

# Verbal number in Sumerian and Itonama

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Samples of Linguistic Structure: Sumerian

## Introduction

Verbal number has been attested in a number of languages across the world, most notably those from North-American and Polynesian language families (Corbett, 2000, p. 245; Crevels, 2006, p. 160). Thus far, Itonama is the only South-American language for which verbal number has been attested. Sadly, the language has become extinct not so long ago. Verbal number is also present in Sumerian, an ancient Near Eastern Language spoken more than 4000 years ago in southern Mesopotamia (modern day Iraq) (Jagersma, 2010).

## Verbal number

As opposed to nominal number, which relates to entities, verbal number relates to events (Corbett, 2000). These events take the shape of actions or states that are repeated across time and/or space (Crevels (2006), p. 160, Jagersma (2010), p. 414). This type of plurality is usually expressed by verbal affixes and reduplication. Most often derivational rather than inflectional (Crevels, 2006, p. 15?).

It is important to note the difference between nominal and verbal number. Corbett (2000, p. 243) gives the following examples:

(1) *the sheep jump*

The verb *jump* in this sentence shows number. However, this number refers to the number of sheep, not the number of ‘jumpings’. Hence, this is nominal number. The next two examples show the use of verbal number in Rapanui:

(2) *ruku*  
dive  
‘dive’

(3) *ruku ruku*  
dive dive  
‘go diving’

(3) suggests several diving events, but doesn’t give us any information regarding the number of divers.

***Types of verbal number***

According to Corbett (2000) there are two types of verbal number: event number and participant number. (3) is an example of the former. Event number is independent of the number of participants. The most important distinction that is made with event number is between single and multiple events.

The difference between participant number and agreement is subtler. Instead of enumerating entities, participant number expresses the quantifies actions or states. In Sumerian, for instance, this is expressed using alternating verb stems. Compare:

(4) PN gurušta-da mu-da-lu<sub>5</sub>-ka-am<sub>6</sub>

PN gurušta =da Ø -mu -n -da -lu<sub>5</sub>.k -Ø -?a  
PN fattener =COM VP -VENT -3SG -with -live:SING -3N.S/DO -NOM  
=Ø =?am  
=ABS =be:3N.S

‘It (viz. one lamb) is one that lives at PN, the fattener’s place.’  
(Jagersma (2010), p. 316)

(5) lugal-ì-kúš e-da-se<sub>12</sub>

*lugal.ì.kúš=d(a) ʔi-n -da -se<sub>12</sub> -Ø*

Lugalikush=COM VP-3SG -with -live:PLUR -3N.S/DO

'They (viz. 82 sheep) live at Lugal-ikush's place.' (Jagersma (2010), p. 316)

## Sumerian

### *Verb alternation*

Sumerian uses two different ways to express verbal number. Some verbs specify number as part of their lexical meaning (Table 1). Other verbs use reduplication of the verbal stem.

**Table 1:** Sumerian alternating verbs

stem	meaning
gub	stand (singular)
š <sub>u</sub> <sub>4</sub> .g = su <sub>8</sub> .g	stand (plural)
ġen	go, come (singular, perfective)
er	go, come (plural, perfective)
du	go, come (singular, imperfective)
su <sub>8</sub> .b	go, come (plural, imperfective)
tuš	sit (singular, perfective)
dúr	sit (singular, imperfective)
durun	sit (plural)
lu <sub>5</sub> .k	live (singular) (said of animals)
ti.l	live (singular) (said of persons)
se <sub>12</sub>	live (plural)
túm	bring (singular)
laġ <sub>5</sub>	bring (plural)
du <sub>11</sub> .g	say, do (singular, perfective)
e	say, do (plural, perfective)
úš	die, kill (singular)
ug <sub>7</sub>	die, kill (plural)

Verb alternation is generally associated with suppletion (Crevels, 2006, p. 168). Jagersma (2010, p. 315) that, at least in the case of Sumerian, this is not the case. Suppletion presupposes a verb paradigm, e.g. as with inflection. The difference in singular or plural forms shown by the verbs in Table 1 is not a regular feature, and therefore not a paradigm. These verbs behave just like other verbs. The difference is that the above verb forms show number as part of their lexical meaning (Jagersma, 2010, pp. 315–319). Hence the different forms in (4) and (5).

It has been assumed that in these cases, the verb expresses participant number.

In (6), however, the singular verb refers to a plural participant:

(6) *ki ensi<sub>2</sub>-šè ġen-na-ne-ne*

*ki*    *ensi<sub>2</sub>.k* = *ak*    =šè    *ġen*    -Ø    -ʔa    = *anēnē* = *e*  
place ruler    =GEN =TERM go:SING -NFIN -NOM =their    =DIR

‘when they went to the ruler’s place’

In other words, the alternating verbs in Table 1 show event, rather than participant number. The association with participant number is somewhat accidental: multiple actions often involve multiple participants (Jagersma, 2010, pp. 317–319).

### **Verb reduplication**

Verb alternation is limited to a small subset of Sumerian verbs. Verbal number, however, is not. For verbs that do not belong to the subset in Table 1, Sumerian uses full verb stem reduplication to express number. Plural stems generally indicate plurality of action or state, e.g.:

(7) *zi-da gabu<sub>2</sub>-na piriġ ì-nú-nú*

*zi.d*    -Ø    -ʔa    *gabu<sub>2</sub>* = *ane* = ʔa    *piriġ* = Ø    *ġi* -*b(i)*    -nù-nù  
be.right -NFIN -NOM left    =his =LOC lion =ABS VP -3N:on -lie-lie  
-Ø  
-3N.S/DO

‘Lions lay on his right as well as on his left. (Jagersma (2010), p. 320)

This can be either a single person performing one action on several objects, a single person performing the same action several times, or several persons performing the same action once, etc. For an overview, see (Jagersma, 2010, pp. 316–321).

Interestingly, the verbs with a lexical plural also occur with reduplicated stems:

- (8) *diġir an-na diġir k[i]-a nu-ú-m[a]-su<sub>8</sub>-su<sub>8</sub>-ge-éš*

*diġir an* =?a *diġir ki* =?a =Ø *nu* =?i -m(u) -ba  
 god heaven =LOC god earth =LOC =ABS NEG =VP -VENT -3N.IO  
 -su<sub>8</sub>.g -su<sub>8</sub>.g s-eš  
 -stand:PLUR -stand:PLUR -3PL.S/DO

‘The gods in heaven and the gods on the earth were not yet on duty for it (lit. “did not stand for it”).’ (Jagersma (2010), p. 322)

This shows that in Sumerian, verbal number is not limited to one action or state.

## Verbal number in Itonama

Like Sumerian, Itonama does not mark non-human entities for number. Table 2 lists the only nouns for which a plural form has been attested.

**Table 2:** Plural nouns in Itonama

singular		plural	
woman	<i>wabī’ka</i>	women	<i>īwabi</i>
man	<i>umu</i>	men	<i>umu’ke</i>
girl	<i>t’iyaya’tya</i>	girls	<i>t’iyaya’tye</i>

Kinship terms are also marked for number, but according to Crevels (2006, p. 163) these terms have been derived from verbs and hence owe their plural marking to that origin.

Crevels (2006) argues that number is a verbal category in Itonama. The language expresses both participant and event number, using a variety of strategies (Table 3).

**Table 3:** Expression of verbal number in Itonama

Participant number	Verbal number
partial CV reduplication	partial CV reduplication (with intensive infix)
suppletive stems	distributive marker
pluractional markers	pluractional markers
verbal classifiers	

### ***Participant number***

Participant number can be expressed using partial CV reduplication, e.g. in (9) the reduplication of the stem signals that several dogs were involved in the biting, in contrast to (10) (all following examples are taken from (Crevels, 2006)).

- (9) *sih-k'i-ma-doh-ne*                      *upa'u*  
1PL.EXCL-INV-hand-bite-NEU dog  
'The dog bit us on the hand.'
- (10) *sih-k'i-ma-do~doh-ke*                      *upa'u*  
1PL.EXCL-INV-hand-ITE-bite-PL dog  
'The dogs bit us on the hand.'

Suppletive verbal stems can also be used. Note that the use of different verb stems in (11) and (12) automatically leads to a distinction in participant number (Crevels, 2006, p. 167).

- (11) *ah-may-sewa-na*    *tyahka'kahka wa'ihna oli'-na*  
3-SUBORD-see-NEU moon                      DM                      fall.SG-NEU  
'When he saw the moon, he fell.'
- (12) *ispi'i*    *soloh-ke wanu'we*  
almost fall.PL-PL water  
'They almost fell into the water.'

The verbal classifiers in (13) and (14) refer to vertical, planted objects. Itonama has a number of different verbal classifiers. Generally, these are combined with an existential predicate or predicates of possession, location and manipulation. An overview can be found in Crevels (2012, p. 269)

- (13) *s-mi-chuwanano si-chobo abite opi'i*  
 1SG.POSS-REL-compound be-CLF5 tree small  
 'There is a small tree in my compound.'
- (14) *nik'abi chokosno osi-bo abite*  
 over.there forest be-CLF6 tree  
*mi-yu-so~lo<ho>loh-te dih-ni-yumo'-te*  
 REL-CAU-fall~ITE<INTNS>fall-CONT 1PL.INCL-REL-eat-CONT  
 'There are trees over there in the forest that are dropping fruit all the time so that we can all eat.'

Participant number is also marked using pluractional markers (Crevels, 2006, p. 167). In (15), for example, the pluractional marker *-cha'ke* indicates plural participant number. Example (16) shows that pluractional markers are used for event number as well. An overview of these markers is given in Crevels (2006, p. 168)

- (15) *chaswada-'ke ihwana obeha*  
 shave-PL juan sheep  
 'Juan shaved the sheep (SG).'
- (16) *chaswada-'cha'ke ihwana obeha*  
 shave-MULT juan sheep  
 'Juan shaved the sheep (PL).'

### ***Event number***

Event number in Itonama is expressed using several approaches (Table 3), some identical to those used for participant number. The examples in (17) and (18) show the use of a distributive marker to mark different 'giving-events' (Crevels, 2006, p. 165).

- (17) *wase'wa si-maki uwaka k'a-dili ubuwa*  
 yesterday 1SG-give meat DEM.DIS-CLF2 person  
 'Yesterday I gave those persons meat'
- (18) *wase'wa si-maki-he uwaka k'a-dili ubuwa*  
 yesterday 1SG-give-DISTR meat DEM.DIS-CLF2 person  
 'Yesterday I gave each of those persons meat'

Another strategy is partial reduplication. This strategy differs from the one marking participant number in that it is combined with an intensifying infix, e.g.:

(19) >

*sosohte yumani ya~ka<'a>ka-ne-'ka*                      *wabi'ka*  
all      night      sing-ITE<INTNS>sing-NEU-F.SG woman

'The woman sang every night'

(20) *sosohte yumani ya~ka<'a>ka-na-'ke*                      *iwabi*  
all      night      sing~ITE<INTNS>sing-NEU-PL women

The women sang every night'

Finally, Itonama also marks event number using a pluractional marker:

(21) *ubuwa ibah-ne ihwana*  
person hit-NEU juan  
'The man hit Juan (once).'

(22) *ubuwa bah-na-'ke ihwana*  
person hit-NEU-PL juan  
'The man hit Juan (several times).'

## Comparison

The way Itonama and Sumerian deal with number is in some respects surprisingly similar. Both languages only mark plurality on nouns referring to human entities, for instance (although the set of entities for which this goes is rather small in Itonama). Another similarity is the available strategies for verbal number marking: both languages use verbal stem reduplication and verb alternation/suppletion. Again, there are differences: Itonama has additional mechanisms available (Table 3), while in Sumerian alternation is restricted to a subset of verbs.

The most important difference, however, is that Sumerian primarily marks event number (Jagersma, 2010, p 319), whereas Itonama marks both kinds of verbal number equally. A possible explanation for this behaviour is that Sumerian has more options to mark number on nouns, compared to Itonama. Its users were not as dependent on verbal number



for the expression of plurality and hence used it more for the semantics of actions and states.

Although there certainly are differences, I was surprised by the level of similarity of this feature in Sumerian and Itonama. Especially because you would be hard pressed to find two languages that are more apart in time and space.

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