PROPOSED MODIFICATIONS

TO DELETE AND ADD SIGNS to N2798 = L2/04-189 Proposal for Cuneiform Encoding. Expert contribution from Lloyd Anderson, Ecological Linguistics <u>ecoling@aol.com</u>

The additional signs proposed to be added here complete the major portion of common signs needed to satisfy the evidence concerning what are the functional independent units of the script. Choices of units to encode are not purely arbitrary, because they have consequences for complexity vs. simplicity of many aspects of implementation. The evidence for single-sign status comes (a) from actual cuneiform texts, the primary criterion, and (b) from the long scholarly tradition of sign lists. These two sources are in full agreement in almost all cases, primarily because the scholarly tradition of sign lists depends on the experts' implicit knowledge of usage in actual texts, and has had 150 years for rough spots to be ironed out.

What the standard tradition recognizes as single signs are almost without exception written closely together, while what the standard tradition recognizes as sequences of signs are written with considerable space between them when such space is available (in lines or indents with few signs, or more accurately, where the total of sign widths is less than the total space). This regularity persists from Early Dynastic through late Cuneiform. It is true of widely differing types of text, whether on stone or clay, whether "literary" or economic / administrative. I have reported on this fact with extensive examples. There has been no counter-argument. (An assertion was made in the past that there is no such thing as "careful" Cuneiform typography, even that the Gudea statues and Hammurabi's code, both carved on stone instead of clay, were not careful. The assertion was clearly false. Scholars recognize scribal errors vs. careful writing. A statement was made that there will be few or no continuous texts produced in Cuneiform. Yet the Finnish project has now printed three epics of Gilgamesh, Etana, and Anzu in Cuneiform, with very clear, even exaggerated spacing between signs and at least in general none within signs. This constitutes a "legacy" treatment consistent both with the long scholarly tradition and to a great degree also with the ancient practice in spacing Cuneiform texts.

It is known in sociolinguistics that meta-discussion about symbol use is far less consistent, far less reliable, and far less valid, than is unconscious use. While writing is on average less automatic than speaking, it is also more consistent when automatic than when consciously manipulated. Names of signs are much more meta-texts than they are like normal texts, and are accordingly not as good evidence (consider the AL SHESHIG which Steve Tinney notes is found named in a sign list as AL SHE).

With each proposed set of additions (one deletion) appear illustrations of the signs, in Neo-Assyrian font style or in the "classical" font style. At the end there are tables showing the high agreeement among the various sign lists from the scholarly tradition.

Failures to provide an encoded character for independent functioning units of the script causes much default behavior of the characters to go awry.

- (a) Spacing will be screwy, where it could be straightforward, extra space appearing between full signs, not between components of signs (of course understood: where there is room)
- (b) It causes violations of the unification desired across time periods. Components of signs change historically in different ways than do the identical-appearing components functioning as independent signs. It is on the level of signs not components that equations are best drawn across time periods. UMBIN (which has now been accepted for encoding) maintains its identity as a sign across substantial time periods. But it does not maintain the identity of its component structure, that is reanalyzed and changes radically.
- (c) Minimal contrasts will be violated if, even in texts with adequate spacing, there is no difference between SIGN U GUD SIGN and SIGN UL SIGN. The sign UL consists of two components U plus GUD, it is not a sequence of two signs. Just as one example. Or the example which Piotr Steinkeller discussed where spacing was used by experts to decide which of two distinct content readings was correct for a given passage (PA.DISH vs. GUR).
- (d) Creation of fonts will entail substantial additional work if many of the signs have to be made up of parts with context-sensitive renderings [SIGN joined to SIGN] yielding another sign with a single and often irregular glyph. It is much simpler to encode what are known to be single signs from the outset.
- (e) Searches for particular lexical content will be considerably more complex if signs are unnaturally decomposed, in particular if some of the signs proposed for addition here are decomposed, the only way to encode them without these signs. Users will normally not want to request a search for the sequence SIGN-1 SIGN-2 U and have the result contain also all sequences SIGN-1 SIGN-2 UL [where UL looks a bit like, but not exactly like, U-joined to GUD]. There are similar oddities in quite a number of cases. Most of them cannot be remembered by users as such a simple pattern as this one.
- (f) There will no doubt be other hacks and kludges and patches necessitated by an encoding which is partly of individual signs, partly of sign components. Only a full and detailed study of implementation might let us know of most such problems. Even then, it is safer to simplify. Just as the working group decided early not to have dynamic composition of parts for larger numbers of signs of the type Container x Infixed components, so the compositions required by the current proposal are just as disadvantageous. Let's clean this up from the start.

Following are a relatively small number of single signs not yet provided for, whose addition will clean up most of the common instances which would cause problems.

Proposal 1. 12115 GISH TUG2 PI SHIR TENU SILA3 :: remove after 122D7 CUNEIFORM SIGN SHIR :: add CUNEIFORM SIGN SHIR TENU

Comments. (a) Steve Tinney Agrees. He notes that <<Borger lists sequences SHIR-tenu SILA3 and GISH TUG PI SHIR2 TENU which support the necessity of this change.>>
(b) Such long sequences are almost certainly never single signs, even if we do not yet know the immediate constituency (how structurally to break them into parts which are functional constituents of their total sequence). They will therefore almost certainly end up deprecated, and it is better to eliminate them before they get into any standard.

Proposal 2.

Before 12058 CUNEIFORM SIGN DAG KISIM5 TIMES A PLUS MASH :: Add CUNEIFORM SIGN DAG KISIM5 Before 12267 CUNEIFORM SIGN NUN LAGAR TIMES GAR :: Add CUNEIFORM SIGN NUN LAGAR

	配	UTUA2	DAG KISIM5	B439	Uooooo
৸ৗৗ৻৾৸ৗ		TUR3	NUN LAGAR	B 145	Uooooo

Comments: (a) Since DAG KISIM5 (also called UTUA2) exists as a unit into which other components can be infixed, as in 12058ff, and since NUN LAGAR (= TUR3) exists as a unit into which other components can be infixed, as in 12267ff, as standard linguistic deduction on the constituent structure of symbol strings indeed demonstrates, therefore these two combinations of components are presumptively functioning units even when there is no infix. This is not inconsistent with general principle 3.4. (c) Although the signs of the group (DAG KISIM5) x infixes are in part artificial, in vocabularies only, the sign TUR3 exists all the way through the time periods starting from archaic Uruk. Just as the sign UMBIN discussed in a paper for the previous UTC, the early form of TUR3 clearly has the two components superfixed, not in sequence. Its early form is NUN x LAGAR, later NUN LAGAR (components adjacent, even touching, not overlapping), but the identity as single sign persists throughout.

Here and in what follows, single-morpheme names (UTUA2 and TUR3) are given alongside the names which refer to **components** of signs, rather than sequences of signs. (Signs proposed here for addition could also be ordered differently, or not, if the single-morpheme names are used.) At least most of the DIRI list is quite likely a naming of sign **components**, of single signs with particular readings, not a naming of sign sequences which have special idiomatic readings. Dr. Wolfgang Heimpel has confirmed that this interpretation is quite plausible.

Proposal 3.

After 122DC CUNEIFORM SIGN SHU2 :: add the following sequence of signs (illustrations and sign numbers from Borger MZL, further sign lists at end of proposal). Although the use of "TIMES" implying infix or overlap may seem surprising to many cuneiformists here, at least two early Uruk forms clearly have the vault of the night sky (origin of SHU2) surrounding the AN or the E2. The "roof" radical of Chinese characters also behaves structurally just like other radicals which surround enclosed parts. These could also be named SHU2 AN (etc.) or EN2 (etc.)

CUNEIFORM SIGN SHU2 TIMES AN CUNEIFORM SIGN SHU2 TIMES AN THREE TIMES CUNEIFORM SIGN SHU2 TIMES ASH2 CUNEIFORM SIGN SHU2 TIMES DUN2 CUNEIFORM SIGN SHU2 TIMES ESH CUNEIFORM SIGN SHU2 TIMES NE CUNEIFORM SIGN SHU2 TIMES UR SHESHIG

Į⊷Į	EN2	SHU2 x AN	B870	U00000
[₽₽₽₽	SHUHUB, KUNGA	SHU2 x MUL	B872	U00000
[] 〕	GBL2; KBR	SHU2 + ASH2	B875	U00000
IEIIEI	SHUDUN	SHU2 x DUN4	B876	U00000
<u>]</u> ્રેવરવ	LIL3	SHU2 x ESH	B879	U00000
	LIL5	SHU2 x NE	B874	U00000
III		SHU2 x UR-sheshshig	B880	U00000

CUNEIFORM SIGN SHU4 TIMES BURU14 CUNEIFORM SIGN SHU4 TIMES DIM CUNEIFORM SIGN SHU4 TIMES DIM TIMES KUR CUNEIFORM SIGN SHU4 TIMES E2 CUNEIFORM SIGN SHU4 TIMES GA CUNEIFORM SIGN SHU4 TIMES GAR CUNEIFORM SIGN SHU4 TIMES GAR CUNEIFORM SIGN SHU4 TIMES ITI CUNEIFORM SIGN SHU4 TIMES MU CUNEIFORM SIGN SHU4 TIMES SI GUNU CUNEIFORM SIGN SHU4 TIMES URUDU

After 12055 CUNEIFORM SIGN BUR2 :: Add CUNEIFORM SIGN BURU14

, ► Frr t		BURU14	B 165	U00000
< <u></u> ▶>	SHIBIR	SHU4 x BURU14	B666	U00000
	GAKKUL3	SHU4 x DIM	B667	U00000
	GAKKUL	(SHU4 x DIM) x KUR	B668	U00000
<₽ĭĭ	SHITA4	SHU4 x E2 early	B699	U00000
 	υτυ2	SHU4 x GA	B700	U00000
Û	SHAGAN	SHU4 x GAN	B684	U00000
₹₩	PAD (ŠUG)	SHU4 x GAR	B746	U1227E
< A		SHU4 x ITI	B664	U00000
< A	UDUN	SHU4 x MU	B665	U00000
≪শ্নুস্থা		SHU4 x (SI gunu)	B670	U00000
	GUL	SHU4 x URUDU or DUB ?	B682	U00000

Comments: (a) These are all assigned sign numbers by Borger MZL and for about half of them also by most of the other sign lists across all time periods where the sign occurs in the lists. The verdict of the tradition is thus unanimous, so far as I am aware. Borger almost always distinguishes very carefully between sequences of signs (not assigned numbers. For IGI see MZL pp.187-8) and single signs (assigned numbers, MZL pp.189-190), showing different spacing in the two cases. Images of Borger's entries on MZL pp.188-189 are at the end of this paper. Though there may be some influence from prior tradition, the prior tradition is itself under the long-term persistent influence of actual text usage.

(b) Where attested in actual texts (the probative type of evidence), the portion SHU2 or SHU4 is never separated from the remaining wedges of the sign, not across "indents" (lines) within a "line" (frame), and not when additional space is used in the cuneiform form of justification or expanded text. (Not probative of single-sign status is meta-discussion of signs such as the naming of sign components. As noted earlier, in sociolinguistics it is known that normal usage is consistent, reliable, and valid while meta-discussions, on a more conscious level, are not. There is absolutely no reason to believe that this difference does not hold for cuneiform. Even if writing is not on average as fully unconscious as speaking, it can often be automatic.)

Proposal 4.

After 12254 CUNEIFORM SIGN NIM TIMES GAR PLUS GAN2 TENU :: Add CUNEIFORM SIGN NIN Or else name and order as CUNEIFORM SIGN SAL TUG2 shown below.

After 122AD CUNEIFORM SIGN SAL :: Add the following signs CUNEIFORM SIGN SAL KUR

After 122AE CUNEIFORM SIGN SAL LAGAB TIMES ASH2 :: Add the following signs CUNEIFORM SIGN SAL LAGAR (see comment (b) below) CUNEIFORM SIGN SAL SHE3 CUNEIFORM SIGN SAL TUG2 CUNEIFORM SIGN SAL UR (see comment (b) below)

ř.	润	Þ	NIN	SAL x TUG2 or SAL x KU	B886, B887	U00000
F	₽ 4	\bowtie	GEME2	SAL x KUR	B890	U00000
Į~́T				SAL x LAGAR	B895	U00000
			EGI2	SAL x SHE3 or SAL x NAM2	B897	Uooooo
Ŕ₩Þ			NIG	SAL x UR	B898	Uooooo

Comments: (a) Borger MZL and sign lists for Fara, sometimes Ur III and Rosengarten, assign a single number to these signs, with the exception (b) that two signs are not attested in earlier stages. (c) Text spacing shows the sign NIN is a single sign already in archaic Uruk (zero exceptions found in extensive searches). Plate No.1 in Biggs **Abu Salabikh** (the time period of Fara) contrasts single-sign forms in the frames 1 and 9 below, either stretching the sign or leaving blank space, completely different spacing from the free combinations of separate signs in frames 2 to 8. (d) Using the sign name NIN avoids having to determine its second component after SAL, where there may still be room to discover the true original components (etymology).



Proposal 5.

After 12149 CUNEIFORM SIGN IGI :: Add the following signs CUNEIFORM SIGN IGI DUB CUNEIFORM SIGN IGI E2 CUNEIFORM SIGN IGI ERIM CUNEIFORM SIGN IGI MIN (see comment (b) below) CUNEIFORM SIGN IGI NI CUNEIFORM SIGN IGI RU CUNEIFORM SIGN IGI SHE3 CUNEIFORM SIGN IGI UR CUNEIFORM SIGN IGI UR

	AGRIG; GISKIM	IGI x DUB or IGI x UM	B727 (v(2))	Uooooo
٩₽₽₽	U 6	IGI x E2	B728	Uooooo
∢⊩₩	\$IG5	IGI x ERIM	B729	U00000
< Ĭ ≻ IT		IGI x MIN or IGI + MIN	B724a	U00000
<rp>Image: Approximation of the second seco</rp>	IGI.NIG2	IGI x NI	B735, B730	Uooooo
∢⊫~∛∭	PAD3	IGI x RU	B725	Uooooo
		IGI x SHE3 ?	B732	Uooooo
<rp>ILI_</rp>	HUL	IGI x UR	B733	Uooooo
Image: A A A A A A A A A A	HUL4	IGI x (UR x KASKAL)	B734	Uooooo

Comments: (a) Borger MZL and sign lists since Fara assign a single number to these signs, with the exception (b) that IGI MIN and IGI UR TIMES KASKAL are not listed in Fara, and IGI E2 is not listed in Rosenberg (Lagash) or in Schneider (Ur III). At least I have not yet managed to find them there. (c) Text spacing shows that the sign IGI RU (PAD3) is treated as a single sign (extensive text searches, overwhelming practice). (d) Given a Borger MZL reference somewhere to the duals of body parts, presumably like the assumed ligature here with MIN "two", the semantic specialization may mean that this "ligature" turns out to be always obligatory, never written in sequence, and is thus not a ligature but simply an irregular form like our ampersand "&" or like an irregular verb form "went" instead of "goed". A separate sign to be encoded. I don't know the answer to this question yet, I hope it is in other chapters of Borger MZL.

Concordance to Sign Numberings for Signs Proposed Here as Additions

Tables show where I have been able to identify each sign in traditional numbered sign lists. Since the universal practice has been to assign a number to those forms regarded as single signs, not to sign sequences or to mere components (fragments) of signs, these numbered lists can be taken as a default list of distinctive signs. Of course there are differences between different scholars, but those differences mostly concern the rarer signs or sign sequences, whichever they turn out to be. The omission of a sign from one list may also reflect lack of use in a particular scribal tradition, it need not say anything about the scholar's belief whether the form is a single sign or a sequence. Study of actual texts is real evidence which confirms the sign lists. In tables below, the sign names are not regularized, and group labels in larger print can be disregarded.

Borger's MZL list is especially extensive. Since he is also careful to distinguish between sign sequences (those with IGI as first sign see pp.187-188) and single signs (those with IGI as first component see pp.189-190), the MZL list is surely one of the most valuable.

Hittite Friedrich	Rüster & Neu	von Sod		Laba	at		Borger MZL	Unicode N2698	Labat readings		Sign Name	Ros.Rép . Lagash	Ur III KWU	Fara (LAK)	Ur Exc. Texts UETII Arch.	PI JN	ATUI	Z. freq.	ZA TU
68	34	63	a	8	7 8		B 145	Uooooo	tur3	TUR3	NUN x LAGAR = TUR3	R186	131	77, 78	60	30	239	46 x	Z563
	278 in this			28	1		B439	Uooooo			UTUA2								

Hittite Friedrich	Rüster & Neu	von Sod e	n Labat		Borger MZL	Unicode N2698	Labat readings		Sign Name	Ros.Rép . Lagash	Ur III KWU	Fara (LAK)	Ur Exc. Texts UETII Arch.	PI JN		Z. freq.	ZA TU
			Cov	ers	; Th				vight Sky								
232	295	273	469	469	B746	U1227E	pad {šug}	PAD (ŠUG)	SHU4 x GAR	R171		398	180		457	18x	Z426
217	275	258	441	441	B698	U1230F	ul	UL	SHU4 x GUD	R012	502	(? 299) 300	221				
210	271	249	429	429	B682	Uooooo	gul	GUL	SHU4 x URUDU or DUB ?	R279	546	389	172	137, 226	454 [455]	1x+atu	Z242
(cf.) 207	266		430	430	B683	Uooooo		GIR4	SHU4 x AD	R015	545	414	181				
			442	442	B699	U00000		ŠITA4	SHU4 x E2 early			397	(?230) 170	297		4x	Z535
216	270		428	428	B684	Uooooo		ŠAGAN	SHU4 x GAN	R016	547	407		_			
			447	-	B706	U00000		NIGIN4	SHU4 x UD		511	401			206	ATU	Z537
,			419	419	B671	Uooooo		SAGŠU	SHU4 x SAG		513	316	179	_			-
213	272	243	412	412	B663	U00000	muh	UGU	SHU4 x KA	R013	514	413					
206	263		418	418	B670	Uooooo		U.GUN	SHU4 x (SI gunu)		334	179		_			_
			443	443	B700	U00000		UTU2	SHU4 x GA			412					
212	274		54	54	B 165	Uooooo	-		BURU14			531					-
			413 ?	413	B666	U00000		ŠBR	SHU4 x BURU14	2 2			2	8 - 1	2		2 - 3
			415 a	_	B667	U00000		GAKKUL3	SHU4 x DIM (SHU4 x DIM) x					_	_		
			416	416	B668	U00000		GAKKUL	KUR								_
	8 8		448		B710	U00000		KUŠU	ŠU4 x GIR3		504 ??		0	S - 1	8	S	8 3
			414	-	B664	U00000			SHU4 x ITI								-
sub. 205	264		415	415	B665	U00000		UDUN	SHU4 x MU								

Hittite Friedrich	Rüster & Neu	von Sod e				ger	Borger MZL		readings		Sign Name	Ros.Rép . Lagash	Ur III KWU	Fara (LAK)	Ur Exc. Texts UETII Arch.	PI JN	ATUI	Z. freq.	ZA TU
				Cc	ve	ers	; Th	e Va	ult c	of the N	ight Sky	у				2			
			ļ	546		546	B870	Uooooo		EN2	SHU2 x AN		510	356		180		4x+atu	Z138
				547		547	B872	Uooooo		ŠUHUB, KUNGA	SHU2 x AN THREE TIMES								
24				549		549	B876	Uooooo		ŠUDUN	SHU2 x DUN4		503	409		8 3	3	×	
	88			553	a		B880	U00000		ŠU2 x UR- šeššig	SHU2 x UR- sheshshig		570						
				548		548	B875	Uooooo		GBL2; KBR	SHU2 + ASH2								
			+	553			B879	Uooooo		LIL3	SHU2 x ESH								
			ł	552			B874	Uooooo		LIL5	SHU2 x NE								

Hittite Friedrich	Rüster & Neu	VOL Sod		Labat	8			Borger MZL	Unicode N2698	Labat readings		Sign Name	Ros.Rép . Lagash	Ur III KWU	Fara (LAK)	Ur Exc. Texts UETII Arch.	PI IN	ATUI	7 fron	ZA
11160101	0. 1100	NOU	сщ		-		×		L = 1		NUS	olgi Hame	. 198921	NW0	I as (LHK)	on march.	011	HIOT.	a. neg.	
240	299	300		556			556	B886, B887	Uooooo	nin	NIN	SAL.TUG2 or SAL.KU	R190	795a, 796, 787	522	401	305		11x	Z40
243	305	303		558			558	B890	Uooooo	amat	GEME2	SAL x KUR	R173	793	49	398	303		13x	Z20
239	298	301		557			557	B889	U12070	dam	DAM	DAM	R191	799	523, 46a	291 ?				
241	300	299		555	a		555	B884	U12371	şu(m.)	ZUM & ZUM2	SAL x 'tomb''	R175	788, 791, 790	519					
				555	b			B885	U122AF	zum	ZUM	SAL x (LAGAB : ASH2 (<'comb'))		791	524					
				555	b			****	Uooooo	zum	ZUM	SAL x			520		0			
		305		563			563	B898	Uooooo	nig	NIG	SAL+UR			521					
				556	v			B897	Uooooo		EGI2	SAL x SHE3 or SAL x NAM2								
				554	v	1		****	Uooooo			SAL x KAB or SAL x HUB2								
				554	v	2		*ototek	Uooooo			SAL x ME	R154	791a						
				554	v	3		*****	Uooooo			SAL x TUK								

Hittite Friedrich	Rüster & Neu	von Sod		Labat	8			Borger MZL	Unicode N2698	Labat readings		Sign Name	Ros.Rép . Lagash	Ur III KWU	Fara (LAK)	Ur Exe. Texts UETII Arch.	PI JN		Z. freq.	ZA TU
				IC	ίI															
		261	a	449	n			B724a	Uooooo			IGI + MIN								
208	265	264		455			455	B731	U12149	u3	U3	IGI x DIB	R070	568	432, 433					
226	289	263		451		(n)		B726 (v)	U1214A	ər	AR	IGI.RI	R073	557	422			2		2
	292	262		450			450	B725	U00000	раЗ	PAD3	IGI.RU	R074	558	423	243				
228	290	265		456			456	B733	Uooooo	hul	HUL	IGI.UR	R071	565	428					
227	291			452		1 (n)		B727 (v(2))	Uooooo		AGRIG; GISKIM	IGI x DUB or IGI x UM	R072	563	427					
225	293			454			454	B729	Uooooo		SIG5	IGI.ERIM		559-60	424					
				449				B735, B730	Uooooo		IGI.NIG2	IGI x NI	R068	561	435					
				455				B732	U00000			IGI.SHE3 ?		? 562, 567	426	244				
												IGI.TUG2			434					
				449		2		B728	Uooooo		U6	IGI + E2			429			2		
				456	a			B734	Uooooo		HUL4	IGI. (UR x KASKAL)		566						

Here is how Borger's MZL distinguishes sign sequences in which IGI is the first full sign (p.188) from complex signs having IGI as leftmost component, where IGI is not a full sign (p.189). The scholarly tradition is systematic about this. The distinction needs to be made somehow, as it occurs in texts, not just in sign lists. It is not a matter of ligaturing or other formatting (formatting should not be making distinctions between significantly different text content). To merge these is very much like treating "bold" and "loolol" and "boolol" and "loold" as the same sequence of characters, except for formatting. We would not dream of encoding Latin English in such a way.

Vokabulare: Diri II 1 (nicht uhhur). (F== Vokabulare: MSL 1 DiriNippur 143, cf Ca Diri II 159f. (SAL II 9 161f. (SAL II 9 151f., (JAOS 65 225 51-53; dálla, šukur, ubrim); I GAG = he-bu-ru-umDiri II 112 (SAL II ' <⊢ ĦⅢ sie 1-* Vokabulare: Diri II CAD D 91, CAD E 3 Lw. gànzi/er). ଐ≁₩ Vokabulare: Diri II E 308b, CAD G 43b, K 8631 Vs.1; Lw. gan (F (F Vokabulare: Proto-l Thureau-D., Syllabaii lim); Diri II 75-78 (S. 180b) mit Lw. (lib4-li AHw 858b sub 8 c, C DiriNippur 120f. cf C IGI = lilib auch BiOr 小耳口 Vokabulare: Diri II 195b, CAD I/J 82a, / CAD I/J 82a, aber vc $pallil_x = pálil)$. Oder streichen (gehört zu § <⊩ <u>IH</u> <u>#</u> Cf CAD M/II 147b <⊩ II Vokabulare: Diri II (nicht ùhhur). (I- W siehe (I- 1- 2-Vokabular: Diri II auch VS 24 n8 6; Lv ildu). Cf Farber, WC

725 (-211 Fossey p876f. Rose Vokabulare: Proto-] MSL 12 134 164 (Lw nicht in Vokabularen 726 (]]] , (]] Fossey p877-880. S Vokabulare: MSL 3 (Lw. abgebrochen). 727 (HHHTTTT, au - ŠL 452 Fossey p881. Rosen Vokabulare: Sb I 35 Lw. giškim o.ä.) und 304b, AHw 1368a); I 62b), Lw. agrig; MSL fehlerhaft statt giš/ski 728 ∢ ⊢⊨ Fossey p881. Vokabulare: Sb I 35 CAD B 81a und 115b tragen], CAD N/II 12 (Lw. u₆); MSL 17 49 ŠL 453 ∢⊢শ Fossey p882 n2902(n29022f. siehe CAD Küchler, Medizin tXV CAD Š/III 84a) vorge 729 (1-4] Fossey p882f. Schne Cf Krecher, MARI : Vokabulare: Proto-F 356 (Lw. sag10); MSL abgebrochen); MSL 1 730 (1-27, alt (1 454,12 bzw. 449,244 Fossey p892. Rosen Cf Powell, OrNS 43 Vokabulare: Proto-E 78 4' (Lw. kur7); MSI ["kúrum" wäre kurum (Lw. kur7); MSL 17 2 731 (月目 RÉC n247 und 248. n264. HethZL n265.