga mangaga / é-kìšib-ba é-maš-ta / ur-ab-zu šidim / šu ba-ti, where éš má gid is dutifully explained by the authors as "rope, for towing a ship." However, the rope is followed by a designation of mangaga (cp. YOS 4, 238 obv. 4) date palm fibers and both are received not by some general workmen but by a builder (šidim) whose interest would rest in ropes used in construction, for instance of boats (cp. *AnOr* 1, 88 rev. iv 32) within the cargo boat center known as the mar-sa, of which in Umma the Lugalebansa mentioned above, but also Adumu of the administrative partitur at the beginning of this essay were two of the numerous attested receiving agents.

^{3,410} mi-rí-za alone were reported from one tree farm in MVN 11, 126, and see now CUSAS 3, 1362, an edition of which is in preparation by W. Heimpel, that speaks of the delivery of 9,300 mi-rí-za from a provincial tree farm, destined for use with cargo boats in the 20–60 gur range.

²¹ *TCL* 5, 5673, contains a number of parallel references; cp. *SANTAG* 6, 68 obv. 9 with 50 mi-rí-za for a 10-gur boat

Cp. SAT 2, 196 // 233; the agent Lugalebansa in these texts very often received grain á má hun-ĝá, "as boat rental fee," but also mats and building supplies for boat construction, e.g. the bitumen flavors ésir é-A and hád.

The persons labeled má-gíd in *ITT* 4, 7382 rev. 5, also qualified as "various cooks released from detention" (muḥaldim didli en-nu-ta è-a), remain unclear to me.

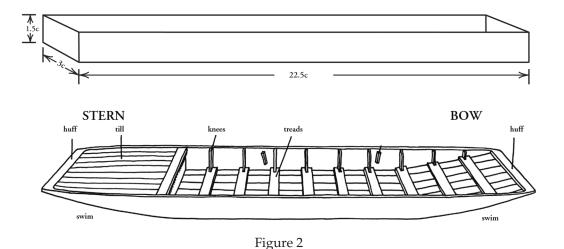
FAOS 5/1, Ent. 28–29 i 11: éš GÁN bé-ra; RIME 3/1.1.7, Gudea Cyl. A xvii 26: GÁN-zi-dam éš ì-ĝar-ĝar.

We see in the archaeologically preserved depictions of Mesopotamian boats the vessels of royalty, but not those of the cargo manager. The recently published Old Babylonian text *Nisaba* 19, 163 (IM 90465), from Ur, gives us, I think, our first remarkable glimpse at the real form of boats traversing the canals of third-millennium Mesopotamia:

1(diš) má 3(u) gur gíd-bi 1(diš) ½(diš) ninda 4(diš) ½(diš) kùš igi 8(diš)-gál gíd-bi dagal-bi 'dagal'-bi gi-na 3(diš) kùš [šu?]-'ri?'-a-bi dagal-bi sukud-bi [...] 'sukud'-bi 1(diš) ½(diš) kùš [...] x-x-me-en 1 boat of 30 gur, its length 1½ ninda 4½ cubits (ca. 11m); ½ of its length (is) its width, its width is a firm 3 cubits (ca. 1.5m); one half its width (is) its depth, ... its depth 1½ cubits (ca. 75cm);

The boat described here in a simple mathematical problem text is very much in the form of a punt (figure 2), extremely stable in shallow waters, and, with a light frame and very shallow draft, easily maneuverable in alluvial canals in

Mesopotamia. The calculated volume capacity of the boat is 121/24 ninda $\times 3/12$ ninda $\times 1\frac{1}{2}$ kùš \approx $0.7 \, \text{sar}^{\text{vol}}$ or ca. 42 gur capacity, where $1 \, \text{sar}^{\text{vol}} = 60$ gur $\approx 18 \text{ m}^3$. We may compare with this the Old Babylonian mathematical exercise MCT 88 (MKT 1, 193, and MKT 2, 43, BM 85196), problem 5 (Sachs 1944: 29-39), that records a ^{ĝeš}má-lá of length 1 ninda, width 8 kùš and depth 6 kùš, giving an irregularly wide and deep boat with 4 sar^{vol} capacity, about 240 gur and thus beyond Ur III norms.²⁵ Such keelless flat boats, as would particularly be qualified with a "firm" (gi-na) width throughout their length, would make much better sense than a heavy cargo boat with keel, not just from the standpoint of maneuverability through canals that must have been of varying depth for the captains planning a longer voyage, but also from the standpoint of crews that apparently had to be prepared to unload and hoist the entire boat this way and that. The advantages of such a light and stable boat in shallow waters must of course be weighed against the records that document the construction of Ur III boats. Unfortunately, we are not well informed about the meaning of many of the materials that went into such boat building. For instance, TCL 5, 5673, gives us the following numbers for one 60-gur boat (obv. i 27-ii 28): 3600 ^{ĝeš}kak, 150 ^{ĝeš}mi-rí-za, 150 ^{ĝeš}ĝìri, 137½ ^{ĝeš}emeérin, 26 ^{ĝeš}ù, 20 ^{ĝeš}umbin, 8 ^{ĝeš}du₅-má, 8 ^{ĝeš}má-gú, 8



²⁵ This is to be noted to Heimpel 2009: 203 n. 144.

^{ĝeš}a-ra, 8 ^{ĝeš}a-da, 4 ^{ĝeš}murgu, 3 ^{ĝeš}níĝ-zú, 2 ^{ĝeš}medím (0 ^{ĝeš}gi-muš!), 131 gú ésir hád ("dry bitumen"), 8¾ gú ésir gul-gul, 6 gú si₄-SAR, 1 gur ésir é-A, 30 sìla ì-ku₆, 900 u_4 (= "workdays"), and 1 málah₅ (= "boatman," presumably the crew foreman).26 If these are meant to be canal boats, the amount of bitumen (ésir) alone might account for upward of 4 tons of weight and thus would not support an interpretation of má gíd-da = "punt"; we would look to the miriza planks, "foot boards" (^{ĝeš}ĝìri) and ^{ĝeš}eme-érin as major framing and outer hull components, obviously held together with large numbers of pegs (^{ĝeš}kak), but the size and weight of the structural wooden parts is not recorded. A preliminary search of extant texts, however, has uncovered no evidence that the skippers of the boats recorded in these texts were in charge of *gíd*-able craft.

Given this apparently ambivalent evidence, it may be wondered whether and under which circumstances the boat navigation term gid may be confidently translated with "to tow" with a rope, or "to punt" with a pole for the Ur III period—I cannot see a third alternative. Technical considerations of canal depth, of the unlikelihood of adequate dike maintenance, of the need to lift boats out of and into another canal or just around weirs, of the maneuverability and stability of flat-bottomed keelless boats, of the specific tractive force (i.e., the ratio of a vessel's thrust in motion to its weight) and the velocity of currents that boatmen faced in navigating their craft upstream; and practical considerations of the presumed exclusive use of human rather than even one clear example of draft animal traction in hauling boats up waterways would tend to undermine the philological evidence equating parīsum with two or more Sumerian correspondences that would then make up the referents for "punting poles" in the Ur III texts. Regardless of how we understand either gimuš/mùš or mi-rí-za in boat-building texts, however, ĝeš gíd-da is likely, in laborer qualifications of Ur III boatmen, to refer not to a fisherman's spear or to a bowman's weapon, but to a punting

pole. How otherwise are we to imagine the work performed in maneuvering fishing boats along waterways or in the great southern marshes, or craft gathering in, and laden high with reed moving up and down dikes overgrown with their targeted plants, precisely the work involved in the accounts mentioning this profession? In contrast to the associations of barge transport with wooden instruments of propulsion, moreover, evidence of the use of ropes in moving boats upstream remains highly elusive; ropes were, according to our texts, employed in the construction of boats, and in tying down cargo. And yet we may tend to overstate the case for failing maintenance of dikes sufficient to support towing paths, as well as the lack of clear references to the distribution and use of towing ropes, in denying the probability that boats were towed in the Ur III period. In the first instance, it is today difficult to imagine a southern Iraq with well-tended and straight canals, dikes stabilized and paths cleared for the critical lifeline that was water transportation. Yet this was indeed the basis for both communication, and irrigation, and was thus evidently an issue of great concern to rulers with regional influence. Our fishermen too, according to the texts, received no, or very few, nets or sinkers from their household depots, and yet we cannot doubt that these, together with traps, were the main equipment used in the catch, and so the fisheries workers must have been responsible for their own work tools. It would therefore be prudent to leave the matter of third-millennium towing for such time as new sources offer a final clarification. Boats were likely towed, but aside from the verb gid, there appears to be no compelling philological evidence to support that use of human labor.

I would like to end this note on the sign BU by returning to Deimel's speculation that the "original form of this sign could be a 'rudder'." As figure 3 demonstrates, the referent of the Uruk IVa period sign is much more likely to be a snake, based not just on its graphic form, including a

Cf. OrSP 47–49, 249, with reference to many of the same eight boatmen recorded in this section of TCL 5, 5673, and with corresponding numbers of some, perhaps replacement boat parts, although both Umma texts date to Šulgi 45.

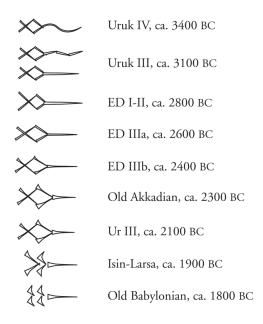


Figure 3

probable representation of the snake's forked tongue, but based also on the sign MUS that is this sign with lines drawn perpendicularly through its body, and an inexplicable fork of the tip of its tail. The presumed proto-cuneiform precursor of this sign is very poorly preserved in the archaic record, if at all, with badly abraded instances of the sign in the lexical lists Lú (l. 112, but very doubtful) and Birds (ll. 29 and 91; see ATU 3, p. 259). We might rather discount these attestations and assume that BU in the Late Uruk period was the pictogram of the snake.²⁷ Krebernik (2007: 43) has pointed to the correspondences between the archaic and later versions of the City List (ATU 3, pp. 34–35, 145–150), where line 52 has Archaic ŠÀ BU // ED LAK50/ša-bu-nun // OAkk ša-ab-bunu-um. This string would tend to support the reading both of $\check{S}A = /\check{s}a/as$ well as, based on -abof the Old Akkadian witness, of BU = /bu(nun)/ and thus, potentially, the reading /bu(nun)/, or even /bnun/, of the Late Uruk word for snake (note that City List I. 87 indicates an ED variant

NUN of archaic BU). The further attestations of the sign in Pig List II. 9–10 ((ZATU686) BU ŠUBUR; W 12139) and Fish List I. 2 (BU SUḤUR; W 22101.7+) would also be consonant with an interpretation of the sign as "snake." The only credible Late Uruk precursor of the MUŠ sign is BU+DU₆, that is, of a snake rising out of a mound of some sort. The next and then relatively clear attestation of muš is found in the ED IIIa (with no clear evidence in the ED I-II texts), for instance in the personal name ur-dnu-muš-da, written AN MUŠ UR NU DA, or in the professional designation muš-lah₅, both multiply attested (consult CDLI search).

But quite aside from speculation about the ultimate pictography and reading of BU in the archaic period, it is striking that the sign with a meaning paralleling our gíd is attested also in the texts. The definitive examples of this function of BU are found in the field survey texts from Jemdet Nasr (*MSVO* 1, 2–6; see conveniently Bauer, Englund and Krebernik 1998: 206–209). According to a standardized format, these accounts re-

Such instances as IM 23434,a (unp., but available in CDLI) obv. i 2.b with NI_b GI₆ BU_a and MSVO 3, 24 obv. i 4 with GI₆ BU_b NI_a demonstrate that horizontal and vertical BU are simple orthographic variants.

cord on their obverse surfaces a number of apparent agricultural fields, measured by length and width and qualified with a surface notation derived from the so-called GÁN-system. One example is MSVO 1, 2 obv. 3: $4N_{34}$ $5N_{14}$ AŠ NÁM DI $/1N_{34} 3N_{14} 3N_{1} DIŠ /1N_{50} 5N_{14} GÁN, "240 + 50$ (ninda) length, (field of the official named) NÁM-DI; 60 + 30 + 3 (ninda) width: 1 bur'u 5 bùr irrigated field," calculated as $290n \times 93n = 269.7$ iku, or very nearly 15 bur. The five surface measures, based evidently on the laying down and recording of some sort of measuring device in the fields of a set of elites at ancient Jemdet Nasr, were combined in a total surface area notation on the reverse of the text, and this notation was qualified with KI BU, certainly to be translated "measured/ surveyed land." This is in exact parallel to the meaning of gid in later periods to qualify the use of a rope (éš) to measure fields; see, for instance, "Oxford" diri l. 564 (MSL 15, p. 49): GÁN BU = šadi-id aš-li-im, "rope puller," the lú éš gíd discussed above, and the many references to GÁN gíd in the online resources. If it were not considered flippant, I would call our archaic surveying device the "platinum snake."

REFERENCES

Adams, Robert McC.

2010 Slavery and Freedom in the Third Dynasty of Ur: Implications of the Garshana Archives. *CDLJ* 2010/2.

Bauer, Josef, Robert K. Englund, and Manfred Krebernik

1998 Mesopotamien: Späturuk-Zeit und Frühdynastische Zeit. OBO 160/1. Freiburg, Switzerland: Universitätsverlag Freiburg Schweiz.

Cavigneaux, Antoine

1980-83 Lexikalische Listen. RlA 6: 609-64.1.

Civil, Miguel

1984 Notes on the 'Instructions of Suruppak'. *JNES* 43: 281–298.

1989 The stone fragment AO 4397 (NFT 222). *NABU* 1989: 61.

Cooper, Jerrold S.

1983 *The Curse of Agade*. Baltimore: Johns Hopkins University Press.

Damerow, Peter, and Robert K. Englund

1987 Die Zahlzeichensysteme der Archaischen Texte aus Uruk. Pp. 117–166 in *Zeichenliste* der Archaischen Texte aus Uruk, eds. M. W. Green and H. J. Nissen. ATU 2. Berlin: Gebrüder Mann.

Deimel, Anton

1928–50 *Sumerisches Lexikon*. Rome: Pontificio Istituto Biblico.

Englund, Robert K.

1990 Organisation and Verwaltung der Ur III-Fischerei. BBVO 10. Berlin: Gebrüder Mann.

Falkenstein, Adam

1956 *Die neusumerischen Gerichtsurkunden*. Munich: Verlag der Bayerischen Akademie der Wissenschaften.

Foxvog, Daniel A.

1986 A Summary of Non-Sealed Labor Assignments from Umma. *ASI* 8: 59–75.

Geller, Mark J.

1998 Reflexives and Antipassives in Sumerian Verbs. *Or* 67: 85–106.

George, Andrew R.

2003 *The Babylonian Gilgamesh Epic: Critical Edition and Cuneiform Texts.* Oxford: Oxford University Press.

Halloran, John

2006 Sumerian Lexicon: A Dictionary Guide to the Ancient Sumerian Language. Los Angeles: Logogram Publishing.

Heimpel, Wolfgang

1987 Das Untere Meer. ZA 77: 22–91

2009 Workers and Construction Work at Garšana. CUSAS 5. Bethesda, Md.: CDL Press.

Hübner, Barbara and Albert Reizammer

1984 *Inim kiengi*. Marktredwitz: Selbst-verlag A. Reizammer.

Hurowitz, Victor

1992 I Have Built You an Exalted House. JSOT Supplement Series 115. Sheffield: Sheffield Academic Press.

Klein, Jacob

1990 Shulgi and Ishmedagan: Originality and Dependency in Sumerian Royal Hymnology. Pp. 65–136 in Bar-Ilan Studies in Assyriology Dedicated to Pinhas Artzi. Bar-Ilan Studies in Near Eastern Languages and *Culture*, eds. J. Klein and A. Skaist. Ramat-Gan: Bar-Ilan University Press.

Kleinerman, Alexandra and David I. Owen

2009 Analytical Concordance to the Garšana Archives. CUSAS 4. Bethesda, Md.: CDL Press.

Krebernik, Manfred

2007 Zur Entwicklung des Sprachbewusstseins im Alten Orient. Pp. 39–61 in *Das geistige Erfassen der Welt im Alten Orient*, ed. C. Wilcke. Wiesbaden: Harrassowitz.

Landsberger, Benno

1934 Die Fauna des alten Mesopotamien nach der 14. Tafel der Serie Har-ra= hubullu. ASAW 42/6. Leipzig: Hirzel.

Landsberger, Benno, et al., eds.

1937ff. *Materials for the Sumerian Lexicon*. Rome: Pontificio Istituto Biblico.

Langbein, Walter B.

1962 Hydraulics of River Channels as Related to Navigability. USGS Water Supply Paper 1539-W. Washington: U.S. Department of the Interior.

Maekawa, Kazuya

1934 The Agricultural Texts of Ur III Lagash of the British Museum VI. *ASJ* 11: 113–144.

Owen, David I. and Rudi H. Mayr

2007 *The Garšana Archives.* CUSAS 3. Bethesda, Md.: CDL Press.

Potts, Daniel T.

1997 Mesopotamian Civilization: The Material Foundations. London: Athlone Press.

Powell, Marvin A.

1978 Ukubi to Mother . . . The Situation is Desperate. A Plaidoyer for Methodological Rigor in Editing and Interpreting Sumerian Texts with an Excursus on the Verb taka: da_x-da_x (TAG₄). ZA 68: 163–195.

1992 Timber Production in Presargonic Lagaš. Pp. 99–122 in *Trees and Timber in Mesopotamia*, eds. J. N. Postgate and M. A. Powell. *BSA* 6. Cambridge: Cambridge University Press.

Sachs, Abraham J.

1944 Some Metrological Problems in Old Babylonian Mathematical Texts. *BASOR* 96: 29–39.

Sallaberger, Walther

2006 *Leipzig-Münchner Sumerische Zettelkasten.* Available online.

Salonen, Armas

1970 Die Fischerei im alten Mesopotamien. Helsinki: Suomalainen Tiedeakademia.

Steinkeller, Piotr

2001 New Light on the Hydrology and Topography of Southern Babylonia in the Third Millennium. *ZA* 91: 22–84.

Why Should Someone Who Knows Something Conceal It?

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edited by
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