

A Sumerian Connective Particle and Its Possible Semitic Counterparts¹

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1. The Sumerian conjunction \dot{u} is, according to conventional wisdom, a loan from early Semitic **wa* and/or **fa*. It appears for the first time in an archaic tablet from Tell Abu Salabikh (ca. 2600 B.C.) in the phrase *za-gin ù kù-babbar* “lapis lazuli and silver.” The text (*OIP* 99 326+342 and p. 32), however, is likely to be a translation from a Semitic original, represented by a Semitic version (*ARET* 5 6) found in Ebla. Although the Semitic origin of Sumerian \dot{u} belongs to the kind the things for which there is never strict proof, several considerations make it likely that the common opinion is acceptable. Historically, many languages have borrowed particles from a neighbor (e.g., Mithun 1988:351-57). Suffice it to mention the borrowing of Spanish particles, often in a large scale, by many Mexican and South American Indian languages. As for the borrowing of a conjunctive particle, the latest Sumerian grammar (Edzard 2003:27) enumerates several cross-linguistic parallels: Turkish *ve* from Arabic *wa*, Finnish *ja* from Old German *jah*, Basque *eta* from Latin *et*, and so on. The precise reasons for such borrowings are not too well-known, but it is likely that they may be prompted by the poverty of connective particles in a given language, compensated by the fact that “grammatical gaps tend to get filled thorough borrowing” (Harris and Campbell 1995:128). This is clearly the situation in Sumerian where simple juxtaposition is the rule. There are, to be sure, native strategies to express *conjunction*, based on comitative and possessive affixes:

- [1.1] $N_1 N_2$ -bi (neuter 3s possessive/demonstrative): tur mah-bi ‘young and old’
 $N_1 N_2$ -da (comitative): áb amar-da ‘cows and calves’ (lit. ‘with’)
 $N_1 N_2$ -bi-da (possessive+comitative): ^{id}idigna ^{id}buranun-bi-da
‘the rivers Tigris and Euphrates’

An infrequent strategy inserts a pluralizer affix:

- [1.2] $N_1 N_2$ -e-ne-bi-da (pluralizer+possessive+comitative): ^{md}En-ki-ta-lú ^{md}En-ki-hé-gál-e-ne-bi-da
‘Mr. Enkitalu and Mr. Enkihegal’ (the two of them)

1. This article is intended to provide the Semitists with basic information about a particular function of the Sumerian connective \dot{u} that may be relevant for a study of the prehistory of the preverbal *waw* in Hebrew, and similar, if less known, Semitic phenomena. It is not intended as a full treatment of preverbal \dot{u} - for Sumerologists.

Sumerian has also a conjunctive *nga-*, of unknown origin, symmetrical and reversible, but used only between predicates. *Disjunction* may be expressed with co-ordinated subjunctive-optative clauses:

- [1.3] N_1 hé-a N_2 hé-a ... N_n hé-a (hé-a = optative ‘let it be’): lugal hé-a en hé-a ensí hé-a sanga hé-a ‘a king, or a high priest, or a governor, or an estate administrator’

To express an *adversative* relation, there are no other means than the undifferentiated *ù*, except perhaps for unrecoverable prosodic ones. Some examples of the uses of the particle:

- [1.4.1] conjunctive: níg-tuku ù nam-ukú-ra ‘wealth *and* poverty’
 [1.4.2] disjunctive: gá-e ù za-e ‘*either* you *or* me’
 [1.4.3] adversative: ù za-e uru-šè nu-ku₄-ku₄-me-en (you pretend to be a lady), ‘*but* you are not even admitted in town’
 [1.4.4] emphatic adversative conjunction (‘not only ... but also’): ù níg-tuku-ta-àm ù nam-dumu-lú-ta-àm ‘*not only* for reasons of wealth, *but also* for reasons of family nobility’
 [1.4.5] to introduce a new subject in a letter (paragraph divider)

All these strategies, in any case, are used very sparingly, and thus it is no surprise that Sumerian would be receptive to the borrowing of a coordinating particle from a neighboring Semitic language.

2. So far, there is nothing here surprising or especially remarkable. What is unusual, however, are other functions of *ù*. There are 368 instances of *ù* in the basic corpus used for this investigation (the literary compositions in the XVIIIth century Nippur catalogue, plus the Gudea cylinder A, ca. 2100 B.C.).² Of those instances, only 19% have simple connecting functions as exemplified in [1.4], the rest, or 81%, are proclitics preposed to finite verbal forms. The main thrust of this paper will be to examine the use of *ù* as a verbal proclitic in Sumerian, so that the results can be used to inquire whether it is a reflex of some latent feature of Proto-, or Early, Semitic (or even perhaps Afroasiatic), or, on the contrary, if it is the result of some internal morphosyntactic process within the Sumerian language itself, so that any morphological or syntactic similarity with Semitic would be due to chance, or to some infrequent cross-linguistic tendencies. It should be noted here that Akkadian does not show any trace of a verbal proclitic *u* (so that any borrowing would be from some Semitic language other than Akkadian proper), but has a connective verbal clitic *-ma*, used after predicates, which was borrowed sporadically into the Sumerian of the XIX-XVIIIth centuries (Karashashi 2006).

First, some remarks on the phonology of what is transliterated here as preverbal *ù-*. If the particle is of Semitic origin, the initial glide of **wa* seems to have disappeared with a concomitant change *a > u*. A phonological shape /*wa*/ in Sumerian, however, is not absolutely excluded, given our insufficient data on the phonology of Sumerian. There are no traces of any influence on a following consonant. The graphemics and morphophonemics are simple, and their chronology is irrelevant in the present context.³

- [2.1.1] $ù > V / _ _$ ba-, bí-: ù-ba-an-dab₅ > a-ba-an-dab₅, ù-bí-ús > ì-bí-ús
 [2.1.2] ù-im-ma > um-ma-: ù-im-ma-ni-in-dé-dé > um-ma-ni-in-dé-dé

2. This is the corpus used for statistics, about 120 additional passages have been used as needed.

3. In the Sumerian scribal practice, one can detect two opposed tendencies in the representation of morphophonemic variants: an innovating one, visible in Gudea and Ur III times, that tends to make explicit the phonological variants, another one, in the Old Babylonian period, keeps the underdifferentiated traditional writings. Each case has its own history, and thus *ì-bí-* does not survive the end of the third millennium, but *a-ba-* does, although alternating with *ù-ba-*. Similarly, *ha-mu-* is the rule until the end of Ur III, against the tendencies of the period, while *hu-mu-* is the rule in OB, and so on.

[2.1.3] \dot{u} -VC > (\dot{u})-uC: \dot{u} -al-gaz > ul-gaz, \dot{u} -V-b-si-ke > ub-si-ke, \dot{u} -V-n-gen > un-gen

3. As for the function of \dot{u} - as a verbal clitic, it converts a regular declarative clause into a temporal clause of anteriority subordinated to the following main clause, or rather, we should perhaps say, *combined* with it.⁴ How to label this function, will be discussed later on. The particle \dot{u} -, which alone marks originally a simple coordination ‘and’, when connecting two predicates representing successive events is interpreted as asymmetrical and becomes a mark of temporal subordination: ‘ C_1 and then C_2 ’. A possible path in the grammaticization of \dot{u} - from a connective particle to a mark of dependency would be the following [3.1]: two clauses, originally in asyndetic relation (*a*), are connected with the particle \dot{u} (*b*); when the construction receives an asymmetrical interpretation ‘and then’, the independent particle is considered a clitic at the end of the first clause (*c*), and, since Sumerian has a strict SOV syntax, it becomes *de facto* a verbal enclitic. This stage is uncontroversial and a large number of cross-linguistics parallels can be adduced (Cristofaro 2003:20; Haiman 1985:198-203). Then the \dot{u} , now a clause enclitic, becomes a verbal proclitic (*d*), i.e., moves to the front of the verbal form where it falls into the same slot as the preverbal modals.

[3.1]	(a) $C_1 C_2$	juxtaposition
	(b) $C_1 \dot{u} C_2$	insertion of connective particle
	(c) $C_1\text{-}\dot{u} C_2$	cliticization ⁵
	(d) $C_1 = S O V\text{-}\dot{u} > S O \dot{u}\text{-}V$	clitic movement

The reasons for the last step, much more infrequent typologically, are far from clear. Bybee et al. 1990, have studied the ordering of morphemes in a word; according to this study, only 18% of the SOV languages tend to have preposed affixation, so that the case of Sumerian warrants further inquiry:⁶ for instance, could the form \dot{u} +verb have been borrowed *en bloc* as an established pattern? Note that the verbal connective nga- is also preposed to the predicate I will not consider here seriously the possibility that the source of Sumerian preverbal \dot{u} - is the Akkadian subordination marker -u.

4. The preverbal \dot{u} - appears in two kinds of contexts: (1) preposed to narrative or declarative main clauses, and (2) in prescriptive texts with an ultimately deontic sense. In the first case, it can be something that happened in the past, present or customary, or in the future. The main clause C_2 will have the verb in the perfective aspect in the first case (with very rare exceptions), and in the imperfective in the second.

4.1. Narrative or declarative: the \dot{u} -clause (C_1) describes a situation prior to the main event (C_2). Note that the number of \dot{u} -clauses in the combined sentences is not limited to one; there is sometimes a long chain of them; in which case, the multiple \dot{u} -clauses rather than being co-ordinated, form a cascade of successive events.⁷

4. Some problems have been raised recently concerning the classification and terminology of connected clauses (Croft 2001, ch.9). For practical reasons I will keep here the traditional terms.

5. Compare Turkish: Mehmet gel-di- \emptyset ve git-ti- \emptyset > Mehmet gel-ip git-ti- \emptyset ‘Mehmet came and went’.

6. Sumerologists, for some strange reason, do not seem to ever have asked themselves about the possible phonological segmentation and analytic structure of the so-called “verbal chain”: it is really a series of prefixes, or it is rather a series of suffixes, appended to some preverb or preverbs?

7. I translate C_1 with “after” plus past, to stress the sequentiality, a translation “and then,” or even simply “and,” would also be correct in most cases.

4.1.1. C₂ in the past.

[4.1.1] mušen-e gùd-bi-šè sig₁₄ un-gi₄
 amar-bi gùd-bi-ta inim nu-um-ma-ni-ib-gi₄
After the bird had called to its nest
 its fledglings did not answer back from their nest. *Lugalbanda 2:070-71.*

[4.1.2] en-me-er-kár dumu^dutu-ke₄
^{gi₅}šinig-bi un-sig^{gi₅}bunin-šè un-dím
 gi-sumun ki kù-ga úr-ba mi-ni-bu šu im-ma-an-ti
 Enmerkar, the son of the Sun god,
after he cut down a tamarisk, after he carved it into a water-trough,
pulled out by its roots an old reed in a clean place, grabbed it (as a fishing rod).
Lugalbanda 2:401-03.

These passages come from an adventure tale. Instances of ù-forms in strictly historical narratives, are very rare.⁸

4.2. In the present, as something customary:

[4.2.1] šà-tùr-zu ganba-ka lú ù-bí-in-túm
^{túg}níg-dará ní-za gú-za ù-bí-in-lá
 u₈-mu-šè še^{gi₅}ba-an-e si-ma-ab lú lú-ù in-na-ab-e
After someone brings your “belly” to the market place,
after he ties up, with your consent, a loin-cloth around your neck,
 one man says to another: “fill me up the measure of grain (as a price) for my ewe.”
The Ewe and the Grain 176-78.

This is part of a description of what usually happens in a market place.⁹ Similar to customary events are timeless statements such as wisdom advice, proverbs, and such:

[4.2.2] gud-mah-e kun-bi lú a-ba-an-dab₅
 lú id-dè ba-ra-an-bal-e
After a man has grabbed the tail of a big bull,
 he will not be able to cross a river. *Wisdom of Šuruppak 194-95.*¹⁰

4.3. The main clause describes a potential event in the future:

[4.3.1] [[lú [é a-ba-sumun ù-un-dù] mu-sar-ra-bi ... nu-ub-kúr-re-a] igi^dnanna-ka hé-en-sag₉]
 The one who, *after* the house had become old and he has repaired it, will not alter the present commemorative inscription, may he enjoy good health in the presence of the Moon-god.
Amar-Suen 12:32-39.

8. This is not due purely to stylistic reasons, but rather to the nature of the historical narrative itself, and raises some interesting theoretical questions, for which see Comrie 1985:27, 61-63. Example [4.1.2] is in fact part of the description of a magic ritual.

9. “Belly” is a pejorative metonymy for a fat ewe, and “loin-cloth” is a dirty word and a subject of jokes in Sumerian literature.

10. I.e., the man that grabs the tail, instead of the horns, of a bull, is a coward and thus incapable of fording the cattle (considered elsewhere a dangerous activity).

This example shows a \dot{u} -clause embedded in a nominalized relative clause.¹¹

4.4. Prescriptive contexts (deontic use). One or more \dot{u} -clauses enumerate successive steps in a process. The main clause is in the imperfective (with future function), or in the optative-subjunctive. The main prescriptive uses are the following:

4.4.1. Instructions for the preparation of a medicinal compound. The main clause, with the verb in the imperfective indicative, tells how to administer the compound.

- [4.4.1] $gi\dot{s}$ hašhur-hád \dot{u} $gi\dot{s}$ munzer_x \dot{u} -gaz sur₁₁-šum-ma kaš \dot{u} -dé i-giš i-bí-šeš₄ níg ab-lá-e
After you crush dried apples and licorice, after you pour beer lees (on this), after you rub oil on (the diseased spot), you will tie up a poultice.
Ur III prescription (RA 54 [1960] 61:62-68).

At the end of prophylactic incantations, there is often a ritual to ward off some evil. The successive steps of the magic procedure are given by \dot{u} -clauses, the same construction seen in the medical texts. The main clause is normally in the optative-subjunctive describing the intended effect of the ritual, but can be occasionally an indicative with future interpretation.

- [4.4.2] síg SAL.áš-gàr $gi\dot{s}$ nu-zu-ka \dot{u} -ma-ni-nu gaba ki-sikil-lá-ke₄ \dot{u} -mi-tag
é gál-tak₄-a nu-mu-ši-kéš-a
After spinning goat hair of a female kid that has not yet copulated, after touching with it the breasts of a young girl, the “open house” will not close. Incantation (AUAM 73.1425).

An identical construction can be found in the formulation of other procedural rules:

- [4.4.3] níg kur₇-ak-dè \dot{u} -ba-ab-til, lú a-a-ke₄ dug dab₅-ba-ab lú im dug-zu \dot{u} -bí-in-dug₄ dug ab-dab₅-bé-ne, íd šè-uru-ka-ta àm-mi-ib-si-si-ne
After ending the inspection (of the exercise tablets),
after the 'water-man' has said: “take the jar, your jar! idiot,” they (the pupils) will take the jars (and) fill them from the canal in the center of town. Rules of the School (Ed R) C 8-10

And in the formulation of penalties:

- [4.4.4] $gi\dot{s}$ dub-dím-ta $gi\dot{s}$ tukul 60-àm \dot{u} -ba-ab-ra-ah, $uruda$ šir-šir gir-na \dot{u} -ub-sì-ke, é an-nigin-ma é-dub-ba-a-ta itu 2-àm nu-ub-ta-è
(The guilty pupil) after being struck sixty times with a tablet-shaping board, after putting his feet in chains, he will be locked in the house and will not leave school for two months. Dialogue 3:183-85.

Note the presence here of the originally Semitic *-ma* next to \dot{u} -clauses.

4.5. The \dot{u} -clause introduces direct speech. This construction is limited to the verb dug_4 with dative ‘to say to someone’, ‘to address’, (and the associated verbs *dah* ‘to repeat’ and *peš* ‘to say for the third time’). In the opening formula of letters the main clause has the verb *na-ab-bé-a* ‘this is what he says’,

11. Another good example: [[alan-bi [u₄-ul-lí-a-aš \dot{u} -mu-un-dím-ma] ... [ki-a-nag-ba um-mi-gub-bé]] me-te-aš hé-em-ši-gál], “After these statues, previously made as eternal memorial, had been installed in the place of libations, let them be there a fitting decoration” *Lugale* 476-78.

followed by a *verbatim* reproduction of the message.¹² Otherwise, the main clause is elliptic, the verb is omitted and only the direct quotation is left.

- [4.5.1] lugal-mu ù-na-a-dug₄
^mArád-mu arád-zu na-ab-bé-a
 After you address my king,
 (you will say) “this is what Aradmu, your servant, says.” *Ur III royal correspondence*.

The message follows immediately. Simple letters, such as business requests for delivery, omit most of the time the na-ab-bé-a formula, while literary letters may add ù-na-a-dah and ù-na-a-peš, ‘after you repeat a second time’ and ‘a third time’, respectively. The corresponding Akkadian formula is:

- [4.5.2] ana PN₁ (addressee) qibi-ma (imperative + -ma) umma PN₂-ma (sender + -ma):
 Say to PN₁, thus (speaks) PN₂ (the message follows).

The correspondence between the two languages is *functional*, not a translation morpheme by morpheme. The difference reflects different strategies in imparting instructions: Sumerian uses two approaches: a) the optative-subjunctive, (or the imperfective as a deontic future), on the one hand, and b) the imperative on the other (note that Sumerian has otherwise a well-developed imperative system). Akkadian uses the imperative in all cases.

5. As shown by these examples, the connected clauses preserve their own morphology intact (no serial verbs). Subjects and objects do not need to be the same in C₁ and C₂, although very frequently they are identical by context requirements. There are no examples of C₁ with negative forms, or with modal proclitics for that matter, for obvious reasons. The verb of C₂, the main clause, can be perfective or imperfective, and have a variety of modal prefixes, including negative ones, and can even be an imperative:

- [5.1] ... ù-bí-ak túg-gur-ra-ab
 after having made ... till with the *tuggur*. *Farmer’s Instructions* 31

The verb of C₁ is practically always a perfective, although there are exceptional instances of imperfectives, in the following example C₁ has the -d- modal infix denoting subject-centered obligation:

- [5.2] é lú-AN kaš-dé-a-ka ù-du-dè-en
 egir lú kaš-dé-a-ka ba-an-ku₄-re-en
 After you had to go to a house of a man who gives a beer party,
 you go after the “beer party-man.” *Dialogue* 1:104-05.

6. It should be noted here that Sumerian has a competing strategy, studied in Gragg 1973, to form anterior adverbial clauses, it is based on native grammatical resources: a nominalized sentence followed by the ablative postposition -ta (with a phonological variant -ra). Curiously, there are a few examples of

12. For the non-assyriologist readers: Sumerian letters are formulated as messages to be read to the addressee by the letter bearer, or from a tablet by his secretary or the like.

clauses with both the ù- clitic and the nominalization with -ta. Most of them make reference to concrete points of time (evening, midday, twilight, number of days or nights)¹³:

- [6.1] u₄-dè u₄-te-en-e um-ma-te-a-ta (var. -ra)
After the day approached the evening ...

This is a stereotyped formula to introduce events that take place at the end of the day. In isolated cases, the added ablative infix could have a causative nuance, unless it is simply a redundant stylistic device of the scribe.¹⁴

- [6.2] geštin níg-dùg ù-mu-un-nag-eš-a-ta
kaš níg-dùg ù-mu-un-dùg-ge-eš-a-ta
a-gàr-a-gàr-ra du₁₄ mi-ni-in-mú-mú-ne
Because/after they had been drinking good wine,
because/after they had been enjoying good beer,
they start(ed) quarreling in the fields. *The Ewe and the Grain*:067-68.

The Sumerian verb expresses an aspectual distinction between an imperfective and a perfective (the so-called *marû* and *hamtu* forms, respectively) and, in general, tense distinctions are not grammaticized. The ù-clause, however, is understandably in the perfective and the clitic ù- becomes *de facto* a tense mark indicating a *relative* tense, i.e., taking as a reference point not the moment of speech, but the time of realization of the main clause. As a result, one may have a verbal form that is morphologically a perfective (as a relative tense), but pragmatically may have at the same time a present-imperfective connotation (with reference to the moment of speech). In other words, an anterior verbal form includes a time reference, even if a relative one, and therefore may have a sort of disruptive effect on a pure aspectual system.

7. Finally, some considerations about an appropriate label to designate the grammatical function of the ù-clitic. The search for a good label will help to dispell some misconceptions found in some Sumerian grammars where the ù-clauses have received, in addition to “prospective”, the most varied labels: an “imperative,” a “*mild* imperative,” a “suppositif,” an “optative,” a “conditional,” etc.¹⁵ The ù-clauses, as shown by the examples given, code no more and no less than simple anteriority. The rest, when correctly understood, is nothing but interpretations based pragmatically on the context, or on a reconstructed situation. This is true of the procedural contexts, as we have seen, so that the term “imperative” is inappropriate. The deontic orientation, if present, comes from the main clause, not from the proclitic ù-. The term “conditional,” see most recently Kaneva 2000:524-30, is based also on a (questionable, I believe) pragmatic interpretation of some legal contexts. It is true that sometimes *post hoc* can be interpreted correctly as *propter hoc*, but this does not mean that *post* and *propter* are the same thing. To avoid quarreling about labels, we must remember that there is such a thing as *homonymy* of syntactic

13. Some examples in Gragg 1973:132. The passage *Tree and Reed* 208 makes reference to early morning “after dew has appeared.”

14. In *Plow and Hoe* 083, the immediate main clause in 084 is in turn an adverbial subordinate of the main clause in 085: [[a-gàr-ta a um-ta-kud-a-ta], ki-dur₅ kin-gá ba-gál-la-ta], ⁹¹⁵apin igi-zu-šè a-šà-ga gá-e ma-an-e₁₁-dè]. The redundant -ta of 084 may have been inserted by parallelism with 085.

15. Sollberger 1952:168 calls it a “suppositif” (with incorrect interpretation); according to Thomsen 1984:208-11 it “denotes prospective or a condition”; Edzard 2003:121-23 speaks both of a “prospective” that “sometimes comes close to a conditional clause,” and of a “polite imperative.” Older opinions listed in Sollberger 1952:168.

constructions: the same meaning is mapped into different forms (Haiman 1985). Many structures can be used to express sequentiality or condition, depending on context and pragmatics. In the case of Sumerian \dot{u} -, the label “prospective” is the generally accepted one in Sumerian grammar since Falkenstein 1949-50 2:223, who describes correctly the function of the clitic. He remarked that the \dot{u} -forms correspond to the *futurum exactum* of Latin, and proposed the term “Prospektiv (Präformativ),” introduced by his teacher Landsberger, possibly inspired by the terminology of the Egyptologists. However, the term is not a current one in linguistics, and neither in English nor in German corresponds too well to what these forms mean. The best we can do, it seems, is to call them “temporal forms of anteriority.”

8. In conclusion, I have dealt, perhaps for too long, on a Sumerian construction possibly based on a borrowing from Semitic, that presents some striking similarities with Semitic constructions, the most remarkable being of course the preverbal *waw* in Hebrew. The morphological structure is the same, the disruptive effects on the aspectual system are similar, and so on, even if this *waw* took syntactically a life of its own (Smith 1991; Givón 1977). Since a direct contact is impossible, we have to ask: do we have here distinct manifestations of a prehistoric tendency present in some undocumented branch of Semitic (or even perhaps in Afroasiatic if we take Egyptian *jw* into consideration, Loprieno 1980), or are the similarities due to an accidental convergence resulting from some cross-linguistically more or less attested tendency? The answer, if there is one, will come from a careful reexamination of the clause-connecting functions of Semitic **wa*. Without forgetting, of course, the rules of thumb proposed in Givón 1991:301: “(a) Explain externally, i.e. by contact, only what has no reasonable internal explanation; and (b) Explain by contact only changes that are counter-intuitive, i.e. go against the more common diachronic drift.”

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