

Verb Agreement in Southern Tiwa

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VERB AGREEMENT IN SOUTHERN TIWA<sup>1</sup>

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## INTRODUCTION

The purpose of this paper is to demonstrate, as straightforwardly as possible, given the complexity of certain details of morphology, that verb prefixes of Southern Tiwa reflect features of the initial direct object (DO) as well as the final DO and subject (SU). Before demonstrating this, however, we must present the clearest facts about agreement in intransitive and transitive clauses so that these facts can enter into the arguments put forward in defense of our major claim.

## BACKGROUND FACTS

Intransitive verb agreement reflects person and number of SU, including a distinction between dual and plural in all persons (this latter fact is a useful test for final SU), as illustrated in (1)-(3):

- |     |                            |                      |
|-----|----------------------------|----------------------|
| (1) | te-'aru-we<br>lsg-cry-pres | 'I'm crying'         |
| (2) | in-'aru-we<br>ldu-         | 'We (2) are crying'  |
| (3) | i-'aru-we<br>lpl-          | 'We (>2) are crying' |

The following chart shows the full paradigm of prefixes:

	sg	du	pl
1st	te	in	i
2nd	a	men	ma
3rd	∅	in	i

Transitive verb agreement reflects person and number of both SU and DO; in addition, noun class of third person DO is indicated. There are three noun classes which we will designate as i, ii, and iii; the first includes all and only animate nouns. Examples (4)-(13) illustrate these facts:

- |     |                                  |                       |
|-----|----------------------------------|-----------------------|
| (4) | bey-mu-ban<br>2sg:lsg-see-pst    | 'You saw me'          |
| (5) | a-mu-ban<br>2sg:3isg-            | 'You saw him'         |
| (6) | i-mu-ban<br>lsg:2sg-             | 'I saw you'           |
| (7) | ti-mu-ban<br>lsg:3isg-           | 'I saw him'           |
| (8) | ti-seuan-mu-ban<br>lsg:3isg-man- | 'I saw the man'       |
| (9) | men-seuan-mu-ban<br>2du:3isg-    | 'You (2) saw the man' |

- |      |  |                        |
|------|--|------------------------|
| (10) | ma-seuan-mu-ban<br>2pl:3isg-             | 'You (>2) saw the man' |
| (11) | ti-shut-pe-ban<br>lsg:3iisg-shirt-make-  | 'I made a shirt'       |
| (12) | te-shut-pe-ban<br>lsg:3iipl-             | 'I made shirts'        |
| (13) | bi-mukhin-tuwi-ban<br>lsg:3iisg-hat-buy- | 'I bought a hat'       |

As stated earlier, the dual vs plural distinction is reflected in verb agreement for SU only. The lone exception to this is that with first person SU and second person DO, there is a three way contrast for number of the DO rather than for the SU.<sup>2</sup>

There is a good deal of homophony and/or overlap in use of prefixes between and within paradigms<sup>3</sup>, but comparison of full paradigms leads to the statements we have made above.

As illustrated in (8)-(13), the noun head of a DO is usually incorporated into the verb. Details of the constraints on this incorporation are beyond the scope of this paper. See Allen and Gardiner 1977 for a preliminary treatment.

Passive, i.e. advancement of DO to SU, is possible if and only if the initial SU is third person, and necessary if the DO is higher than the SU on something like a "chain of being" hierarchy in which first and second person outrank animate third person which in turn outranks inanimate third person (Allen and Frantz, 1977). (14) and (15) illustrate necessary passive. (17) illustrates possible passive; compare (16). And (18) and (19) violate the constraint that the initial SU of a passive must be third person.

- |       |                                   |                                       |   |                                   |
|-------|-----------------------------------|---------------------------------------|---|-----------------------------------|
| (14)  | seuanide-ba<br>man-instr          | te-mu-che-ban<br>lsg-see-pass-pst     | 'The man saw me'<br>(I was seen by the man)     |                                   |
| (15)  | seuanide-ba<br>man-instr          | a-mu-che-ban<br>2sg-see-pass-pst      | 'The man saw you'<br>(You were seen by the man) |                                   |
| (16)  | seuanide<br>man                   | ∅-liora-mu-ban<br>3:3isg-lady-see-pst | 'The man saw the lady'                          |                                   |
| (17)  | liorade<br>lady                   | ∅-mu-che-ban<br>3-see-pass-pst        | seuanide-ba<br>man-instr                        | 'The lady was seen<br>by the man' |
| (18)* | te-mu-che-ban<br>1st-see-pass-pst | 'ĩ-ba<br>2-instr                     | 'I was seen by you'                             |                                   |
| (19)* | a-mu-che-ban<br>2sg-see-pass-pst  | na-ba<br>1-instr                      | 'You were seen by me'                           |                                   |

As evidence that a sentence such as (14) is truly passive as defined within relational grammar (Perlmutter and Postal, 1977), observe that the verb prefix is from the intransitive paradigm given earlier and agrees only with the putative final SU (initial DO). Further evidence that first person is final SU of (14) is seen in (20) and (21), for as stated earlier the dual vs plural distinction is extant only for (final) subjects:

- |      |                     |               |   |
|------|---------------------|---------------|---|
| (20) | seuanide-ba<br>ldu- | in-mu-che-ban | 'The man saw us (2)'<br>(We were seen by the man) |
|------|---------------------|---------------|---|

- (21) seuanide-ba i-mu-che-ban 'The man saw us (>2)'  
 lpl- (We (>2) were seen...)

Observe also that the initial SU of the putative passives is marked with the same post-position which otherwise marks instrument and means; this in itself is so extremely common with passives in languages around the world that it constitutes strong circumstantial evidence for the passive analysis of these sentences.

#### IO ADVANCEMENT

We now have presented sufficient background to enable us to demonstrate that indirect objects (IO) in Southern Tiwa may be advanced to DO, after which we will demonstrate the main thesis of this paper: that verbs in such clauses agree with the initial DO as well as the final DO and final SU.

Compare (23) with (22), (25) with (24), and (27) with (26):

- (22) ti-khwien-wia-ban 'i-'ay 'I gave the dog to you'  
 lsg:3isg-dog-give-pst 2-to
- (23) ka-khwien-wia-ban 'I gave you the dog'  
 lsg:2sg:3isg-
- (24) ti-khwien-wia-ban seuanide-'ay 'I gave the dog to the  
 lsg:3isg- man-to man'
- (25) ta-khwien-wia-ban seuanide 'I gave the man the dog'  
 lsg:3isg:3isg-
- (26) a-khwien-wia-ban na-'ay 'You gave the dog to me'  
 2sg:3isg- 1-to
- (27) ben-khwien-wia-ban 'You gave me the dog'  
 2sg:lsg:3isg-

Observe first of all that the verbs of (22), (24), and (26) have the prefix which is a function of the first person SU and third person animate DO ('dog'), as seen earlier in (8) and (5). These even-numbered examples have a final SU, DO, and IO, the latter marked by post-position -'ay. Compare now the odd-numbered examples which follow each of (22), (24), and (26); these differ in at least two ways: the IO's of the even numbered examples are not post-positional phrases in the corresponding odd numbered examples, and the verb prefixes are different. Both of these differences are accounted for by an analysis involving advancement of IO to DO, and hence enter into arguments for this analysis:

1. If the initial IO is final DO, it should not be marked by the post-position which marks final IO's (because pronouns in Southern Tiwa do not appear unless emphatic or supporting post-positions, (23) and (27) display no pronouns). This we have seen to be true in the odd numbered examples.
2. As we showed above, verb prefixes are a function of both SU and DO. If the initial IO is final DO, varying this putative DO should vary the prefix. Comparing (23) with (25) and (28) we see that the prefix shape is a function of the putative final DO. (The prefixes are not from the same set seen earlier on transitive verbs; more on this below, when we will

explain the glosses given under these prefixes.)

- (28) mim-kwien-wia-ban seuanin 'I gave the men the dog'  
lsg:3ipl:3isg- men

3. We saw earlier that Southern Tiwa sanctions advancement of DO to SU. If the initial IO is final DO in sentences such as (23), (25), (27), and (28), then we should expect advancement of the DO to SU under the same conditions outlined for advancement of initial DO's. These conditions were as follows:

a) Passive is possible only if the initial SU is third person; thus the passive counterparts to (23) and (27) should be bad, and they are:

- (29) \*ka-khwien-wia-che-ban na-ba 'You were given the dog  
2sg:3isg-dog-give-pass-pst l-instr by me'

- (30) \*in-khwien-wia-che-ban 'i-ba 'I was given the dog by you'  
lsg:3isg-

b) Passive is necessary if the DO outranks the SU; thus if an initial IO is first or second person, and the initial SU is third person, advancement of the initial IO to DO would require its further advancement to SU. This we see in (32) and (34); compare (31) and (33) which involve no advancement:<sup>4</sup>

- (31) liorade ø-khwien-wia-ban na-'ay 'The lady gave a  
lady 3isg:3isg- l-to dog to me'

- (32) liorade-ba in-khwien-wia-che-ban 'The lady gave me  
lady-instr lsg:3isg-dog-give-pass-pst a dog'  
(I was given a dog by the lady)

- (33) liorade ø-khwien-wia-ban ŋ-'ay 'The lady gave a  
2-to dog to you'

- (34) liorade-ba ka-khwien-wia-che-ban 'The lady gave you  
2sg:3isg- a dog'  
(you were given...)

c) If the DO does not outrank a third person SU, then passive is possible but not necessary. Thus we would expect a sentence such as (35) to have two paraphrases, one in which the initial IO is final DO, and another in which the initial IO advances to DO and then to SU. But we find only the latter, as illustrated in (36):

- (35) liorade ø-khwien-wia-ban 'u'ude-'ay 'The lady gave  
child-to the dog to the  
child'

- (36) liorade-ba a-khwien-wia-che-ban 'u'ude  
3sg:3isg- child 'The child was  
given the dog by  
the lady'

This state of affairs can be accounted for in conjunction with the IO to DO advancement hypothesis by adding the

additional constraint that if an IO advances, it must advance as high as possible on the term hierarchy. We will call this the 'all-the-way' constraint. And since DO to SU advancement is possible only when the initial SU is third person, it is just in these 3c) cases that this all-the-way constraint comes into play. Such a constraint is certainly a natural one, given IO to DO advancement is (evidently) triggered by semantic or "discourse" factors that can broadly be classified as 'prominence'; these same factors might be expected to call for advancement as high as possible.

#### AGREEMENT WITH INITIAL DO

In (22) - (36) we were concerned with demonstrating advancement of IO to DO, and therefore held the initial DO constant. But now we are ready to demonstrate that verb agreement must make reference to features of the initial DO in such cases, as well as to features of the final SU and final DO. The verb prefixes used, as already mentioned, are from sets which apparently have in common that they are attached to verbs which have an initial absolutive which is not the final absolutive, but this is merely an initial characterization in need of further testing<sup>5</sup>. The point we are about to make is that these affixes are a function of three variables in the transitive cases, and of two variables in the passive cases. We now look again at cases where an IO has advanced to DO (and no higher), but this time we will hold the final DO constant and vary the initial DO as in (37) - (42). Prefixes are glossed 'final SU:final DO: initial DO-'.  
 (37) ka-'u'u-wia-ban 'I gave you the baby'  
 lsg:2sg:3isg-baby-give-pst  
 (38) kam-'u'u-wia-ban 'I gave you the babies'  
 lsg:2sg:3ipl-  
 (39) ka-shut-wia-ban 'I gave you the shirt'  
 lsg:2sg:3iisg-shirt-  
 (40) kow-shut-wia-ban 'I gave you the shirts'  
 lsg:2sg:3iipl-  
 (41) kam-keuap-wia-ban 'I gave you the shoe'  
 lsg:2sg:3iiisg-shoe-  
 (42) kow-keuap-wia-ban 'I gave you the shoes'  
 lsg:2sg:3iiipl-

It is clear that the verb prefix shape is a function of the class and number of the initial DO.<sup>6</sup>

Perhaps even more impressive are the cases with third person initial SU. Recall that in these cases an advanced IO must be final SU, and so the clause has no final DO. Yet even these passive verbs are marked for number and class of the initial DO as well as the final SU. To make this clear, we will hold the final SU (initial IO) constant and vary only the initial DO in (43) - (45). The prefixes will be glossed 'final SU:initial DO-'.  
 (43) ka-'u'u-wia-ban 'I gave you the baby'  
 lsg:2sg:3isg-baby-give-pst  
 (44) kam-'u'u-wia-ban 'I gave you the babies'  
 lsg:2sg:3ipl-  
 (45) ka-shut-wia-ban 'I gave you the shirt'  
 lsg:2sg:3iisg-shirt-

- (43) 'u'ude a-shut-wia-che-ban seuanide-ba  
child 3sg:3iisg-shirt-give-pass-pst man-instr  
'The child was given the shirt by the man'
- (44) 'u'ude ow-shut-wia-che-ban seuanide-ba  
3sg:3iipl-  
'The child was given the shirts by the man'
- (45) 'u'ude am-keuap-wia-che-ban seuanide-ba  
3sg:3iisg-  
'The child was given the shoe by the man'

In these examples, observe that the verb prefix varied as the class and number of the initial DO varied. Note the obvious relationship to the affixes in (37) - (42). This relationship is not so obvious with first person as final SU, but the verb prefix shape is still a function of the initial DO, as (46) - (48) show:

- (46) in-'u'u-wia-che-ban seuanide-ba  
lsg:3isg-child-  
'I was given the child by the man'
- (47) im-'u'u-wia-che-ban seuanide-ba  
lsg:3ipl-  
'I was given the children by the man'
- (48) iw-shut-wia-che-ban seuanide-ba  
lsg:3iipl-shirt-  
'I was given the shirts by the man'

#### CONCLUSION

Southern Tiwa rules of verb agreement must make reference to person, number, and class of final SU, final DO, and where it is distinct from either of those, the initial DO: in just this latter case, the prefixes will be drawn from a different set.<sup>7</sup> Such a state of affairs is quite naturally stateable within uninet network relational grammar, for though networks may involve multiple strata of relations, no information can be "lost" in a network as it can, and is expected to be, in a transformational derivation. At any rate, it is clear that Southern Tiwa agreement rules must make reference to more than one stratum in a relational grammar, and to more than one derivational stage in a transformational grammar (though of course the latter theory allows addition of some ad hoc device to prevent information from being lost in the course of the derivation).

#### NOTES

1. Southern Tiwa is a Tanoan language spoken in Isleta and Sandia pueblos in New Mexico. Data are exclusively from the Isleta pueblo, and were gathered by Barbara Allen and Donna Gardiner in conjunction with their assignment with SIL from October 1973 to the present. We are greatly indebted to David Perlmutter for his encouragement and insights during latter stages of the analysis and for comments on an earlier draft of this paper.

Abbreviations used in this paper include: 1 = first person;

2 = second person; 3i = third person, animate class; 3i and 3ii are the other two noun classes; sg = singular; du = dual; pl = plural; pst = past; pass = passive; instr = instrument. Colons in glosses separate sets of features of terms reflected in verb prefixes; e.g. 'lsg:2sg' means that the verb prefix indicates SU is lsg and the DO is 2sg.

2. These cases are definitely not passive, however, for the following reasons: 1. the verb does not have passive morphology; 2. if present for emphasis, the first person pronoun cannot be marked with -ba as a subject chomeur (see below).

3. The most notorious of the latter follows a pattern referred to as "number reversal" by Tanoan scholars: iisg = ipl; iiipl = iipl while isg = iisg.

4. We would like to present ungrammatical sentences in which the necessary passive constraint is violated, but it is not possible to do this for there are no verb prefixes for the impossible person combinations.

5. It certainly is incorrect as it stands, for there are initial DO complements which are not final DO, yet do not trigger these sets.

6. See note 3 re. the appearance of the same prefix in more than one of these examples. Also, some analysis of these prefixes is possible. In the set appearing in (37) - (42) it is possible to segment off a k- as indicating that final SU and DO are first and second person, respectively, while the remainder of each prefix indicates class and number of the initial DO. Such segmentation has no real bearing on the claims of this paper, however.

7. As mentioned earlier, this statement will probably have to make reference to the initial absolutive rather than initial DO. This is seen to be necessary when cases of ascension of a possessor from initial subject are taken into account. Research is in progress on this, as well as many other fronts in Southern Tiwa.

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