

ROKOKAS REFERENTIALS

Irwin B. Firchow

Summer Institute of Linguistics

(Received September 1971)

1. General Orientation

The Rotokas language¹ is spoken by approximately 4000 people living in the central portion of Bougainville Island. It is part of the Kunua-Keriaka-Rotokas-Eivo Stock of Non-Austronesian languages. Because of its position, however, it does share some features of the Austronesian languages which border the area to the north.²

The Rotokas language is not only peculiar in that it does not fit neatly into either of the two major linguistic groups of Bougainville District, but also in that the phonology includes but eleven segmental phonemes: /p, t, k, β, ʔ, g, a, e, i, o, u/. The lack of nasal phonemes and the fluctuations between some obstruents and fricatives also violate postulated linguistic universals.³

2. Terms and Symbols Used

2.1 In this paper the term referential is restricted to those forms in Rotokas which may occur with nominal affixation only. Some forms described will be noun-like, others are very similar in form to Rotokas personal pronouns, while still others range from manner-like words to an empty morph. However diverse they may seem there are several common characteristics which unite them in a single nominal-like word class, the referentials.

2.2 The terms anaphoric, ambiphoric, and cataphoric are useful in describing the various referentials. It is in fact the direction from referential to referent syntactically which distinguishes the three classes of referentials, i.e., the referent precedes anaphoric referentials, it may precede and/or follow ambiphoric referentials, and it follows the cataphoric referentials.

2.3 Three symbols will be used in the examples: parentheses will bracket the portion of the construction (i.e. the referent) which may be identified by the semantic content of the referential, arrows will give the direction from the referential to the bracketed referent, and underlining will indicate the portion of the construction of which the referential is an included member. The referential being illustrated will appear in capital letters.

3. Features of Rotokas Referentials

3.1 There are three classes of Rotokas referentials. As has been mentioned already, the referentials are defined syntactically on the basis of the direction of the referent from the referential.

Class 1 anaphoric referentials are divided into three subclasses.

Class 1A consists of those words which include a noun and the Referential Markers o-...-a as in o-kepa-a 'which/house' where kepa means 'house' and the prefix o- with the suffix -a mark this regular noun as the referential okepaa 'which/house'.

Examples:

(kepa) rava-ta-vere ← OKEPAA iare opo-pere
(house) ready-you-future ← WHICH towards taro-we will
'ready a house for which we will get taro'

Class 1B consists of the single referential uva 'where/when'.

Examples :

kare-u (vo) ← UVA rera - i
return-you (here) ← WHERE he present
'you return here where he is'
(vo tuariri) ← UVA igei avu iraraaro upo pura-pa-i-vora
(in long ago) ← WHEN our ancestors fight make-were-they-past
'in the past when our ancestors were fighting'

Class 1C consists of a complete set of pronouns which denote person, number, and gender. The set is given in the Appendix Chart 1. Examples:

(katai-toa ragu Pauto) ← IRA voea-pa aioa kareke-re-va
(one-male only Pauto) ← WHO them-for food realize-he-past
'Pauto is the only one who realized food for them'

(raivarei) ← OAREA oisioa resi-pa-i-ve vo uruia vatuaro-ia
(two paths) ← WHICH always mark-be-they-would at village edge-at
'there were two paths which they would always mark at the edge of the village'

Class 2 ambiphoric referentials indicate that the referent (which may be a word, phrase, clause, sentence, or paragraph) may precede or follow the referential. There are two Class 2 ambiphoric referentials, oisi(o) 'like this' and eisi 'like that'.

(paragraph) uva ragai vearopie-re-va ← EISI osia vi tavi-pa-a
(paragraph) so I heal-he-past ← LIKE THAT as you tell-am-I

'(paragraph) so he healed me like that as I am telling you'

uva viapau OISIO → (riro kaekae siposipoa)

so not LIKE THIS → (large long story)

'so it is not a very long story'

(ava-pa-ra-i) ← OISIO → pura-ro-epa (ari kare-ra-vere)

(go-am-I-present) ← LIKE THIS → say-he-past (but return-I-future)

' "I am going, " he said this, "but I will return. " '

Class 3 consists of the two referentials vo and ae. The first of these two forms is equivalent semantically to the Class 1B anaphoric referential uva 'where/when' differing only in that the referent follows the Class 3 cataphoric referential. Examples:

voeao VO-va → voea upo-i-va (Aita-aro)

these HERE-from → them fight-they-past (Aita-locative)

'these from here, the Aita, fought them'

rupa-epa voea-re VO → (tuariri-pa-vokia)

dark-past them-for THEN → (long ago-agent-day-on)

'darkness fell on them then on that long ago day'

The second cataphoric referential of this class is without semantic content; however, it is a most useful and frequently employed device to signal a following referent which may be a word, phrase, clause, or sentence. The symbol \emptyset will represent ae in the translation of the examples. Examples:

varao AUE → (aio okovoro) tapo teki-i-ve vosia kopi-ro

these \emptyset → (food gardens) also take out-they-would when die-he

'they would take out these food gardens also when he died'

vopeva AUE → aio-a-epa (koie kare)

three \emptyset → eat-they-past (pig animals)

'they ate three pigs'

3.2 The Rotokas referential may serve to identify the referent according to the semantic content of the nominal. The explicitness of the semantic content ranges from precise and full in Class 1A forms to zero in the ae form (excluding affixation).

The explicitness of the semantic content seen in Class 1A forms is attributed to the fact that the root is the referent or an integral part of it. Examples: kare 'animals' as

referent occurs as o-kare-a 'which/animals' the anaphoric referential; vavae pute vao vuvukorapa 'piece of hand, this fist' occurs as o-pute-a 'which/piece'.

Class 1C are less explicit, however, the referential must agree with the referent in person, number, and gender. The referents may be nouns or pronouns, nominal phrases, or in the case of the third person-neuter-singular oa, an entire clause, sentence, or even paragraph. Example:

(igei aru-re-va aue-re tetevu) ← OA iava tetevu-sia ava-i-epa
 (we ask-he-past ∅-for sago) ← WHICH after sago-to go-we past
 'he asked us for sago, after which we went to get sago'

Class 1B referential uva and Class 3 referential vo are a degree less explicit in that there is no identification of the referent inherent in the form other than the fact that these two referentials refer to locatives and temporals only.

Very little information about the referent can be gained from the Class 2 referentials oisio and eisi 'like this' and 'like that'. The referent may be a word, phrase, clause, or sentence. Frequently the referent is a stretch of quoted speech or a negated construction.

Examples:

(kare-pa-ra-vere) ← EISI pura-ro-epa
 (return-am-I-future) ← LIKE THAT said-he-past
 ' " I will be returning, " he said that',

viapau OISIO → (ava-pa-ra-i)
not LIKE THIS → (go-am-I-present)
 'I am not going now'

va pura-re-vere OISIO → (asia oa pura-i-va tuariri)
it do-he-future LIKE THIS → (as it do-they-past long ago)
 'he will do it like this as they did it long ago'

No semantic information is given in the Class 3 form aue. It signals only that a referent will follow. Example:

ro AUE → (aiteto) ira rera keke-pa-re-vere
this-male ∅ → (father) who him see-be-he-future
 'this is the father who will be seeing him'

3.3 As a connecting-directive device the Rotokas referentials may direct reference toward a preceding and/or following word, phrase, clause, sentence or paragraph. Enough

has been said about this point.

In terms of the construction of which the referential is a functioning member, the following observations are made. Class 1A and 1C referentials regularly introduce a clause in which they function as subject or object while substituting for the referent. Class 2 referentials introduce or close the clause in which they function as quote or object, e.g., (...) ← EISI puraroepa '(...) ← LIKE THAT he said'; equational subject, e.g., viapau OISIO → (...) 'it is not LIKE THIS → (...)'; or head of the phrase oisio ± Modifier₁ ± Modifier₂ where oisio is obligatory and the two modifiers are optional, e.g., oisio raga ita (like-this just truly) 'truly just like this'. Similarly the Class 3 referential ae may be the head of the above phrase or of a nominal phrase, e.g., eraotau vavae AUE → (koie kare), twenty-five ∅ → (pig animals), 'twenty-five pigs'; or any filler of a clause or sentence construction slot which would otherwise be filled by a nominal or nominal construction. Example:

ava-ve vegoaro-re AUE-re → (kora tara-sia)
go-we-two jungle-to ∅-for → (opossum hunt-to)
'we both go to the jungle to hunt opossum'

3.4 The agreement in person, number, and gender of the Rotokas referentials with their referents is facilitated by the affixation of referent and referential with the same set of nominal suffixes. These suffixes are listed in the Appendix. Co-occurrence restrictions are illustrated in Chart 2 (see Appendix), and all rules of affixation applicable to the noun morphology must be applied to the referentials as well.

The following examples demonstrate the agreement between referent and referential. It should be noted that corresponding suffixes may optionally occur on both or on either referent or referential.

a. Classifying

rera AUE-isi → aio-re-va (takura-isi)
he ∅-round object → eat-he-past (egg-round object)
'he ate an egg'

b. Gender-number

OISIO-to → (oira-to) ava-ro-epa
LIKE THIS-masculine singular → (person-masc sing)
go-he-past
'this man went'

c. Number (only)

...ora (voea-ro) ← OEA-roa oisia tova-i-ve

...and (they-plural) ← WHOM-plural always bury-they-would

'... and these whom they would always bury'

d. Diminutive

(short paragraph) uva ← EISI-vi osia vi tavi-pa-a-voi

(short paragraph) so ← LIKE THAT-less as you tell-am-I-present

'(short paragraph). So it is like that little (story) as I am telling you now'

or 'That's the way my little story goes'

e. Alternative.

It should be noted that when the referential is suffixed with the alternative marker -vu 'other' it no longer functions as a referential but as a pronoun, e.g., ira 'who/he'

+ -vu 'other' yields iravu 'another male'. Example:

(ira-vu) ← IRA ava-roepa

(who/he-other) ← WHO go-he-past

'another man who went'

f. Possessive

vore-o ita vo-re oira VO-aro → (ato-ia)

return again here-to she HERE-poss → (village-locative)

'she returns again here to her village!'

g. Non-absolute and Absolute.

These two suffixes -(a)vai and -i respectively are not as yet well defined. Further investigation is necessary before conclusions can be made concerning co-occurrence restrictions and change of function from referential to noun or pronoun as in the case of the alternative marker. Nonetheless, two examples are given.

easi OISIO-vai → pasi ragai pie-pa-re (osia voeao pie-re-vo)

well LIKE THIS-non-absolute → possibly I make -is-he

(as they make-he-near past)

'well, maybe he is "doing" me like as he "did" them'

viapau IRA-i oisio tou-pa-re-va osia ro kakaetoga raga ira upe-re-va (notice no referent)

no WHO/HE - absolute like this exist-was-he-past as this-male only who initiate-he

past

'absolutely no one else was like this boy whom he (tamboran) initiated'

3. 5 There are two cases in Rotokas which are manifested by the nominal suffixes already described; the nominative case manifested by the nominalizing suffixes: classifiers, gender-number markers, and number markers; and the possessive case manifested by the possessive marker. In that some referentials according to Chart 2 may be suffixed by the above suffixes, one could say that they manifest nominative and/or possessive cases. However, what is more important is that they may nominalize and/or show the possessive case of referents which do not themselves manifest these cases. In the expression ae-a variri, variri is the verb 'to pray', but by virtue of the nominalizing neuter-singular marker -a suffixed to the cataphoric referential ae, the net result is variria 'prayer' in the nominative case. Similarly in the expression ragai ae-aro taraia, taraia 'knowledge' by itself is unpossessed but by virtue of the referential plus the possessive marker -aro the expression is equivalent to ragai tarai-aro 'my knowledge'.

4. The Referential and Relator Enclitics

The functions of the Rotokas referentials as identifying and connecting-directive devices have been explained and exemplified. Another important function is that of base for preposition-like relator enclitics. In English an example of this would be, That is (the man) ← to WHOM the book was given.

The Rotokas preposition-like morphemes are enclitics which are attached to nouns, personal pronouns, referentials, nominal phrases, and various phrase sub-types. The enclitics are: -pa 'for', -re 'to/for', -va 'from/with', -ri 'obliquely', and -ia which approximates many prepositions in European languages. The referentials occur also with the postposed relators: iare 'to', iava 'from/about/after', and tapo(ro) 'with/also/too'. Examples:

a. Class 1A with Relator -ia

teapi vi kea-re-ve (vo vokia-ia) ← OVOKIA-ia ovitoaro

vore-ro-verea oirato

negation you deceive-he-would (this day-about) WHICH-on son -possessed
return-he-future man

'it would not be good if he would deceive you about this day on which the son of man will return'

b. Class 1B with Relator -va

rakoru kare-ie oisio (varavira) ← UVA-va ipa-vi-ei

snake animals-present like this (downward) ← WHERE-from ascend-we-present

'the snakes are down below from where we ascend'

c. Class 1C with Relator iava

(rera-ia) pitu-i-va ← IRA iava reuri-rei kosi-pa-ere-viro-pa ketato

(him-locative) hold-they-past ← WHOM from tooth-dual extract-were-feminine
dual-complete-past tusk

'they held onto him from whom the two tusks were completely coming out'

d. Class 2 with Relator -re

uva OISIO-re → ave-pa-ro-era (ra oira iia-re-ve)

so LIKE THIS-to → consider-was-he-past (then she spear-he-would)

'so he was considering this that he would spear her'

e. Class 3 with Relator -va

ava-ra-epa koie tara-sia AUE-va → (toga) kae-pa-oro

(ora kaakau)

go-I-past pig hunt-to ∅-with → (spear) carry-while-ing

(and dog)

'I went to hunt pig with a spear I was carrying and a dog'

f. Class 3 with Relator -pa

uva AUE-pa → oisioa riro-vira reasi-pa-ro (reo)

so ∅-for → always large-like dislike-was-he (talk)

'so he was always greatly disliking talk'

g. Class 3 with Relator iava in special syntactic relationship

evaova tosi-re-va ragai upo-sia AUE iava → (uvare

asia-pa-ra-epa rera-pa)

tree chop-he-past I hit-to ∅ about → (because dislike-

was-I past him-for)

'he chopped a tree to hit me because I was disliking him'

NOTES

1. The data were collected between the years 1965 and 1969 in the village of Togarao by the author under the auspices of the Summer Institute of Linguistics. I would like to express appreciation for the faithful help of David Akoitai who has assisted in text

collection, transcription, and analysis.

The primary materials in this paper are from a concordance of 70 texts in Rotokas made on the IBM 1410 computer at the University of Oklahoma by the Linguistic Retrieval Project of the Summer Institute of Linguistics and the University of Oklahoma Research Institute sponsored by Grant GS-270 of the National Science Foundation.

2. J. Allen and C. Hurd, Languages of the Bougainville District, (Ukarumpa, PNG 1963)
3. I. and J. Firchow, An Abbreviated Phoneme Inventory, *Anthropological Linguistics* Vol.11, No. 9, Dec 1969.

Chart Number 1

Class IC Anaphoric Referentials

	<u>Singular</u>	<u>Dual</u>	<u>Plural</u>
first person	<u>ragoa</u> 'I, me'	<u>vegoa</u> 'we 2'	<u>vigoa</u> 'we all (inc)' <u>igoa</u> 'we not you (exc)'
second person	<u>vigoa</u> 'you'	<u>veigoa</u> 'you 2'	<u>visigoa</u> 'you all'
third person masculine	<u>ira</u> 'he, him'	<u>aiterea</u> 'they, them 2' (m/m or m/f)	<u>oea</u> 'they, them all' (all m or m/f)
third person feminine	<u>iria</u> 'she, her'	<u>airea</u> 'they, them 2'	<u>airoa</u> 'they, them all'
third person neuter	<u>oa</u> 'it'	<u>oarea</u> 'they, them 2'	<u>oara</u> 'they, them all'

All forms are translated by who, whom, which in the examples according to their function.

APPENDIX (continued)

List of Nominal Suffixes

- a. Order 1 Suffixes. There are four classifiers which all relate to "shape": -isi 'round object', -kuio 'round object (particularly a root such as the edible taro root)', -ua 'narrow object', and -kae 'long object'.
- b. Order 2 Suffixes. There are three genders marked in Rotokas: masculine, feminine, and neuter. A second set of markers is used for number irrespective of gender.

Gender and Number Marked

	<u>Masculine</u>	<u>Feminine</u>	<u>Neuter</u>
Singular	<u>-to</u> ~ <u>-toa</u>	<u>-va</u> ~ <u>-riva</u>	<u>-a</u>
Dual	<u>-toarei</u>	<u>-rirei</u>	<u>-are</u> ~ <u>-arei</u>
Plural	<u>-irara</u>	<u>-riako</u>	<u>-ara</u>

Number Only Marked

	<u>Non-specific</u>	<u>Specific</u>
Singular	<u>-a</u> 'any one'	<u>-o</u> 'this one'
Dual	<u>-re</u> ~ <u>-rei</u> 'any two'	<u>-reo</u> 'these two'
Plural	<u>-ra</u> 'any'	<u>-ro</u> 'these'

- c. Order 3 Suffix. The suffix of Order 3 is -vi 'less' which diminishes the nominal to which it is affixed.
- d. Order 4 Suffix. The Order 4 suffix is -vu 'other' which indicates that the nominal to which it is affixed is an alternate.
- e. Order 5 Suffixes. There are three suffixes of Order 5, the possessive -aro which indicates that the object is possessed, the non-absolute marker -(a)vai and the absolute marker -i. The latter two need further study.

APPENDIX (continued)

Chart Number 2: Co-occurrence Restrictions

	<u>Cl.1A</u>	<u>Cl.1B</u>	<u>Cl.1C</u>	<u>Cl. 2</u>	<u>Cl.3A</u>	<u>Cl.3B</u>
Shape class				+	+	
Gender-number				+	++	
Number only	++	+	++	++	++	
Diminutive	+	+	++	+++	+	
Alternative	++	++	+++	++	+	
Possessive	+		+	(+)	+++	++
Non-absolute			+	++	++	
Absolute			++	(+)	+	

The above chart shows which noun suffixes may occur with the various classes of referentials. The + means a possible occurrence, ++ infrequent occurrence, +++ frequent occurrence, and (+) unconfirmed.