

An introduction to Sumerian Cuneiforms

Eduardo Costa

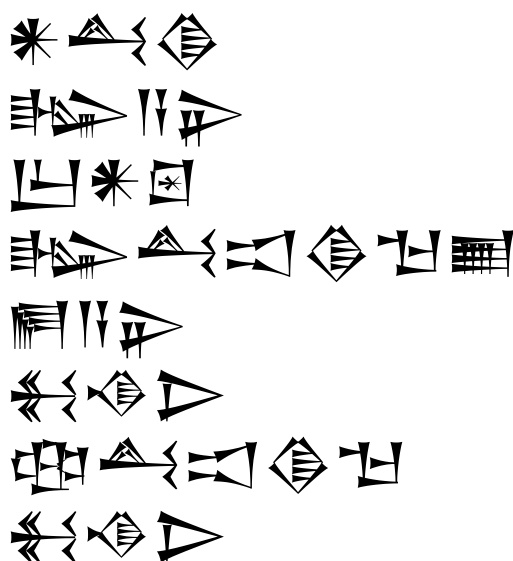
Marcus Santos

Sergio Teixeira

Chapter 1

Ur-Nammu-9

The cuneiform script was the first writing system invented by humankind. Therefore, all educated individuals should learn this 5,000-year-old script. In this tutorial, we will learn how to read Sumerian cuneiform.



There are few grammar books for Sumerian. Unfortunately, Marie-Louise Thomsen's "**The Sumerian Language**" does not use cuneiform, so I cannot recommend it. This leaves us with John Hayes' Manual of Sumerian and Joshua Bowen's "**Learn to Read Ancient Sumerian**". Therefore, I advise you to buy "**A Manual of Sumerian: Grammar and Texts**" by Hayes to learn this ancient language in depth. It is also a good idea to acquire "**Learn to Read Ancient Sumerian**" by Joshua Bowen and Megan Lewis.

1.1 Disclaimer

The authors of this book are not a scholars in Sumerian studies in any sense. Therefore, they may not help serious students of cuneiforms to solve their pendencies and questions.

For scholars and graduate students who are writing their thesis, the authors recommend John Hayes' **Manual of Sumerian** and Joshua Bowen's **Learn to Read Ancient Sumerian**. Hayes' manual strong points are inscriptions and dedicatories, while Bowen and Lewis prefer literary texts.

1.2 Sentence structure

To discuss grammar, scholars use a transliteration of Sumerian cuneiforms to the Latin alphabet. Below, you will find the transliteration of the Ur-Nammu-9 document that we will study in this lesson.

```

1- [nanna
2-     lugal.ani].{(r)} #dat           -- For his king
3- [ur-nammu           -- Ur-Nammu,
4-     lugal.urim.{ak}].{e} #gen/erg  -- the king of UR,
5- [e2.ani].{} #object               -- his temple
6- mu.na.du3 #verb                  -- he built
7- [bad3.urim5.{a(k)}].{} #gen/obj   -- the city wall of Ur
8- mu.na.du3 #verb                  -- he built

```

1.3 Grammar functions in transliteration




In the transliteration, grammar functions are represented by indicators between braces. In the example, the grammar functions are:

1,2 The benefactive has an unwritten “(r)”, which is represented by **{(r)}**

3,4 The genitive ends in **{ak}** after consonant; the ergative ends in **{e}**

5 The object of the action has no ending, which is represented by **{}**

7 The genitive has an unwritten “(k)”, which is represented by **{a(k)}**

8 The verbal chain  (tr mu na du3) starts with the ventive prefix , followed by a cross-reference  (tr na) to the dative.

Square brackets delimit a noun chain, i.e., a noun followed by a sequence of limiting qualifiers that may contain adjectives, apositives and a genitive. Example: [ur-nammu lugal.urim5.{ak}].{e} means

[Ur-Nammu, Ur's king].{task-doer}

After the close square bracket, a braced symbol suffix indicates the function of the noun chain. For instance, .{e} shows that [ur.nammu...].{e} is the doer of the sentence's task. The {(r)} symbol shows that [nanna...].{(r)} receives the benefits of the task: [God Nanna].{benefactive}.

The noun chain may contain a genitive, as was stated in the previous paragraph. If you don't know the role of a genitive, it is a grammar function that shows possession. In English, the Saxon genitive marks the possessor with ['s] and comes before the noun: *Ur's king*. In Sumerian, the possessor follows the noun and is marked with {ak} after consonant and {k} after vowel: {urim5 ma}.{k} is equivalent to *Ur's king*.

Braces represent the grammatical function endings. For instance, the ergative function-ending represents the doer of the task and is written as {e} #erg, where #erg is a comment that will be omitted in more advanced lessons. The person who receives the benefit of the action is called dative and is represented as {ra} #dat, where the #dat comment is usually omitted.

The empty ending of the object is commented as {} #obj or simply as {} #obj. In the example, the objects are the constructions of king Ur-Nammu:

```
[e2 a ni].{}          -- his temple
[[bad3.urim5].{a(k)}].{}  -- the city wall of Ur
```

Unwritten endings are placed between parentheses, such as {(r)}.

1.4 Line 1 & 2

The Ur-Nammu 9 document is divided into eight lines.



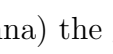

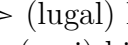

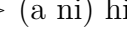







^dnanna lugal a ni

(tr an nanna lugal a ni)

For the god Nanna, his master,

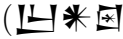






 (danna) the god Nanna

 (lugal) king, master

 (a ni) his

In the first line, the text  is written, which is the Sumerogram for the name of Nanna, the god of the Moon. The  symbol is read as *an* (or *digir*) and is determinative for deity. We will learn in the next paragraph that this word is in the dative case; therefore, the translation of the rectangle is “*For Nanna.*”

Sumerian uses symbols, called determinatives, to make the meaning clearer. The star  in front of a god’s name is the determinative of divinity. In transliteration, the determinatives are represented as a superscript letter, such as ^dnanna.

The Emacs command (tr an nanna lugal a ni) is used to typeset Sumerian. There are instructions about this command on the page where you found this tutorial.


1.5 Line 3 & 4


The third line of the Ur-Nammu-9 document contains the name of Ur-Nammu () the king who rebuilt the temple of ^dNanna and is the document’s author. The king’s name is formed by  (*ur*), which means *man* or *dog*, and  (^dnanna), the Mother Earth of the Sumerians. Therefore, the king’s name, , means “*The Man of Nammu.*” Note that the determinative of deity () precedes the goddess’ name.

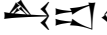
				
ur- ^d nammu	lugal	urim	ma	ke4

(tr ur nammu lugal urim ma ke4)

Ur-Nammu, the king of Ur,


 (ur-^dnammu) King Ur-Nammu


 (lugal) king, master






 (urim^{ki}) the city of Ur


 (ki) *determinative of places*



 (ma(k)) *dative after the consonant “M”*

 (ke4) *contraction of dative with ergative*

 (ma ke4) *genitive contracted with ergative*








The fourth line contains  (tr lugal urim2 ma ke4), where  (tr urim) represents the city that was the cult center of Nanna. It is formed by the Sumerograms (tr shesh) () and (tr unug) (). The Sumerogram  is the determinative for geographic names. Determinatives,




such as ✱ ("digir" - deity) and  ("ki" - place), are not pronounced. Their role is to make the meaning of the word clearer.




The genitive case denotes possession. Unlike the dative, English has a genitive case, formed by an apostrophe followed by "s." In English, one would say, "Urim's King." In Sumerian, the genitive follows the possessor and is marked with {ak} after consonants and {k} after vowels. In this nominal chain, the "a" of {ak} was assimilated with the previous consonant, becoming  (ma). The Sumerogram  (ke4) represents the {k} of the genitive and the {e} of the ergative.

Sumerian is an ergative language, meaning the agent of transitive actions is marked. In Sumerian, the ergative marker is {e}. However, the subject of an intransitive verb, like "to go" or "to sleep," does not receive the {e} that marks the agent, whom linguists call ergative. Unmarked functions, such as the Sumerian subject of an intransitive verb and direct object of a transitive verb, are called absolutive and said to be marked with the null symbol {}. In short, for the Sumerians and modern Basques, if the subject of a sentence does not perform a task, it cannot be called ergative.


1.6 Line 5




The fifth rectangle introduces the temple (e2 - ) that Ur-Nammu built. The expression    (e2 ani) means "his temple." It is in the absolutive case and, therefore, receives the null symbol mark {}, a technical way of saying it does not bear a mark. The noun chain    (e2 ani) undergoes the consequences of the task performed. Thus, it is often called patient, accusative or target.




  
e2 a ni
(tr e2 a ni)
his temple

 (e2) house, temple
 (e2 me esh-pl) pl. houses, temples
 (a ni) his


1.7 Line 6

A verbal stem prefixed by a sequence of particles and possibly followed by a suffix is called a *verbal chain*. The verbal chain  (mu-na-du3) can be translated as “*built*.”

  
 mu na du3
 (tr mu na du3)
he has built for the god

 (du3) to build, to make, to plant
 (mu) *conjugation prefix (CP), ventive prefix, here*
 (na) *cross-references the dative*



The verbal chain of the example has two prefixes and a stem:


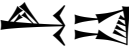




Ventive Conjugation Prefix  (CP). The Ventive CP indicates that the action occurs here, close to the speaker.



Dimensional Prefix  (DP) cross-referencing the dative. Sumerian has a DP for each sentence component, except the ergative and the absolutive cases.

Verbal stem  *he has built*

1.8 Line 7 & 8

The noun phrase  (tr bad3 urim ma) means “*wall of Ur*.” The sumerogram  (tr bad3) means “*city wall*.” The {(k)} of the genitive is omitted, meaning it is not expressed because it was not pronounced at the end of a nominal phrase.

     
 bad3 urim ma mu na du3
 (tr bad3 urim ma mu na du3)
the city wall of Ur, he has built

 (ra) *dative ending*
 (na) *reference to dative*

1.9 Reading the brick

Let's read the whole brick inscription.

1. (tr an nanna) (𒀭𒂗𒍪) – *For the god Nanna...*
2. (tr lugal ani) (𒌦𒂗𒍪) – *his master*, // The word 'lugal' means king or master. It is formed from 'lu2,' (𒌦) which means 'man,' and 'gal,' (𒂗) which can be translated as 'great.' The expression 'a-ni' (𒀭𒂗) is equivalent to the possessive pronoun 'his.'
3. (tr ur-nammu) (𒌦𒀭𒍪) – *Ur-Nammu*,
4. (tr lugal urim ki ma ke4) (𒌦𒂗𒍪𒀭𒍪𒍪𒍪𒍪) – *the king of Ur*,
5. (tr e2 a ni) (𒂗𒍪𒍪) – *his temple*, // Remember that you already learned the meaning of 'a ni.'
6. (tr mu na du3) (𒄀𒍪𒍪) – *he has built*.
7. (tr bad3 urim ma) (𒁕𒀭𒍪𒍪𒍪) – *The wall of Ur*,
8. (tr mu na du3) (𒄀𒍪𒍪) – *he built for Nanna*.

1.10 Translation

The meaning of the whole document is something like this: *“For the god Nanna, his Master, Ur-Nammu, the King of Ur, built his temple. The king also built the city walls of Ur for Nanna.”*

1.11 The method

I will use the method I employed in this first chapter to introduce a few other documents. In other words, each chapter will contain grammar, vocabulary, syllables, and essential Sumerograms for reading a Sumerian document. This methodology ensures you can handle a manageable amount of information initially.

After discussing how to read a Sumerian inscription, each chapter contains an in-depth presentation of the Sumerian grammar. Initially, you can do without reading this final grammar section. You can return to it after practicing Sumerian with a few inscriptions.


APPENDIX 1: Grammar notes

Congratulations. You have finished the first lesson. This appendix gives further details about the case elements, the noun chain and the verbal chain. If you don't feel like it, you don't need to read it now. You can return to this lesson after completing a few Sumerian documents.

Case elements

The subject of a sentence is the topic of the conversation. Besides the subject, the sentence may have other marked components called case elements. Case elements may have references in the verbal chain. The leading case elements with their marks and references are:

Ergative: {e} task doer


(tr lugal e bad₃ urim ma mu na du₃)

The king built the city wall of Ur.

Dative: {ra} / (-na-) for

(tr nin a ni ra lugal e bad3 urim ma mu na du3)


The king built the wall of Ur for his lady.


(tr lugal e uru a e2 mu ni du3)
The king built a house in the city.

(tr ġe26 e uru ġu10-my she-goal ga shi ġen)
 I will go there to my city.

𐤒𐤍𐤅𐤐𐤂𐤏𐤃
(cn uru ta ba ta ġen)
He went out from the city.

𒌦𒈪𒍪𒀭𒊩𒌆𒃶𒄣𒅗𒂗𒉡𒋞𒇺𒍪𒁕𒀭𒊩𒌆𒃶
(tr lugal e dumu a ni da e2 mu un da du3)
The king built the house with his son.

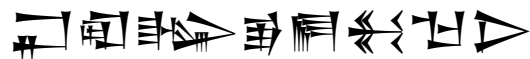

 (tr a ba shesh êu¹⁰-my gin-equitative)
 Who is like my brother?


 (tr nin a ni ra lugal e bad3 mu na du3)
 For his lady, the king has built the city wall.

Dative conjugation

When used as a prefix to a verb, the dative takes different forms depending on the person and number it is referring to.

(-ma-) to me



(tr 𒂗26 ra lugal e e2 mu ma du3)

The king built a house for me.

(-ra-) to you



(tr ze2 ra lugal e e2 mu ra du3)

The king has built a house for you.

(-na-) to him/to her



(tr nin ra lugal e e2 mu na du3)

The king has built a house for the lady.

(-me-) to us



(tr lugal e e2 mu me du3)

The king has built a house for us.

(-ne-) to them




(tr lugal e e2 mu ne du3)

The king has built a house for them.

Transitive verbs

A transitive verb describes an action that transitions from a subject to a direct object. In a transitive verb, the subject is the doer of the action and is






called ergative, which is the Greek term for the person who performs a task. In Sumerian, the ergative is marked with  {e}.

The absolutive case is the entity that undergoes the consequences of a task. The absolutive case can be the person accused of a deed. In this case, it is called accusative.



The absolutive case can also be a target of a shooting. Or it can be the object of health care, in which case it is called patient by the doctors.

Some linguists call *patient* all kinds of absolutive cases of a transitive verb, while others prefer the term accusative.

In Sumerian, the absolutive case receives no mark, but the linguists say it is marked by the null symbol {Ø}.

The transitive verb itself comes last in a Sumerian sentence, and is described by a chain of affixes surrounding the stem. This verbal chain may contain a Modal Prefix (MP, such as  • nu • not), a Conjugation Prefix (CP, such as  • mu • *ventive*, here), initial pronominal prefix (IPP, such as N in  • mu-n.dab.e • he seizes her) and suffix pronouns ( • en-de3-en • us,  • un-ze2-en • you people). Below, there are examples of all initial pronominal prefixes.

Initial Pronominal Prefixes (IPP)

In the verbal chain, the Initial Pronominal Prefixes (IPP) come after the Conjugation Prefix (CP) that is  (-mu-) in the examples below. The  (-mu-) prefix is the *ventive*, i.e., it shows that the action is performed towards the speaker. English uses different verbs for the *andative* (motion away from the speaker) and the *ventive* (motion towards the speaker): *to take away* / *to bring*, *to go* / *to come*, etc. Sumerian gets the same effect by adding the *ventive* Conjugation Prefix (CP) to the verbal chain.

Vocabulary

𒊩 • (munus) woman, female

𒊩 • (ra) *dative marker*

𒊩 • (lu2) man, male

𒊩 • (e) *ergative marker*

𒊩 • (še) barley, grain

𒊩 • (uru) city

𒊩 • (a) *locative marker*

𒊩 • (mu) *venitive conjugation prefix*, here

𒊩 • (na) *cross-reference to the dative*, to her

𒊩 • (ab) *Initial Prefix Pronoun*, it

𒊩 • (shum2) to give

Modal Prefix (MP)

The modal prefixes express modality, i.e., relationships to reality or truth. You can only learn the indicative and negation modal prefixes for now. You may learn the other prefixes when you encounter them in Sumerian documents and inscriptions.

Indicative: (∅-)

In Sumerian, the indicative is unmarked. The empty prefix /∅-/ may represent this fact in transliteration. However, people rarely show unmarked prefixes.

Negation: /nu-/



(tr nu un gu7)

He didn't eat it.

Let him: hhe2-



(tr hhe2 ib gu7 e)

Let him eat it.

Indeed: hha-



(tr hha an gu7)

He ate it, indeed.

Cohortative: ga-



(tr ga i3 ib2 gar re en ne en)

Let us put it there.

Prohibitive: na-



(tr na ab gu7 e)

He must not eat it.

Conjugation Prefix (CP)

The main Conjugation Prefixes (CP) are /mu-/ to indicate that the action occurs here, /ba/ to form middle/passive voice, /i3/ to create a finite verbal tense, and /ma/ in combination with /ra/ of benefit. Below, you will find a fairly complete list of Conjugation Prefixes, but you need to learn only /mu-/ and /i3/ for this first lesson.

Here:



(tr mu un re6)

He brought it here.

Finite verb:



(tr i3 im ĝen)

He came here.

Finite verb, followed by open vowel:



(tr bi2 in re6)

He made the team bring it.

Finite verb, followed by ra:



(tr ma ra an re6)

He brought it here to you.

Middle voice:

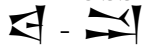


(tr ba an re6)

He took it for himself.

Obs. The middle voice with /ba/ indicates an action that affects the doer.

Passive voice:



(tr ba re6)

It was brought.

Nominal chain

In Sumerian, most adjectives are formed from verbs by adding the suffix 𒀭 {a}. For example, the verb below means to be strong.

𒀭 (kalag) to be strong

To form an adjective from kalag, one adds an {a}. In Sumerian, different from English, the adjectives follow the noun.

The expression below means *mighty king*. Note that the adjective follows the verb, and the 𒀭 marker contracts with the previous consonant to form the 𒀭 (ga) syllable.

𒀭 𒀭 𒀭 𒀭
(tr lugal kalag ga)
a mighty king

In English, the Saxon genitive is marked with S and precedes the verb. Therefore, one writes “*Elil’s Warrior*.” In Sumerian, the genitive is marked with {k} after a vowel and {ak} after a consonant. Like the adjective, the genitive follows the noun. The {k} of the genitive was rarely written except when combined with the ergative. In this case, it was written as 𒀭 {ke4}.

Below, there is another example of the adjective 𒀭 {a} marker contracting with the previous consonant to form an open syllable.

𒀭 𒀭 𒀭 𒀭
(tr e2 lugal la)
the king’s house

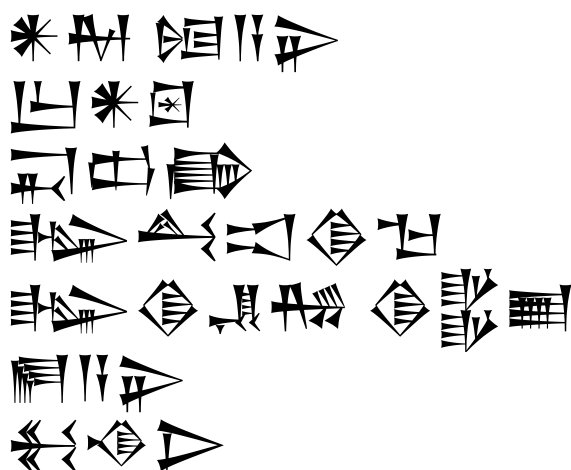
Now, let us examine a somewhat longer example of a noun chain.

𒀭 𒀭 𒀭 𒀭 • 𒀭 𒀭 𒀭 𒀭 • 𒀭 𒀭 𒀭 𒀭

(tr ama a ni ra • dumu lugal la ke4 • e2 mu na du3)
The king’s son has built a house for his mother.

Chapter 2

Inscription in Inanna's temple




Translation: *For Inanna, his lady, Ur-Nammu, the mighty man, the king of Ur, the king of Sumer and Akad, built her temple.*




2.1 Sentence structure

1-	[inanna nin a ni].{(r)}	--	For Inanna, his Lady,
2-	[ur-nammu	--	Ur-Nammu,
3-	[nita kalag].{a}	--	the mighty man,
4-	[lugal urim ma].{(k)}	--	the king of Ur,
5-	[lugal ki-en-gi ki uri].{k}]{.e}	--	the king of Sumer and Akkad,
6-	[e2 a ni].{}	--	her (Inanna's) temple
7-	mu na du3	--	built.


From now on, the sentence structure will not contain the comments *.{k} #gen* for the genitive, *.{r} #dat* for the dative or *.{e} #erg* for the ergative (doer of the task). The suffixes *.{r}* for the dative, *.{k}* for the genitive and *.{e}* for the ergative should suffice for showing the grammatical function of the noun chain and its components. However, functional suffixes you didn't learn in the previous lessons will be commented on.




2.2 Annotations


 an inanna nin a ni
 (tr an inanna nin a ni)
For Inanna, his lady,




 • (^dinana) Inanna
 • (nin) lady, queen, mistress
 • (a ni) his, her

This noun phrase ends in an unwritten *{(r)}*, the dative marker. However, there is no ambiguity since the verb chain has a dative reference.






 ur-nammu nita kalag ga
 (tr ur-nammu nita kalag ga)
Ur-Nammu, the mighty man,



 • (nita) man, male
 • (kalag) to be strong, to be mighty
 • (kalag ga) *adj. from verb*, mighty


One may form adjectives by adding an *{a}*-suffix to a verbal root, *kalag* in the above expression. This nominalizing suffix contracts with the preceding word's final *g*, giving extra information about its correct reading. Different from English, Sumerian adjectives follow the noun they modify.







 lugal urim ma
 (tr lugal urim ma)
the king of Ur,




As we learned from text 1, the genitive is formed by {k} after vowels and {ak} after consonants. The scribe often omitted the {(k)} of {ak}. The “m” of “ma” is contamination from the final consonant of the previous word.








 lugal ki-en-gi ki uri ke4
 (tr lugal ki-en-gi ki uri ke4)
the king of Sumer and Akkad,


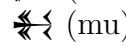
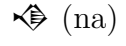
 • (ki-en-gi) Sumer
 • (ki-uri) Akkad

In ke4 () , the {k} is the genitive marker, and the {e} is the ergative marker. You already saw the analysis of the last two lines in lesson 1, therefore they should pose no difficulty to you.




 e2 a ni
 (tr e2 a ni)
his temple

 (e2) house, temple
 (e2 me esh-pl) houses, temples
 (a ni) his




 mu na du3
 (tr mu na du3)
he has built for the god

 (du3) to build, to make, to plant
 (mu) *conjugation prefix (CP), ventive prefix, here*
 (na) *cross-references the dative*

APPENDIX 2: Conjugation

Congratulations on finishing another lesson. This appendix details Sumerian pronouns and verbs. After completing the fifth lesson, you can return to it to gain an in-depth understanding of verbs.

Possessive Pronouns

You already learned a possessive pronoun: 𒄩𒅗𒀭𒀭 (tr lugar ani) “*his master*”. Below, I’ve included a complete list of possessive pronouns.

(tr e2 ġu10) – my house

𒄩𒅗𒄩𒅗

(tr e2 zu) – thy house

𒄩𒅗𒄩𒅗

(tr e2 a ni) – his house

𒄩𒅗𒄩𒅗

(tr e2 bi) – its house

𒄩𒅗𒄩𒅗

(tr e2 me) – our house

𒄩𒅗𒄩𒅗

(tr e2 zu ne ne) – your house

𒄩𒅗𒄩𒅗𒄩𒅗𒄩𒅗

(tr e2 a ne ne) – their house

𒄩𒅗𒄩𒅗𒄩𒅗𒄩𒅗

Independent pronouns

Sumerian has a set of independent pronouns that I advise you to learn right away. They are very important.

(ĝe26) I/me

𒀭

(ze2) thou/thee

𒀭

Obs. 𒀭 (ze2) becomes 𒀭 (za) when followed by the dative 𒀭 (ra).

(a-ne) he/she/him/her

𒀭

(a-ne-ne) they

𒀭

𒀭	𒀭	𒀭	𒀭	𒀭	𒀭	𒀭	𒀭
a ne	dab5	za ra	ma ra	ab	shum2	mu	
he	the tablet	to you	will	give			

He will give you the tablet.

Vocabulary

𒀭 (a-ne) he/she

𒀭 (dab5) the tablet

𒀭 (zara) to you. 𒀭 (ze2) plus 𒀭 (ra) becomes 𒀭

Sometimes, an independent pronoun appears with an enclitic copula (verb *to be*) attached to its end, as shown below.

gu5-li zu ĝe26 me en

 friend your I am

I am your friend

(tr gu5 li ĝu10-my (my friend) ze2 me en (you are))

 You are my friend.

(tr gu5 li zu (your friend) a ne am3 (she/he is))

 She is your friend.

(tr gu5 li zu (your friend) me en ne en (we are))

 We are your friends.

(tr gu5 li ĝu10-my (my friend) me en ze2 en (you guys))

 You guys are my friends.

(tr gu5 li zu (your friends) a ne ne me esh-pl (they are))

 They are your friends.

Interrogative pronouns

Sumerians marked yes/no interrogative sentences only by intonation and possibly by lengthening the final vowels, like many modern languages, such as Spanish and Portuguese.

To ask who performed a task, Sumerians used the interrogative word 𒀭𒄩𒀭 (tr a ba a), as shown below.

𒀭𒄩 . 𒀭𒄩𒀭 . 𒂍𒀭𒄩𒀭
 (tr e2 • a ba a • in du3)
 the temple • who • built?
 Who built the temple?


To ask who is something, Sumerians used the interrogative pronoun 𒀭𒄩 (tr a-ba), as shown in the following example:

𒀭𒄩 . 𒆪𒄩𒀭 . 𒂍𒀭𒄩𒀭
 (tr a ba • utu • gin-equitative)
 Who • Utu • is like?
 Who is like Utu?

In Sumerian, there is no wh-movement to the beginning of the clause, like in English and Spanish. Instead, the interrogative words are placed immediately before the verb.

𒀭𒄩𒀭𒄩𒀭 . 𒀭𒄩𒀭 . 𒂍𒀭𒄩𒀭𒄩𒀭𒄩𒀭
 (tr lugal e • a na • mu un ak)
 the king • what • did he do?
 What did the king do?

𐎧𐎫𐎼𐎢𐏁 . 𐎠𐎧𐎺𐎠 . 𐎡𐎴𐎧𐎺𐎠
(tr dumu ġu10-my • a na • nu zu)
my son • what • does not know?
What does my son not know?














































































 (tr a na • am3 • ne e)

 what • is • this?

 What is this?

An exception to the rule of placing the interrogative word immediately before the verb occurs in *why*-questions, as the example below shows.

The expression 𐎠𐎡𐎴 (a-na-ash) that one usually translates as “why?” means literally “what for?”

Conjugation

Sumerian verbs have two aspects: the hamtu (perfective) and the marû (imperfective). For the time being, you can translate the hamtu as the English present perfect, and the marû, as the English future.

hamtu: 

(tr lugal e bad3 mu un gub)

The king has erected a wall here.

marû: 

(tr lugal e bad3 i3 gub e)

The king will erect a wall.

Hamtu and marû conjugation

First person



(tr na mu gub)

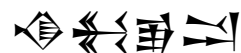
hamtu: I have set up a border stone.



(tr na i3 gub en)

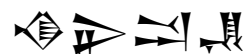
marû: I will set up a stone.

Second person singular



(tr na mu e gub)

hamtu: You have set up a stone.



(tr na i3 gub en)

marû: You will set up a stone.

Third person singular (humans)

(tr na mu un gub)

hamtu: He has set up a stone.

(tr na i3 gub e)

marû: He will set up a stone.

First person plural

(tr na mu gub be en de3 en)

hamtu: We have set up a stone.

(tr na i3 gub en de3 en)

marû: We will set up a stone.

Second person plural

(tr na mu e gub be en ze2 en)

hamtu: You have set up a stone.

(tr na i3 gub be en ze2 en)

marû: You will set up a stone.

Third person plural

(tr na mu un gub be esh-pl)

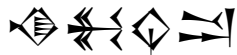
hamtu: They have set up a stone.



(tr na i3 gub be e ne)

marû: They will set up a stone.

Animals and plants have different pronouns for the third person singular. Therefore, in the third person singular, the hamtu aspect is not the same for humans and animals.



(tr na mu ub gub)

It has set up a stone.

Intransitive verb conjugation

Intransitive verbs have the same forms for the hamtu and the marû aspects. Below is the complete conjugation of the verb 𐤆𐤍 (ġen), “to go” (or “to come”).

Singular

𐤆𐤍 𐤆𐤍 𐤍

(tr i3 ġen en)

I went.

𐤆𐤍 𐤆𐤍 𐤍

(tr i3 ġen en)

You went.

𐤆𐤍 𐤆𐤍

(tr i3 ġen)

He went.

Plural

𐤆𐤍 𐤆𐤍 𐤍 𐤆𐤍 𐤆𐤍 𐤍

(tr i3 re7 en de3 en)

We went.

𐤆𐤍 𐤆𐤍 𐤍 𐤆𐤍 𐤆𐤍 𐤍

(tr i3 re7 en ze2 en)

You people went.

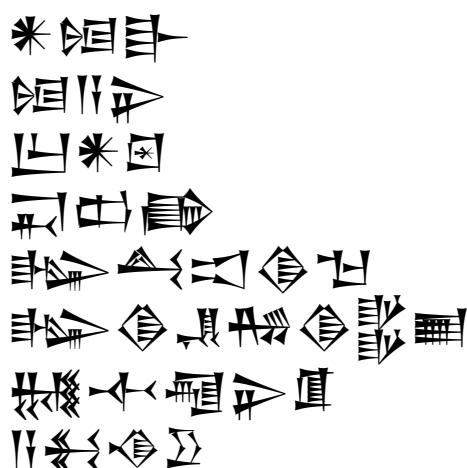
𐤆𐤍 𐤆𐤍 𐤍

(tr i3 re7 esh)

They went.

Chapter 3

Ur-Nammu-31





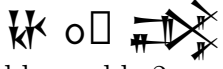










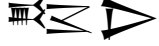

For Ningal, his lady, Ur-Nammu, the mighty man, the king of Ur, the king of Sumer and Akkad, dedicated this vessel for the protection of his life.

Sentence structure






1-	[ningal	--	For Ningal,
2-	nin a ni].{(r)}	--	his Lady,
3-	[ur-nammu	--	Ur-Nammu,
4-	nita kalag.{a} #adjective	--	the mighty man,
5-	[lugal urim5 ma].{(k)}	--	the king of Ur,
6-	[lugal ki-en-gi ki uri].{k}].{e}	--	the king of Sumer and Akkad,
7-	[nam til3 a ni].{she3} #goal	--	for the sake of his life,
8-	a mu na ru	--	dedicated (this vessel).

3.1 Verbal chain




A Sumerian verb appears as a chain of affixes in a particular order, which is depicted in the table below for the most common occurrences.

Modal Prefix	Indicative . \emptyset null prefix	Negative  nu	Coortative  ga	Desiderative  hha or hhe2
Conjugation Prefix	Finite  i3	Coordinator  'n ga	Ventive  mu	Middle Voice  ba
Dimensional Prefix	Dative  -na-	Locative  -ni-	Directive  -she3-	
Ergative Infix	i3 du3  I built	e du3  thou built	in du3  s/he built	ib2 du3  they built
Verbal stem				





Example:

				
(tr an nin gal ra)	(tr lugal e)	(tr uru a)	(tr e2)	(tr na ni in du3)
for Ningal	the king	in the city	a temple	he built
dative	ergative	locative	absolutive	ref. dat/loc




3.2 Annotations







 (an) ningal nin a ni
 (tr an ningal nin a ni)
For Ningal, his lady,





𒀭𒄩𒂍𒀭𒄩𒂍 (dNin-gal) goddess of prisons
𒀭𒄩𒂍 (nin) lady





 ur-nammu nita kalag ga
 (tr ur-nammu nita kalag ga)
Ur-Nammu, the mighty man,




人	(nita) man
力	(kalag) to be mighty
力	(ga) <i>adj. from verb</i>









 lugal urim ma
 (tr lugal urim ma)
the king of Ur,

	(lugal) king
	(urim) the city of Ur
	(ma) <i>contr. of gen. with “m” of “urim”</i>

lugal ki-en-gi ki uri ke4
 (tr lugal ki-en-gi ki uri ke4)
the king of Sumer and Akkad,





 (ki-en-gi) Sumer
 (ki uri) Akkad
 (ke4) *adj. contraction gen/erg*

nam til3 la ni she3

(tr nam til3 la ni she3)

for the sake of his life,







(nam+ gen//she3) because of

(nam bi she3) because of this

(til3) to live, to be alive

(til3 la(k)) of his life

The novelty in this inscription is the terminative marked with  (she3). According to Wikipedia, *Sumerians used the terminative case “-še” to indicate end-points in space or time and the targets or the goals of the action.*








a mu na ru

(tr a mu na ru)

dedicated it (this object).

 //  (a//ru) to dedicate

APPENDIX 3: Imperative

The prefix /h̥a/ 𐌕𐌕 expresses a request to the second person. It can be considered a polite form of imperative.

𐌕𐌕 𐌕𐌕𐌕𐌕 𐌕𐌕 𐌕𐌕𐌕𐌕 𐌕𐌕𐌕𐌕𐌕𐌕
 she ġu10-my hha mu tum3
 (tr she ġu10-my hha mu tum3)
You should bring my barley.

𐌕𐌕 (she) barley, grain
 𐌕𐌕𐌕𐌕 (ġu10) my, *first-person possessive pronoun*
 𐌕𐌕𐌕𐌕 (mu) *ventive particle*, here
 𐌕𐌕𐌕𐌕𐌕𐌕𐌕 (tum3) *Alternative form of 𐌕𐌕𐌕 (tum2), to bring*

On the other hand, the imperative expresses a direct command to a person. It is expressed by re-shaping the verbal phrase: imperative forms start with the hamtu base followed by the prefixes of the finite verbal form.

𐌕𐌕𐌕𐌕 𐌕𐌕𐌕 𐌕𐌕𐌕
 shum2 ma2-me ab-it
 (tr shum2 ma2-me ab-it)
Give it to me.

𐌕𐌕𐌕𐌕 (šum2) to give
 𐌕𐌕𐌕𐌕 (ma2) *1st-person personal pronoun*: to me, I, with me
 𐌕𐌕𐌕𐌕 (ab) *3rd-person pronoun*: it

Compare the imperative with the declarative sentence:

𒍪 𒀭𒄩𒀭 𒄩𒄩𒄩
 ma2 a ne shum2
 (tr ma2-me ane-him shum2)
He gave it to me.

𒄩𒄩𒄩 (shum2) to give
 𒍪 (ma2) *personal pronoun*: to me, I, with me
 𒀭𒄩𒀭 (a ne) he, she
 𒀭𒄩𒀭 𒄩𒄩𒄩 𒀭𒄩𒄩𒀭𒄩𒄩𒀭𒄩𒄩 (a ne da nu me a) without him

Plural imperative forms add the suffix 𒄩𒄩𒄩𒄩𒄩𒄩𒄩𒄩 (tr un ze2 en) that you will learn in a future lesson. This suffix means “You people.”

𒀭𒄩𒀭 𒄩𒄩𒄩𒄩𒄩𒄩𒄩𒄩 𒄩𒄩𒄩 𒄩𒄩𒄩 𒄩𒄩𒄩𒄩𒄩𒄩𒄩𒄩
 nin9-sister ġu10-my tum2 mu un ze2 en
 (tr nin9-sister ġu10-my tum2 mu un ze2 en)
You people, bring in my sister.

𒀭𒄩𒀭 (nin9) sister
 𒄩𒄩𒄩𒄩𒄩𒄩𒄩𒄩 (ġu10-my) my
 𒄩𒄩𒄩𒄩𒄩𒄩𒄩𒄩 (mu) *ventive prefix*, here
 𒄩𒄩𒄩 (tum2) to bring, pl. 𒄩𒄩𒄩
 𒄩𒄩𒄩𒄩𒄩𒄩𒄩𒄩 (un ze2 en) *suffix pronoun*: you people

Another example of imperative:

𐀓𐀠 𐀶𐀓𐀠 𐀓𐀠

dug4 ane-him ab-it

(tr dug4 ane-him ab-it)

Say it to him.

𐀓𐀠 (dug4) to speak, to say

𐀶𐀓𐀠 (ane-him) he/him, she/her

𐀓𐀠 (ab-it) *3rd-person pron.:* it

In the imperative, the prefix 𐀓𐀠 (i3) is often replaced by /-a/:

𐀓𐀠 𐀓𐀠 𐀓𐀠 𐀓𐀠

(tr e2 she3 i3 ġen)

“He went home.”

𐀓𐀠 𐀓𐀠 𐀓𐀠 𐀓𐀠

(tr e2 she3 ġen na)

Go home!

Conjunctions

All languages have conjunctions to connect sentences, and Sumerian is no exception. An important conjunction is tukun-be2, which means “if.”

tukum-be2	dub bu2 ta	gu3	mu da ab de2	e2 she3	gen na
if	this tablet	out	can read	to house	go

(tr tukum dub be2 ta gu3 mu da ab de2 e2 she3 gen na)
If you can read out this tablet, go home.

Vocabulary

• (ne-en) this thing

• (tukun-be2) if

// • (gu3//de2) to read out, *requires ablative*

• (dub) tablet

• (dub-be2) this tablet

Other important conjunctions are (tr u3) “/also||and/,” (tr ud) “/when/,” (tr ud da) “/when||if/,” (tr tukum bi) “/if/” and (tr en na) “/until/.”

Mark of an entrepreneur



(tr lipish u3 nam-ku3-zu)

Courage and Sagacity

Vocabulary



(lipish) emotion, anger, rage, courage

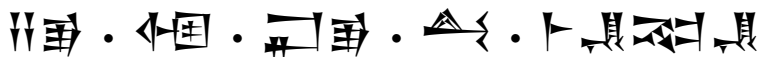


(u3) and



(nam-ku3-zu) intelligence, sagacity

A colaborator is a brother



za-e • u3 • ġa2-e • shesh • me.en.de3.en

you • and • I • brothers • we are

You and I are brothers.

Vocabulary



(za-e /ze/) Alternative form of , you



(u3) and



(ġa2-e) Alternative form of (ġe26), “I”



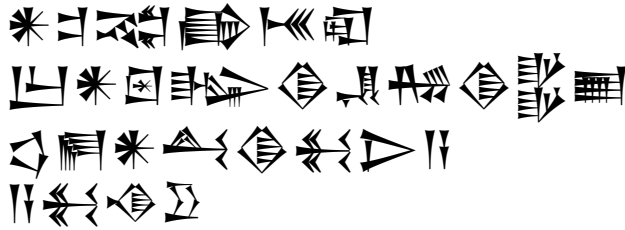
(šesh /šesh/) brother, colaborator



(me.en.de3.en) we are

Dedication to Gilgamesh

Gilgamesh was the first king of Uruk. His rule probably took place in the beginning of the Dynastic Period, c. 2900 – 2350 BC, and he became a major figure in Sumerian legend during the Third Dynasty of Ur, from circa 2112 to circa 2004 BC.



(tr bil3-ga-mesh3 ra)

For Gilgamesh,

𒂗 • (ra) *Dative marker, to* || for



(tr ur-nammu • lugal • ki-en-gi • ki uri • ke4)

Ur-Nammu, the king of Sumer and Akkad,

𒂗 • (ki-en-gi) Sumer

𒂗 • (ki-uri) Akkad



(tr ud • e2 an nanna • mu du3 • a)

when he built the temple of Nanna,

Obs. || (a) is the locative marker.

𒂗 • (ud) when

𒂗 • (e2 an nanna) temple of the god Nanna

𒂗 • (mu-du3) he built here

 · / /

| (tr ne-en • a / mu-e / ru) |

he dedicated this object.

𐤊𐤍𐤁 • (ne-en) this thing, this object

W//Σ • (a // ru) to dedicate

Obs. the verb $\mathbb{W} // \Sigma$ is split around its prefixes

The $\mathbb{H}/$ (a/) component comes before the prefix chain, and the $/\mathfrak{D}$ (/ru) component comes after. In the vocabulary, the two components of such a verb are separated by a double slash, C1//C2. Examples:

𐎧𐎠𐎡𐎢 // 𐎧𐎠𐎡𐎢 • (gu3//de2) to read out, *requires ablative*

W//Σ • (a // ru) to dedicate

𐤁𐤁𐤁//𐤁 • (saḡ-ḡiš-ra) to commit murder

Ur-Nammu's Law

西 江 金 山 南 山 金 山 金 山 金 山 金 山

(tr tukun-be2 lu2 u3 saĝ gish bi in ra lu2 bi i3 gaz e)

If a man commits murder,

this man will be executed.

四六八二一 · 一 · 全四 · 全五 / 全六 / 全

| (tr tukun-be2 • lu2 • u3 • saĝ-gish / bi in / ra) |

if • a man • and • commit murder,

• (tukun-be2) if

• (lu2) man

- (u3) and

ᠰᠠᠭᠦᠭᠢᠰᠢᠷᠠ // ᠷᠠ • (saḡ-ḡiš-ra) to commit murder

𒌷𒌵𒂗 • 𒌷𒂗𒌵𒂗
 (tr lu2 bi • i3 gaz e)
 that man • will be executed

𒌷𒌵𒂗 • (lu2 bi or lu2 be2) this man
 𒌷 • (i3) *finite verb marker in the verbal chain*
 𒂗𒌵 • (gaz) to kill, to slaughter, to execute

Vocabulary for the examples of conjunction

𒌷𒌵 • (za-e /ze/) *Alternative form of 𒌷𒌵, you*

𒌷𒌵𒂗 • (ne-en) this thing

𒌷// 𒌵 • (a // ru) to dedicate

𒌷 • (ud) sun, day, when

𒌷𒌵𒂗 • (ki-en-gi) Sumer

𒌷𒌵 • (ki-uri) Akkad

𒂗𒌵 • (gaz) to kill, to execute

𒌷𒌵// 𒌵 • (saġ-ġiš-ra) to commit murder

𒌷 • (lu2) man

𒌷𒌵𒂗 • (lu2 bi or lu2 be2) this man

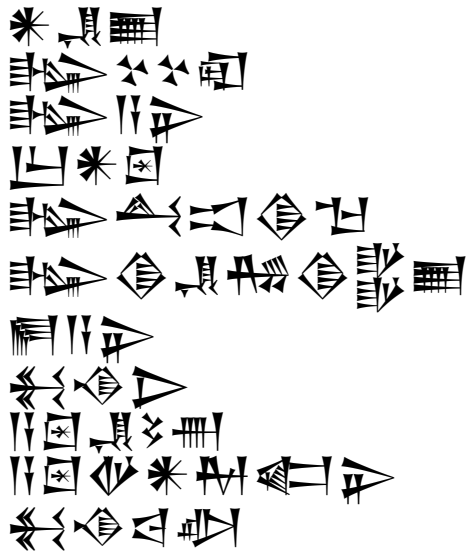
𒌷𒌵𒂗 • (ne en) this object

𒌷𒌵 • (ne) this object

𒌷𒌵𒂗𒌵 • (tukun-be2) if

Chapter 4

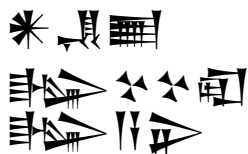
Ur-Nammu-23



Translation: *For Enil, the king of all the lands, his master, Ur-Nammu, the king of Sumer and Akkad, built his temple. The king also dredged the Enerinnun canal for Enlil.*

4.1 Sentence structure

The text starts with the benefactive, that ends in {(r)}, not expressed.



The plural of nouns that refer to human beings is formed by a suffixed “ene”. The plural of things, plants and animals is usually unmarked. Reduplication – such as “kur kur” (𒂗𒂗) – conveys the idea of totality: “all the lands.”

Then comes the agent, with the E prefix combined with the genitive ending into KE4 (𒂗𒂗𒂗𒂗).

The next in the line is the object that was built, to wit, his temple 𒂗𒂗𒂗𒂗𒂗𒂗 (tr e2 a ni).

1- [enlil	-- For Enlil,
2- [lugal kur kur].{ra(K)}	-- the king of all lands,
3- [lugar ani]].{(r)}	-- his king,
4- [ur nammu	-- Ur-Nammu,
5- [lugal urim].{ma(k)}	-- king of Ur,
6- lugal [kiengi kiuri].{k}].{e}	-- king of Sumer and Akkad,
7- [e2 ani].{}	-- his temple
8- mu na du3	-- build
9- [id2 en erin2 nun	-- The Enerinnun canal,
10- [id2 nidba].{k}.ani].{}	-- his canal of food offering,
11- mu na ba al	-- (the king) dredged for him.





4.2 Annotations










an en lil2 lugal kur kur ra lugal a ni
(tr an en lil2 lugal kur kur ra lugal a ni)





For Enlil, king of all lands, his master,





𒂗𒂗𒂗𒂗 (d-en-lil2) Enlil, the king of gods
𒂗𒂗 (kur) mountain,land, country










 (tr ur-nammu) (tr lugal) (tr urim5) (tr ma)
 (tr ur-nammu lugal urim5 ma)
Ur-Nammu, the king of Ur,





 (tr lugal) (tr ki-en-gi) (tr ki uri) (tr ke4)
 (tr lugal ki-en-gi ki uri ke4)
the king of Sumer and Akkad,




 (tr e2) (tr a ni) (tr mu na du3)
 (tr e2 a ni mu na du3)
he has built the god's temple.





 (tr id2) (tr en) (tr erin2) (tr nun)
 (tr id2 en erin2 nun)





 (tr id2) (tr en) (tr erin2) (tr nun)
 (tr id2 en erin2 nun)
The Enerinnun canal,






 (tr id2) (tr nidba) (tr ka) (tr ni) (tr mu na ba al)
 (tr id2 nidba ka ni mu na ba al)
his canal of food offerings, the king dredged for him.

Vocabulary

𒂗𒅗 (id2) river, watercourse, canal

𒌷 (kurum6) food ration

𒌷𒍪𒀭𒅗𒅗 (kurum6 inanna.k) food of Inanna

𒂗//𒂗𒅗 (ba-al) to excavate, to dig

Appendix 4: Numerals

You completed lesson four. Then you should be able to read many votive Sumerian artifacts that you find in museums around the world.

To boost your reading skills, I recommend that you go back to the first lesson and read the contents of the **APPENDIX: Grammar notes**. Thus, you will improve your holding of case elements, and learn that the dative changes depending on the person to whom the scribe is dedicating a building or an object. You will also receive an introductory concepts of transitive verbs, intransitive verbs, the *hamtu* and the *marû* conjugation.

However, before returning to the first lesson, you may want to read about Sumerian numerals, and learn to count things in cuneiform.

Sumerian Numerals










To count things, modern people use ten digits: 1, 2, 3, 4, 5, 6, 7, 8, 9 and 0. Therefore, it is said that we use base 10. Computers use only two digits to perform calculations: 0 and 1. Then, computers work with base 2. As we will see below, Sumerians used base 60. Therefore, they needed 60 digits to count things.

You will be happy to learn that we still use the Sumerian method of counting when we deal with navigation and time. That is the reason for having 60 minutes in an hour and 60 seconds in a minute. Besides this, the latitude and the longitude that determines a position on the Earth's surface is measured in degrees, where each degree is divided in 60 minutes.

Since the distance from the North Pole is 90 degrees and ten thousand km, each degree of latitude has $10000/90$, roughly 111 km. If you divide 111 km by 60 to discover the length of one minute, you get 1852 km, which is a nautical mile.

Numbers from 1 to 9: dish

Numbers from 1 to 9 can also be represented by vertical wedges, as shown below.


1. (tr dish) 
2. (tr 2-dish) 
3. (tr 3-dish) 
4. (tr 4-dish) 
5. (tr 5-dish) 
6. (tr 6-dish) 
7. (tr 7-dish) 
8. (tr 8-dish) 
9. (tr 9-dish) 










Numbers from 10 to 50

Numbers from 10 to 50 can be represented with Winkelhaken. By the way, Winkelhaken is a German word that means angle-hook. The plural is Winkelhaken. Then, one can say that five Winkelhaken represents the number fifty.

- 10 (tr 1-u) <
- 20 (tr 2-u) <<
- 30 (tr 3-u) <<<
- 40 (tr 4-u) <<<<
- 50 (tr 5-u) <<<<<
- 60 (tr 6-u) <<<<<<
- 70 (tr 7-u) <<<<<<<
- 80 (tr 8-u) <<<<<<<<
- 90 (tr 9-u) <<<<<<<<<
- 54 (tr 5-u 4-dish) <<<<W
- 42 (tr 4-u 2-dish) <<W







Numbers from 60 to 540

The Sumerians represented multiples of sixty with the same symbols they used for counting from 1 to 9: vertical wedges. This makes sense because their numerical base was 60. Then, in the same way that we use the digit 1 to represent the number one and the number ten, the Sumerians used  to represent the numbers one and sixty. However, in these lessons, you will use *gesh*-wedges to represent multiples of 60. The *gesh* wedges are slightly larger than the dish wedges.

- 60 (cn *gesh*) 
- 120 (cn 2-*gesh*) 
- 180 (cn 3-*gesh*) 
- 240 (cn 4-*gesh*) 
- 300 (cn 5-*gesh*) 
- 360 (cn 6-*gesh*) 
- 420 (cn 7-*gesh*) 
- 480 (cn 8-*gesh*) 
- 540 (cn 9-*gesh*) 

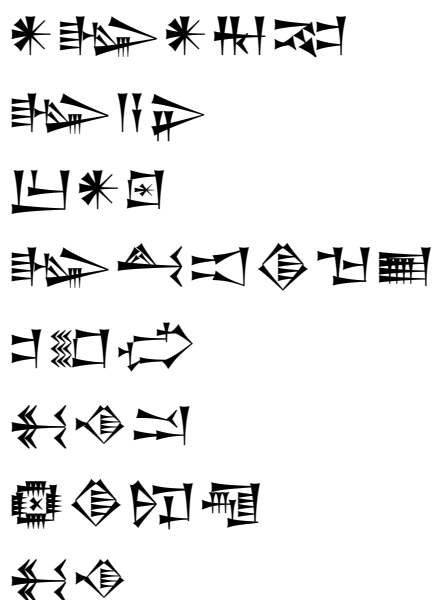
Numbers from 600 to 3600

The geshu wedges are used to represent both multiples of 600 and the numbers 70, 80, 90, 100 and 110, as shown below.

- 600 or 70 (tr 600-geshu) 
- 1200 or 80 (tr 1200-2-geshu) 
- 1800 or 90 (tr 1800-3-geshu) 
- 2400 or 100 (tr 2400-4-geshu) 
- 3000 or 110 (tr 3000-5-geshu) 
- 3600 (tr 3600-shar2) 

Chapter 5

Ur-Nammu-5










Translation: *Ur-Nammu, the king of Ur, planted a magnificent garden for An, the king of gods. He also has built a dais in a pure place for the god.*



Sentence structure




1- [an lugal [diĝir.{re.ne}]	-- For An, king of the gods,
2- lugal a ni].{(r)}	-- his master,
3- [ur-nammu	-- Ur-Nammu,
4- [lugal urim5].{ma (k)}].{e}	-- the king of Ur,
5- [gish kiri6 mah].{Ø}	-- an outstandig garden
6- mu na gub	-- planted.
7- [barag [ki sikil].{la}].{Ø}	-- a dais in a pure place
8- mu na du3	-- (the king) built (for An).





5.1 Annotations











 (tr an) (tr lugal) (tr digir) (tr re ne)
 (tr an lugal digir re ne)
For An, the king of the gods,

 (an) sky, the sky god Ān
 (digir) deity, god/goddess
 (diggir-rene) gods



 (tr lugal) (tr a ni)
 (tr lugal a ni)
his master,





 (tr ur-nammu) (tr lugal) (tr urim5 ma ke4)
 (tr ur-nammu lugal urim5 ma ke4)
the king of Ur,





 (tr gish) (tr kiri6) (tr mah) (tr mu na gub)
 (tr gish kiri6 mah mu na gub)
a magnificent garden he planted.


 (tr barag) (tr ki) (tr sikil) (tr la) (tr mu na du3)
 (tr barag ki sikil la mu na du3)
He also has built a dais in a pure place for An.


Vocabulary

 (ḡeš, ḡiš) tree

 (kiri6) orchard, garden plot

 (maḥ) to be lofty, magnificent

 (barag) dais, throne

 (sikil) to be pure, clean