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## REFLEXIVE AND RECIPROCAL ELEMENTS IN IXIL

Glenn Ayres

Abstract: Reflexives and reciprocals in Ixil, a Mayan language of Guatemala, appear to have features which distinguish them from reflexives surveyed in typological studies such as Faltz 1985 and Geniušiene 1987. Third person reflexives and reciprocals seem to have the form of a possessed noun optionally followed by a possessor NP. Moreover, reflexives occur only as direct objects, as subjects of copulative clauses, and in constructions derived from transitive verbs. Evidence for that analysis is presented, with a description of reflexives and reciprocal elements in Ixil.<sup>1</sup>

### Introduction

Reflexives and reciprocals in Ixil, a Mayan language of Guatemala, (like cognate forms in Mayan languages generally) appear to have some unusual features which distinguish them from any of the reflexives described in typological studies such as Faltz 1985 and Geniušiene 1987. (See for example Geniušiene 1987:303, which presents a list of types of formal means of reflexive marking in a wide variety of languages, but not the formal means apparently employed in Ixil.) The aim of this paper is to document these features, in the context of a general description of reflexives and reciprocals in Ixil.

The reflexive or reciprocal element in may be readily identified in simple sentences with transitive verbs such as (1) (cf. the discussion of "primary reflexive strategy" in Faltz 1985):

- (1) Kat q- il 0<sup>2</sup> q- ib' .<sup>3</sup>  
Asp<sup>4</sup> 1pErg<sup>5</sup> see 3Abs<sup>6</sup> 1pErg Refl

"We saw ourselves/each other."

As indicated by the gloss, the sentence is ambiguous between a reflexive and a reciprocal interpretation (though for reasons extraneous to the discussion here, the reciprocal interpretation is favored).

Superficially, **qib'** in example (1) appears to be an unremarkable reflexive/reciprocal pronoun, of the sort found in many other languages. A complete list of Ixil reflexive/reciprocal elements is given in (2):

(2) Forms of the reflexive/reciprocal element

<u>person</u>	<u>singular</u>	<u>plural</u>
1	vib'	qib'
2	eeb'	etib'
3		tib' <sup>7</sup>
indefinite		ib'

Alternative Analyses of Reflexives

The constituent structure of examples such as (1) is not uncontroversial, and the source of the controversy may be brought out by considering a sentence in which the notional subject is specified, rather than understood as it is in (1). (Such subjects are necessarily third person.) The reflexive element may be regarded as on a par with the subject and verbal complex as a separate constituent of the clause; as forming a constituent together with the notional subject; or as being incorporated into or absorbed by the verbal complex, either retaining its identity as object, or ceding that role to the notional subject. These alternative lines of analysis are represented schematically in (3):

(3) Kat t- il tib' naj . "He saw himself."  
 Asp 3Erg see Refl he

A:           V    | O  | S  
 B:           V    |    O  
 C:                    | O  | S  
                   V    |  
 D:           V           | S  
 E<sup>a</sup>:           V           | S & O

Analysis A treats sentence (3) as having a structure consisting of a sequence of three constituents: the subject, the verb, and the direct object. This analysis, if correct, implies that reflexive sentences are unusual from the standpoint of Ixil grammar, since word order in the Nebaj dialect of Ixil ordinarily is strictly VSO and not VOS.<sup>9</sup>

Analysis B draws on the fact that the reflexive element **tib'** is structurally similar to a possessed noun, which can be optionally followed by its possessor, as in (4):

(4) t- amiigo naj "his friend, friend of his"  
 3Erg friend he

On this view, **tib' naj** is a constituent functioning as the direct object of the sentence, and the subject is understood implicitly.

Analysis C represents a third alternative: the object **tib'** might be cliticized onto the verb, forming a constituent with it. As indicated in the gloss of sentence (1), the position at the end of the verbal complex is where first or second person agreement with the direct object is marked by an absolutive marker, but in the third person there is no marker. It may be that the reflexive element occupies the position of the absolutive marker in the verbal complex. In the absence of other considerations of the sort to be discussed, this hypothesis seems very plausible, since the positions in which reflexive elements occur are very restricted, like clitics in other languages.<sup>10</sup>

Analysis D is meant to suggest that the reflexive cancels the object relation, yielding a structure which shares some similarities with C. Something along these lines might be what we would expect if Ixil has verbal reflexives, with a verb suffix rather than a clitic or independent nominal reflexive element. (Nevertheless, it seems implausible that the reflexive element could be a verb suffix, since it is morphologically complex and bears an agreement prefix, unlike suffixes in other languages.)

In analysis E, the number and configuration of constituents is the same as in D, but different claims are made about the grammatical function of *naj*, which simultaneously assumes two different functions: subject and object.

Although some linguists have suggested informally that reflexives in Mayan languages be analyzed in essentially the manner shown in A, to my knowledge no published references advocate such an account. However, analyses somewhat like B, C, D, and E have been proposed for other Mayan languages: Day 1973:74-5 and Craig 1976 & 1977 support an analysis like B for Jacaltepec, and an analysis along the lines of C was developed by Furbee-Losee 1976 for Tojolabal. Aissen 1982 proposes for Tzotzil and other languages that in reflexive clauses the object relation is cancelled, as in D, and Berinstein 1985 argues that in reflexive clauses in K'ekchi, a single NP is both ergative and absolutive, or functions as subject and object at the same time. (Actually, Aissen and Berinstein state their positions quite different terms, and D and E might not do justice to their views.)

In Ixil a rather compelling argument can be given to show that analysis A is probably incorrect, based on the placement of the quotative particle *chi*. This particle may be approximately translated as "they say", and is used to indicate that the information in the clause is not direct knowledge of the speaker, but rather was told to him or her by others. As can be seen in examples (5) and (6), *chi* follows the first noun phrase representing either the subject or the object in the clause:

- (5) Kat t- il ixoj chi naj .  
 Asp 3Erg see she Prt he

"She saw him, they say."

- (6) Kat et- il ixoj chi .  
 2pErg

"You (plural) saw her, they say."

In sentences with reflexives, **chi** follows both the reflexive and the following subject/possessor, consistently with the other analyses:

- (7) Kat t- il tib' naj chi t u ilomb'al .  
 Asp 3Erg see Repl he Prt in the mirror

"He saw himself in the mirror, they say."

The particle **chi** may not be inserted in (7) between **tib'** and the following noun phrase, which is the position where we would expect it if **tib'** by itself were the direct object, as analysis A suggests:

- (8) \*Kat til tib' chi naj tu ilomb'al .

In light of this fact, it is assumed in what follows that analysis A is not viable.

On analysis B, sentence (7) contains no explicit subject; **tib' naj** is the object, and **chi** follows it. According to C, D or E, **kat til tib'** is the verbal complex; **tib'** is a clitic or possibly a suffix, and at any rate is not a full-fledged object, so **chi** would be expected to come after **naj**.

Evidence which distinguishes between the other analyses is more equivocal. There are some suggestive facts to be found in the form of negation, omission of the subject, etc.

A very common way of negating a simple transitive clause is to move the object to the front, following the negative word **ye'l**. The same particle may not be used for the transitive subject. Nevertheless, **ye'l** is used with the notional subject in (9), as compared with (10) and (11):

- (9) Ye'l naj kat til tib' .  
not

"He did not see himself."

- (10) \*Ye'l naj kat til axh .  
2sAbs

\*("He did not see you (singular).")

- (11) Ye'l naj kat til ixoj .  
she

"She did not see him."

These facts do not count against analysis B, because **ye'l** can be used with a fronted possessor, as in sentence (12), and on analysis B, **naj** in (9) could be syntactically the possessor of **tib'**:

- (12) Ye'l u picheel kat tz'itq'u t- i' .  
not the cup Asp chip 3Erg on

"The surface of the cup did not chip."

(The word **t-i'** is a relational noun: it has the form of a possessed noun, and usually serves to translate a preposition such as "on", but also has the meaning of "outside surface, shell, skin, etc.")

Similarly, on analysis D or E, the **naj** in (9) might behave like the subject of an intransitive verb. The word **ye'l** can also precede intransitive subjects, as in:

- (13) Ye'l naj Xhun n- i- b'ix t- -uk'  
not Cls John Asp 3Erg dance 3Erg with

ixoj Ma'l .  
Cls Mary

"John is not dancing with Mary."

So the employment of **ye'l** in (9) is not incompatible with D or E.

On the other hand, analysis C does not seem to imply that the subject of (9) should behave like an in-



transitive subject. Consequently, these facts count against analysis C (and also, of course, against analysis A), since C (and A) leads one to expect *naj* in (9) to behave like a transitive subject, and some account of why it does not must be given. A proponent of C could perhaps maintain that despite appearances to the contrary, *naj* is not a transitive subject, or that it differs from other transitive subjects in some way which is critical for determining whether it may be used after *ye'l*. Since the possibility of such an explanation cannot be ruled out, the evidence is not conclusive.

It should be mentioned that in Ixil, there are several affixes which can be used with only transitive or only intransitive verbs, and generally the verb accompanied by the reflexive element is used with transitive rather than intransitive affixes. Consequently, the assumption that the clause becomes intransitive if reflexive cannot be made without cost, and analysis which suggests that a verb accompanied by a reflexive is transitive is to be preferred. Still, the assumption that the reflexive has the effect of intransitivizing the verb draws some support from universal considerations: for example, Faltz 1985:14 observes that "there is a clear connection between reflexivization and intransitivity."

There are other contexts as well where the supposed subject of a sentence with a reflexive pronoun fails to behave unequivocally like a transitive subject. For example, transitive subjects can typically be fronted for contrastive purposes, as in (14), with the ergative prefix eliminated and the suffix *-(o/u)n* added to the verb:

- (14)      *Naj kuxh -e' kat il -on .*  
           he just Dem Asp see Suf

"He just/only saw it, It was just/only he who saw it."

(See Ayres 1983 for further information about this construction.) Although informants' intuitions are not entirely clear, it seems that fronting *naj* is not completely grammatical if the suffix is used and the ergative prefix dropped:

- (15) \*?Naj kuxhe' kat ilon tib' .

If the verb were functioning like a normal transitive verb, it should have the form shown in (15) when the preposed subject bears the demonstrative suffix -e'. Compare:

- (16) \*Naj kuxhe' kat t- il -a .  
                        3Erg    Suf

- (17) Naj kuxhe' kat til tib' .

"Only he saw himself."

(The suffix -a in (16) is a phrase-final suffix, and is not relevant to our present concerns.) Similarly, if the word jit "not" precedes the subject, the verb form ordinarily would have to be ilon, but that form is not used with the reflexive:

- (18) Jit naj kat til tib' .  
         not

"It was not he who saw himself."

At the same time, informants agree that the form ilon may be used in certain constructions, like the idiomatic:

- (19) Ixoj kuxhe' kat ilon tib' (s i- junal).  
         she   (alone)

"She took care of herself alone [on giving birth]."

There are no significant structural differences between this last example and (15) above, and the existence of sentences like this prevent us from reaching any categorical conclusions.

In short, the facts considered offer some support for analysis B, D or E over C, but the evidence is not conclusive.

One fact which appears to favor C, D or E over B is that speakers avoid the omission of animate third person subjects, as in (20), usually strongly preferring<sup>11</sup> instead either to include a pronoun such as naj "he" as

the subject, or to use the passive, as in (21):

- (20) %Kat t- il u kab'al -e' .  
 Asp 3Erg see the house Dem

("[3rd pers.] saw the house.")

- (21) Kat il -ax u kab'ale' .  
 Pas

"The house was seen."

Since analysis B commits us to third person subject omission in reflexive sentences, it goes against this strong preference. Nevertheless, there are conditions under which a subject would normally be omitted if it is coreferential with another element in the sentence, and on analysis B, the subject would be identical to the possessor of *tib'*. For that reason, the facts are again inconclusive.

The most decisive test that I have been able to devise for selecting one of these analyses over the other has to do with contexts in which it seems that there ought to be only one syntactic position which could be occupied by a reflexive, and no other position for a separate subject. If such positions exist, and *tib'* followed by a noun phrase can occupy them, that would favor B, according to which *tib'* plus the following NP can be a constituent, and count against C and D, which would presumably require separate argument positions corresponding to the subject NP and the clitic. The situation as regards E is less clear, as explained below. Consider, for example, sentence (22):

- (22) Acha'v chit ixoj t- -e naj .  
 pretty always she 3Erg to he

"He likes her, She is attractive to him."

The predicate *acha'v* has only two syntactic positions associated with it, one of which is oblique, and those positions are occupied by *ixoj* and *naj* in this example.

Indeed, *acha'v* is never accompanied by more than one non-oblique noun or clitic. That is, unless the sequence *tib'* NP could be described in such terms: it is possible for *tib'* followed by a NP to occupy the

position of *ixoj*, as in (23):

- (23) Acha'v chit tib' chajlab' (s t- -e -aj).  
                                   Refl    they   Prt 3Erg to Pl  
                                   |            S ?       |

"They like each other, They are attractive to each other."<sup>12</sup>

One way to explain this situation would be to take *tib' chajlab'* as a single constituent functioning as the subject, as analysis B might suggest. On the other hand, this counts against an analysis like C which requires that there be two argument positions associated with the verb, and against the idea that the reflexive has the effect of cancelling the object relation, as in D, since there is no object relation to be cancelled. If analysis E implies that *tib'* is just a marker to indicate that *chajlab'* has a double syntactic function in (23), where one of the functions occupies the absolutive position (subject of a copulative sentence) and the other is ergative, at least to the extent that there is an ergative prefix in *s teaj*, then it too is compatible with the data.

Moreover, we can show that in Ixil the reflexive/reciprocal element actually does occupy an argument position, at least sometimes. There are sentences in which it displaces the notional subject or object, which is shifted into an oblique case, marked by a relational noun such as *t-i'* "on", *vatz* "before", *t-uk'* "with", *t-e* "to", etc.

- (24) N- i- tx'ak tib' unq'a xaak ti' ooro' .  
           Asp 3Erg win Refl the(pl.) boy at marble

"The boys are winning marbles from each other,  
 (more literally but less accurately: The boys  
 are winning/beating each other at marbles)."

- (25) Nitx'ak tib' ooro' vatz unq'a xaake' .  
   before

"The boys are winning marbles from each other,  
 (more literally: Marbles are winning each  
 other before the boys)."

- (26) Kat t- ava tib' ku- chikoj (s ku-  
 Asp 3Erg plant Repl 1pErg plants Prt 1pErg  
 vatz) .  
 before

"We plant our crops among ourselves (inter-  
 change of work)."

- (27) Kat un- q'os vib' tuk' naj Xhun .  
 Asp 1sErg hit Repl with Cls John

"I fought with John, (more literally: I hit  
 myself with John)."

The reflexive/reciprocal element displaces the notional object **ooro'** in (24) and **naj Xhun** in (27)<sup>13</sup>. In (25) and (26), the reflexive/reciprocal element forces the notional subjects (**unq'a xaak** "the boys" and **o'** "we" respectively) into an oblique case; this would presumably necessitate other adjustments in the argument structure as well, so that either a null subject or the notional object takes over the subject position, depending on the analysis one accepts. Of course, these facts only show that the reflexive/reciprocal element occupies an argument position in some sentences, but the simplest assumption, in the absence of evidence to the contrary, is that the same situation prevails in all sentences in which it occurs.

Similarly, in (28) **kolel** may be thought of as a participle or adjective derived from a transitive verb, and usually occurs with a subject only. However, it may be used with a reflexive/reciprocal element plus a following noun phrase:

- (28) Kolel kuxh tib' naj .<sup>14</sup>  
 hidden just Repl he

"He is only hidden/hiding/put away."

If there is a second argument position, it must remain implicit, and may not be specified in the surface structure without an adverse effect on the grammaticality of the sentence. (However, **by**-phrases are grammatical in comparable nonreflexive sentences.) If **tib'** is a clitic (or suffix) and does not itself occupy an argument position, it is normally assumed that there must

be an empty position to which it corresponds, and with which it is coindexed. (See for example Borer 1981.) Here there appears to be no such position. Again, the facts are hard to reconcile with C or D, but are more compatible with B and possibly E.

There are other examples which present more serious difficulties for analyses other than B. In nominalizations formed with the suffix *-b'al* (which often indicate the place where an action occurs), there may be a noun following the nominalization which corresponds to the direct object of the transitive verb. If instead of the direct object, a reflexive/reciprocal element is used, it is often personless:

- (29) *k'ul -b'al ib'* "meeting place"  
       *join where Refl*

However, a personal form may also occur, and it may even be followed by a full noun (phrase), as in:

- (30) *k'ulb'al tib' b'aj* "joint (between bones)"  
       *Refl bone*

On hypothesis B, *tib' b'aj*, which is the reflexive/reciprocal constituent and direct object, controls the implicit subject argument, and is understood to be coreferential with the subject of the transitive verb. In this case, *b'aj* is the possessor of *tib'*, since *tib'* must bear the third person ergative/possessive prefix *t-*. Compare the previous example.

On all of the analyses other than B, *b'aj* would have to be the subject. However, nominalizations with the suffix *-b'al* ordinarily do not permit a following subject, so examples of this kind count against them. (These nominalizations do occasionally permit a possessor which is understood as the subject, but in that case, there would be an ergative/possessive prefix at the beginning of this example.)

In light of these arguments, at this point analysis B seems to be the strongest, despite the fact that the grammatical structure it implies is unattested outside of Mayan languages.

Syntactic functions and uses of the reflexive/reciprocal element

Let us put these remarks in perspective by concluding with a general discussion of uses of the reflexive/reciprocal element and clause-internal coreference in Ixil.

The basic uses of the reflexive/reciprocal element are as the object of a transitive verb and as the subject of a copulative clause in which the predicate is a possessed noun.<sup>15</sup> Day 1973:74-5 in his grammar of Jacaltec observes that these two cases have something in common: the predicate (i.e. transitive verb or possessed noun) has two associated noun phrases, one of which shows agreement by means of an ergative (Erg) prefix and the other of which shows agreement by means of an absolutive (Abs) marker. The reflexive in both cases fills the position associated with absolutive agreement, the marker invariably being the null third person absolutive marker.

In addition to these basic uses, there are some derivative occurrences, mostly involving forms derived from transitive verbs. A list of the possible syntactic functions is given below, including both basic and derivative uses:

i. Transitive object

See examples (1), (3), etc.

ii. Subject (?) of a copulative clause in which the predicate is a possessed noun understood reciprocally

(31) Q- amiigo qib' .  
 1pErg friend Refl  
 | S? |

"We are friends (mutually/reciprocally)."

Note that in nonreflexive clauses, if the subject is o' "we", it normally appears at the beginning, as in (32). However, o' cannot grammatically appear at the beginning of (31), as can be seen in (33), indicating that o' is not the implicit subject of (31). The absence of an independent pronoun or absolutive marker in (31)

suggests a third person subject: *o'* is presumably the implicit possessor of *amiigo*, and *qib'*, which as a noun should be third person for agreement purposes, must be the subject.

- (32) *O' t- amiigo naj .*  
we 3Erg friend he

"We are his friends/friends of his."

- (33) \**O' qamiigo qib' .*

- (34) *I- koontra tib' u q'anb'o'lay -e' chi*  
3Erg enemy Repl the tiger Dem Prt  
                  |          S?                  |
- tuk' u chee b'alam -e' .*  
with the lion Dem

"The tiger and the lion are enemies (of one another)."

iii. Subject (?) of an adjective understood reciprocally (rare)

See (23). There is an alternative version of that sentence with the same meaning, in which the adjective is treated as a noun, with a possessive prefix:

- (35) *t- acha'v chit tib' chajlab' .*  
3Erg

iv. Other uses with derived forms of transitive verbs

a. With an indefinite subject (*ib'*)

The constructions in this section under 1 and 2 permit only the indefinite form *ib'*, with no ergative (Erg) prefix indicating person. Perhaps we could say that the verb morphology satisfies or absorbs the subject position of the verb, and that the understood subject is understood to be coreferential with the reflexive. Here no such theory will be developed, however, and we restrict ourselves to a presentation of the facts.



## 1. infinitives

- (36) q'osiib' "fight" < q'os + -o + ib'  
hit Suf<sup>16</sup> Refl
- k'uliib' "meet, join together"  
< k'ul- + -u + ib'  
meet Suf Refl
- chusiib' "study, teach oneself"
- mujiib' "hide (oneself)", etc.
- (37) Q'osiib' kat un- b'an -a .  
Asp 1sErg do Suf

"Fight [is what] I did."

## 2. agentive nouns in -(o/-u)l

- (38) chus -u -l ib' "student"  
teach Suf Suf Refl

## 3. nouns indicating location, etc., with the suffix -b'al

- (39) kol -b'al ib' "hiding place"  
keep where Refl

- Cf. (40) chik -b'al xu'm "flower garden"  
cultivate where flower

See also (29), discussed above.

The constructions under 3 also permit **ib'** with personal prefixes. See the next examples.

## b. With personal prefix

1. nouns indicating location, etc., with the suffix -b'al

(41) il v- un- kolb'al vib' ile' .  
 see(?) the 1sErg Refl there

"There is my hiding place."

Compare (39). See also (30), discussed above.

2. participles

(42) Kolel te' kuxh tib' .  
 hidden always just Refl

"[3rd pers.] is always put away/hidden."

(43) Q'alumal chit tib' ixoj tuk' naj .  
 embraced always Refl she with he

"She and he are always embracing."

3. agentive nouns in -n(aal)

(44) Q'alun chit ve't tib' naj tuk' ixoj .  
 embracer always already Refl he with she

"Now he is always embracing (with) her."

Cf. (45) olin ch'ich' "[car] driver"  
 driver car, iron thing

4. passive voice (not all speakers, rare, and always reciprocal)

(46) ?\*n- i- tx'ak -ax tib' ooro' ta'n  
 Asp 3Erg win Pas Refl marble by

unq'a xaak -e' .  
 the(pl.) boy Suf

"The boys are winning marbles from each other."

The grammaticality of this last example is debatable: some speakers accepted it while others did not, but no

one felt very comfortable about their judgements on it.

### Identity of Reference within a Clause

Ignoring the unusual and derivative cases, we may say that the reflexive/reciprocal element is employed when there is identity of reference between the subject and object of a transitive verb, or between the possessor of a noun functioning predicatively in a copulative clause and the subject of that clause. The restrictive distribution of the reflexive/reciprocal element naturally raises the question of what happens in the case of identity of reference between other elements within the clause.

Reciprocity in Ixil is only understood if a reflexive/reciprocal element occurs explicitly in the clause. We have already seen that that element may displace other elements, and force them into an oblique case. The relevant examples are (24) through (27).

To express simple nonreciprocal identity of reference in other positions, a null pronoun is used, generally in conjunction with an Erg prefix on an associated word. The null pronoun follows its antecedent. For example, in (47), the subject of the sentence, *naj* "he", may be understood as coreferential with the third person possessor of *ixqel* "wife", and in (48), the subject *ixoj* "she" may be the antecedent of the *t-* of *s te*, which is also presumably followed by a null pronoun. In fact, in both cases the coreferential reading is favored, since an explicit (non-null) pronoun is preferred if there is no coreference with an antecedent within the clause.<sup>17</sup>

(47) Kat t- il naj u t- ixqel -e' .  
 Asp 3Erg see he the 3Erg wife Dem

"He saw his (own) wife."

(48) Kat i- tz'is ixoj ma'l u chik  
 Asp 3Erg sew she one the skirt

s t- e .<sup>18</sup>  
 Prt 3Erg to

"She sewed her(self) a skirt."

To dispel the impression that the antecedent must be the subject, consider also:

- (49) v- i- tx'i' u naj kat i- q'os -a .  
 the 3Erg dog the man Asp 3Erg hit Suf

"The man hit his (own) dog, (more literally: The dog of the man<sub>1</sub> he<sub>1</sub> hit)."

In this example, the possessor of the direct object is the antecedent of the null pronoun presumably in subject position (i.e., after the verb). The salient point is that the antecedent is to the left of the position hypothetically occupied by the null pronoun.

The requirement that the explicit noun or pronoun must be to the left of a null pronoun disambiguates sentences like (50) to a certain extent. Moreover, for reasons which are not clear, a null pronoun in the transitive object position cannot be coreferential with an NP which is the possessor of the immediately adjacent subject.

- (50) Kat t- il u t- ixqel naj -e' .  
 Asp 3Erg see the 3Erg wife he Dem

Nevertheless, there are several possible interpretations for this sentence<sup>19</sup>.

- (50a) Subject = u tixqel naje' "his<sub>1</sub> wife"  
 "His<sub>1</sub> wife saw [3rd pers.]<sub>1</sub>/\*him<sub>1</sub>."  
 (50b) Subject = u tixqel; Object = naje'  
 "His<sub>1</sub> wife saw him<sub>1</sub>/\*him<sub>1</sub>."  
 (50c) Subject = null; Object = u tixqel naje'  
 "[3rd pers.]<sub>1</sub> saw %his<sub>1</sub>/\*his<sub>1</sub> wife."

If the sentence is taken to have a null subject, as in (50c), the subject cannot then be taken to be coreferential with another NP in the sentence, since that interpretation would have a null pronoun with its antecedent following it. Some speakers do not accept this analysis of this sentence even with a non-coreferential (his<sub>1</sub>) interpretation, since it has a null subject with no explicit antecedent within the clause.

(Notice too that this is essentially the same structural configuration proposed here for reflexives; not surprisingly, the facts are different as regards coreference of the subject with the possessor of the object.)

Furthermore, there is no way for the sentence to be interpreted to mean that the husband is being seen by his wife: if *naje'* is taken to be part of the subject, as in (50a), then it violates the previously mentioned constraint against a null pronoun object being coreferential with the possessor of the adjacent subject, and if *naje'* is the direct object, then it follows the null pronoun possessor of *tixqel*, and again cannot be coreferential with it.

This raises the question of how one would say that the man<sub>1</sub>'s wife saw him<sub>1</sub>, and the answer is that the word order must be changed from the basic VSO order, as for example in:

(51) U tixqel naje' kat til -on .  
Suf

"His<sub>1</sub> wife saw him<sub>1</sub>/[3rd pers.]<sub>3</sub>."

The verb of this sentence is understood transitively, and if there were an explicit direct object, it would follow the verb. The favored interpretation for this sentence is that the null direct object is coreferential with the possessor of the fronted subject.

And to avoid having a null pronoun in subject position, some speakers have a strong preference for (52) to express the meaning of (50c):

(52) Kat il -ax u tixqel naje' .  
Pas

"His wife was seen."

In sum, for clause-internal coreference of the sort marked in some languages with reflexive pronouns, *Ixil* appears to be working toward a system which distinguishes between two cases. For coreference between a transitive subject and object, and between a copulative subject and possessor of a noun which may be the copulative predicate, reflexive pronouns are used. They

also occur in some derivative cases. On the other hand, when there is coreference between other elements in a clause, the antecedent occupies the first or left-most position, and a null pronoun occurs in subsequent positions.<sup>20</sup> In most positions, an Erg agreement prefix (which also marks possession) must be used (whether with a null pronoun or an explicit NP), to show agreement with the verb or possession of a relational noun. Explicit (i.e. non-null) pronouns ordinarily have antecedents outside the clause. Like null pronouns and ordinary nouns, in most positions they must be used together with an Erg prefix.

Reciprocals are marked by reflexive pronouns in object position or in the position of subject of a copulative clause, regardless of their understood syntactic role, if necessary displacing the notional subject or object.

Needless to say, this system appears to be quite different, at least superficially, from what is found in most other languages. Whether it can be analyzed in a way which makes it look less unusual at a more abstract level remains to be seen.

#### NOTES

1. Data comes from the Nebaj dialect of Ixil, though there appears not to be significant dialectal variation as regards reflexives and reciprocals. All examples were kindly provided by Manuel López Santiago of Nebaj, or were checked by him. Thanks are also due to Pedro De Paz Pérez, Jacinto De Paz Pérez, Sebastián Caba of Chajul, and the Ixil team of the Proyecto Lingüístico Francisco Marroquín, all of whom helped me with my work on this topic and/or Ixil grammar in general.

The questions taken up in this paper were originally posed in Ayres 1980b. An earlier version was presented under the title "Pronombres Reflexivos, Recíprocos y Otros en el Ixil" at Taller Maya XI, Universidad Rafael Landívar, Quezaltenango Campus, Guatemala, June

21, 1989. I appreciate the supportive comments of participants in the workshop.

2. Where Abs = 0, it is not indicated after this example.

3. The alphabet employed is that adopted by the Academy of the Ixil Language. The letters have their expected phonetic values, with the following exceptions:

	VV	=	long vowel
	'	=	glottal stop when written after vowels, not written word-initially
	b'	=	implosive bilabial stop, usually voiced
other	C'	=	ejective consonant
	ch	=	palatoalveolar affricate, as in English and Spanish
	j	=	[h]
	tx	=	voiceless retroflex affricate
	tz	=	[c], voiceless alveolar affricate
	v	=	sound with labiodental and bilabial allophones, ordinarily voiced, cognate with /w/ in other Mayan languages
	x	=	voiceless retroflex fricative
	xh	=	voiceless palatoalveolar fricative

4. The following abbreviations are used in the examples:

Asp	=	aspect or tense marker
Abs	=	absolute marker (often called Set B in Mayan linguistics), with person and number (except that singular and plural are not distinguished in the third person)
Erg	=	ergative or possessive marker (called Set A in Mayan linguistics), with person (and number)
Refl	=	reflexive/reciprocal element
Dem	=	demonstrative suffix
V	=	verb or verb phrase
S	=	subject (of a copulative predicate or a transitive or intransitive verb)
O	=	direct object
Prt	=	particle
Suf	=	suffix
Pas	=	passive suffix
Cls	=	noun classifier, used before a noun (Most classifiers also function as pronouns, and are identical to nouns.)

5. The complete set of Erg (ergative) prefixes is:

	<u>before a consonant</u>	<u>before a vowel</u>
1s	un-	v-
2s	a-	a(v)-
3s&3p	i-	t-
1p	ku-	q-
2p	e-	et-

(The a(v)- prefix often fuses with the following vowel.) In addition to being used for verbal agreement (for transitive subjects and, in restricted circumstances, intransitive subjects), Erg markers serve as possessive prefixes. See example sentence (4).

6. The Abs (absolutive) clitics are identical to the first and second person independent pronouns:

1s	in	"I, me"
2s	axh	"you (singular)"
3s&3p	-	(no marker for third person)
1p	o'	"we, us"
2p	ex	"you (plural)"

The Abs markers are used for verbal agreement with the object of transitive verbs, the subject of intransitive verbs (in most circumstances), and the subject of some copulative predicates (i.e., participles, etc.).

7. There is no number distinction for reflexives in third person.

8. It has been suggested to me that mnemonic names for these analyses might be helpful. Let me propose the following:

- A = the reflexive object hypothesis
- B = the reflexive + possessor hypothesis
- C = the reflexive clitic hypothesis
- D = the verbal reflexive hypothesis
- E = the multi-attachment hypothesis

Since some of these names may be misleading, they are not employed in the body of the paper.



9. According to Nora England (personal communication), VOS is the basic word order of the Cotzamal dialect of Ixil. I have no other information about word order in that dialect.

10. Presumably reflexive clitics will behave like pronominal clitics in many ways, if not all. According to Borer 1986:1-2, "many of the morpho-syntactic properties of pronominal clitics in a variety of languages are best captured if we assume that these clitics, on a par with affixes, are attached to their host by a morphological rule, the output being a word." In the same volume, Osvaldo Jaeggli (in Borer 1986:17) says of Spanish clitics, "The clitic will be considered a separate 'word' syntactically. However, as it is dominated by the same level node as the word it is affixed onto, it is considered also to be part of the verb."

11. An examination of texts shows that animate third person subject pronouns in main clauses are virtually never dropped, except under conditions described elsewhere in this paper, and where they are, it may be due to some unidentified syntactic trigger or a performance error.

12. The fact that *te naj* in the previous example is replaced by *s teaaj* in this one is just what we would expect. Pronouns are not repeated if they have a coreferential antecedent within the clause, so there is no pronoun after *te* in this sentence; if the sentence were analyzed in terms of a theory with empty categories, there would be an empty category after *te*. When no explicit noun phrase follows *te*, the particle *s* precedes it. Plurality is optionally (but commonly) marked by the suffix *-aj*, as in this sentence.

13. This example is of interest because the grammatical antecedent of the reciprocal *vib'* "myself" must be "I", and differs from its notional antecedent, "I with John". Thus, a reciprocal in Ixil does not necessarily have a plural grammatical antecedent, despite suggestions to the contrary by prominent linguists, for example in Chomsky 1980:12, where it is asserted that "...the reciprocal requires a plural antecedent..." In Chomsky's terms, we must conclude that Ixil deviates from "core grammar", and does not represent the "unmarked case", which are not implausible conclusions.

It is not clear that present theories of the relation between syntactic and logical form, especially within a GB framework, allow for the realignment of coindexing which this sentence appears to exemplify, so that the reciprocal can be analyzed as having a plural antecedent at the level of logical form, since such a realignment would seem to entail the creation of a coordinate structure in the logical form.

Zribi-Hertz (1989:697) conjectures that one way in which anaphors (reflexives and reciprocals) differ from ordinary pronouns is that only ordinary pronouns may have split antecedents whose two components bear two distinct  $\theta$ -roles. Her examples are:

- a. John<sub>1</sub> spoke to Mary<sub>2</sub> about them<sub>1,2</sub>.
- b. ?\*John<sub>1</sub> spoke to Mary<sub>2</sub> about themselves<sub>1,2</sub>.

Unless it can be shown that the components of the split antecedent in the Ixil sentences do not have distinct  $\theta$ -roles, Zribi-Hertz's test to distinguish pronouns and anaphors is not universally valid.

14. This sort of example, which occurs very frequently in texts, shows that the construction is not restricted to examples in which *tib'* signals reciprocity.

15. In these restrictions, Ixil reflexives are unusual. Faltz 1985:63 maintains that, as a general principle, "[i]f the primary reflexive in a language is morphologically obviously of the NP type [i.e., "a special pronoun is used as the object NP to signal its coreference with the subject" - p. 15], and if that language has prepositional phrases, then the reflexive may appear in some of them to mark coreference (at least) with the subject." Ixil has just one preposition, *t(u)*, which is not used with pronouns or reflexives, and relational nouns (explained elsewhere in this paper), which serve the function of prepositions, and which also never have reflexives as their objects/possessors.

16. In the Nebaj dialect, the -o or -u suffix assimilates to the following vowel, but its presence is evident from the vowel length. The vowel occurs with consonant-initial direct objects, and in the Chajul dialect, there is no assimilation. Incidentally, the suf-

fix  $-(o/u)l$  in the following examples should probably be analyzed as being composed of this same suffix  $-u$  (if the vowel of the root is  $u$ ) or  $-o$  (elsewhere), plus a suffix  $-l$ .

Intransitive infinitives are generally formed with a suffix  $-chil$ , and not with  $-o$  or  $-u$ , so the existence of these forms counts against analysis D, if D is taken to imply that the verb becomes intransitive.

17. The requirement that there be an explicit pronoun is not absolute. The picture is muddied by the fact that there is no neutral pronoun to refer to ordinary inanimate objects (except with respect or disrespect, which may not be appropriate), and in such cases, a null pronoun is possible.

18. This example is actually slightly unnatural. Wherever possible, it is preferred to express a dative or benefactive meaning as the possessor of the direct object, rather than with  $s\ te$  or a similar oblique construction:

Kat itz'is ixoj ma'l w- i- chik .  
the 3Erg

It remains true that the fact that there is no explicit pronoun after **chik** favors a coreferential reading between the subject and the person to whom the skirt belongs or for whom it is made.

19. Similar facts are reported for other Mayan languages in Larsen (1980) and Larsen and Norman (1979).

20. Although the constituency of some examples is not clear, it does not appear to be necessary or even possible to use a variant of  $c$ -command rather than simple linear order to specify structural relations of antecedents relative to coreferential null pronouns.

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