AN ANALYSIS OF KUNIMAIPA PRONOUNS

This paper describes a small fraction of the Kunimaipa noun phrase. The formal grammar of it is stated in four Phrase-Structure rules and two Transformations. These rules are excerpted from my unpublished paper, "A Brief Kunimaipa Grammar."¹

1. Pronoun Contrast. Before presenting the themselves, I would like to discuss the range of pronoun contrasts. Figure (1) is a display of all of Kunimaipa pronouns.

<table>
<thead>
<tr>
<th>Singular</th>
<th>Dual (X)</th>
<th>Plural (X)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st person ne (1)</td>
<td>reipi (2)</td>
<td>rei(paro)</td>
</tr>
<tr>
<td>inclusive reipi (sp person + 1)</td>
<td>rari (sp + X)</td>
<td>rari(paro)</td>
</tr>
<tr>
<td>2nd person ni (1)</td>
<td>aripi (2)</td>
<td>ari(paro) (X)</td>
</tr>
<tr>
<td>3rd person pi (1)</td>
<td>parupi (2)</td>
<td>paru(paro) (X)</td>
</tr>
</tbody>
</table>

It will be noted that the terms 'singular' and 'dual' are used in a distinct sense. At first glance the form rari is trial and reipi simply dual.

On closer examination it appears that reipi is used with both inclusive and exclusive meanings. Rari is used only as an inclusive. Among the forms of the Imperfective aspect is a suffix which is used with reipi only in the inclusive sense. This is the kind of situation in which the speaker is addressing one other person and saying, 'Let's we two . . . .'

(2) reipi so-opaine 'Let's we two go.'
reipi sa-ka 'We two will go.'
rari reipi sa-ka 'Let's we three go.'
These examples (2) show the contrast in the usage of reipi, and the parallel with the inclusive usage of rari pi.

In order to summarize these observations, I postulate that there are two homophonous forms reipi in a six-way contrast as shown in the first two rows of (1). Note that as inclusive singular reipi includes the speaker plus one other; rari pi as inclusive dual includes the speaker plus two others; rari(pare) as inclusive plural includes the speaker and any number of others.

Postulating a contrast between homophonous forms reipi sheds light on the otherwise incongruous paradigm of the Imperfective Aspect (3). Reference to Figure (4) shows that Perfective lacks a similar contrast.

(3) Imperfective

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Dual, Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st person</td>
<td>-oma</td>
<td>-ka</td>
</tr>
<tr>
<td>Inclusive person</td>
<td>-opaine</td>
<td></td>
</tr>
<tr>
<td>2nd person</td>
<td>-ke</td>
<td>-pike</td>
</tr>
<tr>
<td>3rd person</td>
<td></td>
<td>-pane</td>
</tr>
</tbody>
</table>

(4) Imperfective

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Dual, Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st person</td>
<td>-ho</td>
<td>-gi</td>
</tr>
<tr>
<td>Inclusive person</td>
<td>-ngi</td>
<td></td>
</tr>
<tr>
<td>2nd person</td>
<td></td>
<td>-ha</td>
</tr>
<tr>
<td>3rd person</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Since the form reipi does not by phonological form fit into the singular column or in the inclusive row, I postulate, historically, an analogical leveling in which
the original form has been replaced by reipi. At least one related language has retained distinct forms in these positions. It's inclusive singular form is not phonologically related to reipi.

2. Noun-pronoun relationship. The particular form of the rules given here (Figure 5) postulates a kind of relationship between Kunimaipa nouns and pronouns.

(5):

PS-8: Nominal ----> \{ P \} Num
       \{ N (PRO) \}
       \{ P-fst \}
       \{ P-in \}
       \{ P-sec \}

PS-9: P ----> \{ Sing (Dual) \}
       \{ Plural \}

PS-10: Num ----> \{ N-root (descriptive) \}
       \{ Name \}

PS-11: N ----> \{ Name \}

T-12 (Obligatory): Person-number Spread.

SD: X + \[ Y, P + Num, subj \] \[ Z, [ X' ] Verb \] VP \] \{ Sv, Y' \}
1 \ 2 3 4 5

SC: - - - - - - - - - [ X', P + Num ] Verb VP \} \{ Sv, Y' \}
1 \ 2 3 4 2 5

T-16 (Obligatory): Pronoun substitution.

SD: X, \[ N + PRO, Y \] Noun \, Z
1 \ 2 \ 3 \ 4

SC: X, \[ P-td, Y \] Noun \, Z
1 \ 2' \ 3 \ 4

The rules given in (5) state that a nominal may be of two different types (P or N) both of which may be inflected
for number (singular, dual, or plural). N-type nominals (nouns) may occur with the PRO element (dummy) which operates a later transformation. Nouns are further divided into the two types N-root and Name. Descriptives will not be discussed here. P-type nominals (pronouns) are of three types (rule PS-9): exclusive first person (P-fst), inclusive first person (P-in) and second person (P-sec). (The T rules are discussed below.)

We may ask the question, In what way are pronouns related to nouns and how may we show this in the grammar? My rules give a particular interpretation to this relationship by the way in which pronouns are generated. In effect I am postulating that the first person, the inclusive person and second-person forms are noun-like words contrasting with other noun roots (rule PS-11). The third-person pronoun is regarded as the only pronoun which substitutes for nominal forms (rule T-16).

Some other possibilities for the interpretation of this relationship between pronouns and nouns are presented here.

(a) We might decide that pronouns have only a substitution relationship to nouns. All pronouns could then be introduced in the grammar through superficial changes brought about by transformations. This will easily care for third person forms but with first and second person forms we strike difficulty. For inclusive and exclusive forms we would need to postulate two hypothetical morphemes which are introduced into the lexicon. This seems somewhat speculative. For second person forms we might suggest that any name plus the vocative morpheme might be the basic form for which second person forms substitute. This is not a workable
solution since name plus vocative never acts as subject of the sentence. The following example illustrates this clearly:

(6) Baroa-ae ba-ta na-sa Baroa-vocative get-and not-go
This sentence is not marked for subject and may be equally well translated by the following glosses:
'Hey Baroa, they didn't take it.'
'Hey Baroa, you didn't take it.'

In addition to this difficulty, we find that transformations which regulate the agreement of verb suffixes with subject of the sentence are awkward and unwieldy in this interpretation.

(b) We may go to the opposite extreme and interpret all pronouns as a special class of nouns which function in a manner parallel to noun roots. But to deny the substitution properties of third person forms does not conform with our intuitions as grammarians or as language speakers.

But we may pursue this general option a little farther by expanding rule PS-9 to include P-td (third person pronoun). To do this would be to postulate that third person pronouns are of two different types: one which has a grammatical meaning of 'third person substitute' and the other which has a lexical meaning of 'third person'. This is speculative and the distinction is difficult to maintain, so I have not chosen this analysis.

(c) A third alternative analysis of the relationship of pronouns to nouns is embodied in the rule stated in Figure (7):

\[
\text{Nominal} \rightarrow \begin{cases} \text{P} \\ \{N + \text{P-td}\} \end{cases} \text{Num}
\]
That is, nominals are of two basic types (P and N). N-type nominals (nouns) are obligatorily accompanied by a pronoun element in the deep structure of the grammar. Optional transformations will act upon this deleting one or the other (or perhaps leaving both). This interpretation has little to say for it because our intuition about substitution is again not followed. It is also less desirable because of added complications in the transformational rules.

These appear to be the major alternatives to the solution which I have chosen. I have already noted that first person, inclusive person, and second-person forms are thus described as a special class of nominals in contrast to those which may have a third person form substituted for them.

Substitution of the third person pronoun for N-type nominals is accomplished in a very simply way by rule T-16. It provides that any sequence of N plus PRO is deleted and a third-person pronoun substituted for it. Since transform grammar has limited itself to the sentence as the maximum grammatical unit, it will be difficult to state constraints on this transformation which may relate to paragraph structure.

Rule T-12 attacks a problem not previously mentioned in the discussion. It has been noted elsewhere that it is the subject of the sentence which determines the person and number of the verb. To show this in the rules which describe Kunimaipa, it is necessary to write a transformation which will take the person and number of the subject and duplicate it in the verb. This is very difficult to handle unless person and number are characterized in the grammar simply (one or two nodes). The rules which I have set up have the following characteristics:
(1) Third-person aspect markers are regarded as a basic form in that they are routinely chosen. In any sentence in which N-type nominals are chosen; no further operation is required, since third-person forms are not distinguished for number.

(2) In sentences in which P-type nominals are chosen, rule T-12 operates to add the P and Num nodes to the verb. Selection rules of some type not specified here are required to operate on this segment of the output to draw from a matrix the paradigmatic form which combines a certain aspect with the proper person and number.

A number of shadow areas remain in the building of a complete grammar of Kunimaipa pronouns; however, the rules which are given satisfy the requirement that a grammar reflect the corpus with simple rules which shed light on the intuition of a native speaker about his language.

1This paper is based on data gathered from 1959 to 1963 in the Bubu Valley near Garaina, Morobe District, under the auspices of the Summer Institute of Linguistics. The dialect spoken there (Gajili) is close to that spoken in the Goilala Sub-District near Guari Patrol Post.


3My statement of transformations follows the conventions of Klima and others in which brackets and subscripts indicate relations of dominance. The rule \([a + b]_c\) indicates a structure:

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  c
 a --
    b
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Commas indicate the extent of application of the code numbers below the main line.