

Syntax of Sumerian multiword verbs

Types (all nominal constituents preverbal)

1 *Light verb constructions:*

1.1 Verb = *dug*₄ = ‘to say/do’

Nominal constituent = verbal noun:

*sa*₂ *dug*₄ = ‘to achieve being equal’ = ‘to reach (place, person), accomplish (desire)’

*sag*₂ *dug*₄ = ‘to achieve scattering/dispersing’ = ‘to scatter/disperse (people, animals)’

Nominal constituent = noun:

*a-da-min*₃ *dug*₄ = ‘to apply the contest’ = ‘to dispute’

*gu*₃ *dug*₄ = ‘to apply the voice’ = ‘to bawl’

Nominal constituent = body-part noun:

*ḡiṣ*₃ *dug*₄ = ‘to apply the penis’ = ‘to make love/copulate/inseminate’

ṣu *dug*₄ = ‘to apply the hand’ = ‘to prepare (something)’

1.2 Verb = *ak* = ‘to do/make’

Nominal constituent = verbal noun:

*gu*₂-*gur*₅-*ru* *ak* = ‘to do cutting down’ = ‘to chop down’

*tu*₁₁ *ak* = ‘to do striking down’ = ‘to defeat’

Nominal constituent = noun:

al *ak* = ‘to apply the hoe’ = ‘to hoe (field)’

*ga-rig*₂ *ak* = ‘to apply the comb’ = ‘to card (wool)’

Nominal constituent = body-part noun:

bar *ak* = ‘to do the outer body’ = ‘to test, examine (a person’s behaviour)’

ṣu *ak* = ‘to do the hand’ = ‘to seize’

1.3 Verb = *za*, nominal constituent = onomatopoeic noun:

animal noises: *wu-wa za* ‘to bleat’ (of goat)

drumming noises: *dub-dab za* ‘to clatter’ (of hailstones)

liquid noises: *du-bu-ul-da-ba-al za* ‘to gurgle’ (of beer)

2 *Content verb constructions:*

2.1 Nominal constituent = verbal noun: not attested

2.2 Nominal constituent = noun:

*gu*₃ *mur* ‘to roar the voice’ = ‘to rumble (of storm)’

pa *e*₃ = ‘to bring forth branches’ = ‘to make (something) radiant’

2.3 Nominal constituent = body-part noun:

*ḥub*₂ *sar* = ‘to hasten the foot’ = ‘to run’

ṣu *tag* = ‘to touch the hand’ = ‘to decorate’

3 *Content verb constructions plus finite light verb:*

3.1 First nominal constituent = noun:

*gu*₃ *mur* *ak* ‘to do roaring the voice’ = ‘to rumble (of storm)’

pa *e*₃ *ak* = ‘to do bringing forth branches’ = ‘to make (something) radiant’

3.2 First nominal constituent = body-part noun:

*ḥub*₂ *sar* *ak* = ‘to do hastening the foot’ = ‘to race’

ṣu *tag* *dug*₄ = ‘to do touching the hand’ = ‘to decorate’

Examples

(1) Oblique object in dative

lugal	ki	an-na-a \check{g} ₂ - \check{g} a ₂ -ni	^d nin- \check{g} ir ₂ -su-ra
lugal	ki=Ø	a-nn-a-n-a \check{g} -Ø=’a=ani	nin- \check{g} irsu=ak=ra
king	earth=ABS	PRO-OBL.3SG.OBL-DAT-A.3SG-measure-O.3C=SUB=POSS.3SG	[nin- \check{g} irsu=GEN]=DAT

‘for Nin- \check{G} irsu (Master-of- \check{G} irsu), his king who loves him’

(Lagaš, 25th century BCE)

(2) Oblique object in comitative

^d en-ki-da	e ₂	an-gur ₄ -ra-ka	šag ₄	mu-di ₃ -ni-ib ₂ -kuš ₂ -u ₃
en-ki=ak=da	e	engur=ak=’a	šag=Ø	mu-n-da-ni-b-kuš-e
[en-ki=GEN]=COM	house	underground.waters=GEN=LOC	heart=ABS	CISL-OBL.3SG-COM-LOC-O.3-trouble-A.3C

‘he takes counsel with En-ki (Lord-of-earth) in the temple of the underground water’

(3) Oblique object in terminative

^d en-lil ₂ -e	en	^d nin- \check{g} ir ₂ -su-še ₃	igi	zid	mu-ši-bar
en-lil=e	en	nin- \check{g} irsu=ak=še	igi	zid=Ø	mu-n-ši-n-bar=Ø
en-lil=ERG	lord	[nin- \check{g} irsu=GEN]=TERM	eye	just=ABS	CISL-OBL.3SG-TERM-A.3SG-direct-O.3C

‘En-lil (Wind?-lord) looked with favour on Lord Nin- \check{G} irsu (Master-of- \check{G} irsu)’

(4) Oblique object in directive (most frequent)

lu ₂	be ₆ -lu ₅ -da	di \check{g} ir-re-ne-ke ₄	si	bi ₂ -sa ₂ -sa ₂ -a
lu	beluda	di \check{g} ir=ene=ak=e	si=Ø	b-i-n-sa~sa-Ø=’a=e
person	custom	deity=PL=GEN=DIR	horn=ABS	OBL.3-DIR-A.3SG-equalise~PL-O.3C=SUB=ERG

‘the man who arranged every ritual of the deities’ (transitive subject)

(5) Argument-promotion (from directive to dative; locative in verb excludes directive)

(5A)

šag ₄ -ba	niḡ ₂ -mussa	^d ba-u ₂	nin-a-na-ke ₄	si	ba-ni-sa ₂ -sa ₂
šag=bi=’a	niḡ-mussa	bau	nin=ani=ak=e	si=∅	b-a-ni-n-sa~sa-∅
heart=POSS.3=LOC	thing-in.law	bau	mistress=POSS.3SG=GEN=DIR	si=ABS	OBL.3-DAT-LOC-A.3SG-equalise~PL-O.3C

‘he arranged every bridal gift of Bau, his mistress, in its centre’

(5B)

temen-bi	i ₃	ir	nun-ka	šu-tag	ba-ni-dug ₄
temen=bi=e	i	ir	nun=ak=’a	šu-tag=∅	b-a-ni-n-dug-∅
foundation=POSS.3=DIR	oil	fragrance	princely=GEN=LOC	hand-touching=ABS	OBL.3-DAT-LOC-A.3SG-do-O.3C

‘he decorated its foundation with oil of princely fragrance’

(6) Agent-deletion (direct object becomes intransitive subject)

kug-ba	inim	ba-a-ḡa ₂ -ar
kug=bi=’a	inim=∅	ba-y-ḡar-∅
silver=POSS.3=LOC	word=ABS	PASS-DIR-place-S.3C

‘its silver was claimed’

(Urim, 21st century BCE)

Diachronic variations

(7) Double direct object (absolutive) constructions

šū-luḥ	si	bi ₂ -sa ₂
šū-luḥ=∅	si=∅	b-i- ^ʔ -sa-∅
hand-washing=ABS	horn=ABS	OBL.3-DIR-A.1SG-equalise-O.3C

‘I arranged the purification rituals’

(two direct objects in noun phrase, but oblique and direct objects in verb)

(8) Noun-incorporation/Morphological compounding

(8A) without free-standing double of noun

laḥtan	maḥ-a	mi-ni-in-si-sa ₂ -am ₃
laḥtan	maḥ=a	mi-ni-n-si-sa-∅=me-∅
collector vat	huge=LOC	CISL-LOC-A.2SG-horn-equalise-O.3C=COP-S.3C

‘you arrange it on a huge collector vat’

(8B) with free-standing double of noun

šag ₄ -bi	ur-saḡ-ur-saḡ-e-ne	si	mu-un-si-sa ₂ -e-ne
šag=bi=e	ursaḡ~ursaḡ=ene=e	si=∅	mu-n-si-sa-ene
heart=POSS.3=DIR	hero~PL=PL=ERG	horn=ABS	CISL-LOC-horn-equalise-A.3PL

‘all the heroes make their way straight to its interior’

(both 18th century BCE manuscripts)

Notes to examples

First line

The first line is a transliteration: a sign-by-sign representation of what is written in the cuneiform script. Hyphens are added between signs that constitute a word, and between an enclitic and its host. Determinatives (unspoken signs that indicate the semantic set to which a noun belongs) are in superscript. Subscript numerals are a convention used within the discipline to distinguish between homophonous signs.

Second line

The second line is a morpheme-by-morpheme reconstruction, using the principal allomorph of each morpheme (consequently in the case of vowels a form prior to any contraction or assimilation). Hyphens are used between morphemes that constitute a word, and = between an enclitic and its host. Weak consonants are not recognised in the transliterations but are in this line.

'Mismatches' between transliteration and morpheme-by-morpheme reconstruction

Incongruence between sign and morpheme: The bases of most lexical words are written logographically and all function morphemes (bases, clitics and affixes) phonographically. Most 'mismatches' involve phonographic writings. Morphologically, there is not always a one-to-one correspondence between sign and morpheme: some signs constitute two morphemes, and the writing of some morphemes involves more than one sign.

Incongruence between sign and sound syllable: Phonologically something similar applies: there is not always a one-to-one correspondence between sound syllable and sign, CVC (consonant-vowel-consonant) sound syllables often being written CV-VC or (in the 3rd millennium BCE) simply CV.

Third line

The third line glosses the morphemes.

The Sumerian gender distinction is between human (people and deities) and non-human (animals and inanimates). Only pronominal morphemes that are human in gender distinguish number; in the glosses those with a number specification (SG or PL) are necessarily human and those without a number specification non-human. Some PNG (person-number-gender) verbal affixes have common (C) forms, that is the singular human form matches the non-human form. In the examples given here, common forms that mark the transitive subject (A) have human reference while those that mark the direct object (O) or intransitive subject (S) have non-human reference.

Square brackets enclose a proper noun that includes a genitive noun phrase.

Provenance

Unless specified otherwise all examples come from Lagaš (in the south of modern Iraq) and date to the 22nd century BCE.

Phonemes

All the alphabetic representations used in the examples should be regarded as approximations. In addition, \tilde{g} (and \tilde{G}) = sing; \tilde{s} = ship; h = loch; ' = glottal stop.

Further abbreviations

C	common form, i.e. human singular form matches non-human form		
CISL	cislocative		
DIR	directive case	SUB	subordinator (relativiser-complementiser)
PRO	prothetic prefix	TERM	terminative case

Possible criteria

Semantic unit

Typically translated into English (and Akkadian) by verb.

Non-referentiality of direct object

Never followed by demonstrative determiner.

Extent of modification of direct object

Typically no modification, but sometimes direct object is modified by:

genitive noun phrase: *šū lil₂-la dug₄* = ‘to do the hand of a ghost’ = ‘to make (something) ghost-like’,

adjective: *igi zid bar* = ‘to direct a just eye’ = ‘to look with approval’,

possessive pronoun : *igi-ni bar* = ‘to open his eye’,

never by relative clause or numeral.

Syntactic inseparability of direct object from verb

Movement is highly atypical but occurs occasionally with some constructions that might otherwise be regarded as multiword verbs, e.g. *igi* oblique object *bar*.

Morphology of nominal constituent

Never (?) reduplicates.

Distribution

Passivisation is restricted. Nominal constituent can't (?) be antecedent of relative clause.

Multiword verbs occur in non-finite forms as nouns and modifiers. Whether these are phrases or morphological compounds is difficult to determine (no information on stress).

Syntactic role of nominal constituent

Typically the nominal constituent is an absolutive-marked direct object and the semantic object is in an oblique case. But sometimes nominal constituent is oblique-marked and the semantic object is in the absolutive: *šū-a gi₄* = ‘to return in the hand’ = ‘to transfer’, *gu₂-da la₂* = ‘to stretch with the neck’ = ‘to embrace’, and with possessive pronoun *ki-bi(-e) gi₄* = ‘to return to its place’ = ‘to restore’. *ki-a ġar* = ‘to place in the the ground’ = ‘to found’ also attested as morphological compound *ki-ġar* ‘to ground-place’.

Corpus-based statistical analysis

Electronic Text Corpus of Sumerian Literature: <http://www-etcsl.orient.ox.ac.uk/>

And finally ...

Akkadian *kašāšum* ‘to overpower’ possibly borrowed into Sumerian as *ka ša-an-ša-ša*, the three Semitic roots being adapted to the body-part paradigm of Sumerian multiword verbs (i.e. Semitic root *k* isolated as Sumerian *ka* ‘mouth’), from which a further multiword verb was formed, *šu* (‘hand’) *ša-an-ša-ša*.

Further reading

argument-promotion:

Zólyomi, Gábor. 1996. ‘Directive infix and oblique object in Sumerian’. *Orientalia* NS 68: 238–242.

body-parts:

Karahashi, Fumi. 2000. *Sumerian compound verbs with body-part terms*. University of Chicago Ph.D. Dissertation.

ak:

Sjöberg, Åke W. 1998. *The Sumerian dictionary of the University of Pennsylvania Museum* (Volume 1, A, Part III). Philadelphia, Pa: Babylonian Section of the University Museum.

*dug*₄:

Attinger, Pascal. 1993. *Éléments de linguistique sumérienne: la construction de du₁₁/e/di “dire”*. Fribourg, Suisse/Göttingen: Éditions Universitaires/Vandenhoeck & Ruprecht.

za:

Black, Jeremy. 2003. “Sumerian Noises: Ideophones in Context”. In Sallaberger, Walther, Volk, Konrad & Zgoll, Annette (eds.) *Literatur, Politik und Recht in Mesopotamien: Festschrift für Claus Wilcke*. Wiesbaden: Harrassowitz. 35–52.

Tables

Table 1: Sumerian non-core case morphemes

<i>Adverbial phrase-final enclitic</i>		<i>Translation guide</i>		<i>Equivalent verbal prefix</i>	
<i>Local</i>					
Dative (human only)	<i>r(a)</i>	to/for	Dative	<i>a</i>	
Directive (non-human only)	<i>e</i>				
Dative (human only)	<i>r(a)</i>	in(to) contact with	Directive	<i>i</i>	
Directive (non-human only)	<i>e</i>				
Dative (human only)	<i>r(a)</i>	on(to)	Directive	<i>i</i> and <i>y (> e)</i>	
Locative (non-human only)	<i>ʾa</i>				
Locative (non-human only)	<i>ʾa</i>	in(to)	Locative (non-human only)	<i>n(i)</i>	
Terminative	<i>š(e)</i>	to(wards)	Terminative	<i>ši</i>	
Ablative	<i>ta</i>	from	Ablative	<i>ta</i>	
Comitative	<i>d(a)</i>	(together) with	Comitative	<i>da</i>	
<i>Manner</i>					
Equative	<i>gin</i>	like	None		
Adverbial	<i>eš</i>	in the manner of	None		

Note: the directive is sometimes referred to as the locative-terminative.

Table 2: Sumerian core (subject and direct object) affixes in finite verb

	<i>Intransitive</i>	<i>Transitive</i>			
	<i>Both aspects</i>	<i>Completive aspect</i>		<i>Incompletive aspect</i>	
	<i>Subject suffix</i>	<i>Subject prefix or circumfix</i>	<i>Direct object suffix</i>	<i>Direct object prefix</i>	<i>Subject suffix</i>
1 hum sg	<i>en</i>	<i>ʾ</i>	<i>en</i>	<i>ʾ</i>	<i>en</i>
2 hum sg	<i>en</i>	<i>y(>e)</i>	<i>en</i>	<i>y(>e)</i>	<i>en</i>
3 hum sg	∅	<i>n</i>	∅	<i>n</i>	<i>e</i>
3 nhum	∅	<i>b</i>	∅	<i>b</i> or ∅	<i>e</i>
1 hum pl	<i>enden</i>	<i>ʾ...enden</i>	<i>enden</i>	<i>me</i>	<i>enden</i>
2 hum pl	<i>enzen</i>	<i>y(>e)...enzen</i>	<i>enzen</i>	–	<i>enzen</i>
3 hum pl	<i>eš</i>	<i>n...eš</i>	<i>eš</i>	<i>nne</i>	<i>ene</i>

Graham Cunningham, 1 August 2004,
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Table 3: Sumerian finite verb

<i>Extra-inflectional prefixes</i>				<i>Non-core prefixes</i>					<i>Core affixes and verbal base</i>			
<i>a(l)</i> or <i>i</i>	Clause connective <i>nga</i>	Cislocative <i>m(u)</i>	Middle- passive <i>ba</i>	Non- core PNG	Dative	Comitative	Ablative or terminative	Directive or locative	Core PNG	Verbal base	Aspect <i>e(d)</i> or \emptyset	Core PNG

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