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Notes on reciprocal constructions in Akkadian in light of typological and historical considerations*

1. INTRODUCTION

1.1. Reciprocal constructions have received much attention over the last decade, especially in the recent publication of the five volumes of the seminal typological study by Nedjalkov in 2007. It is unfortunate that Nedjalkov’s enterprise did not dedicate even a single section to any Semitic language, ancient or modern. In this paper I would like to fill in this gap by discussing aspects of these constructions in Akkadian, with comparisons to parallel constructions in other Semitic languages. This discussion will not exhaust every aspect of this topic in Akkadian, but will elaborate on certain crucial aspects of reciprocal constructions, and will discuss several possible diachronic changes that we can trace in the history of Akkadian. As will become clear the typological observations allow us first to recognize and then to understand better the various diachronic developments occurring in the history of Akkadian.

1.2. The corpus

Working on reciprocity in a extinct language raises a significant challenge, as the quantity of instances of reciprocal constructions per period or per dialect is small. Consequently the significance of any generalization on such a restricted corpus is very limited. Therefore I took the Assyrian Dictionary [= CAD] as the primary corpus for this study, and added examples from various primary and secondary sources, including data from several grammar books. I conducted digital searches for English reciprocal expressions (such as “each other”) in the on-line volumes of the CAD. Once the different Akkadian reciprocal constructions were identified it was possible to explore in other directions and to examine the behavior of the expressions in Akkadian. While, in light of the corpus, it is obviously impossible to argue decisively for any generalization, such generalizations are still very significant, since it is telling (statistically) if something is never found in this corpus. Similarly, if, for example, this study identifies a unique behavior of a certain construction, and if it always behaves in the same way in this corpus, then the probability that this is true for all periods and all dialects of Akkadian is relatively high.

* Editions of Akkadian texts are quoted with abbreviations used in the Assyrian Dictionary, Gelb, Landsberger et alii 1956 [= CAD]. In general, when the examples in this paper appear in the CAD, I followed their translation, unless I either disagree with their proposals, or when I thought an alternative translation would be better for the purpose of the argument. For each example, if it is known to us, I will also indicate its time, and when necessary its location, as at times it will affect the discussion. The interlinear glosses are according to the Leipzig Glossing Rules. In adopting this system I had to use a different terminology than what is customarily used in the context of Akkadian, here are the various terminological adjustments: PST-preterite; SBJV-subordination marker; additional abbreviations: DSM-direct speech marker; ING-ingressive; INJ-injunctive particle; PRC-precative; ST-stative. I wish to thank Prof. Eran Cohen, Prof. Benjamin Foster, Prof. Eckart Frahm, Mary Frazer, Dr. Uri Gabbay, Prof. William Hallo, Prof. John Huehnergard, Nadine Pavie and Adam Strich for reading earlier versions of this paper and for their numerous suggestions, questions and corrections.

1. In addition, one should mention the following two volumes: Fraizingher, Curl 1999 and König, Gast 2008, and the following articles: König, Kokutani 2006 and Evans et alii 2007.

2. At present there exist very few studies on Semitic languages which consider reciprocal constructions. For a study on Standard Arabic, see Kremers 1997; on Biblical Hebrew, see Jay 2009; on Biblical and Mishnaic Hebrew, see Bar-Asher Siegal forthcoming-a; on Modern Hebrew, see Siloni 2001, 2008. In the context of Amharic, Goldenberg 1991, pp. 537-541 offers a survey of the pronominal constructions and Amberber 2002 discusses the various verbal constructions.
2. THE TYPOLOGY OF VERBAL AND PRONOMINAL RECIPROCAL CONSTRUCTIONS

2.1. A proto-typical reciprocal construction is a grammatical means to denote a mutual event(s). A clause which contains such a construction is said to substitute at least two propositions, thus we would say that (1a) is semantically equivalent to (1b):

(1) (a) Emily and Tony admire each other
    (b) Emily admires Tony and Tony admires Emily

When speaking of reciprocal constructions\textsuperscript{4} it is first and foremost crucial to distinguish between verbal and pronominal encoding of reciprocity. Reciprocal verbs can be morphologically encoded through different ways of affixation and inflection (for a detailed survey of morphological forms see NEDJALKOV 2007b, pp. 170-181). In Akkadian as is the case in the Semitic languages, it is marked by verbal templates, called in the Akkadian grammars stems.

Examples in (2)-(3) demonstrate the two types in Akkadian. The sentences in (2) illustrate the morphological encoding, in which Akkadian has both verbs in the N-stems\textsuperscript{5} and T-stems. In (3) we include pronominal reciprocals of two types – “two-unit pronouns” (a-c) and “one-unit pronoun” (d):

(2) a. anâkû u atta ninnâmir
I and you 1PL.PST.meet.RECP
We met, you and I (OIP 27 15:22, OA)
b. išu tım-im ša niṯam-ê
from day-GEN REL 1PL.PST.see.RECP-SBJV
“Since the day we came to know each other”
(Baghd. Mtt. 2 59 iv 12, OB)
c. [ti]jaśiqû = ma īpûsû ru ūtam
3MPL.PST.kiss.RECP-=-and 3MPL.PST.make friendship
“They kissed each other and they formed a friendship”
(Gilig. Y. i 19, OB)
d. summa ab-u u mār-u kitsûlû
COND father-NOM and son-NOM 3MPL.ST.angry.RECP
“If a father and a son are angry with each other”
(CT 39 46:75, NA)
e. ina GN ittāṣashû
in GN 3MPL.PST.fight.RECP
“They fought in GN” (ABL 879:13 NA)

(3) a. ul īmmar ab-u ab-ā-šu
NEG 3SG.DUR.see brother-NOM brother-ACC-3MSG.POSS
“One person cannot see the other”
(Gilig. XI 112, NA [SB])
b. urkatam ab-um ana ab-im là inappûš
afterwards brother-NOM to brother-GEN NEG 3SG.DUR.make.a.claim
“Afterwards one will not make a claim against the other”
(TCL 19 63:45, OA)
c. innašiqû ab-u ab-ê
3MPL-PST.kiss-ING brother-NOM brother-GEN
“They began to kiss each other”
(En. El. III132, NA [SB])
d. ša aḫāmeš imattûqû-ê ma uššarû
REL RECP 3MPL.DUR.lift=-and 3MPL.DUR.swing
“(The actors) who lift and swing each other”
(CT 15 44:30, NA).

6. This form is in the N-stem. However, with this root reciprocity is expressed with a T-stem (see example 2c). As for the use of the N-stem in this context, it seems to be the impressive use of this stem, and therefore the translation: “They began to kiss each other”. In fact it fits the larger context where this line appears “They entered before Anshar, filling Ushshukina. They began to kiss one another in the Assembly” (En. El. III 130-132]). Concerning the impressive use of the N-stem, see inter alia VON SODEN (GAG 1952 [§ 90e-g]); KOUWENBERG 1997, p. 99. TESTEN 1998, p. 138 even argues that this is the original function of this stem.

7. The genitive here is not expected. It should be noted, however, that on another manuscript it is written logographically (ŠES-ŠES) and only the first has a phonetic representation of the case.

3. Thus I will not comment on unique forms such as el-îštu in (18d), but I will discuss the unique reciprocal pronouns from Susa (§ 3.5.1).

4. HASPELMATH 2007 has, justifiably, proposed terminology which distinguishes between the semantic plane and the linguistic expressions, referring to the former as speaking about mutual relations and the latter about reciprocal constructions. Although I agree with the importance of this distinction, I will follow the common terminology in the literature and will speak about reciprocity for both planes.

5. However, as VON SODEN (GAG § 90e-g) noted, this function of the N-Stem is very rare.
While both strategies express reciprocity, they are substantially different from the point of view of the argument structure. In fact, as will become clear (§ 3.4), expressions of reciprocity with the so-called “reciprocals pronouns” are a subgroup within a larger group of strategies in which from the point of view of the sentence’s argument structure the sentences are “regular”, as the expressions conveying the reciprocals meaning (such as “one… another”) appear with the regular form of the verb, and occupy the regular positions of the subject, the object or other syntactic positions. In contrast, verbal reciprocals might be regarded as derivatives resulting from a process of detransitivization, characterized by two sets of participants which stand in a reciprocal relationship and occupy the same argument position while the other argument position remains “empty” (“Alex kissed Ruth and Ruth kissed Alex” vs. “Alex and Ruth kissed,” in which the latter does not have a direct object while the former does).

2.2. It is very common cross-linguistically that in the case of verbal reciprocals, in addition to “regular constructions” in which both participants are the subject, there is also the so-called “discontinuous constructions” in which both participants are the argument position while the other argument position stands in a reciprocal relationship and occupy the same syntactic positions.

8. There are some studies (inter alia Siloni 2001, Bar-Asher 2009a) which demonstrate some semantic differences between the verbal and the pronominal strategies. However it is (almost) impossible to determine whether these distinctions hold in an extinct language such as Akkadian. Below in § 4 I examine whether some parts of the semantic typology are still relevant in our study of the Akkadian.

9. Similarly to Nedioalkov 2007a and Haspelmath 2007, I am using this terminology merely as a schematic description, without taking a position regarding an actual synchronic or diachronic derivation. In fact, Bar-Asher 2009a demonstrates that we should not speak about an actual detransitivization as these are two separated items in the lexicon (in the sense of the linguistic “mental storage”). Instead it is advisable to speak about a structural relationship marked by the lexicon.

10. I am speaking about “sets” since the reciprocity can be a relation between groups and not just individuals. As example (20) below demonstrates, in the Akkadian sentence, “The people of Assyriny and Babylonia mingle with each other” the relation is clearly between sets of individuals.

11. Beierens 2007 discusses the choice between the “regular” and the “discontinuous” constructions considering information structure parameters. An examination of this in Akkadian will require a more thorough study of the context of each example of these constructions in order to reveal the contrast between them.

b. šumma rē-ē-un... itti bēl eql-im là intagar 
   COND shepherd-NOM with owner.of field-GEN NEG 
   3SG.PST.reach.agreement
   “If the shepherd does not reach agreement 
   with the owner of the field”
   (CH § 57:50, OB).

It is worth mentioning that in the context of Akkadian, Streck (2003, pp. 82-86) assumes that the subject in reciprocals should comprise two agents. Consequently, he considers sentences in the discontinuous construction and sentences with only a singular subject as later conceptually developments, which eventually resulted in the use of Gt verbs in non-reciprocal contexts.

Approaching this material from a more typological perspective reveals that nothing is unique to Akkadian about discontinuous constructions, as even just the following examples from among the Semitic languages can demonstrate:

5. ki hwē minnasāl PN1 w-PN2, mur le-h when 3MPL.PST.be 3MPL.PTCP.quarrel.RECP
   PN1 and- PN2, 3MSG.PST.say to-him
   PN1: bohad-ay didi minnaysel?
   (Jewish Babylonian Aramaic)
   PN1 with-me POSS.1SG 2SG.PTCP.quarrel.RECP
   “When PN1 and PN2 were quarrelling, PN1 said to him: 
   ‘are you really quarrelling with me?’”
   (BM 88b)

6. tāhāraba rajul-un ma’a sādq-in
   (Standard Arabic)
   3MSG.PST.fight.RECP man-NOM.INDF with friend-GEN.INDF
   “A man fought with a friend”

7. ha-yelad-im hitašku im ha-yelad-ot
   (Modern Hebrew)
   DEF-boy-PLM 3PL.PST.kiss.RECP with DEF-girl-PLF
   “The boys and the girls kissed”

12. According to Siloni’s typology (Siloni 2001), such a construction is possible only in languages that, according to her theory, express reciprocity by the lexicon. In fact Haspelmath 2007, p. 2093 proposed the following universal rule: “only verb-marked reciprocals allow discontinuous construction.” On this matter see also Maslova 2007, p. 337. The fact that in some languages discontinuous constructions are allowed with clitics seems to be problematic for this universal claim. Bar-Asher 2009a, pp. 272-275 offered a solution to this problem.

13. In this dialect of Aramaic the infix r assimilates regularly with the following consonants (the first radical of the root).
After presenting the two strategies of the encoding of reciprocity, I shall delve into each of the strategies separately, starting with the various pronominal constructions (§ 3) and then moving to some discussion about the extent of the verbal encoding (§ 4). In (§ 5) I will briefly discuss the relationship between the pronominal and the verbal constructions, and examine a claim made in previous literature concerning their historical relation.

3. PRONOMINAL CONSTRUCTIONS

3.1. As is the case in other language families, there is no genetic relationship between the pronouns in the pronominal reciprocal constructions of each of the different languages. In general, these pronouns are transparent in various degrees in terms of their origins, as they are nouns at different stages of the process of grammaticalization, and used for describing mutual relations between sets. As demonstrated in (3), Akkadian (like English for "to another," "one with the other," "one the others"). But the iconicity of the reciprocal relations between the members of the subject ("each-others"); or the two-unit pronouns, preserving the plural subject ("to each-other," "with each-other," "one the others").

As noted earlier, pronominal reciprocals regularly appear with the basic form of the verb (NEDJALKOV 2007b, p. 154), and, similarly to reflexive pronouns, these pronouns either take the position of one of the arguments or can appear in the place of other nouns in the sentence. Thus, with regard to basic sentences, pronominal reciprocal constructions can have the same argument structure.

Generally speaking, there are two types of reciprocal pronouns: the one-unit pronoun co-refering with the plural subject ("to each-other," "with each-other," "each-others"); or the two-unit pronouns, preserving the iconicity of the reciprocal relations between the two sets participating in a reciprocal relationship ("one to another," "one with the other," "one the others"). As demonstrated in (3), Akkadian (like English for this matter) has both types of pronouns. The two-unit pronouns consist of a repetition of 

\[ \text{aḥāmiš / aḥāš} \]

in its various forms. 17

14. For some preliminary collections of forms in the Semitic languages and proposals for their origin, see RUBIN 2005, pp. 22-23, and BAR-ASHER SEGAL forthcoming-a.

15. This is, for example, the case in the History of Hebrew. See, ibid.

16. Later in § 3.4.2 we shall discuss the conditions under which reciprocal pronouns may appear with the detransitivised verbal form.

17. Other forms of both types will be discussed further throughout the article.

3.2. The syntax of the sentences with the various types of pronouns

Akkadian shows an interesting distribution of the one-unit and two-unit pronouns. Based on a preliminary survey, while the one-unit pronoun may appear with its antecedent in the same sentence, the two-unit pronouns are used only when the antecedents are not part of the sentence. Thus, most often the members of the subject of the sentence with aḥāmiš are the parties participating in the reciprocal relations. They appear either separately (8a) or as a group whose members participate in such relations (8b):

(8) (a) isumma surd-ū u ārib-u itti aḥāmiš ṣalt-a ṣuṣaša =ma

COND raven-nom and falcon-nom with recp fight-acc 3mpl do.pst =and

"If a falcon and a raven fight, and..." (CT 39 30:35)

(b) māt-di-i ana aḥēš ʿišbāši

country+fpl obl to recp say du3mpl

"The countries say to each other"

(Craig ARBT 1 26:8 NA)

Moreover, the one-unit pronoun never occurs as the subject of the sentence. It is either the direct object or it is the object of prepositions (for examples see § 3.6).

In contrast to this, in sentences with the two-unit pronouns, the participants in the reciprocal relations do not hold grammatical positions. In most cases the first element of the two-unit pronouns is the subject and is in the nominative (aḥum), while the second fills the slots of the other arguments in the sentence and appears in the appropriate case (aḥum or aḥim). Therefore, it is most often used in impersonal contexts (and very often in legal contexts), when the antecedents previously occur in the text (10), or when they are extrapolated appearing in the absolute case (13-14). Thus, a sentence with an explicit subject [such as "the children saw one another"] was probably ungrammatical with two-unit pronouns. The following examples illustrate the use of the two-unit pronouns:

(9) a. aḥ-um eli aḥ-im mimma uf išu

brother-nom toward brother-gen something

neg 3sg pst have

"None has a claim upon the other"

(PBS 8/1 81:17, OB)
b. aḫ-um ana aḫ-im u l eraggam
brother-NOM against brother-GEN NEG 3MSG.DUR.claim
“One will not raise a claim against the other”
(10) atta u nakir-ka taššabbātu=ma aḫ-um
you and enemy-2MSG.POSS 2MSG.DUR.get.into.
fight=and brother-NOM
aḫ-am usāmquat
brother-ACC 3SG.DUR.destroy
“You and your enemy will get into a fight, and one will
destroy the other” (YOS 10 50:8, OB).

An interesting example is found when these
pronomes replace a reflexive pronoun. In such a case the
first element of the pronoun is in the accusative.\(^1^9\) Such
a rare example is found with the verb kaḇāsum. In
general this verb means “to put pressure on” and with a
reflexive pronoun (ramāmē) it has the meaning of “to
exert oneself”. Thus in a reciprocal construction (31)
we find a unique case of the two-units reciprocal
pronouns acting also as reflexive pronouns:
(11) gamr-am... aḫ-am ana aḫ-im là takhabbas
expenses-ACC brother-ACC to brother-GEN NEG
2MSG.DUR.put.pressure
“Do not exert pressure on one on the other with regard to
the expenses” (BIN 4 51:13-14, OA).

In all of the previous examples the verb is, as
expected with aḫum, in the singular. In other sentences,
however, there are plural verbs that reflect confusions
between the singular grammatical subject and the fact
that reciprocity assumes multiple agents:
(12) a. aḫ-um aḫ-am là ḫaqqarā
brother-NOM brother-ACC NEG 3MPL.DUR.
raise.a.claim
“None should raise claims against the other”
(YOS 8 99:19f, OB)
b. aḫum aḫam ina mē là udarrāš
brother-NOM brother-ACC concerning
water.OBL NEG 3MPL.DUR.treat.oppressively
“One should not treat the other oppressively on
account of the water” (TCL 7 23:29, OB).

This is a good example of what is known in the litera-
ture (CORBETT 2006, pp. 155-160) as semantic agreement
instead of a syntactic agreement (“the committee have
met” vs. “the committee has met”).\(^2^0\) However, this
also seems to be an example of a phenomenon not
described yet in the typological literature on agreement
(for a summary see CORBETT 2006, p. 160), as it is not
that the reference of the subject is semantically plural
(as is the case in “the committee have met”), but rather
that the plurality is that of the events, and that in differ-
ent events the same pronoun refers to a different entity
among those who participate in the reciprocal relation.
Although the antecedents do not appear with the
two-unit pronouns they can still appear as “nominative
absolute,” and, as such, are no longer a part of the
sentence:
(13) atta u nakir-ka aḫ-um ina pānī aḫ-im
you and enemy-2MSG.POSS brother-NOM from brother-GEN
udappar
3SG.DUR.withdraw
“You and your enemy will withdraw from each other”
(YOS 10 47:81, OB)
(14) īštu pāna-numma anāku u kātī awil-um ana
awil-im paqid
since formerly I and you man-ΝΟΜ to man-GEN ST.trust
“From of old our relationship was such as one trusted
the other” [lit. “From of old I and you trusted man to
man”] (TCL 17 31:8f, OB).

The fact that “you and your enemy” (13) and “I and
you” (14) are pre-posed and are not part of the main
predication is indicated by the fact that the verb is in
3rd person singular and not 2nd person plural in (13)
or 1st person plural in (14), as the verb agrees with the
reciprocal pronoun aḫum. This can be clearly
demonstrated by contrasting (14) to (15), in which
the encoding of the reciprocity is verbal and not
pronominal and, therefore, a plural subject:
(15) inūma anāku u kātī ina GN mušāt-ū
when I and you in GN 1PL.PST.see.RECP-SPJIV
“When you and I saw each other in GN”
(PBS 7 108:10, OB).

While aḫāmiš and aḫum-ḫam seem to have a
different distribution, in the sense that only the former
is possible with an explicit antecedent, they, of course,
do not exclude each other in the larger context. In (16),
in order to form a poetic parallelism both strategies are
used:
(16) aḫ-u aḫ-a là igammātā linaṟrū aḫāmeš
brother-NOM brother-ACC NEG 3MPL.DUR.spare 3MPL.
PRC.slay RECP
“One should not spare the other, they should slay each
other” (Cagni Era IV 135, NB [SB])

19. A different issue is when the reciprocity stands between
the objects of causal relation. In such a case the common
strategy for this function is with the preposition birīt-
(“among”), for example: ina birītīšina saltam tassakki
“you cause them to quarrel with each other” (RA 24,36).
20. For a further discussion concerning this cross-linguistic
phenomenon see BAR-ASHER SIEGAL forthcoming-a.
3.3. Two-units and one-unit pronouns from a diachronic point of view

In the previous section the syntactic functions of the various types of pronouns within the clauses was demonstrated as if they were both simultaneously available. Such an assumption is obviously valid since we encountered an example (36) where the two types co-occur. However, this assumption is not so simple since there is also a historical aspect to this distribution. It is quite evident that on the one hand the one-unit pronouns are used in a reciprocal meaning only from the Middle Babylonian / Assyrian periods, and on the other hand that the examples of two-unit pronouns are mostly from the Old periods and appear less frequently later on.21 One can still find the two-unit pronouns in the later periods, however they appear mostly in classical texts written in SB (examples 3a, 3d and 16), or in legal texts as in the following marriage contract:

(17) PN u PN2 aššas-su ina eqli u libbi a[l-i]
PN and PN2 wife-3MG.POSS in field-GEN and in city-GEN
Palaḥu ša ah-u a[6-i] eppušā
obligation-ACC of brother-NOM brother-GEN 3PL.DUR.do
“PN and PN2 his wife, will serve each other’s obligations in both country and city” (TIM 4 45:8, MB).

With this information in mind we may move for a discussion about the origin of each of the pronominal strategy.

3.4. The origin of the two-unit pronouns

3.4.1. There is some evidence to support the claim that a repetition of any noun, besides ʾahum, without a specification of the particular reference of each of its tokens “implies another sentence with the reversed order of the same noun phrase” (Nedjalkov 2007, p. 154).22 While it is known to happen with the word ʾəwîlum “man” (18d), it occurs in all periods with many other words as can be demonstrated in the following examples:

(18) (a) šarr-um šarr-am ina kakki idāk=ma
king-NOM king-ACC in battle-GEN 3SG.DUR.defeat=and
“One king will defeat the other in battle”
(YOS 10, 56ii37, OB)23

21. See Bar-Asher Siegal forthcoming-a for a diachronic explanation for the shift from a two-unit to a one-unit construction.


23. Whether this is example is relevant for our discussion see the end of the next discussion.

24. Sentence (18b) is peculiar in that both of the nouns which represent the participants of the reciprocal relation are in the nominative (qaqqarum eli qaqqarum), while the second participant is expected to be in the genitive, as it follows a preposition (This is the case both in 50:3 and in 52:4; in 51:1 it is a restoration). While this could be a local error, it is interesting that we find a similar phenomenon in other sentences with reciprocal constructions, that both participants are in the nominative, while grammatically one would expect that the second will be in the accusative, as the following examples illustrate:

(a) pīraštu pīraštu itappal
ambiguous(sign)-NOM ambiguous(sign)-NOM correpond,3SG.DUR.
“One ambiguous sign corresponds to another” (TCL 6 5 37f, LB, Seleucid)

(b) amēl-u amēl-u... la igammili...
man-NOM man-NOM... NEG spare,3MPL.DUR
“One man may not spare the other man”
(Cagni Erra IV 135, NB [SB]).

The fact that this “grammatical error” recurs is striking. It is very likely that this is a result of the fact that two participants of the “reciprocal relation” are in many senses equally the “subjects”, as each of them at the semantic level occupies also the subject position, and in these example the semantics also affects the syntax. It should be noted, however, that (18b) is the strongest example among the three, as it is from a text usually dated, based on the language and the writing, to the first Dynasty of Babylon or a little later, and written in Old Babylonian. The other two examples are from later periods, in which the cases were not always systematic, and one can find the ending –u when the accusative –a ending is expected. Therefore only with more examples from the older periods this hypothesis can be strengthened. However, as for (a) note that this verb is in the Gt stem, thus the direct object is unexpected.

(b) qaqqar-um eli qaqqar-um utellī24
surface-NOM over surface-NOM 3SG.DUR.higher
“How much higher is one level
(of water in the water clock) than the other level?”
(TMB 26 nos. 50:3, 51:1, 52:4, OB).

(c) kuss-ū kuss-ū idarris
thrones-NOM throne-ACC 3SG.DUR.overthrow
“One throne will overthrow the other”
(CT 27 25:24, NA)

(d) avīl-u eli avīl-i minma el-iṣu
person-NOM to person-GEN thing NEG-3SG.PST.have
“They do not owe each other a thing”
(MDP 24 328: 8, LB, Achaemenid).

Sentence (7b), besides illustrating “reciprocity” without pronouns or special verbal form raises another issue that should be discussed further:
3.4.2. “Higher than” is of course not a reciprocal relation, but a classic example of an asymmetric relation. However, cross-linguistically reciprocal pronouns are used more generally as “unspecified pronouns to express relations between sets.” As, for example, is the case in the following English sentence:

(19) They are standing behind each other.

In (19), obviously, the one-unit pronoun each-other does not express reciprocity but merely a relation between two sets, without specifying which of the sets occupies which position in this asymmetric relation. Thus, a natural conclusion would be that the reciprocity is only an interpretation resulting from the combination of the type of the predicate and the unspecified pronouns (Winter 2007 reached some similar conclusions).

A similar phenomenon is found with the Akkadian one-unit pronoun aḫāmiš as the following example demonstrates:

(20) 2 kakkabān-i rabātī... arki aḫāmeš isarrā
     two stars-gen big-gen after recip 3mpl.dur.flash
     “Two great shooting stars flash one after the other” (Thompson Rep. 202 r. 4, NA23).

A similar example to (18b) is the following:

(21) šad-ū mars-u ša amēl-u arki
     mountain-nom difficult-nom rel man-nom
     “A difficult mountain where one must walk one behind the other” (Wiseman Chron. P.74:11, LB).

In light of this discussion, it is also not crucial to determine whether (18a) is a “real” reciprocal sentence, as most likely only one king defeats the other, but it is still relevant for our discussion since this is another case of unspecified nouns that express relations between sets. It should be noted, however, that in a negative sentence such as (18d) a reciprocal meaning is always attained (this is a necessary logical deduction):

(18d) avīl-u eli avīl-i mimma el-īšu
     person-nom to person-gen thing neg-3sg.pst.have
     “They do not owe each other a thing” (MDP 24 328:8, LB, Achaemenid).

3.4.3. In the previous section we saw that in the history of Akkadian a repetition of any noun could express reciprocity. Thus naturally one could speculate the following stages in the grammaticalization of the pronouns:

I. Originally, there was not a single word dedicated for expressing reciprocity. At this stage the word aḫu “brother” was used only in contexts where the meaning of “brother” is relevant.

II. Later, through a process of grammaticalization, aḫu semantically “bleached” and became a pronoun.

One can even imagine that this process began when aḫu was used in contexts similar to the following:

(23) bīt-u itti bīt-i inakkir aḫ-u aḫ-a
     house-nom with house-gen 3msg.dur.hostile
     “Family will turn hostile against family, brother will kill brother” (KAR 148:13, SB).

While this example is late, it shows a context where the original meaning of “brother” is relevant, but it could also be translated more generally as “one will kill the other”.

In the early stage, aḫu, was probably used only for people, and kept the gender distinction, as is the case in the following examples from OB:

(24) a. aḫāt aḫāt-am ina puzr-i awātī umma;
    sister sister-acc in secret-gen word dsm
    “You (f.pl) are saying secretly to each other” (Kraus Abb I 135, 22)

b. aḫāt-im ana aḫāt-im ul iraggam
    sister-nom against sister-gen neg 3mpl.dur.sue
    “One woman will make no claim against the other” (CT 6 42b:9f).

Once this word was grammaticalized we find the following expected developments. It is used also in contexts with animals:

25. Daleymple et alii 1998 survey the various logical relations that can be expressed by the so-called reciprocal pronouns in English. They examine what the various semantic components are that determine the specific logical relations between the various sets that hold the relation expressed by the predicate.

26. According to this description we expect that this will be the case only with the pronominal encoding of reciprocity and not with the verbal. However already in OB we encounter the verb rākābu “to ride, to lie on top” in the Gt form and it is usually translated with the meaning of “to ride on top of the other” (besides the meaning of “to copulate”). The relation “on top of” is of course asymmetric, and therefore this is a similar phenomenon. However, this verb appears mostly in omens and the reality there is not completely clear whether it describes an asymmetric situation or that the two parties are mingled.

27. This document, however, is from a Babylonian rather than an Assyrian scholar.

28. In this case amēlū seems not to be a pronoun but an unspecified noun with the actual meaning of “man” as it describes actual people walking one after the other (see below § 3.5).
3.5. The etymology of the various one-unit pronouns

3.5.1. Cross-linguistically, the elements of the two-units pronoun occasionally fused together (compare “one another” in English to “einander” in German). With Akkadian it seems unlikely that aḥāmīs / aḥaʾīs derived from a repetition of aḥhum, but in other dialectal forms such a relationship can be more easily established.

In Old Babylonian texts from Susa\(^\text{30}\) one can find one of the following “one-unit pronoun”: aḥmaḥam/im or aḥmāmam/im (see CAD, A1 p. 193).\(^\text{31}\) The former is clearly a fusion of the “two-unit pronouns” into a “one unit pronoun.” In the case of the latter the elision of the second /h/ seems to be a result of haplology (aḥmaḥam > aḥmāmam).\(^\text{32}\) It is interesting to note how the same phenomenon happens in East Aramaic *ḥadāḏ > ḫāḏē (with the addition of the plural marker). Maybe this is also the case in Greek: ἀλλήλη (another, f) ἀλλήλοι (each other). In light of the observation that there is a diachronic relation between the two-unit construction and the one-unit construction (§ 3.3), the fusion of the two-units into one is the phonological representation of this development (see BAR-ASHER SIEGAL forthcoming [Hebrew] for the details of such a process).

3.5.2. As for aḥāmīs / aḥaʾīs / aḥhāʾīs\(^\text{33}\) overall we find the variations with the /m/ in the Babylonian dialects, starting from the Middle Babylonian period, and the other forms in the Assyrian ones. While it seems likely that these forms are etymologically related to the component aḥ of the “two-unit pronouns” the origin of the various endings is obscure. There are two obscurities with these forms: 1/ What is the origin of the /w/ and the /j/ in each of the dialects respectively? 2/ What is the nature of the -iš ending in this context, as it is usually an adverbial ending in Akkadian?

\(^{29}\) Note that this is an example of two-units pronouns from a late period; but as noted this text seems to be written in SB.

\(^{30}\) Susa’s dialect is considered as “peripheral” Akkadian, and it is assumed that its speakers had a different language as a substrate. However this is irrelevant for the typological discussion about the etymology of such pronouns.

\(^{31}\) Note that in the CAD the entry of these pronouns, as is the case with other nouns, are in the nominative. However, as “one-unit pronouns” they cannot appear in the subject position (“one loves the other” vs. “each other loves”), as in fact the examples in the entry itself demonstrate. For more on these pronouns see VON SODEN 1933, p. 130, n. 1, MEYER 1962, p. 70, and SALONEN 1962, pp. 100-102. I wish to thank John Huehnergard for these references.

\(^{32}\) See also NEDJALKOV 2007, p. 201.

\(^{33}\) I wish to thank John Huehnergard for discussing this paragraph and for most of its associated bibliography.
GELB (1957, p. 104b) proposed that the origin of this prounon is *aḥāw+ĭš, in which the first component is a plural form of *aḥum (compare with Old Assyrian *aḥwaš “sisters,” Syriac *aḥwātā “sisters,” Ge’ez aḥaw and *išonā “brothers” in Arabic).34 However, as John Huehnergard has noted (p.c.), this is a problematic proposal since the -iš ending does not otherwise occur on plural forms.

However, it is possible to suggest that a historical /w/ in this word was not part of a plural marker, but rather a way to expand the root.35 In fact, in Hebrew we similarly find the abstract noun ’ahwā “friendship,”36 or the Arabic noun *‘ahwawāt(t) “friendship,” both with a similar expansion. In any case the development of *aḥāwis > aḥāmiš is expected in later dialects. Accordingly, the one-unit pronoun originated from a fusion of an expanded form of aḥ together with the -iš ending.

At this point, however, we should raise the issue of the -iš ending in this context. In the next section we will discuss whether aḥāmiš / aḥāiš is a pronoun or an adverb. At this point we should only note that if “friendship” is indeed the right etymology, then an analysis of this form as an adverb is more reasonable, assuming an original meaning of “brothers-like.” However, as will become clear it is evident that synchronically in Akkadian, in almost all periods, this is a pronoun, and, thus, we will have to assume a grammaticalization from an adverb to a pronoun—a process unknown in the literature about reciprocal pronouns (see NEDJALKOV 2007b, pp. 154-163).37

34. For a recent discussion about -w as an external plural marker and a summary of the literature on the topic see HASSELBACH 2007, pp. 125-126. It should be noted that the phenomenon of the one-unit pronoun in a plural form is known from other languages. Earlier we saw the pronouns in the Late-Eastern Aramaic dialects, and one could mention the form ḍalāḏān as well.

35. VOIGT 2001, pp. 210-212 argues that the w is part of the proto-Semitic root. For our purposes it is less significant whether this was part of the proto-Semitic root or a common way to expand bi-radical nouns.

36. This word appears only once in the Bible in Zechariah 11:14, and it is more common in Mishnaic Hebrew. In fact, we have an early rabbinic interpretation that demonstrates a relationship between abwā “friendship” and aḥ “brother” (see Sifra, Behar 5:2).

37. It is of course possible that it developed from something similar to the forms from Susa (aḥmahām/im), discussed earlier, with the mimation of the singular form. However, since Susa is “peripheral” Akkadian, and has non-standard features, probably as it was written by non-native speakers, it is unlikely that its forms are the origin of the other dialects.

Due to this problem, it is worth considering an alternative etymology. This brings us back to the various spellings of the Assyrian alternative forms: aḥājiš and aḥējiš.38 These forms suggest that originally the glide before the ending -iš was /y/ and not /w/.39 While one can suggest a phonological reasons for these forms in the Assyrian dialects,40 in light of the problem of the shift from an adverb to a pronoun, it is tempting to propose that there were three components to these pronouns: aḥyay+iš, and that the middle component is the oblique ending of the dual (as is reconstructed for Proto-Semitic).

There are two motivations for this proposal:

I. As mentioned in NEDJALKOV 2007b, pp. 176-177, we do find the use of the dual in reciprocal constructions in other languages. This is of course not surprising since a reciprocal relation usually holds between two participants (aḥum–aḥam). Among the Semitic languages, Arabic demonstrates a frequent use of the dual form in the VI form for reciprocal meaning, as the reciprocal relation is between two participants.41 Very rarely such a phenomenon is found also in early periods of Akkadian. In Old Akkadian there are examples of dual verbal agreement in the context of a reciprocal event (with the verb maḥās “to fight”),42 and there are examples of reciprocity with nominal dual endings from Old Babylonian when these morphemes were still somewhat productive:

(27) šarr-ān itakkirā
   king-DU.NOM Šmpl.DUR.become.hostile.RECP
   “Two kings will become mutual enemies”
   (YOS 10 26 iii 20, OB)

38. For the periodic/dialectal distribution see CAD, A1, p. 164a.
39. Assuming that the vowel /e/ represents a contraction of the diphthong /ay/.
40. Intervocalic /w/ in the Middle Assyrian is usually written <b>, but there are examples such as a-šlu for awīltum “man”. Thus theoretically, in Assyrian a-hu-t-jiš could represent *aḥāwīš. In fact Hecker, § 26a, e; 62a noted for some evidence of this phenomenon already in Old Assyrian. However, the fact that in these dialects aḥētiš is the normal, and forms such as aḥabīš are never found suggests an alternative etymology, according to which the /y/ is original, as the one proposed here.
41. Somewhat relevant to this is Sapir’s note that “the idea of reciprocity leads naturally to that of duality of terms involving mutual relationship” (SAPIR 1931, p. 110).
42. AFO 20, p. 39-40.
II. The dual Semitic ending *ay is for the oblique. As mentioned earlier (§ 3.2), with such a one-unit pronoun we expect that the forms will not be in the nominative as they do not take the subject position.

There are a few problems with this proposal that should be considered. In the history of Akkadian it is expected that the diphthong /ay/ will contract to either /i/ or /ē/. While this is indeed what we find in the form aḫēiš, how can we explain the forms aḫājiš / aḫāiš? It is possible that the ending -iš, which follows the dual form, prevented this contraction as it starts with an /i/ vowel. It is, therefore, possible that such a contraction did not take place with the sequence /ayiš/.

There is some evidence for such a prevention with the feminine gentilic ending /ay+it/ which in some Akkadian dialects became -aʿít, attesting to the lack of contractions in this environment (Butts 2010). Evidence for a similar glide are found in spellings such as is-ṣa-ḥeš-*iš.

Another potential problem is the long /a/i in forms such as aḫāiš, which is represented in a spelling such as a-ḥa-a-iš. It should be noted, however, that such a spelling seems to be extremely rare.

The major problem with this proposal is of course the -iš ending. First, again we do not expect it to appear after a dual ending; second what is the nature of this ending in this context, as it is usually an adverbial ending?

However, one can propose a solution that will answer the various problems together, and also the co-existence of the forms with /i/ and those with /i/, namely, that both solutions, should co-exist. As mentioned above, following the proposal that the etymology is aḫāwiš “friendship” is more reasonable that this form evolved in the context of the adverbial sense, and in the case of the discussed form, the meaning of this adverb was “together.” And, in fact, we demonstrated that similar abstract nouns, close in meaning, with the consonant /i/ are found in other Semitic languages. However, as mentioned earlier, the development adverb > reciprocal pronoun is less likely as it is unknown cross-linguistically. Therefore, I propose that this etymology (*aḫāwiš) should work for the adverb “together,” and that the dual ending (*aḫaṣiš) for the pronoun “each-other.” If this is true, it is possible that these forms merged into one in the course of the history of Akkadian due to their semantic and phonological closeness. One could even speculate that, initially the pronominal forms did not contain the “adverbial” ending -iš (similarly to the forms from Susa), although I am well aware that it is difficult to provide positive evidence for such a proposal.

Thus I propose the following etymology for both uses of these forms, before their mergerence in meaning.

Accordingly the same phenomena happened in all dialects, but each of them eventually “picked” only one form.

<table>
<thead>
<tr>
<th>*aḥay</th>
<th>*aḥa+y ay</th>
<th>Reciprocal pronoun:</th>
</tr>
</thead>
<tbody>
<tr>
<td>“each”</td>
<td>“other”</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>*aḥawiš</th>
<th>*aḥaw+iš</th>
<th>Adverb:</th>
</tr>
</thead>
<tbody>
<tr>
<td>“together”</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The possibility that such to forms will become similar is not unlikely and in a footnote I propose that a similar phenomenon may have occurred in two Neo Eastern Aramaic dialects.

Accordingly the original ending of the reciprocal pronoun *ay reflects a dual agreement with the subject.

43. In the Jewish Neo-Aramaic dialect of Koy Sanjaq (described by Mutzafi 2004) the regular reciprocal pronoun is *daxle. In the context of the adverbial meaning of “together” it has two variants: either *daxle or *baxle. Similarly, in The Jewish Neo-Aramaic dialect of Sulemaniyya (described by Khan 2004), while the regular reciprocal pronoun is *līxe, in the context of the adverbial meaning of “together” again there are two variants *bīxle, or most frequently *bīxle. Both *daxle and *līxe are reflects of the Eastern reciprocal pronoun ḥaddādē or maybe even its older form ḥadḫadē (with both /d/ shifts into /l/ in Sulemaniyya and only the latter in Koy Sanjaq). Khan (ibid., p. 259) explains the variations of the adverbial sense of “together” as a result of a reanalysis of the /l/ at the beginning of *līxe as a preposition, hence its elision. This explanation is problematic for two reasons: first, why it occurs with this preposition and not with the other ones, as *līxe appears with other prepositions and only in this function it is elided. Second, while it may explain the Sulemaniyya’s form it may not explain the form of Koy Sanjaq as d- is not a preposition. Moreover, the sociative meaning of the reciprocal meaning is usually attained with the sociative preposition. Thus in Sulemaniyya the expected preposition is min- (ibid., pp. 346-347), as indeed it happens (ibid., p. 259, example [8]). Therefore I would like to consider that both *bīxle and *bīxle originally had nothing to do with the reciprocal pronoun ḥaddādē, but derive from an independent adverb *bāḥadd(i) “in one” meaning “together”. Semantically this is very likely. Adverbs with the sense of together frequently derive from the cardinal number “one”, as for example is the Akkadian adverb ištišiš (one + adverbial ending). Some support to this proposal may be found within an older Eastern Aramaic dialect, the Jewish Babylonian dialect where the sociative preposition is *bāḥadi and it is very likely that it is another example of an adverb which became a preposition. If this proposal is correct then, *bīxle and *bīxle are the original ones and *bāḥadd and *bāḥadd are the secondary, resulting from an assimilation to the reciprocal pronouns in their dialects respectively.

44. It is interesting to note that the ending ē of the one-unit pronoun in the Late Eastern Aramaic dialects: ḥaddādē (Syriac), ḥadādē (Jewish Babylonian Aramaic), originated from a repetition of had “one,” can also be explained as resulting from an additional agreement feature: ḥad ṣad > *ḥaddah > *ḥaddadē > *ḥaddadē + ē

The ending ē can either be a vestige of a dual form (*ay > ē), or the regular Late Eastern Aramaic plural marker ē.
The hypothesis that the origin of *ay* in the Akkadian form originated from an agreement marker is not an ad hoc, as in another Semitic language, Mehri, this phenomenon of an addition of an agreement feature is transparent, as the data represented in Rubin 2010, p. 50-51 illustrate.

Occasionally reciprocity is expressed in Meheri, by a repetition of the word *fayt* “one”:

(28) yečawk șawayr fayt dar țayt
3SG.throw.IMP stone one upon one
“They throw stones on one another”

(Stroomer 1999, 16, p. 2)

It is reasonable to assume that the more common one-unit pronoun *țățiday-* is related to a repetition of *fayt*. For the current discussion it is significant that this one-unit pronoun declines according to its antecedent, depending on whether the subject is plural or dual:

(29) ĭmorô  ha-țățiday-hi
3MD.say.PRF to-RECP-DUdu
“They (two) said to each other”

(Stroomer 1999, 4, p. 17).

(30) tōlī ṣohëm
țățiday-hom
then 3MP.understand.PEF RECP-3MPL
“then they (pl) understood each other”


Accordingly, Mehri reflects a possible stage, which once the one-unit pronoun grammaticalizes, it results with a dependency with the subject, expressed with an agreement.

3.6. *aḥāmiš/*aḥāš: a pronoun or an adverb?

So far I have assumed that the forms *aḥāmiš/*aḥāš* are pronominal. These forms, however, have the suffix -*iš*, known to be an adverbial suffix elsewhere in Akkadian, and the same expression is undoubtedly used in Akkadian adverbially in the sense of “together, jointly”. Sentence (31) nicely illustrates the contrast between the uses of this form:

(31) aḥāmeš šumû= ma aḥāmeš ippalladu
then they=and RECP 3MPL.DUR.caus.trouble
“They are together and (still) cause trouble for each other” (ABL 528 r. 5f. NA).

These facts are probably the reasons why others considered these forms to be adverbial.

As noted in the typological literature (Nedjalkov 2007b, p. 162-163), in the context of reciprocal constructions the line between adverbs and pronouns is not so distinct, and, in fact, in some languages pronominal reciprocals can also function as adverbs (Nedjalkov 2007, p. 163 brings Korean as an example). I believe, though, that the syntax should help us to distinguish between reciprocal pronouns (“each other”) and adverbs (“mutually”). Pronouns saturate the position of the “missing” argument (the “goal” in [32]), while adverbs do not and the slot for one of the arguments remains empty (the lack of “goal” in [33]). The adverb in (33) fills this gap and indirectly indicates the identity of the goal. In English this distinction is also revealed by another syntactic behavior as the pronouns appear in the appropriate syntactic position (after the preposition), while the reciprocal adverb is not the object of any preposition and can appear in any slot available for adverbs:

(32) They gave each other gifts/ gifts to each other.

(33) They mutually gave several proofs of their wit.

Since these are two different strategies to express reciprocity, it is not surprising that they do not exclude each other and, consequently, we may find both simultaneously in one sentence:

(34) They mutually gave each other the kiss of peace.

As for *aḥāmiš/*aḥāš* in the classical stages of Akkadian (below we will discuss possible exceptions), it seems that this is an example in which the morphology is misleading (see above § 3.5). While it has an adverbial ending, it is quite certain that in the classical periods this “word” (in its various forms) functions as a indeclinable pronoun (no overt cases) appearing as a one-unit pronoun, and filling the expected syntactic positions. Thus one cannot expect to find an Akkadian equivalent to (34) in which a pair of two-unit pronouns (such as the pair *ahum-aham/im*) and *aḥāmiš* appear together.

Moreover, *aḥāmiš* functions like any other reciprocal pronoun. Thus, with transitive verbs it occupies the position of the expected direct object:

(35) aḥāmeš ippali
RECP 3MPL.DUR.pay
“They will compensate each other” (Dar 321:29, LB).

While in the case of the direct object it is hard to demonstrate that *aḥāmiš* is not an adverb, its appearance as the object of other prepositions reveals its pronominal nature:

45. See, for example Delitzsch 1889: 221, who discusses this form in the context of the adverbial ending -*iš*. The CAD characterizes it as an adverb, and so does Buccellati 1996, p. 381.

The following example is crucial:

(36) *ana aḫāmeš ul ikellī*
to RECP N 3MPL.DUR.refuse

“They will not refuse each other…” (TuM 2-3 2: 21)

(37) *im-i māḏāt-i ana libbi-i aḫāmeš*
day-PL.OBL many.PL.OBL into heart-of RECP

*kakk-i-tūnu išellī aḫāmeš urassabī*

weapon-PL.OBL-3MPL.POS 3MPL.DUR.sharpen

RECP 3MPL.DUR.cut down

“For many days they would sharpen their weapons at each other, they would cut each other down” (JAOS 88, p. 126, NB).

Similarly, with the form from Susa (see above § 3.5.1):

(38) *mār-u-tūnu* ana aḫāmā-im u[l] iraggamā
child-PL.OBL-3MPL.POS to RECPGEN NEG 3MPL.DUR.sue

“Theyir children will not sue each other” (MDP 23 171.9-10, OB).

And in genitival constructions:

(39) *sāb-ē ša aḫā-IA-šī idūkkā*
people-PL.OBL of RECP 3MPL.DUR.kill

“They are killing each other’s men” (ABL 645: 10f, NB).

(40) *ana resut aḫāmeš ittakāt=ma*
to help.of RECP 3MPL.PRF.trust=and

“They trusted in one another’s help” (3R 7 i 43 Shalm. III, NA).

To complete the discussion of the pronoun aḫāmiš the following example is crucial:

(41) *nišē māt Aššur māt Karduniaš ittī aḫāmeš*
people.of country.of Assyria country-of Babylonia with RECP

(ibbālī 3MPL.DUR.mingle

“The people of Assyria and Babylonia mingle with each other” (CT 34 39 ii 37, NA SB)).

This example introduces the use of aḫāmeš with predicates that are used by themselves to express reciprocal events. The verb balālam “to mix” in the N-stem has a symmetrical meaning (probably also with the addition of the ingressive aspect, therefore a better translation would be “they begin to mingle”). As is the case in other languages, with symmetric predicates it is possible to have, in addition to the use of the plural subject alone (“they disagree”) and to the discontinuous construction (“she disagrees with him”), the combination of both (“they disagree with each other”). From a theoretical point of view, this is similar to the discontinuous construction discussed earlier (§ 2.2), as the object of the preposition itti is not occupying a grammatical slot dictated by the verb, and, therefore, it can be added despite the fact that it has the same reference as the subject.

It is extremely significant to notice that with a verbal form that has a reciprocal meaning we do not encounter aḫāmiš as the object without the associative preposition itti. From what we know from the cross-linguistic typology (see Siloni 2001 and Bar-Asher 2009a) this is what we expect with detransitivized forms, as they do not have an object position. Had we encountered aḫāmiš without a preposition we would have characterized it as an adverb. The fact that we do not find it in such a position strengthens our analysis that, despite its appearance with an adverbial ending, aḫāmiš is not an adverb since it behaves perfectly as a pronoun. Accordingly, it is another example of a “one-unit” reciprocal pronoun that is mistakenly analyzed by modern scholars as an adverb, despite being a regular pronoun.

3.7. A possible “one-unit pronoun” > “adverb” shift

As implied earlier, this analysis of aḫāmiš pertains to the classical dialects of Akkadian. It is possible, however, that at some point in the long history of Akkadian aḫāmiš was reanalyzed as a reciprocal adverb. In fact, evidence for such a process is extant in the late text of the Assurbanipal royal inscription from the 7th century BCE.

49. For an elaboration on this theoretical aspect, see Bar-Asher 2009a, pp. 266-270.

50. In the Semitic languages, another example is the pronoun hadade in Jewish Babylonian Aramaic. For a discussion about this and the support for this argument, see Bar-Asher Siegal (forthcoming JBA § 8.1.2.3).

51. Another possible example is with the verb șemū. According to CAD, in the Gt form it has the reciprocal meaning of “to accept each other” with the connotation of “making an agreement.” And in fact we find a free form of aḫāmeš, unbound to any preposition: PN u PN2 aḫāmeš iltamū “PN and PN2 made an agreement with each other” (UET 4 33:14, NB) and arkanīš aḫāmeš iltamū “Afterwards they came into agreement” (TCL 12 14:9, NB [but dated to the reign of Šin-šar-iskun, one of the last Neo-Assyrian kings]). However, it is very likely that these are perfect forms of the G-stem (see, for example, aletemu “I have heard” [ABL 901:5, either NB or NA]) as a similar construction is found also with the G-stem: PN u PN2 aḫāmeš is-mu-ṣa “PN and PN2 came to an agreement with each other” (VAS 6 331:7, NB). Thus it
As mentioned earlier, it is difficult to determine in sentences such as (42) whether ăhāmeš is pronominal or adverbial, as in both cases it appears without a preposition:

(42) ăhāmeš urassabû
\[\text{RECP 3MPL.DUR.cut.down}
\]
“They cut down each other”
(Streck Asb. 130 B vii 49, NB).

However, when the verb has a reciprocal meaning, especially when it is in a T-stem form, based on our previous observation, ăhāmeš is expected to come after the associative preposition ītti. In the following example we encounter ăhāmeš without a preposition, indicating that ăhāmeš in this sentence functions as an adverb:

(43) nindaggara ăhāmeš
\[\text{1PL.DUR.agree RECP}
\]
“Let us mutually agree” (Streck Asb. 12 i 125, NA [SB])

There is further support for this conclusion. As argued above, only if a form is a reciprocal adverb can it co-occur with a reciprocal pronoun (see sentence 34). In fact, we encounter such an example in this very text:

(44) nišû mat Ari bi īstēn ana īstēn īstāna’alū
\[\text{(var. īstā’alū)}
\]
people.of land.of Arabia one to one 3MPL.DUR.ask ăhāmeš
\[\text{RECP}
\]
“The people of Arabia mutually keep asking/ask each other” (Streck Asb. 76 ix 68, NA [SB]).

It is worth noting that the expression īstēn ana īstēn [lit. one to one] in this sentence is unique as a pronominal reciprocal expression in Akkadian.\(^{52}\) Interestingly, the reciprocal pronouns in Eastern Aramaic consist of a repetition of the word “one”, thus since Neo Assyrian is suspected of Aramaic influence this is most likely a calque of Aramaic.\(^{53}\) Accordingly, it is possible to propose that the form ăhāmeš in the Neo Assyrian period was reanalyzed as an adverb instead of a pronoun. Besides the morphologic motivation for this change (the ending -es / -iš), the fact that syntactically ăhāmeš in sentences such as (42) can be analyzed (as demonstrated in [45]), both as a pronoun, and as an adverb, without changing the meaning, could contribute to this shift as well:

(45) ăhāmeš urassabû \[\rightarrow\] ăhāmeš urassabû
\[\text{RECP (pronoun) 3MPL.DUR.cut.down RECP (adverb)}
\]
3MPL.DUR.cut.down
“They cut down each other”
(Streck Asb. 130 B vii 49, NA [SB])

\section{4. The semantics of verbal reciprocals in Akkadian}

The comparison between languages in general and between the Semitic ones in particular very often stays at the description of the syntactic level, because a much more careful comparison is needed for the semantic level. It appears to be even harder, and sometimes even impossible, to propose a rich semantic analysis for extinct languages such as Akkadian. Despite these reservations, it is still possible to look for similarities and dissimilarities among the languages that can help us to decipher semantic aspects in these ancient languages.

As mentioned (§ 2) with regard to their syntactic properties, many of the Semitic languages that use the T-affix follow a similar syntactic typology. The question is, therefore, how much this typological similarity reflects the semantics as well; or, to be more specific, to what degree a discussion about languages with a similar typology can be generalized and applied to other languages with similar syntactic behavior.

Bar-Asher 2009a, following a theoretical semantic elaboration (mostly Siloni 2008 and Dimitriadis 2004), dealt with the exact semantics of this type of lexical-verbal encoding of reciprocity. Leaving this theoretical discussion aside, for our purposes the significant conclusions of this discussion were that these predicates are usually in the range of describing symmetrical bodily events (kissing, hugging, etc.) or physical/emotional conflicts (fighting, arguing, etc.). These types of events are described by Dimitriadis as irreducibly symmetric events, and he proposed (46) ([32] in his article) the following definition for these predicates:

(46) Definition: A predicate is irreducibly symmetric if (a) it expresses a binary relationship, but (b) its two arguments have necessarily identical participation in any event described by the predicate.

Consequently, we do not expect to find these predicates used to describe events with high transitivity (as described in Hopper, Thompson 1980), in which there is a distinctive agent and a distinctive patient with
the former acting upon the latter, especially since in this type of events both participants are also affected in one single event. This characterization can be illustrated by Siloni’s 2002 observation about another difference between irreducibly symmetric and non-symmetric predicates. While the non-symmetric verbal reciprocals show a counting ambiguity, their symmetric counterparts do not show this ambiguity. Thus, in the pronominal construction (47a) “five times” can either be the total number of “kissing events” or the number of kisses that each one of the participants performed (with the total of 10 acts of kissing); while in the verbal construction (47b), the only reading of the counting is 5 occurrences of mutual kissing events.

(47) a. dan ve-ron nišku ze et ze xameš pe’amim
Modern Hebrew
Dan and-Ron 3PL.PST.kiss.DEM.MSG ACC DEM.MSG five time-PL
i. There were five mutual kissing events
ii. There were 10 kissing events; five by Dan and five by Ron
b. dan ve-ron hitnašku xameš pe’amim
Dan and-Ron 3PL.PST.kiss.RECP five time-PL
There were five mutual kissing events (symmetric only)

One important consequence of this typology is that according to Siloni 2001 this type of lexical-verbal reciprocal predicate is not very productive in those languages that have it, thus there are not many of them in a given language.

Following these typological semantic observations, the question remains as to whether we can find among the Semitic family of languages verbal forms with a T-infinit that are used more generally to express all reciprocal events, even if they in fact refer to plural mutual (non-symmetric) events. In other words, are there examples of reciprocity with high transitivity?

According to what we find in the literature, it is possible to consider Akkadian an example of such a language. As mentioned earlier (§2.1), one can find the expression of reciprocity among the uses of the T-stems in Akkadian. There are many examples in the Gt stem, and a group of predicates in the Dt stem.\(^{54}\) Among the verbs in the Dt stem one finds the expected *irreducibly symmetric* predicates: *rutummu* (from *rāmu*) “to love each other” or *šutannunu* (from *šanānu*) “to quarrel with.” In addition, some have claimed that the verb *patāhu* “to stab,” which is a clear example of a predicate with a high transitivity, also falls into this category. However, it is hard to see how the agent is affected by stabbing the other in one event. It can only be the case if there were two events of stabbing. Similarly, it has been argued that there is an example of the verb *kullunu* “to show,” in which there is an object and the reciprocity is between the “sources” and the “goals” of the showing (“x and y show z to each other”).\(^{55}\) If indeed such verbs exist, it could be an indication that the uses of the T-forms should be expanded to cover a larger group of reciprocal events. It is, therefore, worth examining the occurrences of these forms very carefully.

In fact, for both verbs the forms are $uC_jta:C_j:C_jC_j$ (C indicates the consonants of the root), which can be interpreted morphologically either as a Dt preterit or as a D perfect. Thus, the linguistic evidence is not so strong to begin with.\(^{56}\)

In the case of the verb *kullunu* “to show,” we are dealing with one example:

(48) *paľg-am... sa anāku u atta nuktalallim-u*
canal...REL I and you 1PL.PRF.shown.RECP-SHBV
“The canal which I and you have just shown/showed each other” (AbB 9, 204:4-7, OB).

Assuming a reciprocal reading in this case necessitates treating this sentence as a unique example of a T-stem in which the reciprocity is between the sources and goals of the activity (i.e. that they showed something to each other). Since nothing in the context necessitates such a reading, the reading of this as a perfect form is preferable.\(^{57}\)

A possible reason to believe that *nuktalallimu* in (48) is a Dt form and not a D perfect has to do with the fact that this sentence is in a relative clause, and the perfect in general is very rare in such clauses. However, this is not impossible, and can be found in texts from the same period (see Maloney 1982, pp. 184-195, Loesov 2004, pp. 122-125).

The example with the verb *patāhu* (“stab”), which may have a reciprocal meaning, appears in the following context:

(49) *šā kizā-šu ina patri parzill-i šibbi-šunu upatetēhā*
he groom-3MSG.POSS with sword-of iron-GEN belt-3MPL.POSS 3MPL.PST.pierce

54. There is a sub-group of verbs in the Dt stem with a reduplication of the consonant, and among them a few which express reciprocity. Kouwenberg (1997, pp. 327-328) suggested that “these cases of reduplication serve to underline the inherently plural nature of reciprocity.” However, as Gronenberg (1989, pp. 31-32) stated, it is impossible to attribute one special meaning to this group, and it seems that they are just allomorphs of the regular Dt stems.

55. See Kouwenberg (1997, pp. 325-327) for a list of Dt reciprocal verbs, among them all the ones mentioned here.

56. See, Lipiński 1997, p. 346 for a similar discussion concerning this homophonic problem, and its relevancy for the discussion on plural forms.

57. For both proposals see note in AbB 9:131, 204a.
The reciprocity here is clearly expressed by aḥāmeš, but the question is whether it is also expressed by the verbal form. Reading upattetēhū as a Dt form will require either considering aḥāmeš as an adverb, or understanding it as a case in which a Dt reciprocal form takes an accusative. However, in this specific line, as seen earlier (§ 3.7), aḥāmeš uniquely functions in this text as an adverb, and therefore it is possible to read the verbal form as Dt.

If we read it as a perfect D-stem ("have pierced"), then the aḥāmeš is either the object of the sentence or an adverb, and therefore lacks a preposition. We should remember that the pronoun aḥāmeš behaves differently in the Assurbanipal royal inscription than in any other Akkadian dialect that we have encountered (§ 3.7). Thus, it is possible that this is a reflection of a substrate of another language, and, in any case, it is not the best text to gauge the linguistic situation in Akkadian, with regards to reciprocity.

This is an example, I believe, of how sensitivity to typological considerations enriches our discussion even concerning a specific reading in one line of an ancient text. Our examination exposed the components of the reciprocal construction. This understanding combined with the accurate analysis of aḥāmeš as a pronoun elsewhere in Akkadian, and the knowledge that verbal reciprocals with T-forms typically have no direct objects, led us to our conclusion concerning this specific text.

It should be emphasized that with regards to the last two examples I could not prove that the reciprocal readings are impossible. It is, of course, possible that Akkadian developed a reciprocal encoding unique among the Semitic languages. However, our only intention was to add other considerations that should be included in this discussion.

Finally, it is worth mentioning in this context the different verbs for "to exchange." This verb has a natural reciprocal meaning, in which each of the "sources" (giver) is also a "goal" (the receiver). In the argument structure of verbs with this meaning there will be another argument, the object of the action that is expected to be the object. Therefore, we would not expect to encounter the T-stem with this verb. Indeed in Akkadian the regular verbs are šupēlu and puḥḫu, both not in a T-stem. However, KOUWENBERG (1997, p. 326) proposed that there are examples in the Dt stem. According to what we saw in Akkadian and in the other languages, this is against our expectation. And, indeed, his example for a finite form can be analyzed as a D perfect form. The non-finite form putuḫḫā that he mentioned, however, is doubtful.

61. In Arabic the root b-d-l has this meaning in different forms. In the case of the VI form, Arabic clearly shows a different behavior, as this i-infex stem can take an object, which can be also passivized:

(50) tabādala nasrallāh wa-almert l-ʿasrā
3DU.PST.exchange Nasralla and-Olmert
def-prisoner/pl.
"Olmert and the Hizbollah exchanged the prisoners"

(51) tubūdila
3MSD.PASS.exchange DEF-prisoner/pl.
"The prisoners were exchanged"

This is clearly a different behavior than what we see in Hebrew and in Aramaic, as this is a use of a T-stem with a verb with high transitivity, and its inclusion of a clear direct object exhibits a different syntactic behavior. This evidence concerning Arabic invites us to look further for other verbs in Arabic with high transitivity, and to examine whether Arabic developed a true reciprocal marker, or whether this is just a lexical feature of this specific predicate in Arabic (probably developed by some analogy). This is another example of how we should be careful when we generalize from one language to another. It should be noted, however, that not all speakers of Standard Arabic consider (51) to be grammatical, and it might be a reflection of different substrates.

58. STRECK (1916, p. 61) translated it as a reciprocal “durch- bohren sich,” but did not indicate whether it is due to aḥāmeš only or also due to the verbal form. For a new edition of the text see BORGER 1996, p. 59.
59. In both readings sabbīšānu “their belt” should be taken as an adverbial accusative.
60. This is also relevant to the verb zakāru “to swear.” While semantically it can be used in the T-stem for mutual agreement with an oath (as is probably the case with the verb tamū “to swear” for which we encounter a clear durative Dt form), the syntactic construction is with a direct object, literally meaning “evoking the name of the life of certain god.” Again all of the examples can be read as D perfect, and the reciprocity, if it existed, is received from the fact that both parties took an oath.

62. In fact, such a construction is common with a perfect form, as can be seen from the entry puḥḫu in the CAD. However, Von Soden AHw 1280 also analyzes some of the examples as Dt forms.
63. The problem with the example he mentions (p. 327) is that this verb seems ungrammatical without an object. Since this would be the only example of Dt it would be better to consider this as a corrupted text.
5. VERBAL VS. PRONOMINAL RECIPROCAL CONSTRUCTIONS

BUCELLATI (1996, p. 381) considers verbal and reciprocal constructions in Akkadian to be similar, one synthetic and one analytic. Indeed, in most sentences, semantically, the two constructions are interchangeable but, as noted in the previous section, typological studies show distinctions between them, and occasionally they differ semantically as well. Buccellati's approach led him to the claim that "the full reciprocal force of the Bt stems seems to have been lost in the later periods of Babylonian, for in these periods adverbs such as aḥāmeš 'together, mutually' come to be used more and more either in place of, or next to, verbal forms of the Bt stem".64

In fact, Buccellati is referring to two different phenomena: a/ a detransitivized verb with the one-unit pronoun aḥāmeš, and b/ a transitive verb with a reciprocal pronoun. He thinks that the frequent appearance of the two constructions indicates that the T-stems lost their reciprocal power in the later periods. It is very important to distinguish between the two phenomena. As long as the one-unit pronoun, aḥāmiš, does not appear as an adverb with the detransitivized verb (and as we saw in § 3.6-7, it almost never does), it often follows the preposition itti "with" with the one-unit pronoun aḥāmiš (see [41], and below [59]), or appears after another preposition. Thus, as noted earlier (§ 3.6), from a grammatical point of view, such an appearance of the detransitivized verb with the one-unit pronoun aḥāmeš is similar to the discontinuous construction (discussed in § 2.2). Pragmatically, the reason for the co-occurrence of the reciprocal verb with the reciprocal pronoun has to do with an ambiguity many languages with verbal encoding encounter. Naturally, it is hard to demonstrate this ambiguity in a extinct language, but BAR-ASHER (2009a, pp. 240-242) has demonstrated this in other languages with verbal encoding:

When reciprocity is not expressed by a discontinuous construction and there is a plural subject, both a collective and a distributive reading are possible. In other words, while the sentences almost always express events with reciprocal relations, it is not necessary that the sentence describes a single event, i.e. that all the members of the subject-set participate as a collective in one single event. It is possible that each member of the subject-set indeed participates in reciprocal events, but that these events may involve other entities, not necessarily present in the sentence. Thus each member of the subject is participating in different events, and the sentence should be read distributively. This is similar to the ambiguity of (52) which has two readings, while in most social contexts (53) has only one, due to pragmatic considerations.

(52) John and Mary got married
   a. Mary married John (and John married Mary)
   b. John married someone (who is not Mary) and Mary married someone (who is not John)

(53) My brother and my sister got married last week.
   a. #My brother married my sister last week.
   b. My brother married someone and also my sister married someone (else) last week.

In this way, we find the same ambiguity in Modern Hebrew, Modern Greek, and Turkish wherever a discontinuous reciprocal is possible:

(54) dan ve-yosi hitnašku Modern Hebrew
   Dan and-Yosi 3mpl.pst.kiss-recp
   i. “Dan and Yosi kissed (each other)"
   ii. “Both Dan and Yosi had a reciprocal kissing with someone" [not each other, and not necessarily the same person]

(55) O Giannis kje i Maria līl-thīk-an Modern Greek
   DEF Giannis and DEF Mary kiss-recp-3pl.pst
   i. “Giannis and Maria kissed each other"
   ii. “Both Giannis and Maria had a reciprocal kissing with someone" [not each other, and not necessarily the same person]

(56) John ve Mary op-us-tu-ler Turkish
   John and Mary kiss-recp-pst-3pl
   i. “John and Mary kissed each other"
   ii. “Both John and Mary had a reciprocal kissing with someone” [not each other, and not necessarily the same person]

There are various ways to disambiguate the meaning of these sentences. For example, with the addition of a counting with a distance distributor to the plural subject, the only available interpretation is the distributive reading [the (ii) from each of the above sentences]. According sentences in (57) have only one reading (I bring the evidence from Hebrew, for the data in the other languages see BAR-ASHER 2009a):

(57) dan ve-yosi hitnašku xameš peam-im kol exad Modern Hebrew
   Dan and-Yosi 3mpl.pst.kiss-recp five time-3l every one
   “Both Dan and Yosi had five reciprocal kissings with someone [not each other, and not necessarily the same person]"

A strategy to specify collective reading is to add the pronominal encoding:

(58) dan ve-yossi hitnašku exad im hašeni Modern Hebrew
   Dan and-Yosi 3mpl.pst.kiss-recp one with DEF-second
   “Dan and Yosi kissed (each other)".

64. Bt stands here as a general term of the T-stems
Based on this evidence, if indeed this was also the case in Akkadian, the appearance of a detransitivized verb with the one-unit pronoun ḫāmēš functions similarly to other languages with a verbal encoding, and makes explicit the reciprocal relation between the members of the subject set. Therefore, this is not an indication of the loss of the verbal encoding of the reciprocity at the later periods, as argued by Buccellati.

As noted it is hard to demonstrate contexts of ambiguity in a extinct language, but possibly the following example represents a good case were the explicit pronoun could disambiguate the meaning:

\[(59)\] an-ahāmīš nintahhâs=mi
\[\text{to-recp} \quad \text{1pl-pst.fight,recp}=\text{and}\]

“We fought with each other” (AASOR 16 72:10, Nuzi).

On the basis of the context of this lawsuit concerning the result of a fight between two men, it is reasonable that it was important to make it explicit that it is not the case that they fought together against another party, but rather that they fought each other. Indeed once it was clarified, three lines later in the text the same form nintahhâs=mi appears without the reciprocal pronoun ḫāmēš as this ambiguity was resolved, indicating that it could carry the same reciprocal meaning without the pronoun.

As for the high frequency of the transitive verbs with reciprocal pronouns in the later periods, although Buccellati did not provide clear evidence for this claim, the impression from surveying the data for this paper is that there is some support for it. If one takes, for example, the uses of the verb amārum “to see”, in the old dialects (and for this matter in SB as well) it is used in the N-Stem with the reciprocal meaning of “seeing each other” or “meet”, as, for example, is the case in example (1a), repeated below:

\[(60)\] anāku u ̃atta ninnamir
\[\text{and you 1pl-pst.meet,recp}\]

“We met, you and I” (OIP 27 15:22, OA).

By contrast, in an example from MB we encounter the use of this verb in the G-stem (the transitive stem) with the reciprocal pronoun ḫāmēš:

\[(61)\] ḫāmēš là nîmûr
\[\text{recp} \quad \text{inj} \quad \text{1pl-pst.see}\]

“Let us see each other” (AfO 10, p. 3:13 and 15).

However, by no means we do not encounter examples of the T-stems with reciprocal meaning in the later periods – as shown, for example, in some of the examples in this paper \[\text{inter alia} \ 2d-e\]. In light of these observations, if indeed Buccellati’s claim reflects the reality, the content of the description should be rephrased that in the later periods, in the choice between the verbal and the pronominal reciprocal constructions, the latter was favored. It is possible that this development was in fact related to the historical development discussed above (§ 3.3), the shift from two-unit pronouns to the one-unit pronoun.

As demonstrated earlier (§ 3.2), the two-unit pronouns are available only without an explicit subject. Thus, their use is much more restricted. The one-unit pronoun is available also with explicit subject, and hence it is used more often. Accordingly, it is not the case, as argued by Buccellati, that the loss of the reciprocal meaning of the T-stems motivated the use of the one-unit pronoun ḫāmīš. The opposite is in fact the case: once the shift to a one unit-pronoun happened, the pronominal encoding of reciprocity became more useful (also with explicit subject). Consequently the use of pronominal encoding became more frequent, and the need of verbal encoding much less.

6. CONCLUSIONS

This paper concentrated on the various reciprocal constructions in Akkadian. Starting with the main distinction between verbal and the pronominal constructions (§ 2), and considering the various pronominal strategies (§ 3.1) a reciprocal situation may be represented in one of the following syntactic forms:

1/A transitive verb with reciprocal pronouns, with either
\[\text{a/ a plural subject with a one-unit pronoun and a plural verb (3d) or,}\]
\[\text{b/ a singular verb with the two-units pronoun (3a),}\]
\[\text{and one of the elements of the pronouns function as a subject (a few examples with plural verbs [12a-b] were discussed as well).}\]

2/A detransitivized verb consisting of either (or a semantic symmetric predicates [41]), with either
\[\text{a/ a plural verb (2c), or}\]
\[\text{b/ a plural verb with reciprocal pronoun after the associative preposition (41), or}\]
\[\text{c/ only one set in the subject position and the other set after the associative preposition (4b, the discontinuous construction).}\]

\[\text{66. From our survey it seems that also in the later periods it was more common with some specific verbs, such as mîtuṣu “to fight”}\].
This is not to say that every reciprocal situation may be encoded with all these strategies, since the verbal construction seems to be restricted semantically to a certain type of events (§ 4, however, the validity of this claim in the context of Akkadian has been examined in this section).

With regards to the pronominal construction it has been noted that the various constructions are subgroups within a broader strategy of expressions of reciprocity with the regular transitive verb (§ 3.4.1).

Besides the various syntactic distinctions between the one-unit and the two-unit pronominal constructions (§ 3.2), it has been noted that each belong to different periods of in the history of Akkadian (§ 3.3). Considering the history of the pronominal expressions, proposals for the origins of each of the various constructions have been proposed (§ 3.4-6).

The historical development within Akkadian, and the different in syntax between the constructions together with the semantic differences between the verbal and the pronominal encodings (§ 4) were used to explain the fact that verbal construction seems to appear more frequently in the earlier periods and less later (§ 5).

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