The indexation of central arguments in main clauses in Urique Tarahumara

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In the present work I describe the Urique Tarahumara (Uto-Aztecan) system for encoding grammatical relations, with special attention to explaining the complex allomorphy through which subjects are marked on the verb. As in other Uto-Aztecan languages, most patterns relevant to core arguments in Urique Tarahumara (UT) are nominative-accusative; however, the grammatical treatment of speech act participants, specifically the first and second person singular, indicates that UT has an innovated grammar sensitive to a referential hierarchy in which 1 > 2 > 3. The nominative-accusative patterns are in constituent order and subject indexation in the UT verb. The hierarchical patterns are in distinctive verbal enclitics for 1SG and 2SG, which do not vary for role of A versus P, with a special case-marker that occurs on the 1SG P.

The Tarahumara language is a member of the Uto-Aztecan family. The majority of Tarahumara speakers live in the Sierra Tarahumara, which is located in the Sierra Madre Occidental mountain range in the state of Chihuahua in Mexico. The variety of Tarahumara studied in this work is spoken in the municipality of Urique, Chihuahua. Out of a total population of 19,566 in the

¹ My deepest gratitude goes to all the Rarómuri people who have shared their time and knowledge with me, especially to Juana Moreno Caraveo and Martina Moreno Caraveo for their friendship and patience. Comments by Spike Gildea, Scott DeLancey, and an anonymous reviewer have improved this paper tremendously. All omissions and misinterpretations are my own.
Urique municipality, 9,196 people speak an indigenous language, the majority of them Tarahumara. Tarahumara speakers from Urique call themselves and their language rarómuri ‘people’, while in the rest of the Tarahumara territories Tarahumara speakers call themselves rarámuri ‘people’.

The present study is based on discourse data and elicited material from my fieldwork in the Urique Tarahumara language. The texts were recorded from six native speakers, transcribed using Transcriber, glossed, and translated into Spanish and English using Toolbox. The translation into Spanish was done with the help of a single consultant. The database consists of twelve texts (2,422 intonational units), including personal histories, narratives, folk stories, recipes, and spontaneous conversations. I begin the next section by explaining the behavior of case-marking and word order.

1. Case-marking and word order

Core arguments in UT are generally not marked for case, and verb indexation cannot distinguish which unmarked third person participant is the subject and which is the object, so word order becomes important as a means to disambiguate. Basic order is APV (1.1.1), but core arguments can freely occur post-verbally for pragmatic reasons (1.1.2).

After investigating order, we consider the one (exceptional) case-marking pattern, which is restricted to 1SG objects (1.2).

1.1. Word order

In UT the order of the arguments with respect to the verb indicates who is the A and who is the P.

1.1.1. Canonical Word Order

In UT, the canonical word order for the pragmatically unmarked intransitive clause is the subject preceding the verb, schematically [SV], as in examples (1) and (2). In the pragmatically unmarked transitive clause, the A precedes the P and the P precedes the verb, schematically [APV], as in examples (3), (4), and (5).

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2 Information taken from the Mexican Census 2010 at http://www.inegi.org.mx
3 I use the term intonational unit following Chafe (1987:22) for “a sequence of words combined under a single, coherent intonation contour, usually preceded by a pause.”
4 In this work I use the labels S, A, and P (following Comrie 1978) for the single argument of an intransitive clause (S), the most agent-like of a transitive clause (A), and the most patient-like of a transitive clause (P).
Then there the chickens got lost, people said." (ACCLOLA: 38)

'The stone turns over.' (ACCLOLA:12)

'Then I am mashing soap.' (AL:10)

'I ground hominy.'

'I that man stabbed Antonio.'

Nevertheless, word order in UT can vary in discourse for pragmatic reasons. Generally, the sequence NP V NP has the interpretation of AVP, as in examples (6) and (7). This is important because when both participants are human, either could logically play either role, and therefore the order of the arguments determines which one is interpreted as A: in (6) the preverbal *alue riowe* ‘that man’, and in (7), Antonio.

That man stabbed Antonio.'

‘Antonio stabbed that man.’

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5 Abbreviations: 1=first person; 2=second person; 3=third person; A=the most agent-like of an intransitive verb; AFF=affirmative; APL=applicative; CONT=continuative; DEM=demonstrative; EXPL=expletive; FOC=focus; FOC2=focus type 2; FUT=future; IMP=imperative; IPFV=imperfective; IRR=irrealis; LOC=locative; MOV=movement; P=the most patient-like of an intransitive verb; PASS=passive; PST=past; PFV=perfective; PL=plural; POS.IN=possession inalienable; POV=posture verb; RED=reduplication; S=the single participant of an intransitive verb; SG=singular; SUBJ=subject; V=verb.

6 Voiceless stops /p/, /t/, /k/, /c/ in UT are preaspirated. For example, /wipia/ realizes as [wihpia]. In this work, orthographic <c> is a voiceless palatal stop and <> is a glottal stop.
However, when a predicate requires a volitional, animate human as the A and only one argument is human while the other is an inanimate object, then the human is always interpreted as the A regardless of the order of the arguments. In (8a), the semantics of the verb make it possible for only the human participant *ne ‘1SG’ to be the agent, but in (8b-c) *ne remains the A even though the pronoun occurs post-verbally.

\[
\begin{align*}
\text{A} & \quad \text{V} & \quad \text{P} \\
\text{a.} & \quad ne-ka & \quad rucu-ge=ne & \quad napili \\
& \quad 1SG-FOC & \quad \text{grind-PST}=1SG & \quad \text{hominy} \\
& \quad \text{‘I ground hominy.’} \\
\text{b.} & \quad napili & \quad rucu-ge=ne & \quad ne-ka \\
& \quad \text{hominy} & \quad \text{grind-PST}=1SG & \quad 1SG-FOC \\
& \quad \text{‘I ground hominy.’} \\
\text{c.} & \quad awe & \quad meco-ga & \quad ne-ka \\
& \quad \text{soap} & \quad \text{mash-cont} & \quad 1SG-FOC \\
& \quad \text{‘I am mashing soap.’}
\end{align*}
\]

When only one argument precedes a predicate that requires two arguments and no context is available, that argument is interpreted as the P and the A is interpreted as a third person (zero marking).

\[
\begin{align*}
\text{P} & \quad \text{V} & \quad \text{A} \\
\text{a.} & \quad ece-le & \quad alue & \quad riowe \\
& \quad \text{stab-PST} & \quad \text{DEM man} \\
& \quad \text{‘(Someone) stabbed that man.’} \\
\text{b.} & \quad Antonio & \quad ece-le \\
& \quad \text{stab-PST} & \quad Antonio \\
& \quad \text{‘(Someone) stabbed Antonio.’}
\end{align*}
\]

In the absence of context, when there is only one NP and it follows the transitive verb, the speaker can find this confusing and unacceptable (11); to make the clause clear, the speaker offered examples in (12).

\[
\begin{align*}
\text{a.} & \quad *ece-le & \quad alue \quad riowe & \quad \text{[The man stabbed (someone)/(someone) stabbed the man.]} \\
\text{b.} & \quad *ece-le & \quad Antonio & \quad \text{[Antonio stabbed (someone)/(someone) stabbed Antonio.]} \\
\text{c.} & \quad Antonio & \quad si-le=kuru & \quad ece-a \\
& \quad \text{be-PST-FOC2 stab-IPFV} & \quad \text{‘It was Antonio stabbing (someone).’}
\end{align*}
\]

Although these examples from elicitation all appear to be clear and unambiguous, in discourse multiple NPs do sometimes occur post-verbally.
These are interpretable due to the occurrence of the clitic =kuru. The clitic =kuru can occur suffixed to the verb of a main clause, creating a boundary after which free core arguments do not occur, only obliques and afterthoughts, as in (13) and (14). In example (13) the NP aló Sabina yuga ‘with Sabina’ is an oblique. In example (14) the NP cuwábuga ‘all’ functions as the P and comes before the verb. The NP that occurs after the verb with =kuru is extra information, specifying what kind of liquid was spilled.

\[(13) \quad \text{pe } \text{bineli ripi}=kuru=ne \quad \text{alo sabina yuga} \]
\[
\text{only alone stay}=\text{FOC2}=1\text{SG DEM Sabina with} \\
\text{‘I stay alone with Sabina.’ (ADJ:27)}
\]

\[(14) \quad \text{ma cuwabuga koli}=kuru \quad \text{bawi-la} \]
\[
\text{just all spill}=\text{FOC2 water-NMLZ} \\
\text{‘(He) just spilled everything, the water soup.’ (ADJ:37b)}
\]

Although the order V NP is not uncommon in texts, it is usually for the purpose of presenting additional information in an afterthought phrase.

### 1.2. Differential object marking: ne-ci

Differential object marking (DOM) occurs when a language overtly marks some objects but not all, with the choice conditioned by a personal or referential hierarchy (Comrie 1981; Bossong 1991; Song 2001; Næss 2007; Siewierska & Bakker 2008, among others). Free pronouns in UT have the same form for subject and object except for the first person singular (see Table 1 and examples in (15) for more details). In this section, I explain that the only object to be marked at all is the first person singular.

<table>
<thead>
<tr>
<th>SUB</th>
<th>OBJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>ne</td>
</tr>
<tr>
<td>2SG</td>
<td>mué</td>
</tr>
<tr>
<td>1PL</td>
<td>rámué</td>
</tr>
<tr>
<td>2PL</td>
<td>éme</td>
</tr>
</tbody>
</table>

\[(15)a. \quad \text{ne-ka}^8 \quad \text{mué} \quad \text{eté-ge}=\text{ne} \]
\[
\text{1SG-FOC 2SG see-PST=1SG} \\
\text{‘I saw you SG.’}
\]

---

7 The clitic =kuru has two allomorphs: =turú, =guru.

8 The focus suffix -ka occurs most of the time in the subject. However, it is not only a subject marker. It can occur also in obliques such as temporals and locatives. Example (i) shows the focus marker -ka occurring in the locative. This example comes from a text where the speaker is talking about the people who came to help her when she had an accident (the capital letters in the translation show the focus).

\[(i) \quad \text{bile nolina}=\text{turú} \quad \text{paca-ka} \]
\[
\text{one come}=\text{FOC2 inside-FOC} \\
\text{‘One comes from INSIDE [of the house].’ (ACCDJ:42b)}
\]

The functions of the focus marker -ka deserve a detailed analysis in a future work.
b. mué-ka ramué eté-ge=mo  
   2SG-FOC 1PL see-PST=2SG  
   ‘You saw us.’

c. né-ka alué eté-ge=ne  
   1SG-FOC 3 see-PST=1SG  
   ‘I saw her/him/them.’

d. ramué-ka éme eté-ru-ge  
   1PL-FOC 2PL see-1PL-PST  
   ‘We saw you PL.’

e. éme-ka ramué eté-le  
   2PL-FOC 1PL see-PST  
   ‘You PL saw us.’

Examples (16a-g) show the pattern of DOM in Urique Tarahumara. Only the first person singular is marked with the locative suffix -ci when it appears as P.9

1SG.P ne-ci may occur either pre- or post-verbally. The form ne-ci is obligatory for 1SG.P when it occurs as a free pronoun.

(16)a. mue-ka wepa=guru=mo ne-ci  
   2SG-FOC hit=foc2=2SG 1SG-LOC  
   ‘You hit me.’

b. rapako mue rewa=turu=mo ne-ci  
   yesterday 2SG find=FOC2=2SG 1SG-LOC  
   ‘Yesterday you found me.’

c. éme-ka ne-ci rewa=turu bako-ci  
   2PL-FOC 1SG-LOC find=FOC2 river-LOC  
   ‘You PL find me at the river.’

d. eme-ka ne-ci wepa=guru  
   2PL-FOC 1SG-LOC hit=FOC2  
   ‘You PL hit me.’

e. alué muki ne-ci ehté-li-ge  
   DEM woman 1SG-LOC kick-3-PST  
   ‘That woman kicked me.’

f. ralómuli ne-ci ehté-li-ge  
   people 1SG-LOC kick-3-PST  
   ‘(Those) people kicked me.’

g. bo’ne pasa ne-ci  
   REFL.SG punch 1SG-LOC  
   ‘(He) himself punches me.’ (ADJ:60)

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9 The main function of the suffix -ci is the locative function, for example: rono-ci ‘in the leg’, gomi-ci ‘at the river’, biti-ci ‘at the house’.
The form neci can be also found in a ditransitive predicate where 1SG is the item given (T), (17a), but not when it is the recipient (R). In this case 1SG occurs as the free pronoun ne (17b). The pronoun neci also occurs to indicate 1SG as the object of the postposition yuga ‘with’, which functions as an oblique noun phrase (17c).

(17)a. alué rió kogo-le ne-cí
    that man give.for.wife-PST 1SG-LOC
    ‘(Someone) gave me to that man.’

   b. mué papá-la mue yá-ri-ge=mo ne
    2SG father-POS 2SG give-3-PST=2SG 1SG
    ‘Your father gave you to me.’

   c. alué rioe ene-gé ne-cí yuga
    that man walk-PST 1SG-LOC with
    ‘That man walked with me.’

I discuss the hierarchy implications of this selective differential object marking in section 3.2.

2. Verbal indexation in UT main clauses

The main goal of this section is to outline the system by which the core argument of the subject and sometimes the speech act participant (SAP) object are indexed in the UT verb. Previous descriptions of Tarahumara morphology have remarked on the extensive allomorphy – at times appearing to be unconstrained variability – in verbal morphology. The description that follows brings some order to the variability by identifying two major morphological classes of verb that condition specific forms of indexation and tense suffixes. I discuss the subject inflectional suffixes used for the 1PL, 2PL, and all third person subjects in 2.1-2.3, then turn to the exceptional singular SAP verbal enclitics in 2.4.

2.1. Subject indexation in the verbal word

This section describes the UT system for indexing 1PL, 2PL, and third person (both 3SG and 3PL) S and A on the verb. 1SG and 2SG are marked by the personal enclitics =ne ‘1SG’ and =mo ‘2SG’ (explained in section 2.4). There are two distinct patterns of allomorphy for subject suffixes, conditioned by the class of the verb root. These distinguish separate allomorphs of the 1PL suffix and the past tense suffix, both of which immediately follow the verb root when used with 1SG and 2SG subjects. For Class 1 verbs, the forms are -ri/-ru ‘1PL’ and -ge ‘PAST’; for Class 2 verbs, -ti ‘1PL’ and -ke ‘PAST’. In both classes, 2PL is a zero form followed by a unique allomorph of the past tense suffix, -le ‘PAST’.

10 The conditioning factor for the variation between -ri and -ru is unknown.
Table 2 Subject and past tense inflections in the two classes of UT verb.

<table>
<thead>
<tr>
<th></th>
<th>CLASS 1</th>
<th>CLASS 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>-Ø</td>
<td>-Ø</td>
</tr>
<tr>
<td>2SG</td>
<td>-Ø</td>
<td>-Ø</td>
</tr>
<tr>
<td>1PL</td>
<td>-ri/-ru -ge =ne</td>
<td>-ti -ge =mo</td>
</tr>
<tr>
<td>2PL</td>
<td>-le</td>
<td>-le</td>
</tr>
<tr>
<td>3SG/PL</td>
<td>-li -ge =ne</td>
<td>-li -ge =ne</td>
</tr>
</tbody>
</table>

Example (18a) illustrates pattern 1 with -ri ‘1PL’; (18b) with the suffix -ru ‘1PL’.

(18)a. *ripí-ge=ne* ‘I stayed.’
*ripí-ge=mo* ‘You stayed.’
*ripí-ri-ge* ‘We stayed.’
*ripí-le* ‘You PL stayed.’
*ripí-li-ge* ‘S/he/they stayed.’

b. *bini-gé=ne* ‘I knew (it).’
*bini-gé=mo* ‘You knew (it).’
*bini-rú-ge* ‘We knew (it).’
*bini-le* ‘You knew (it).’
*bini-li-ge* ‘S/he/they knew (it).’

Other Class 1 verbs that take -ri ‘1PL’ are *ripí-me* ‘remain’, *wipí-me* ‘bend down (plants)’, *ayó-me* ‘get angry’, *buná-me* ‘bend down (people)’, *napó-me* ‘weed (by hand)’, *maxá-me* ‘get scared’, *uxí-me* ‘fart’, *cigó-me* ‘steal’, *napíwa-me* ‘weed (with a tool)’, and *sebá-me* ‘come’. Other Class 1 verbs that take -ru ‘1PL’ are *raxá-me* ‘burn’, *sawi-me* ‘get well/give birth’, *eléna-me* ‘bleed’, *witá-me* ‘defecate’, *aci-me* ‘laugh’, *ciwí-me* ‘die PL’, *neté-me* ‘kick’, *ka’wi-me* ‘transport’ (For an exhaustive list, see the Appendix). Example (19) illustrates the paradigm for a class 2 verb.

(19) *pagó-ke=ne* ‘I washed (it).’
*pagó-ke=mo* ‘You washed (it).’

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A note about two methodological decisions used in this work. First, it is not possible in UT for an unconjugated verb root to appear as an independent word. Following the practice of the speakers with whom I work, I use as the citation form the root plus the suffix -me ‘NMLZ’: [V-me]. Second, the majority of the examples in this work are in the past tense because it is in the past tense that the indexation for S and A shows for all the persons. In the future tense, the first and second person clitics may occur, as in (i a-b), but not the verbal suffixes for 1PL, 2PL, or 3 (i c-f). As the purpose of the current work is to describe these personal indices, the remainder of the examples will all be presented using past tense forms.

(i) a. *né-ka ciná-mala(=ne)* ‘I am going to scream.’
    b. *mué-ka ciná-mala(=mo)* ‘You are going to scream.’
    c. *alué mukí-ka ciná-mala* ‘That woman is going to scream.’
    d. *ramué-ka ciná-po* ‘We are going to scream.’
    e. *éme-ka ciná-mala* ‘You PL are going to scream.’
    f. *ralómuli-ka ciná-mala* ‘People are going to scream.’

In UT, the future tense suffix -mala occurs with all the persons except the first person plural, which occurs with the suffix -po (or its allomorph -bo).
pagó-ti-ge  ‘We washed (it).’
pagó-le  ‘You PL washed (it).’
pagó-li-ge  ‘S/he/they washed (it).’

Other class 2 verbs are emé-me ‘fall down’, rikú-me ‘get dizzy/drunken’, cibu-me ‘hide’, bicí-me ‘peel the cactus’, ticí-me ‘comb’, sasiro-me ‘slip’, pagó-me ‘wash’, balámu-me ‘be thirsty’, cukuré-me ‘scratch’, ciná-me ‘scream’, inámu-me ‘understand’, neté-me ‘do, make’, batú-me ‘grind on a stone’ (For an exhaustive list, see the Appendix).

In addition to the SAP singular enclitics and the verbal suffixes illustrated in this section, subject indexation sometimes also involves irregular changes in one or more vowels in the root and/or in the lexical stress pattern (sections 2.3). I discuss and illustrate this irregularity in specific sections, but I also mention it at the outset to avoid possible confusion when these other elements interfere with otherwise regular patterns of indexation in specific examples. The next section addresses the use of the third person plural inflectional suffix for 2PL subjects.

### 2.2. Using the 3PL form for 2PL

For the majority of verbs in my UT database the third person plural indexation pattern can also be used to indicate the second person plural. As described above, the second person plural regularly has no indexation suffix in the verb, but the past tense suffix takes the unique allomorph -le. In contrast, the third person singular and plural are marked by the suffix -li preceding the past tense allomorph -ge. However, speakers consistently allow the third person form -li-ge to be the indexation also for second person plural subjects. When the 3SG and 3PL forms are distinct, only the 3PL form marks 2PL. Example (20) shows both second person plural forms for the verb nolá-me ‘bring’: the first is the form with zero and -le, and the second is the form identical to the third person plural. In this particular case, penultimate stress distinguishes the third person singular form, whereas both second and third person plural forms show antepenultimate stress.

(20)  
nóli-ge=ne  ‘I brought (it).’
nóli-ge=mo  ‘You SG brought (it).’
nólí-li-ge  ‘S/he brought (it).’
nolá-ri-ge  ‘We brought (it).’
nóli-le  ‘You PL brought (it).’
nóli-li-ge  ‘You PL brought (it).’
nóli-li-ge  ‘They brought (it).’

There is also a small group of verbs in which the third person plural is marked with the same form as the second person plural; in this case, there is a single 2PL form (i.e., no alternation with a more regular third person form) (21).
This sort of variation in marking 2PL verb indexation is not reported for other Uto-Aztecan languages, nor for other dialects of Tarahumara. I propose that this is an innovation in UT (see section 3), probably based on contact with the local dialect of Spanish which, as is common throughout Spanish in Latin America, uses a single verb inflection to mark both 2PL and 3PL. Having presented the most regular portions of the paradigms, I now turn to the irregularities.

2.3. Irregularity

This section describes the high degree of irregularity present in the Urique Tarahumara morphology. Although the UT system is highly irregular, the relevant person and tense distinctions are still systematically encoded in UT morphology.

2.3.1. Irregularity in suffixes

UT has some verbs whose suffixes do not fall into the regular patterns; I discuss these in this section. Some of the irregular patterns in my database are unique, represented only by one example, whereas others are similar enough to be grouped together even though they are not identical.

The first irregular class contains two verbs that occur with the allomorph -e for past tense with 1SG, 2SG, and 2PL subjects (22 a-b).12

(22)a. aci-é=ne ‘I laughed.’
aci-é=mo ‘You SG laughed’
aci-rú-ge ‘We laughed.’
aci-é ‘You PL laughed.’
aci-li-ge ‘S/he/they laughed.’
b. eté-e=ne ‘I saw (it).’
eté-e=mo ‘You SG saw (it).’
eté-ri-ge ‘We saw (it).’
eté-ri-e ‘You PL saw (it).’
eté-ri-ge ‘S/he/they saw (it).’

The second is a group of five verbs in which the form of the past tense suffix differs between the first and second person singular verbs (23 a-c). In four of these verbs, the difference appears to be rounding harmony between a preceding rounded final vowel of the verb root and the following rounded vowel of the

12 In future work it will be important to address the allomorphy of the past tense suffix that usually occurs as -ge but also can occur as -le, -e, -ke, and -re.
second person plural clitic (23 a-b). Vowel harmony has been documented for other variants of Tarahumara. Caballero (2008:158) mentions that Choguita Rarámuri has a rounding harmony process. Another unpredictable case in UT is ciná-me ‘yell’ (23c), in which the first person singular takes an irregular past tense suffix -ka (ciná-ka=ne ‘I yelled’), while the second person singular takes the expected allomorph -ke (ciná-ke=mo ‘you yelled’).

(23)a. ayó-ge=ne ‘I got angry.’
yó-go=mo ‘You SG got angry.’
ayó-ri-ge ‘We got angry.’
ayó-le ‘You PL got angry.’
ayó-li-ge ‘S/he/they got angry.’

b. napabú-ge=ne ‘I harvested.’
napabú-gu=mo ‘You SG harvested.’
napabú-ri-ge ‘We harvested.’
napabú-le ‘You PL harvested.’
napabú-li-ge ‘S/he/they harvested.’

c. ciná-ka=ne ‘I yelled.’
ciná-ke=mo ‘You SG yelled.’
ciná-ti-ge ‘We yelled.’
ciná-le ‘You PL yelled.’
ciná-li-ge ‘S/he/they yelled.’

In example (24), the verbs use an idiosyncratic person suffix to mark one or more of the persons such as -bi ‘2PL, 3PL’ (24a), and -wa ‘1PL’ (24 b-c), which is then followed by the allomorph -e ‘PAST’ (24 b-c). In (25), the plural verb ucú ‘be standing for animals with four or more legs/ be bending down for humans’ (singular verb cuku) marks the third person plural with the suffix -to and the past tense with the allomorph -e. In some examples, the vowel of -to disappears, leaving the sequence -t-e to mark both 3PL and PAST. These are the only examples in my database with -bi, -wa, or -to as person markers.13

(24)a. simi-gé=ne ‘I went.’
simi-gé=mo ‘You SG went.’
simi-li-ge ‘S/he went.’
simá-ri-ge ‘We went.’
simi-bi-le ‘You PL went.’
simi-bi-le ‘They went.’

b. kori-é-ke=ne ‘I said.’
kori-é-ke=mo ‘You SG said.’
kori-wá-e ‘We said.’
kori-Ø-é ‘S/he/they/you PL said.’

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13 The suffixes -bi and -to are homophone with -bi (an allomorph of -pì) ‘INCHOATIVE’ and -to (an allomorph of -ro) ‘MOVEMENT’. Any attempt to establish a functional connection between them seems untenable, at least at this point in the analysis. That is, they are different morphemes.
c. maci-é=ne ‘I met (him/her),’
   maci-é=mo ‘You SG met (him/her),’
   maci-wú=e ‘We met (him/her),’
   maci-Ø-é ‘You PL met (him/her),’
   mació-ri-e ‘S/he/they met (him/her),’

(25) ucú-tí-ge ‘We are bending down.’
    ucú-le ‘You PL are bending down.’
    ucú-to-e ‘They are bending down.’
    ucú-t-e ‘They are bending down.’

In example (26), the verb elowi-me ‘be hungry’ is particularly irregular. Whereas -ri usually marks 1PL in the Class 1 paradigm, it marks 2PL and 3SG/PL with elowi-me, and in all cases is followed by the allomorph -e ‘PAST’. A shift on stress differentiates 2PL from 3SG/PL. The third person SG/PL has a root-final stressed i in a morphologically complex word that consists of the subject marker -ri and the past tense -e, elowi-ri-e; the second person plural has an ultimate syllable stress in a morphologically complex word that consists of the same sequence of morphemes, elowi-ri-é. We could assume that the 2PL is just an extension of the 3PL form (cf. section 2.2), and it is also worth noting that the sequence -ri-e occurs in other irregular verbs marking only the second person plural, e.g. eté-me ‘see’ (22b), or marking only the third person, e.g. maci-me ‘know’ (24c).

(26) elowi-ke=ne ‘I am hungry.’
    elowi-ke=mo ‘You SG are hungry.’
    elowi-ri-e ‘S/he/they is/are hungry.’
    elowi-ti-ge ‘We are hungry.’
    elowi-ri-é ‘You PL/they are hungry.’

A last observation is that some verbs occur with a combination of these irregularities. For instance, the verb mací-me ‘know’ takes the past tense allomorph -e for all persons, marks only the third person with the suffix -ri, and marks the first person plural with the suffix -wa (24c). The degree of morphological irregularity is quite high (including some verb roots, cf. the next section), but it is nevertheless still true that every verb has a consistent conjugational pattern. That is, while a linguistic analysis would be hard pressed to identify a single underlying form for each morpheme, most verbs do show five distinct inflected forms in the past, one each for 1SG, 1PL, 2SG, 2PL, and 3SG/PL. Thus the UT language learner confronts a significant problem in memorization of irregularity, but this is not insurmountable, especially given that some generalizations can be found that group irregularities together (e.g. Class 1 versus Class 2 roots). No linguist to date has been able to propose a motivated synchronic rule-governed derivation for each form, but in future work I hope to be able to find a historical basis for much of the modern allomorphy.
2.3.2. Irregularities in roots

As seen in the examples in this paper, there is a great deal of variation in the UT verb throughout most paradigms, in the forms of both the root and the suffixes. However, not all of the variation is as systematic as the suffix allomorphy conditioned by verb class. For example, the variation can be simply alternation of stress between penultimate and antepenultimate syllables (27), a vowel change in the verb root (28), or loss of a consonant, as in the 1PL form in (29).

(27)  
\begin{align*} 
  \text{bini-} & \text{ge=ne} \quad \text{‘I knew.’} \\
  \text{bini-} & \text{ge=mo} \quad \text{‘You knew.’} \\
  \text{bini-} \text{rú-} & \text{ge} \quad \text{‘We knew.’} \\
  \text{bini-} & \text{le} \quad \text{‘You PL knew.’} \\
  \text{bini-} \text{li-} & \text{ge} \quad \text{‘S/he/they knew.’} \\
\end{align*}

(28)  
\begin{align*} 
  \text{atís} & \text{i-} \text{ge=ne} \quad \text{‘I sneezed.’} \\
  \text{atís} & \text{i-} \text{ge=mo} \quad \text{‘You sneezed.’} \\
  \text{atís} \text{u-} \text{ri-} & \text{ge} \quad \text{‘We sneezed.’} \\
  \text{atís} & \text{i-} \text{le} \quad \text{‘You PL sneezed.’} \\
  \text{atís} \text{u-} \text{li-} & \text{ge} \quad \text{‘S/he/they sneezed.’} \\
\end{align*}

(29)  
\begin{align*} 
  \text{napíwa-} & \text{ge=ne} \quad \text{‘I weeded.’ [with a mattock]} \\
  \text{napíwa-} & \text{ge=mo} \quad \text{‘You weeded.’} \\
  \text{napiá-} \text{ri-} & \text{ge} \quad \text{‘We weeded.’} \\
  \text{napiwi-} & \text{le} \quad \text{‘You PL weeded.’} \\
  \text{napiwi-} \text{li-} & \text{ge} \quad \text{‘S/he/they weeded.’} \\
\end{align*}

For one verb root *raíca-me* ‘speak’, the root alternations combine with idiosyncratic indexation suffixes to distinguish the same set of person oppositions as the standard verbs (30). Unusually, the suffix -ri co-occurs with 3SG, 1PL, and 3PL subjects, which are distinguished instead by differences in the form of the root: the 3SG root is the only one that lacks the glottal, whereas the 1PL and 3PL roots are distinguished by different stress patterns (final and penultimate respectively).

(30)  
\begin{align*} 
  \text{ra’ici-} & \text{ge=ne} \quad \text{‘I spoke.’} \\
  \text{ra’ici-} & \text{ge=mo} \quad \text{‘You spoke.’} \\
  \text{raíca-} \text{ri-} & \text{ge} \quad \text{‘S/he spoke.’} \\
  \text{ra’icá-} \text{ri-} & \text{ge} \quad \text{‘We spoke.’} \\
  \text{ra’ici-} \text{li-} & \text{ge} \quad \text{‘You PL spoke.’} \\
  \text{ra’ica-} \text{ri-} & \text{ge} \quad \text{‘They spoke.’} \\
\end{align*}

The next section addresses the more unusual speech act participant (SAP) clitics, unusual both in the sense that these clitics mark the subject in a different way than the other subject verbal morphology, and in that they sometimes also occur even when the SAP participant is not the subject.
2.4. The verbal enclitics for 1SG & 2SG: S, A, P and hierarchical indexation

The verbal enclitics =ne ‘1SG’ and =mo ‘2SG’ mark S and A. They can mark P but only when the third person is acting on the first and second persons singular. There is no other verbal morphology to indicate a singular SAP subject. The first four examples show these enclitics marking S on an intransitive verb. The clitic may or may not co-occur with a coreferential free pronoun: the free pronoun and the enclitic co-occur in (31a, b), the enclitic occurs alone in (32a, b), the free pronoun occurs alone in (33a, b).

(31)a. *ne-ka eyena-mola=ne tu-mi*
1SG-FOC walk.SG-FUT=1SG down.there-DEM
‘I am going to walk down there.’

(b. *mue-ka eyena-mola=mo mina-mi*
2sg-FOC walk.SG-FUT=2SG there-DEM
‘You are going to walk there.’

(32)a. *kulipi noli-mola=ne*
near.FUT come.SG-FUT=1SG
‘I will come in a moment.’

(b. *kulipi noli-mola=mo*
near.FUT come.SG-FUT=2SG
‘You will come in a moment.’

(33)a. *ne-ka ena-mola mina-mi*
1SG-FOC walk.SG-FUT there-DEM
‘I am going to walk there.’

(b. *mue-ka ena-mola mina-mi*
2SG-FOC walk.SG-FUT there-DEM
‘You are going to walk there.’

The primary function of the clitics for first and second person singular =ne and =mo is to mark the subject.

(34)a. *ne-ka mué eté-ge=ne*
1SG-FOC 2SG see-PST=1SG
‘I saw you.’

(b. *né-ka alué mukí eté-ge=ne* ‘I saw that woman.’

c. *né-ka éme eté-ge=ne* ‘I saw you PL.’

d. *né-ka alué umugí eté-ge=ne* ‘I saw those women.’

(35)a. *mué-ka ne-cí eté-ge=mo*
2SG-FOC 1SG-LOC see-PST=2SG
‘You saw me.’

(b. *mué-ka alué rió eté-ge=mo* ‘You saw that man.’

c. *mué-ka alué mukí eté-ge=mo* ‘You saw that woman.’

d. *mué-ka ramué eté-ge=mo* ‘You saw us.’

e. *mué-ka alué umugí eté-ge=mo* ‘You saw those women.’
The subject free pronoun can be omitted. The object free pronoun can occur before or after the verbal word, but in either case the clitic is interpreted as the subject.

(36)a. \( \text{eté}=\text{ne} \quad \text{mué} \)
     see=1SG  \quad 2SG
     ‘I saw you.’

b  \( \text{mué} \quad \text{eté}=\text{ne} \)
     2SG  \quad see=1SG
     ‘I saw you.’

(37)a. \( \text{ne-cí} \quad \text{eté-ge}=\text{mo} \)
     1SG-LOC  \quad see-PST=2SG
     ‘You saw me.’

b. \( \text{eté-ge}=\text{mo} \quad \text{ne-cí} \)
     see-PST=2SG  \quad 1SG-LOC
     ‘You saw me.’

Both free pronouns can be omitted. When this happen the clitic is interpreted as the subject and the third person object is zero marking.

(38)a. \( \text{eté-ge}=\text{ne} \)  \( \text{‘I saw (it).’} \)

b. \( \text{eté-ge}=\text{mo} \)  \( \text{‘You saw (it).’} \)

It is ungrammatical for two enclitics to occur together (39). It is also ungrammatical when a subject pronoun and an enclitic both occur, but do not agree: that is, the enclitic cannot mark 1SG P when the subject is 2SG A (40b), nor can it mark 2SG P when the subject is 1SG A (40a).

(39)  
\*\( \text{ne-ka} \quad \text{mué} \quad \text{eté}=\text{ne}=\text{mo} \)
\*\( \text{ne-ka} \quad \text{mué} \quad \text{eté}=\text{mo}=\text{ne} \)
\*\( \text{mueka} \quad \text{neci} \quad \text{eté-ge}=\text{mo}=\text{ne} \)
\*\( \text{mueka} \quad \text{neci} \quad \text{eté-ge}=\text{ne}=\text{mo} \)

(40)a. \( \*\text{ne-ka} \quad \text{mué} \quad \text{eté}=\text{mo} \)

b. \( \*\text{mue-ka} \quad \text{neci} \quad \text{eté-ge}=\text{ne} \)

However, these enclitics can mark 1SG P or 2SG P when A is the third person. The 3A is indexed via the suffix \(-\text{li}\) (cf. section 3.1) and, optionally, the verb can also bear the enclitic \(=\text{ne}\) ‘1SG’ (41) and (42). In the same way, when 3A acts on 2SG P, the verb bears both \(-\text{li}\) ‘3’ and the enclitic \(=\text{mo}\) ‘2SG’ (43).

(41) \( \text{ape} \quad \text{ruye-li-ge}=\text{ne} \quad \text{ne-ka} \quad \text{yabe} \quad \text{cigo} \)
     like.that  \quad \text{tell-3-PST=1SG} \quad 1SG-FOC  \quad \text{before too}
     ‘Someone told me that, to me, a long time ago.’ (COL:20)

(42) \( \text{apiriga} \quad \text{lola-ri-ge}=\text{ne} \quad \text{yabe} \)
     like  \quad \text{do.something.bad-3-PST=1SG}  \quad \text{before}
     ‘A long time ago, someone did something bad to me.’ (ADJ:5)
The enclitic =ne cannot co-occur with necí.

*alué muki ne-ci eté-ge=ne  
*‘That woman kicked me.’

The second person T can occur as the clitic =mo when the third person is the A.

mué papá-la mue yá-ri-ge=mo ne  
‘Your father gave you to me.’

The enclitic =ne cannot co-occur agreeing with an oblique noun phrase.

*alué río e eté-ge=ne ne-ci yuga

In summary, the verbal indexation of 1SG and 2SG core arguments differs from the other markers. They are final enclitics, rather than suffixes that precede tense markers. While they occur frequently, the enclitics are not obligatory. In function, these enclitics are not only subject morphemes, they also mark an SAP P, R, and T (for the second person) when A is the third person.

3. Conclusions: Typology and alignment in UT

There are two major points made in this paper that make alignment in UT interesting: the typologically surprising degree of irregularity (3.1), and the hierarchical alignment pattern (3.2).

3.1. Irregularity and homophony in person-marking

The high degree of irregularity in Tarahumara morphophonology and syntax has been mentioned by authors including Copeland (1992, 1994) and Brambila (1953, 1976). Copeland (1994: 6) asserts that there is a “widespread unmotivated variation in the shapes of Tarahumara words and morphemes.” Copeland (1994: 7) also says of the morphology that “there is a great deal of individual freedom in the choice of bound forms and functors for expressing grammatical and semantic functions.” As I showed in section 2.3, there is extensive irregularity in UT. However, this variation is not nearly as unpredictable as has been claimed for other dialects. Despite being highly irregular, the relevant person and tense distinctions are still systematically encoded in UT morphology.

A system with such a high degree of irregularity is ripe for reanalysis to make it simpler to learn, especially for second-language learners. This might be a possible motivation for the use of third person forms to mark the second person plural and for the loss of the personal suffixes everywhere except in the
past tense verb forms. Another possible factor in the regularization of the pattern using third person plural indexation to indicate the second person plural is the contact of UT with the Mexican dialect of Spanish, which uses a single verb inflection to mark both 2pl and 3pl. In future work, I hope to explore the genesis of the various tense markers in UT, so as to better understand why only the past tense retains the full set of person distinctions. This could also motivate reanalysis of first and second person pronouns as verbal enclitics (section 2.4), which has had the effect of introducing a type of hierarchical indexation previously unattested in the Uto-Aztecan family.

As a final note, this description of UT highlights the difference between variation and irregularity. Some have commented on the extreme degree of variability in Tarahumara grammar (e.g. the Copeland quote above), and suggested that this makes the grammar difficult to describe. In my research, I have seen such variation in the domain of syntax (e.g. in word order, case-marking, and occurrence of verbal enclitics). In the domain of morphology, we find extreme irregularity but with little variation. Irregularity is unpredictable and can appear unmotivated, and we certainly cannot predict how a verb paradigm is going to look based on the verb form. Once we know the paradigm of a verb, the shapes of the individual morphemes do not alternate with other shapes – that is, the entire paradigm is invariant. For example, we cannot predict in advance which allomorphs of the verb, the index suffixes, or the past tense suffix will occur in the paradigm of the verb raíca-me ‘speak’ (section 2.3.2): idiosyncratic allomorphy is present in all three domains. Once we know the paradigm, we see that all the persons are differentiated from each other by some means and that these means do not vary.

3.2. Hierarchical effects in morphology

The referential hierarchy has been an object of concentrated theoretical and typological attention in recent years (Silverstein 1976; Hopper & Thompson 1980; DeLancey 1981; Givón 2001; Croft 2003; Bickel 2008). Nomininals can be ranked depending on features such as [+/-human], [+/-personal], [+/-kinship], [+/-animate], [+/-discrete] and [+/- concrete], but also gender (male > female), size (large > small), and age (adult > child) among others (Zúñiga 2006: 21). Zúñiga (2006: 21) proposes a simplified indexability hierarchy: SAP> 3rd person pronoun > [+human] > [+animate] > [+animate]. Differential Object Marking is the grammatical marking by which more highly animate and definite objects may be marked as objects, but not others. Typical parameters for placing an object higher in the hierarchy and therefore more likely to be marked include animacy, definiteness, and topicality, but also crucially personal deixis: 1 & 2 >
3, and sometimes 1 & 2 are also ranked vis-à-vis one another (Comrie 1981; Silverstein 1976; Iemmolo 2010; Iemmolo & Schikowski 2012).

In UT, the first hierarchy effect is the use of 1SG and 2SG verbal enclitics regardless of the role (S, A, or P) of the participant, whereas other person-marking morphemes index only the subject. In this way, UT grammar clearly indicates that the first and second persons outrank the third person. This is not an uncommon pattern in the languages of the world, but to my knowledge, it has not been reported in any other Uto-Aztecan language. The second hierarchy effect is the differential marking of 1SG objects, which uniquely may be marked with the locative suffix -ci. This special marking suggests that in the UT hierarchy 1SG outranks 2SG, giving us the composite hierarchy 1SG > 2SG > 3. In my survey of the typological literature, I have been able to find only one other language in which first person P pronouns uniquely receive accusative case-marking. In this case it is limited to one specific syntactic context in imperative clauses in Lardil (Australia) where accusative case-marking is not found, except that the “accusative must be marked on a first person pronoun” (Dixon 1994: 89-90). In Urique Tarahumara also, this unique accusative marking on the first person singular is not completely consistent, but it is also found only on 1SG.

One might argue that another hierarchical effect in UT is the form of subject indexation in the verb. In UT, first and second person verbal indexation have different forms for singular and plural. In other words, UT uses clitics for verbal indexation only for first and second persons singular. It has a subject indexation form unique for first person plural and the zero subject indexation is exclusive for second person plural. However, the indexation of third person subject has the same form for singular and plural. Although these markers clearly treat first and second person subjects differently from third person subjects, we cannot automatically attribute this difference to the hierarchy. The more marked subjects (first and second person) are actually higher on the hierarchy and therefore more likely to be subjects (and thus less in need of being marked), whereas the less-marked subjects (third person) are lower on the hierarchy and therefore more in need of being marked when they occur in the subject role. This means that the difference is not due to the expectedness or unexpectedness of direction of information flow.

As far as I know, no hierarchical grammatical phenomena have been documented for other dialects of Tarahumara, nor for any other Uto-Aztecan language. This may mean that the UT hierarchical grammar is a recent innovation. In future work, I hope to do an explicit reconstruction of the morphemes involved.

14 Dixon (1994: 90) also indicates in a footnote that Arrernte (Australian) marks the ergative only on first person pronouns, distinguishing the first person from all others in quite a different way.
in the UT hierarchical patterns, and also to explore possible mechanisms by which the system was put into place. Also, since both the verbal enclitics and the DOM occur variably, I will examine the distribution of these morphemes in discourse, and perhaps stylistically and sociolinguistically as well. Understanding the origins of these systems in UT can make a contribution to understanding how hierarchical systems develop in general.

References


## Appendix

### Table 1. Class 1 Verbs with -ri ‘1PL’

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ayó-me</td>
<td>‘get angry’</td>
<td>atisu-me</td>
<td>‘sneeze’</td>
</tr>
<tr>
<td>wipí-me</td>
<td>‘bend down (plants)’</td>
<td>oporú-me</td>
<td>‘get angry’</td>
</tr>
<tr>
<td>ropóca-me</td>
<td>‘bend down (human)’</td>
<td>nakósi-me</td>
<td>‘fight’</td>
</tr>
<tr>
<td>wipína-me</td>
<td>‘turn over dirt’</td>
<td>napabú-me</td>
<td>‘put together’</td>
</tr>
<tr>
<td>buná-me</td>
<td>‘bend down (human)’</td>
<td>galirá-me</td>
<td>‘built a house’</td>
</tr>
<tr>
<td>witilítí-me</td>
<td>‘be hanging’</td>
<td>gasína-me</td>
<td>‘break’</td>
</tr>
<tr>
<td>napí-me</td>
<td>‘weeds (by hand)’</td>
<td>xawá-me</td>
<td>‘put standing OBJ PL’</td>
</tr>
<tr>
<td>napíwa-me</td>
<td>‘weeds (with a tool)’</td>
<td>gapó-me</td>
<td>‘break a bone’</td>
</tr>
<tr>
<td>sèba-me</td>
<td>‘come’</td>
<td>apá-me</td>
<td>‘bring’</td>
</tr>
<tr>
<td>ripí-me</td>
<td>‘stay’</td>
<td>e’né-me</td>
<td>‘see’</td>
</tr>
<tr>
<td>cokiá-me</td>
<td>‘start’</td>
<td>simá-me</td>
<td>‘go’</td>
</tr>
<tr>
<td>nolina-me</td>
<td>‘arrive’</td>
<td>colá-me</td>
<td>‘do something bad’</td>
</tr>
<tr>
<td>nakósi-me</td>
<td>‘fight’</td>
<td>apé-me</td>
<td>‘carry’</td>
</tr>
<tr>
<td>maxá-me</td>
<td>‘get scared’</td>
<td>ucé-me</td>
<td>‘rub on something’</td>
</tr>
<tr>
<td>cukéri-me</td>
<td>‘be contagious’</td>
<td>elá-me</td>
<td>‘put standing OBJ SG’</td>
</tr>
<tr>
<td>océru-me</td>
<td>‘grow up’</td>
<td>reká-me</td>
<td>‘put lying OBJ SG’</td>
</tr>
<tr>
<td>uxi-me</td>
<td>‘fart’</td>
<td>ucá-me</td>
<td>‘put face down OBJ SG’</td>
</tr>
<tr>
<td>isí-me</td>
<td>‘urinate’</td>
<td>kol’é-me</td>
<td>‘spill’</td>
</tr>
<tr>
<td>moè-me</td>
<td>‘be good’</td>
<td>ripú-me</td>
<td>‘cut with a knife’</td>
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<tr>
<td>mayé-me</td>
<td>‘think’</td>
<td>meté-me</td>
<td>‘cut with a machete’</td>
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<tr>
<td>cigó-me</td>
<td>‘steal’</td>
<td>bisi-me</td>
<td>‘skin (an animal)’</td>
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<td>osomá-me</td>
<td>‘wash the head’</td>
<td>cirú-me</td>
<td>‘hunt’</td>
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<tr>
<td>inovélá-me</td>
<td>‘jealous’</td>
<td>opolú-me</td>
<td>‘cover’</td>
</tr>
<tr>
<td>yég-a-me</td>
<td>‘lie’</td>
<td>ocó-me</td>
<td>‘punch’</td>
</tr>
<tr>
<td>eyéna-me</td>
<td>‘walk’</td>
<td>bacibú-me</td>
<td>‘throw stones at (not human OBJ)’</td>
</tr>
<tr>
<td>nayá-me</td>
<td>‘feed the fire’</td>
<td>yá-me</td>
<td>‘give 1’</td>
</tr>
<tr>
<td>ubá-me</td>
<td>‘to bath’</td>
<td>nixí-me</td>
<td>‘give 2’</td>
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</table>

### Table 2. Class 1 verbs with -ru ‘1PL’

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>raxá-me</td>
<td>‘burn’</td>
<td>biti-me</td>
<td>‘be lying down PL’</td>
</tr>
<tr>
<td>raná-me</td>
<td>‘give birth’</td>
<td>rewá-me</td>
<td>‘find’</td>
</tr>
<tr>
<td>sawí-me</td>
<td>‘get well/give birth’</td>
<td>ka’wi-me</td>
<td>‘transport’</td>
</tr>
<tr>
<td>eléna-me</td>
<td>‘bleed’</td>
<td>aké-me</td>
<td>‘hear’</td>
</tr>
<tr>
<td>witá-me</td>
<td>‘defecate’</td>
<td>nátá-me</td>
<td>‘remember’</td>
</tr>
<tr>
<td>ací-me</td>
<td>‘laugh’</td>
<td>me’á-me</td>
<td>‘kill’</td>
</tr>
<tr>
<td>otó-me</td>
<td>‘take’</td>
<td>ciwi-me</td>
<td>‘die PL’</td>
</tr>
<tr>
<td>ani-me</td>
<td>‘say’</td>
<td>neté-me</td>
<td>‘kick’</td>
</tr>
<tr>
<td>bini-me</td>
<td>‘bring’</td>
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</table>
### Table 3. Class 2 verbs with -ti ‘1PL’

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>inámu-me</td>
<td>‘understand’</td>
</tr>
<tr>
<td>rikú-me</td>
<td>‘get dizzy’</td>
</tr>
<tr>
<td>tegú-me</td>
<td>‘get dizzy PL’</td>
</tr>
<tr>
<td>cibú-me</td>
<td>‘hide’</td>
</tr>
<tr>
<td>bokwí-me</td>
<td>‘disappear in the distance’</td>
</tr>
<tr>
<td>elowi-me</td>
<td>‘be hungry’</td>
</tr>
<tr>
<td>okó-me</td>
<td>‘hurt’</td>
</tr>
<tr>
<td>cukuré-me</td>
<td>‘scratch’</td>
</tr>
<tr>
<td>emé-me</td>
<td>‘fall down’</td>
</tr>
<tr>
<td>bici-me</td>
<td>‘peel (fruit and vegetables)’</td>
</tr>
<tr>
<td>ticí-me</td>
<td>‘comb’</td>
</tr>
<tr>
<td>sasiro-me</td>
<td>‘slip’</td>
</tr>
<tr>
<td>pagó-me</td>
<td>‘wash’</td>
</tr>
<tr>
<td>balámu-me</td>
<td>‘be thirsty’</td>
</tr>
<tr>
<td>ciná-me</td>
<td>‘scream/yell’</td>
</tr>
<tr>
<td>neté-me</td>
<td>‘make’</td>
</tr>
<tr>
<td>batú-me</td>
<td>‘grind’</td>
</tr>
<tr>
<td>tegú-me</td>
<td>‘get dizzy/drunk PL’</td>
</tr>
<tr>
<td>xími-me</td>
<td>‘run PL’</td>
</tr>
<tr>
<td>lucú-me</td>
<td>‘fall off/down’</td>
</tr>
<tr>
<td>na’áwi-me</td>
<td>‘argue PL’</td>
</tr>
<tr>
<td>cikiré-me</td>
<td>‘cut’</td>
</tr>
<tr>
<td>tó-me</td>
<td>‘bury’</td>
</tr>
<tr>
<td>nepabá-me</td>
<td>‘throw stones’ (reciprocal)</td>
</tr>
</tbody>
</table>

### Table 4. Exceptions

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ro’íni-me</td>
<td>‘turn over’</td>
</tr>
<tr>
<td>wicó-me</td>
<td>‘wash’</td>
</tr>
<tr>
<td>maná-me</td>
<td>‘put face up SG’</td>
</tr>
<tr>
<td>ro’á-me</td>
<td>‘pour’</td>
</tr>
<tr>
<td>ra’í-me</td>
<td>‘taste’</td>
</tr>
<tr>
<td>korí-me</td>
<td>‘say’</td>
</tr>
<tr>
<td>ciná-me</td>
<td>‘yell’</td>
</tr>
<tr>
<td>ayó-me</td>
<td>‘get upset’</td>
</tr>
<tr>
<td>bokwí-me</td>
<td>‘disappear in the distance’</td>
</tr>
<tr>
<td>ra’ica-me</td>
<td>‘speak’</td>
</tr>
<tr>
<td>simí-me</td>
<td>‘go’</td>
</tr>
<tr>
<td>xubá-me</td>
<td>‘smell’</td>
</tr>
<tr>
<td>ya-ga eyena</td>
<td>‘look for’</td>
</tr>
</tbody>
</table>