

Nasioi Projectives

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NASIOI PROJECTIVES1

- 0. Introduction
- 1. Case-Gender-Number markers
- 2. Basic Projectives
- 3. Derivations
- 4. Complex Systems
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- INTRODUCTION. This paper 0. describes a genre of words in the Nasioi language whose common denominator is that they obligatorily take suffixes of casegender-number, called CGNs in this paper. At a loss for a name for these words, I have merged the terms pronoun and adjective into projective, since most of them can stand for nouns, modify nouns, and be modified by nouns. The CGNs are presented in the first section of this paper because they are basic to all aspects of the projective genre.

Section 2 presents the four basic projectives with their four individual identifying mode markers. They parallel demonstrative and interrogative pronouns in English and also the definite and indefinite articles.

Section 3 presents derived projectives, which differ from basic projectives in that the mode marker is replaced by a derivational suffix which attaches to a variety of stems and words. These are embedded as derived projective stems.

List of abbreviations

CGN case-gender-number suffix coord coordinate def definitive dem demonstrative dep dependent dl dual derivational suffix DS fem feminine gen general Isolative elaborator TE. indef indefinitive Inty Intensity marker Isol Isolative marker loc locative masculine masc NGF negative general future NPH negative present habituative NPP negative present progressive non.proj nonprojective P.pa'noko PE personal elaborator PH present habituative plplural present progressive PP projective proi singular sg substantive subs verb vb

Section 4 presents other types of words which use CGNs by combining basic projectives with derived projectives into one system, or by combining either type of projective with nonprojective words into a system.

Altogether, the projective genre includes, among other things, about 100 counting systems, 100 definite articles, 100 interrogative pronouns, 900 possessive pronouns, and 1600 demonstrative pronouns.

0.1 Nasioi spelling rules. Talking about the grammar of Nasioi projectives will be easier if we first clearly understand the spelling rules which apply when different affixes are put together. These rules are not part of the grammar and must not be confused with it.

0.1.1 The Nasioi alphabet

- ' [?] as in baka'e, 'oh, oh'
- a [a] as in mma', 'father'
- b [b] as in beku', 'basket'
- v [β] (variant of /b/, occurs following a vowel within a word) as in naveku', 'a basket'
- d [d] as in doong, 'day'
- r [ř] (variant of d/d, occurs following a vowel within a word) as in teroong, 'the day'
- e [8] as in ee', 'yes'
- i [i] as in miing, 'knee'
- k [k] as in kooko, 'basket'
- m [m] as in meto', 'mud'
- n [n] as in narung, 'one'
- ng [ŋ] (variant of /n/, occurs word finally and
 before clitics or between the roots of a
 compound stem. Otherwise it occurs word
 medially in only six words) as in mo'ming,
 'string'
- o [o] as in pooro', 'pork'
- p [p] as in pooro', 'pork'
- s [s] as in piisi', 'sand'
- t [t] as in beento', 'star'
- u [u] as in ui, 'squeal'

0.1.2 Word building rules

- (1) ng becomes m when the following suffix begins with p.
- (2) ng becomes n when the following suffix begins with t or k.

- (3) ng becomes \emptyset when the following suffix begins with n.
- (4) d becomes t following n.

Examples:

benkeng + -pansing becomes benkempansing 'I laughed
 at him'

dang + -to becomes danto 'further seaward'
mo'ming + -naving becomes mo'minaving 'a vine'
aing + -dei' becomes aintei' 'those up there'

- 0.2 Common projective structure. A projective consists of:
 - an obligatory projective mode marker (which could be considered to be the stem)
 - (2) an obligatory CGN
 - (3) a mode elaboration marker which is used only with distant demonstratives and numbers higher than one.

The projective mode markers tell how the projective is viewed by the speaker.

The CGNs act as case in that they determine whether the word functions as a noun (substantive), location (locative), or adverb (manner or time). These markers act as gender in that the substantive ones distinguish between masculine, feminine, buildings, ropelike objects, containers, and so on. Finally, the CGNs act as number in that whereas most are basically singular there is a plural marker which takes the place of any substantive marker being pluralized. There is also a dual marker which takes the place of either masculine or feminine markers being dualized. Masculine and feminine categories as such are used only with people, and so also is the dual CGN.

1. CASE-GENDER-NUMBER MARKERS (CGNs). While this set of morphemes contains all the gender markers in the Nasioi language, they do not contain all types of Nasioi number markers or case markers.

There are two major categories of CGNs, the general and the specific.

1.1 General category CGNs are used very frequently and include many different forms which are determined by the preceding mode markers. They are as follows:

	Demon- strative	Inter- rogative	Defin- itive	Indefin- itive	Derivational Suffix
Substantive	-ung	-ra	-e	-rung	-ra/-aa/-ung
Locative	-a'/-Ø	-'	- '	-ro'	-00'/-po'
Manner	-e'	-kee'	-e'	-ri'	_ '

Examples:

a-ung	are-ra which- one	te-e	na-rung	oki-n-aa
this-		the-	one-	small-DS-
one		one	one	one
a-a' this- place	are-' which- place	te-' the- place	na-ro' one- place	nii'-n-oo' other-DS- place
e-e'	are-dee'	te-e'	na-ri'	oovu-na-'
this-	which-	the-	one-	different-DS-
way	way	way	way	way

1.2 Specific category CGNs are used more selectively than the general category CGNs and they generally have only one form each. All 115 of them are tabulated below at least once according to various semantic categories.

Social:

(1) -vitu 'assembly'
(2) -vaku' 'troupe of dancers or singers; a bundle of bamboo'
(3) -nai' 'tens of people, sides of a debate; an individually owned garden plot with log boundaries'
(4) -riong 'some of a group of people'
(5) -manto 'a small group of people, a group of anything'

- (6) -ing 'plural for people, dual and plural for things'
- (7) -naanka 'a couple of people'
- (8) -varang 'a particular peer group, a generation'
- (9) -vuntu' 'village, community, kingdom (Roman Catholic term)'
- (10) -muu' 'clan, community of affinity, kingdom (United Church term)'
- (11) -muiaang 'clan, a synonym for muu''
- (12) -vou² 'grandchildren of a common grandmother'
- (13) -mainta 'two siblings'
- (14) -maia' 'three or more siblings'
- (15) -voraari² 'two sisters with children'
- (16) $-vo^2$ 'mother and children'
- (17) -kong 'mother and child'
- (18) -kang 'father with family, whole or in part'
- (19) -ring 'married or engaged couple'
- (20) -ni 'feminine, woman--one'
- (21) -rung 'masculine, man, neutral or generic-one'
- 'people living on a particular water-shed, basically a river or stream'

Body parts:

- (1) -vi' 'strand of hair'
- (2) -ruta 'eve'
- (3) -rome' 'ear'
- (4) -ri' 'bone, tooth, tool; direction'
- (5) -rime' 'tooth, tusks, horns'
- (6) -vine 'side of a person or beast'
- (7) -ruung 'rib, spear'
- (8) -vuu' 'breast'
- (9) -virong 'limb'
- (10) -naang 'upper extremities, arm including hand'

- (11) -vireng 'fingers'
- (12) -nau' 'legs and feet'
- (13) -ne' 'feather'
- (14) -vusi 'nostril, any aperture'

Animals:

- (2) -vong 'tens of pigs, cows'
- (3) -vara' 'share of feast food'
- (4) -va 'houses; tens of possums'
- (5) -voro 'pig, whole pork, animal (generic term)'
- (6) -u 'animal, coin, pineapple, sweet potato, sore'
- (7) -maku 'pineapple; possum'
- (8) -vio' 'piece of any food'

Trees and wood:

- (1) *-vari* 'tree'
- (2) -u' 'tree, post, upright timber in a house; taro'
- (3) -ve 'tree branch, horizontal timber, beam'
- (4) -rong 'block of wood, section of log or pole'
- (5) -mo' 'dead stick of wood, firewood, fire, smoke column'
- (6) -vaang 'fern tree bough, archery bow'
- (7) -rang 'sago frond, sago shingle'
- (8) -veu 'a main branch of a tree'
- (9) -ne' 'paper, leaf, feather'
- (10) -ne'/ 'stacks of leaves, paper, book'
 rane'/rene'
- (11) -ne'/rone' 'banana leaves only'
- (13) -vento' 'board or plank'

Vine and rope:

- (1) -ving 'rope, vine, string'
- (2) -raanga' 'length of rope or an armspan for measuring'
- (3) -moora'/-mooru' 'turn of a rope when hitched to something'

Bamboo:

- (1) -vu 'stand of bamboo'
- (2) -vaku' 'bundle of bamboo; a troupe of singers'
- (3) -vero' 'length of split or flattened bamboo, a division between cracks in flattened bamboo'
- 'length of unsplit bamboo, empty bottle, an antona' basket (funnel shaped)'

Bananas:

- (1) -voonku 'clumps of banana or taro plants'
- (2) -vareng 'stalk of bananas'
- (3) -u 'stalk of bananas'
- (4) -mang 'hand of bananas, cluster of betel
- (5) -muri' 'part of a hand of bananas or of a string of nuts'
- (6) -noo' 'single banana; arrow, spear, sago shingle'
- (7) -ne'/rone' 'banana leaf'

Taro:

- (1) -u 'Chinese taro, sweet potato, pine-apple, coins, sores, animals'
- (2) -u' 'native taro; tree, post, pole, stud'
- (3) -voonku 'clump of taro plants, clump of banana plants'

Coconuts:

- (1) -rang 'string of coconuts connected as in the tree'
- (2) -muri' 'some of a string of nuts, both coconut and betel'
- (3) -vuru'/ 'bunches of nuts, oranges, tomatoes' varu'
- (4) -ro' 'single coconut, a coconut flask, bottle, length of bamboo'

Fruit:

- (1) -vuru'/ 'bunches of fruit--oranges, tomatoes, -varu' nuts'
- (2) -u 'single orange, lemon, tomato, nut, pawpaw'

House, furniture, and building materials:

- (1) -va/-va' 'house, lean-to; tens of possums'
- (2) -raa' 'bamboo sitting bench'
- (3) -veru 'food display benches and beds'
- (4) -vaara' 'meat-smoking rack'
- (5) -vaatang 'ladder, stairs'
- (6) -raampu 'tens of sago shingles'
- (7) -noo' 'row of sago shingles; a banana, arrow, spear'
- (8) -rang/ 'single sago shingle, a sago frond'
 -ranto'
- (9) -vero' 'section of split bamboo'
- (10) -veng 'piece of flat timber, a wedge, a shim'
- (11) -vento' 'board, plank'
- (12) -ve 'horizontal timber-plate, purling, batten, ridge pole'
- (13) -varo 'room, doorway; hunk of meat'
- (14) -u' 'vertical timber-post, stud, batten'

Containers:

- (1) -reng 'box, container, car, tin can'
- 'bag, fish net, string bag, cloth bag;
 clothing'
- (3) -veku' 'basket'
- 'bamboo or coconut container, bottle, coconut or length of bamboo, antona' basket'
- (5) -roope' 'half section of coconut, coconut bowl'
- (6) -ripung 'basket of taro pudding'
- (7) -kararoong 'dish of taro pudding'

Clothes:

- (1) -naa' 'cloth; garment'
- (2) -manto 'clothes; a group of anything'
- (3) -ra' 'piece of clothing; bag, fish net'

Money:

- (1) -u 'coin, 10 toea piece; animal, pine-apple, sore'
- (2) -miku 'roll of coins, 10 kina (1 pius); any package'

Implements:

- (1) -ripi' 'sarif, knife'
- (2) -noo' 'arrow, spear; banana, row of shingles'
- (3) -ri' 'tool, bone, tooth; direction'
- (4) -ruung 'spear, rib'
- (5) -vaang 'hunting, bow, fern tree bough'
- (6) -re' 'stone'
- (7) -ra' 'fishnet, string bag, cloth bag; clothing'

Physical features:

- (1) -vuu 'light, color'
- (2) -naung 'strata, layer, stage, aspect'

(3)	-ru'	'liquid in a container, pool or lake of fluid'
(4)	-ri	'river, stream, people living by one river'
(5)	-viri'	'ravine, crack, gulch, dry valley'
(6)	-morinku	'canyon, rough valley, hard place to cross'
(7)	-ve'	'cliff, hill, slope'
(8)	-mii	'mountain, ridge'
(9)	-re'	'rock, stone, promontory'
(10)	-mui'	'island'
(11)	-vora'	'bushland, section of countryside'
(12)	-vusi	'aperturehole in clouds, wall or clothes; peek hole'
(13)	-varong	'spacehole, window, hallway'
(14)	-varo	'section of spacedoor, room; hunk of meat'
(15)	-rinkung	'hole in the ground'
(16)	-mo'	'smoke column, fire, stick of fire-wood'
Locati	ons:	
(1)	-nau	'grove, garden plot of one type of plant'
(2)	-nai'	'section of garden area belonging to a particular individual and marked out with boundaries; competing sides or tens of people'
(3)	-nairu	'locality around a particular place'
(4)	-mono	'hamlet; a large piece of something'
(5)	-vuntu'	'village, community, kingdom (Roman Catholic term)'
(6)	-meensi'	'area, land, section of country'
(7)	-vung	'road, path, way'
(8)	-voka	'road, path'

Temporals:

- (1) -mare' 'year'
- (2) -rau 'season of year'
- (4) 'mung³ 'time, day evening to evening'
- (5) -'moo³ 'time, earlier part of a day'
- (6) -nang³ 'time, usually time of day--morning, noon, afternoon'
- (7) -mu'³ 'time, point of time, minute'

Fractions:

- (1) -meng 'side, division, part more or less physically united to other parts'
- (2) -vete 'side, section, area, part of a more or less disjoined whole'
- (3) -marang 'part, section, half (but not necessarily equal)'
- (4) -meensi' 'section of land or country'
- (5) -vora' 'section of bush or countryside'
- 'faction of dissidents, debate teams, tens of people; garden with boundaries'
- (7) -vu' 'piece of anything, animal specimen'
- (8) -mono 'hamlet, large section of something'
- (9) -varo 'section of space--room, doorway;
 hunk of meat'
- (10) -vio' 'piece of food, morsel'
- (11) -roope' 'half section of coconut shell'
- (12) -rong 'short length cut from a pole'
- (13) -veng 'piece of flat wood, gash in a tree'
- (14) -muri' 'some of a string of nuts'
- (15) -vero' 'divisions between cracks of flattened bamboo'
- (16) -manto 'a group of anything'

Kind:

- (1) -murii' 'a kind of something'
- (2) -muriau 'a synonym for -murii''

Word:

- (1) -naare 'excerpt, word, brief speech, paragraph, instructions, sermonette, complaint, charge, case against someone'
- (2) -nai' 'issue of debate, case, argument; garden plot; ten people;
- (3) -varo 'syllable, part of a word; section of space'

Number:

- (1) -ung/-ra/ 'one (general substantive)--masculine -e/-rung/ person or otherwise neuter; collec--aa/-ung⁴ tive'
- (2) -ni⁴ 'one--female person'
- (3) -naanka 'two people, a couple of people'
- (5) -upoong⁵ 'people'
- (6) -nanka⁵ 'many individual things'
- 2. BASIC PROJECTIVES. Basic projectives may be divided into four modes. Each mode is identified by its own individual marker or markers.
- 2.1 Demonstrative mode: 'this, that'. A demonstrative projective consists of:
 - (1) the demonstrative mode markers
 - e for manner and time
 - α for substantives, locatives, and temporals
 - (2) a CGN

- (3) a modal elaborator when distance and direction from speaker is to be indicated. This consists of:
 - (a) a direction indicator
 - (b) a relativity indicator.

The following bidimensional array, Table 1, lists the various morphemes with their glosses.

TABLE: 1: Demonstrative projectives

Mode and CGNs	Modal Elaboration	Markers of Distance
1. General Substantive a -ung 2. General Locative a -a' word finally -n before k -' elsewhere except with Relative Distance both Mode and CGN are lost: Ø -Ø 3. General Manner e -e' 4. Specifics e -'moo -'mung -nang -mu' a all other CGNs as listed in section 1	Direction Indicators -ka 'nearby and parallel to the coast directional- ly, or across the valley' -daang 'inland' -dang 'seaward' -de 'up, south, far inland' -doong 'down, north, far seaward'	Relativity Indicators 1. Nonrelative 'there' 3 allomorphs: -i' following e -' following a -Ø following ng 2. Relative 2.1 Greater Distance 'further away or moving away' 2 allomorphs: -ko following -doong -to following others 2.2 Lesser Distance 'nearer to or approaching the speaker' -peto

Note: General manner projectives of distance are all relative. There are no nonrelative forms.

The up and down directions indicated by the demonstratives speak of extremes of either angle or distance or both. The extreme of angle is more obviously like the English language pattern--up a mountain, a tree, or a house, and down a valley or tree. The extreme of distance in a coastward or inland direction is not so frequently used because distant things are not as easily seen as the demonstrative requires. The north and south aspect is even more rare for the same reason, but the non-relative ones are useful for locating highly visible mountain villages and reading maps while the relative ones are good for describing the movements of airplanes overhead.

Another use for the up and down demonstratives is to make a distinction between two nearby objects which -ka would not give. For example, if you are holding a bottle in each hand while facing west, the bottle in your right hand is aro'doong and the bottle in the left hand is aro'dei'.

Examples:

a-unq	g	'this'
a-un-	-toong	'that down there or to the north'
a-un-	-toon-ko	'that further down, descending from us or flying north'
a-un-	-toom-peto	'that not so far down, ascending from below us or flying in from the north'
α - α'		'here'
a-n-1	kα-'	'there nearby, north or south of us'
a-'-a	daang-Ø	'there inland from us'
Ø - Ø-0	daan-to	'further inland'
e-e'		'like this'
e-e'-	-dan-to	'going seaward from us'
e-e'-	-dam-peto	'approaching us from seaward'
a-ni		'this lady, girl'
a-ni-	-re-to	'that lady higher up or ascending from us'

a-ni-ka-peto
'that nearer lady' or 'she who is
approaching us just there (north
or south)'

- 2.2 Interrogative mode: 'which? where located?'. An interrogative projective consists of:
 - (1) the interrogative mode marker are
 - (2) a CGN.

Examples:

Gen. substantive: Are-ra? 'Which one?' or (more

loosely) 'Where is he/it?'

Gen. locative: Are-'? 'Where?'

Gen. manner: Are-kee'? 'How?' or 'How could that

be?'

Specific-fem.: Are-ni? 'Which lady?' or 'Where

is she?'

Specific--house: Are-va? 'Which house?' or 'Where

is the house?'

- 2.3 Definitive mode: 'the, it'. A definitive mode marker consists of:
 - (1) the definitive mode marker te
 - (2) a CGN.

Examples:

Gen. substantive: Te-e 'the one, it, him' or 'That's

him!'

Gen. locative: Te-' 'the place, there' or 'That's

where!

Gen. manner: Te-e' 'the way, as, like that, thus'

or 'That's the way!'

Specific--fem.: Te-ni 'the woman, she, her' or 'She's

the one!'

Te-e nkaveai. 'Take it!'
It you'll.take

Te-' ba'naniai. 'Sit there!'
There you'll.sit

Te-e kapoo' nkaveai. 'Take the thing!'
The thing you'll.take

Te-' uro'kanoo' ba'naniai. 'Sit down at the front!'
The front you'll.sit

Te-e' nkoeai. 'Do it like that.' Like.that you'll.do

Nkoeai te-e' nauransina'. 'Do as I showed you'
You'll.do as/ as.I.told.you or 'Do it the way I
the.way told you.'

Te-ni are-ni? 'Which (of these) is she?'
She which.one.fem

A-ni te-ni naurantu'nani. 'This is the This.fem the.fem of whom.I.told.you woman I told you about.'

- 2.4 Indefinitive mode: 'a, an, one, only'. An indefinitive projective consists of:
 - (1) the indefinitive mode marker na
 - (2) a CGN.

Examples:

Gen. substantive: na-rung 'one, someone, same one,

only, a, an'

Gen. locative: na-ro' 'one place, same place,

only place'

Gen. manner: na-ri' 'one manner, same manner'

Specific--fem.: na-ni 'a lady, some lady, only her'

Te-e na-rung otoko ooansing. He one.masc being I.saw.it

'I saw that he was the only one there.'

Na-rung ninka pankara ninka nanaau'nung. One.masc with old.man with they.went 'They went with an old man.'

Na-vete nerai' na-rung sipuru'nung. One.side girls one.masc he.put.them 'On one side he put only girls.'

Too-paavaruio' na-rung -e aa'puu': . . .
Since.they.didn't.pierce one.masc actor he.said: . . .
'When they failed to hit it (with their arrows) another said,". . ."'

Te-' na-ro' otoroko ooaransing.
There one.place they.being I.saw.them
'I saw them right there.'

Toire' na-ro' oosiariru'nung.
Children one.place they.gathered.together
'The children gathered together at one place.'

Te-ring ooka-ring na-ro' -ke booretu'nung. The couple all couple one place at they died 'Both the man and his wife died in the same place.'

Te-e' na-ri' nkoareko ooompesing.
Thus same.way when.they.acted I.saw.them.dl
'I saw those two acting just like that.'

Na-ni manikuma te- \emptyset - -ke tavo'kuu'nung. A.lady woman there at she.arrived 'A/One woman arrived there.'

(When the clitic -ke follows the projective te-' the final glottal stop is lost and the word is pronounced teke, as in the last example.)

3. DERIVATIONS. A derived projective consists of:

(1) an independent verb, a verbal (verb stem), a verbal phrase, a descriptive stem, an adverb, a noun phrase, a noun, a pronoun, another (embedded) projective or a goal phrase (2) a case marker--for three of the types only:

-po' for inverse possessives

-koo for partitives

-ka for corporal positionals

(3) the derivational suffix (DS):

-na

 $-\alpha/-k\alpha$ and \emptyset three other very restricted allomorphs which only follow certain small classes of descriptive stems as will be described in section 3.2.

(4) a CGN.

Rules:

- (1) Reduction of the derivational suffix -na:
 - (a) The a is lost preceding another vowel.

e.g. koi' + na + u' becomes wood + DS + vertical

koi'-n-u'
wood-DS-vertical

'a wooden vertical object--tree, post, pole'

(b) The whole form of -na is lost preceding another na.

e.g. asi' + na + naa' becomes last + DS + garment

asi'-Ø-naa' or last-DS-garment

asi'-naa'
'the last garment'

(2) Distribution of the three general substantive CGN allomorphs which are used with derivations: -ra is used with only four descriptive stems:

tamp- 'good'
or- 'bad'
pank- 'big'
ook- 'all'.

- e.g. tamp-a-ra 'a good one' or just good-DS-one 'good'
- -aa is used with associatives descriptives possessive pronouns.
 - e.g. nka + na + aa = nka-n-aa 'mine' my + DS + one my-DS-one
- -ung is used with inverse possessives partitives independent verbs.
 - e.g. pooro'-po'-n-ung 'the one with pig-having-DS-one a pig'

There are six kinds of derived projectives described in this section, all of which are distinguished from one another by the type of stems they take and by their different affixation. They are associatives, descriptives, inverse possessives, partitives, corporal positionals, and embedded sentences.

- 3.1 Associatives. An associative derived projective consists of:
 - a verb stem, noun, embedded projective, or goal phrase
 - (2) the derivational suffix -na
 - (3) a CGN.

Associatives are used in nine different ways:

- (1) To indicate loose possession.
 - e.g. Piita-n-aa 'the one associated with Peter-DS-one Peter', 'Peter's'

a-'-doo-n-aa⁶
dem-loc-down-DS-one

'the one from down there' or 'the northerner'

- (2) To indicate origin or citizenship.
 - e.g. *Kieta-na-ni*Kieta-DS-fem.sg.

'woman associated with Kieta' or 'Kieta woman'

- (3) To indicate the form of a substance.
 - e.g. nto-na-ru' water-DS-fluid.unit

'drop, container, lake of water'

but nto-na-ri
water-DS-stream

'stream, river of water'

- (4) To indicate the substance of a form.
 - e.g. ere-na-ru' blood-DS-fluid.unit

'drop, container, pool of blood'

iira-bauko-na-maia'
anger-its.mother-DS-brothers

'hot-headed brothers'

- (5) To act as an indefinite article.
 - e.g. pava-na-va 'a stilt house' stilt.house-DS-house
- (6) To sharpen the focus of the CGN.
 - e.g. apu-Ø-po' 'a short way' short-DS-loc

but $apu-\emptyset-po'-n-oo'$ short-DS-loc-DS-loc

as an embedded locative projective means 'a place nearby'

- (7) To indicate the direction in which an object is situated relative to another object.
 - e.g. anka' aape-na-ra' there.near.by toward-DS-net
 'the adjacent net'
- (8) To ask how many.
 - e.g. are-kee'-n-ing 'How many?' interrogative-manner-DS-pl
- (9) To indicate ordinal numbers. Details of this are given in section 4.3.
- 3.2 Descriptives. A descriptive derived projective consists of:
 - (1) a descriptive stem
 - (2) a derivational suffix: $-\theta/-a/-ka$ or -na depending on adjacent morphemes used
 - (3) a CGN.

Rules:

- (1) Reduction of the derivational suffix allomorphs -a and -ka:
 - (a) The a is lost preceding all vowels but u.
 - e.g. tamp-Ø-eng 'good ones' good-DS-pl

(b) With $-k\alpha$ the final α may optionally be omitted before u as well.

e.g. isi-ka-u' or isi-k-u'tall-DS-taro tall-DS-taro

'a tall taro'

(2) Perturbation of CGN-initial i. Following the derivational suffix allomorphs -a and -ka, i perturbs to e.

e.g. or + a + ing becomes $or - \emptyset - eng$ bad+DS+pl bad-DS-ones

'bad ones'

(3) Distribution rules are perhaps best presented in a bidimensional array such as Table 2.

TABLE 2: Descriptive stems

Descriptive	Gloss	Derivational	General CGNs		
Stems		Suffixes	Subst.	Loc.	Manner
tamp-	'good/well'	-a	-ra	-00'	_,
or-*	'bad'	-a	-ra	-00'	-ka'
pank -*, †,‡	'big'	-a	-ra	-po'	-'
ook- [‡]	'both/all'	-α	-ra		
ari-*	'difficult'				
ako- [§] , ^{‡‡}	'strange/ astray'				
apu-*,‡‡	'short'				
ive-*	'hard'				
isi-*	'long'	Ø before -po'	- aa	-po'	-'
masi- ^{‡‡}	'true'	-ka elsewhere			
nera-*	'new'				
uri-*	'old'				
sira-*	'clear'				
aa'-	'extreme'		-aa		-'
asi'-"/ asira-	'last'				
ee'-	'particular'				
mme'-	'first with more to follow'	-na		-00'	
nii'-	'other'				
oki'- [#] , ^{‡‡}	'small'				
00vu-	'different'				
ookutu-	'whole'				
siivu-*,**	'deserted'				
tutuna '- ^{††}	'first of a set'				

Derived general manner projectives with these stems are not used as free forms but are stems of Class I transitive verbs, very often the dependent coordinate type. Occasionally these manner projectives may be re-embedded as stems of associative projectives. Not all Nasioi people accept this as correct usage, however.

Examples:

Pank-a-'-paring. 'He's grown.'
Big-DS-manner-himself.past

Sira-ka-'-pui naumuing.
Clear-DS-manner-it.he.past(dep.coord.vb) he.told.me
'He told me clearly.'

Apu-ka-'-na-' toto'-pansing.
Short-DS-manner-DS-manner cut-it.I.past
'I cut it into short pieces.'

† Contrary to what one might expect:

pan-ka-ra means 'an old man'.
big-DS-one

pan-ka-ing means 'big, a big thing' or 'a great man'.
big-DS-one

The morph -ing is used in this sense in only one other place:

The stem ook- means 'all' only with a general substantive CGN.

ook-a-ra 'all, all of them' or 'both of them'.
all-DS-one

In every other instance *ook*- means only 'both' and must be followed by either a dual or a dualized CGN.

Examples of dual CGNs:

ook-a-anka 'both people'
both-DS-two people

ook-Ø-eng 'both non-personal things'
both-DS-dl/pl

ook-a-ring 'both the man and the woman'
both-DS-couple

A CGN may be dualized by the suffixation of the dual number elaboration marker which is (as also in section 4.2.2):

- -ka following glottal stop
- $-t\alpha$ following nasals
- -ra following vowels.

Examples:

ook-a-rin-tu 'both couples' (This is an exception both-DS-couple-pl having a plural marker. Apparently the plural represents the fact that there are four people involved.)

ook-a-vete-ra 'both sides'
both-DS-side-d1

- The word $ako-\emptyset-po'$ 'wrong place', can be abbreviated to odd-DS-place ako'.
- The stem asi'na' can be optionally abbreviated to asi'.
- # Contrary to what one might expect:

 oki'-n-ing means 'a few, too few' or 'a very few'.
 small-DS-pl

oki'-na-reka' means 'many small ones' or 'children'.
small-DS-ones

This is the only occurrence of the allomorph -reka'.

** The stem siivu- is also a Class I reflexive verb stem in its own right; its manner projective form is not.

Example:

Tee siivu-aring.

He desert-himself.is

'All his fellow villagers are gone' (implying catastrophe).

The word tutung means 'first'. This is obviously the true root, but the descriptive stem itself is already a derived projective:

tutu-n-a'first-DS-manner

tutu-n-a'-n-a'
first-DS-manner-DS-manner

General locatives derived from these stems double as temporals.

Examples:

Ako' nempaau'.

Odd.place they.awaited.him

'They waited for him in the wrong place / at the wrong time.' (ambiguous)

Oki'-n-oo' masi-Ø-po' nentaravai.
Small-DS-place true-DS-place you.wait
'Wait just a minute.'

Apu-J-po' minkumuring.
Short-DS-place he.talked.to.us
'He talked to us a short time.'

- 3.3 Inverse possessives. An inverse possessive derived projective consists of:
 - (1) a possessed noun, or noun phrase
 - (2) the inverse possessive case marker -po'
 - (3) the projection marker -na
 - (4) a CGN (manner CGNs excepted).

These possessives are the inverse of the possessive pronouns (section 4.1.1) in that the CGNs of the latter stand for that which is possessed whereas the CGNs of the inverse possessives stand for the possessor.

Examples:

pava-po'-na-ni 'woman who has a house' house-has-DS-fem

Te-e duku'-po'-n-ung. 'He has beads (shell money).'
Def--subs beads-has-DS-one

kansi'-po'-n-upoong
ground-has-DS-people 'land owners'

da'mom-po'-Ø-nanka 'many dusty things' dust-have-DS-many.ones

Niikanamono toire' mmau'-po'-na-nono. Our.village children many-has-DS-village 'Our village has many children.'

- 3.4 Partitives. A partitive derived projective consists of:
 - (1) a noun, noun phrase, verbal, verbal phrase, pronoun, or embedded projective

- (2) the partitive case marker -koo
- (3) the derivational suffix -na
- (4) a CGN.

Partitives are used in four ways:

- (1) To indicate the species or body of which something is a member.
 - e.g. Number CGN dii'-koo-Ø-naanka you-part-DS-two 'a couple of you'
 - Body-part CGN pooro'-koo-na-ruta pig-part-DS-eye 'eye of a pig'
 - Plant-part CGN taio-koo-na-veu
 taio.tree-part-DS-limb
 'branch of a taio tree'
 - Grove CGN main-koo-Ø-nau almond-part-DS-grove 'almond grove'
 - Fraction CGN koi'-koo-na-marang wood-part-DS-part 'a piece of wood'
 - Social CGN pooro'-koo-na-kang pig-part-DS-family 'a family of pigs'
- (2) To indicate the material from which an item is made.
 - - turung-koo-na-vaang 'a bow of palm wood' areca.palm-part-DS-bow

 - boromaka'-koo-na-vuu' 'cow milk' or 'a cow's cow-part-DS-milk/breast udder'

- (3) To indicate the issue of a dispute or complaint.
 - e.g. manii'-koo-Ø-nai' 'dispute over women' women-part-DS-dispute

pooro'-koo-Ø-naare 'complaint about a pig' pig-part-DS-talk

- (4) To indicate the purpose or use of an item. In this case a verbal or verbal phrase precedes the case marker -koo.
 - e.g. A-u marasini-n-u bore'
 This-tablet medicine-DS-tablet head

siipa-koo-n-u.
sick-part-DS-tablet

'This pill is for headaches.'

A-u' nta' koo kau'-koo-n-u'.
This-upright fire for kindle-part-DS-upright.
timber /in timber

'This tree is for kindling in the fire.'

Not all CGNs participate in the partitive system. Among these nonparticipants are notably CGNs of time and manner.

There is a special generic form which is often used to bypass the projective system when specific CGN is not required. The derivational suffix is replaced by the morpheme -ng and a CGN is not used. This is the nonprojective partitive.

e.g. A-ung mooni' beenki koo si'-koo-ng.

This-one money bank in put-part-non.proj
'This money is for putting in the bank.'

Aung mpaang tunun-koo-ng.
This.one bow areca.palm-part-non.proj
'This bow is made of areca palm wood.'

The same said with projectives would be as follows:

A-vaang mpaa-na-vaang tunun-koo-na-vaang.

This-bow archery.bow-DS-bow areca.palm-part-DS-bow.

'This archery bow is a bow made of areca palm wood.'

- 3.5 Corporal positionals. A corporal positional derived projective consists of:
 - (1) a body part
 - (2) the corporal positional case marker -ka
 - (3) the derivational suffix -n
 - (4) the general locative CGN -00'.

Corporal positionals are a special type of locative used to indicate location relative to an aspect of a person's body.

Examples:

duta-ka-n-oo'
eye-position-DS-loc
'in front of someone, before one's eyes'

kopini-ka-n-oo'
back-position-DS-loc
'behind someone, behind one's back'

Paaro-koo kau'-ka-n-oo' donkonuu'.
Troll-of foot-position-DS-loc he.stood.up
'He stood up at the foot of the (sleeping) troll.'

- 3.6 Embedded sentences. A projective derived from an embedded sentence consists of:
 - (1) an independent verb (accompanied by any of its clause and sentence level complement) suffixed by
 - (2) the derivational suffix
 - (3) a CGN.

This construction embeds sentences in three or four ways, 7 depending on the CGN used:

(1) By nominalizing them with a substantive CGN.

e.g. Te-veku' a-'mung baveie-na-veku' are-'
The-basket near-day you.wove-DS-basket which-loc

sipeing?
you.left.it

'Where did you leave the basket that you wove the other day?'

- (2) By localizing them with a locative CGN.
 - e.g. Siapani' -ke paapa' tavaau'-n-oo'
 Japanese actor my.uncle they.killed-DS-loc

noru'ampa'.
I.don't.know

'I do not know where the Japanese killed my uncle.'

- (3) By adverbializing them with a manner CGN.
 - e.g. Kaku teka'paako'-na-' nawmeai.

 Mortar how.they.used.to-DS-manner tell.me

'Tell me how they used to carve out mortars.'

- (4) By temporalizing them with a temporal CGN. 7
 - e.g. Pora' -ke ponto'maru'nung te-'mung paapa'
 Bush in I.was.born the-day my.uncle

pi'na'aau'-na-'mung Siapani' -ke. they.shot.him-DS-day Japanese actors

'I was born in the bush the day the Japanese shot my uncle.'

Rules:

The final morpheme of an independent verb is its tense/aspect marker. All but one of the tenses (present temporal -ng) combine with derived projective suffixes. However, only one aspect, the subjunctive -peu', may be suffixed in this way. The tense markers and the derived projective suffixes are subject to certain rules of reduction when they are combined:

(a) Tense markers drop the phoneme sequences -nung and -ung and all final nasals preceding projective suffixes.

e.g. Diiri bavu-ing.
Panel he.weave-near.past
'He wove the panel.'

Te-varo bavu-i-na-varo tamp-a-varo.
The-part he.wove-near.past-DS-part good-DS-part
'The part he wove was good.'

Toire' davakori'ari-maung
Children they.play.games-present.habituative(PH)

anke.

'Children play games here.'

Toire' davakori'ari-ma-n-oo' a-a'.
Children they.play.games-PH-DS-loc this place
'This is where the children play games.'

Teing -koo bi'dari-auka'nung.
Them by hang.around-negative.
general.future(NGF)

'Don't hang around them.'

Bi'ari-auka'-n-ing orokoaransing.
Hang.around-NGF-DS-pl I.have.forbidden.them
'I have (already) forbidden those who are not to be hanging around.'

(b) Both negative present tense markers (-a') and -aung reduce to -a before the CGNs

-ung (masculine singular)
-ni (feminine singular)
-ing (plural).

Preceding other projective suffixes they are both -a'.

Examples:

Tee' nkoarav-aung.

Like.that happen-negative.present.habituative(NPH)
'It just doesn't happen like that!' or
'How extraordinary!'

Teni tee' nkoarav-a-i.
She like.that act-NPH-fem.sing
'She is not one to act like that!'

Nkoarav-a'-na-' nkoaring.
Happen-NPH-DS-manner it.has.happened
'A strange thing happened' or
'It acted in a strange manner.'

(c) The projective derivational suffix is lost when the CGNs -ung, -ni, and -ing mentioned above are suffixed to verbs of any of the four present tenses (-mang/-maang, present progressive (PP); -a', negative present progressive (NPP); -maung, present habituative (PH); and -aung, negative present (NPH)). At the same time the feminine CGN -ni loses its initial nasal and is reduced to -i.

Examples:

Beero'ampaing tee pakumu-ma-Ø-ung.
I.will.visit he/the he.helps.me-PH-DS-one
'I'll visit the one who helps me.'

Teni toire' tareuri-ma-Ø-i bau'uri-ma-Ø-i.
The.fem children care.for-PH-DS-fem feed-PP-DS-fem
'The lady who cares for the children (is) the one who feeds/is feeding them.'

Teing tampa' mintoompari-ma-Ø-ing peeraoro-a-Ø-ing.
The.ones well work-PH-DS-pl hunger-NPH-DS-pl
'Those who work well (are) those who do not go hungry.'

Note that the ending -aung can be interpreted two different ways, either as negative present habituative tense or as the same tense plus a derived projective suffix. The ending -maung can also be interpreted in two different ways in the same way as its negative counterpart -aung. However, although these forms are ambiguous in themselves, the context usually makes clear how they are to be interpreted.

For example:

Teni -e toire' tareuri-ma-Ø-i -e bau'uri-maung. She actor children care-PP-DS-fem actor feeds.them-PH'She who cares/is caring for the children feeds them.'

In this example the actor clitics on the nouns tell us that this is a transitive clause, not an equational one like the second example of reduction rule (c) above. So the ambiguous ending of the last verb must be a tense marker.

Table 3 lists all the tense/aspect markers which combine with derived projective suffixes and shows how they combine with six of the CGNs. Those junctures which illustrate reduction rule (c) are grouped into the upper left-hand corner for quick identification.

- 4. COMPLEX SYSTEMS. This section describes word classes whose systems combine different types of projectives with one another or else combine projectives with other word types. As each is very different from the others there is no general formula which can be written to cover them all.
- 4.1 Multiple mode. Basically the multiple mode is a reduplicated projective, using two different projective mode markers: the demonstrative, acting as the preposed partial, and the definitive, acting as the main part of the projective.

A multiple projective consists of:

- (1) the morpheme a-
- (2) a whole monosyllabic CGN or the first vowel with any preceding consonant of a multisyllabic CGN
- (3) the morpheme -te
- (4) the whole CGN.

The meaning denoted by this construction is neither demonstrative nor definitive in nature, but multiple. It can be glossed as 'a great many' or 'all kinds of' individual things.

Examples:

a-mu-te-murii' 'many kinds, all kinds' kind

Tense/Aspect Markers	irs	Derived Proje	Derived Projective Suffixes (sample of six): Derivational Suffix -ma + OGNs	(sample of si	x): Derivatio	nal Suffix -r	a + CGNs
		- <i>ung</i> 'masculine'	- <i>ni</i> 'feminine'	- <i>ing</i> 'plural'	-00' 'locative'	-' 'manner'	-va 'house'
Present Progressive	-mang	,	•		•	•	
Present Habituative	-mamg	-ma-p-ung	-ma-p-1	-ma-p-rng	-ma-n-00'	-ma-na-'	-ma-na-va
Negative Present Progressive	-a'	, ,	•				;
Negative Present Habituative	-anug	-a-p-ung	7-4-6-	-a-p-rug	-a -u-00	-pu- p-	-a -ua-na
Immediate Future	-ai	•	•			;	;
General Future	-aing	-ar-n-mg	-ar-na-na	bu1-u-1p-	-41-10-	-74-17-	-ar-ua-na
Negative Immediate Future	-auka'	som a Indian	- 200 - 200	ne l'estimation	100 2 100	1 24 120	ne pu l'odin
Negative General Future	-auka'nung∫	eawa -u-awa	-מאמד -וו-מעל -מאמד -ומי-נה -מאמד -וו-בעל -מאמד -וו-00 -מאמד -וויים -מאמד -וויים -מאמד -וויים -מאמד -וויים -מאמד	-auxa -n-	-auka -n-00	-auxana-	-auxuuxu-
Immediate Past	-ing	-i-n-ung	-i-na-ni	-i-n-ing	-i-n-00'	-i-na-'	-i-na-va
Intermediate Past	-ieng	-ie-n-ung	-ie-na-ni	-ie-n-ing	-ie-n-00'	-ie-na-'	-ie-na-va
Distant Past	-n,(umd)	6un-u-, n-	-u'-na-ni	-u'-n-ing	-n'-n-oo'	-n'-na-'	-u'-na-va
Habituative Past	-ko'(nung)	-ko'-n-ung	-ko'-na-ni	-ko'-n-ing	-ko'-n-00'	-ko'-na-'	-ko'-na-va
Subjunctive Aspect	-peu'	bun-u-, nəd-	-peu'-na-ni	-peu'-n-ing . peu'-n-oo'	, oo-u-, ned-	-peu'-na-'	-peu'-na-va
		_					

a-'mun-te-'mung 'many different days' day

a-va-te-va 'a great many various houses'

house

a-re-te-rempo' 'many litters (of pigs, etc.)'

litter

a-vo-te-voonku 'many clumps of (banana or taro) plants'

clumps

a-u-te-u' 'lots of taros'

- 4.2 Numbers.
- 4.2.1 The number one is the same as the indefinite projective.

The indefinite projective consists of:

- (1) na- 'one'
- (2) a CGN.

Examples:

na-rung
one-one.gen.subs
'one anything'

na-va 'one house'

4.2.2 Numbers two, three, and four are number projectives.

A number projective consists of:

(1) a number mode marker:

ke- 'two'
bee- 'three'
kare- 'four'

- (2) a CGN other than general locative and manner markers
- (3) a number elaboration marker--these vary according to what precedes them, whether glottal, nasal, or vowel respectively:

two-basket-dl

ke-vin-ta 'two vines, ropes'

two-vine-dl

ke-vine-ra 'two sides'

two-side-dl

bee-veku'-pi 'three baskets'

three-basket-pl

kare-vin-tu 'four vines, ropes'

four-vine-pl

kare-mii-ri 'four hills, mountains, ridges'

four-hills-pl

Rules:

(1) Following -ri-final CGNs the plural elaboration marker -ri becomes -ru.

Example:

kare-vari-ru 'four trees'
four-tree-pl

(2) Following certain o-final CGNs (-varo, -mono, -vito), -ri may optionally be reduced to -i.

Example:

bee-varo-ri three-room-pl bee-varo-i three-room-pl 'three rooms'

(3) Usually the numbers three and four which have glottal stop-final CGNs may be abbreviated by omitting the glottal stop and the following p. In a few cases the glottal is kept and the following pi is omitted. Those which do not abbreviate are usually those with monosyllabic CGNs.

bee-vio'-pi or bee-vio-i 'three chunks' three-chunks-pl

bee-meensi'-pi or bee-meensi'- \emptyset 'three sections' three-section-pl

bee-ne'-pi (does not abbreviate) 'three leaves'
three-leaves-pl

(4) General substantive number suffixes are irregular:

ke-naanka 'two'
two-dl.CGN

bee-naumo 'three'
three-?

kare-naumo 'four'

In the mountains of Kong-ara, people are counted with a special set of numbers:

ke-naanka-ra'-ka 'two people'
two-dl.CGN-?-dl

bee-naura' 'three people'
three-?

kare-naura' 'four people'
four-?

- (5) Other minor variants may be noted as marked by asterisks in the comprehensive number list in the appendix, section 5.2.
- 4.2.3 The number five as a general substantive is pa'noko'. It can also be a specific projective. As a specific projective the number five consists of:
 - (1) pa'noko' 'five'
 - (2) the derivational suffix -na (as per section 3)

- (3) a CGN
- (4) the plural number elaboration marker -pi/-tu/-ri as explained in section 4.2.2.

pa'noko'-na-vuntu'-pi 'five villages'
five-DS-villages-pl

pa'noko'-n-u-ri
five-DS-coins-pl
'five coins' or 'fifty toea'

pa'noko'-Ø-naun-tu 'five layers'
five-DS-layers-pl

- 4.2.4 Multiples of ten are phrases which consist of:
 - (1) any number, followed by the word
 - (2) kivora 'ten'
 daaku' 'hundred'
 dakuraaku'/kokoree' 'thousand'
 kokokokoree' 'millions'.

Examples:

kenaanka daaku' 'two hundred'

beenaumo kivora kokoree' 'thirty thousand' three ten thousand

- 4.2.5 Alternate multiples of five (15, 25, 35, etc.) consist of:
 - (1) the nearest lesser multiple of ten
 - (2) the clitic
 - -keta (following glottals)
 -eta (occurring elsewhere) 'from'
 - (3) the word for five which is always pa'noko' except phrase finally, when it may be a specific derived projective.

pa'noko'-keta kenaanka-taa kivora-eta pa'noko'
five-from two-add ten-from five
'seventy-five'

kenaanka kivora-eta pa'noko'-na-ren-tu
two ten-from five-DS-container-pl
'twenty-five containers'

- 4.2.6 Numbers above five other than its multiples are phrases which consist of:
 - (1) the nearest lesser multiple of five
 - (2) -keta/-eta 'from'
 - (3) the number indicating the difference between the nearest lesser multiple of five and the intended numerical meaning
 - (4) the verb-stem-become-clitic -taa 'to be extra'

Examples:

pa'noko'-keta narun-taa
five-from one-add
'six (anything)'

kenaanka kivora-eta pa'noko'-keta beevaari-taa
two ten-from five-from three.houses-add
'twenty-eight houses'

4.2.7 For large numbers the word bera, 'and then', is used in place of the clitic -keta/-eta, 'from', to signal major shifts from millions to thousands, thousands to hundreds, hundreds to tens, and tens to fives.

Examples:

narung kivora-eta narun-taa kokokokoree' (11,000,000) one ten-from one-add million

bera pa'noko'-keta kenaanka-taa kivora-eta and.then five-from two-add ten-from

pa'noko'-keta narun-taa kokoree' (76,000) five-from one-more thousand

bera pa'noko'-keta beenaumo-taa kaaku' (800) and.then five-from three-add hundred

bera pa'noko'-keta karenaumo-taa kivora-eta and.then five-from four-add ten-from

beenaumo-taa (93) three-add

'eleven million seventy six thousand eight hundred and ninety three' or '11,076,893'

4.2.8 While the foregoing counting system has fairly wide usage and is common to the Aropa Valley, other dialects employ slightly different systems for the counting procedure beyond the number five. One of these, which seems to be developing in the Kongara area, is particularly streamlined and worthy of note. Using general substantive numbers, Aropa Valley and new Kong-ara numbers compare as follows:

No. Aropa Valley

narung
 kenaanka

beenaumo
 karenaumo

5. pa'noko'

6. pa'noko'-keta narun-taa 7. pa'noko'-keta kenaanka-taa 8. pa'noko'-keta beenaumo-taa 9. pa'noko'-keta karenaumo-taa

10. kivora

11. kivora-eta narun-taa 12. kivora-eta kenaanka-taa 13. kivora-eta beenaumo-taa

14. kivora-eta karenaumo-taa

15. kivora-eta pa'noko'

16. kivora-eta pa'noko'-keta narun-taa

17. kivora-eta pa'noko'-keta kenaanka-taa

18. kivora-eta pa'noko'-keta beenaumo-taa 19. kivora-eta pa'noko'-keta karenaumo-taa

20. kenaanka kivora

21. kenaanka kivora-eta narun-taa

New Kong-ara

narung
kenaanka
beenaumo
karenaumo
pa'noko'
naruntaa
kenaankataa
beenaumotaa
karenaumotaa

kivora

kivora-eta narung
kivora-eta kenaanka
kivora-eta beenaumo
kivora-eta karenaumo
kivora-eta pa'noko'
kivora-eta naruntaa
kivora-eta kenaankataa
kivora-eta beenaumotaa
kivora-eta karenaumotaa
kenaanka kivora

kenaanka kivora-eta narung

and so on.

- 4.3. Ordinals. An ordinal is a derived projective consisting of:
 - (1) one of three descriptive stems:

mme' 'the first and only one so far'
tutuna' 'the first of many'
asi' 'the last'

or any number greater than one

- (2) the derivational suffix -na
- (3) a CGN compatible with the number.

Note that all CGNs are here compatible with the general substantive numbers provided that no other projectives occur in the same sentence. Otherwise, to be compatible, the final CGN must agree with that of the number.

Examples:

General	General	General	Specific
Substantives	Locatives	Manner	- 'bag'
tutuna'-n-aa	<pre>tutuna'-n-oo' first-DS-place 'first place'</pre>	tutuna'-na-'	tutuna'-na-ra'
first-DS-one		first-DS-way	first-DS-bag
'first one'		'first way'	'first bag'
<i>kenaanka-n-aa</i>	kenaanka-n-oo'	kenaanka-na-'	kenaanka-na-ra'
two-DS-one	two-DS-place	two-DS-way	two-DS-bag
	<pre>kenoo'ka-n-oo' two.place-DS- place</pre>		kera'ka-na-ra' two.bag-DS-bag
'second one'	'second place'	'second way' or 'two by two'	'second bag'
beenaumo-n-aa	beenaumo-n-oo'	beenaumo-na-'	beenaumo-na-ra'
three-DS-one	three-DS-place	three-DS-way	three-DS-bag
	<pre>beekoi-n-oo' three.place-DS- place</pre>		bee-ra'-pi-na-ra' three-bag-pl-DS- bag
'third'	'third place'	'third way' or 'three by three'	'third bag'

```
asi'-n-aa asi'-n-oo' asi'-na-' asi'-na-ra'
last-DS-one last-DS-place last-DS-way last-DS-bag

asira-n-aa -- -- --
last-DS-one
'last one' 'last place' 'last way' or 'lastly'
```

4.4 Pronouns. The pronoun system of Nasioi and the projective system are partially intertwined. This explains why they are both described in the same paper, as neither is complete without the other.

There are four types of pronouns which are distinguished from one another by, among other things, (1) their degree of intensity and (2) their affinity or lack of affinity (to other people or things). These four types are:

possessive pronouns	(intenseaffinitive)
kin term pronouns	(laxaffinitive)
emphatic pronouns	(intenseisolative)
personal pronouns	(laxisolative)

High intensity and nonaffinity (isolation) are explicitly marked in the general formulation of the pronoun, as follows.

A pronoun consists of:

- (1) a pronominal person marker:
 - n 'first person'
 - d 'second person'
 - b 'third person' (except for personal pronouns which use projectives for the third person)
- (2) a pronominal number marker:

Singular

- -Ø after n
- -a after d and b and before vowels and voiceless consonants
- -aa after d and b and before voiced consonants

Dua1

- -e before vowels
- -ee before consonants

Plural

- -i before vowels
- -ii before consonants
- (3) the isolative marker (used only with isolative pronouns):
 - -ing with first person singular
 - -Ø with second and third person singular word medially
 - -' elsewhere
- (4) the intensity marker (used only with intense pronouns) -ka
- (5) elaboration suffixes, different systems occurring with each kind of pronoun.

Interestingly, it is the two completely opposite types which involve projectives—the possessive pronouns, which are derived projectives, and the personal pronouns whose third person forms are basic projectives.

- 4.4.1 A possessive pronoun consists of:
 - (1) a pronominal person marker (as described above)
 - (2) a pronominal number marker (as described above)
 - (3) the intentsity marker -ka
 - (4) the projective derivational suffix -na (as described in section 3)
 - (5) a CGN.

Examples:

n-ee-ka-na-va 'our (d1) house'
us-d1-intense-DS-house

d-a-ka-n-ing 'your friends' or 'your things' you-sg-intense-DS-pl

- 4.4.2 Kin term pronouns (kin terms) consist of:
 - (1) a pronominal person marker (except that first person singular kin terms are special portmanteau forms)
 - (2) a pronominal number marker (with above exception)
 - (3) a kin indicator
 - (4) a kin number marker:

Singular

-Ø

Dual

- -kaara used with all but junior siblings
- -keta used only with junior relatives
 -ka used only with certain junior
- -naanka used only with certain junior relatives

relatives

Plural

- -kaampi used with all but next younger generation
- -ainkaang/-iainkaang/-ukaa'/-ku used
 with different junior relatives.

Kin indicators may be divided into two classes: junior and nonjunior. The nonjunior class takes only one form each to express dual and plural number, -kaara and -kaampi respectively, while the junior class has the many irregular options. Following is a list of kin indicators which are prefixed with various examples of pronominal person and number markers. Parallel to the list is a corresponding list of portmanteau forms which occur when the pronoun is first person singular. More exact glosses for the kin indicators may be found written up technically in the appendix, section 5.4.

Kin indicators

First Person	Kin Indicators	
Singular	with	
Portmanteaux	Prefixes with	Gloss
Nonju	ınior Kin	
teete'	be-ite*	'their (dl) grandmother'
	ni-ete†	'our (pl) grandmother'
kaaka'	ba-kaaka	'his grandfather'
nko'	da-uko	'your (sg) mother'
mma'	ni-uma	'our (pl) father'
noovari	ba-'doovari	'his wife's parent'
kaampo'	bee-kaampo	'their (dl) aunt'
paapa'	bii-paapa	'their (pl) uncle'
baankanung	ba-'baanka'*	'his/her uncle-in-law'
v	nee-'baankanung†	'our (dl) uncle-in-law'
	nii-'baankanung [†]	'our (pl) uncle-in-law'
nnaang	ba-'aang	'his wife'
inung	đa- ' ung	'your (sg) husband'
maasi'	nee-'maasi	'our (two women's) sister-in-law'
noori	ba-'doori	'his brother-in-law'
nnaikang	bee-'aikanġ	'their (dl) cross cousin of
nnai'	bee-'ai	opposite sex' 'their (dl) cross cousin of
monaa	da-'doraa	opposite sex'
nnoraa maama'	dee-'maama	'your (sg) son-in-law'
taata'	da-taata	'your (dl) elder sister'
mmari	dii-'mari	'your (sg) elder brother'
mmar _t	arr- marr	'your (pl) sibling of opposite sex'
mmaiko'‡	ba-'maiko' [‡]	'his friend or relative'
mmarang	ba-'marang	'his friend or relative'
Juni	or Kin	
ntanama Inana	ni i noma Inana	low (al) warmen status
ntarama'nang ntarama'nung	nii-rama 'nang	'our (pl) younger sister'
ntara'	daa-rama-nung	'your (sg) younger sister'
	baa-ra'	'his younger sibling'
nnorang nnuring	ne-urang	'our (dl) daughter'
nnampuru 'nung	de-uring	'your (dl) son'
		'his nephew'
nnampuru'nang	baa-mpuru'nang	'his niece'
nnompeng	nee-'dompeng	'our (dl) grandchild'

- * The regular form.
- † An irregular form determined by the prefixes given.
- # Dual = mmaiko'-kaara or mmaiko'-ka; plural = mmaiko-ri'

Examples of nonjunior kin number markers:

beekaampo-kaampi 'their (dl) aunts (pl)'

their(dl).aunt-pl

his.younger-dl.CGN

Examples of junior kin number markers:

baarama'nan-keta⁸ 'his/her two younger sisters' his.vounger.sister-dl

baarama'nun-keta 'his/her two younger brothers' or his.younger.brother-dl 'his/her younger brother and sister'

baampuru'nun-keta 'his/her two nephews' or his.nephew-dl 'his/her nephew and niece'

baurin-keta 'his/her two sons' or his.son-dl 'his/her son and daughter'

ba'dompen-keta 'his/her two grandchildren' his.grandchild-dl

baarama'-naanka 'his/her two younger siblings'

baampuru'-naanka 'his/her two nephews/nieces' his.nephew/niece-dl.CGN

ba'dompe-naanka 'his/her two grandchildren' his.grandchild-dl.CGN

nee'dompen-da 'our two grandchildren' our.grandchildren-dl baampuru 'nan-kaara 'his/her two nieces' his.niece-dl baampuru'nun-kaara 'his/her two nephews' or his.nephew-dl 'his/her nephew and niece' bauran-kaara 'his/her two daughters' his.daughter-dl baurin-kaara 'his/her two sons' or his.son-dl 'his/her son and daughter' 'his/her two grandchildren' ba'dompen-kaara his.grandchild-dl baarama-inkaang 'his/her younger siblings' his.younger-pl baaumpur-iainkaang 'his/her nephews and/or nieces' his.nephew/niece-pl baur-ukaa' 'his children' his.son-pl ba'dompen-ku 'his/her grandchildren' his.grandchild-pl ba'dompen-kaampi 'his/her grandchildren' his.grandchild-pl 4.4.3 Emphatic pronouns consist of: (1) a pronominal person marker (2) a pronominal number marker

-' elsewhere
(4) the intensity marker (Inty) -ka

singular

the isolative marker (Isol):

(3)

-ina

(5) the optional isolative elaborator (IE) -mai' 'alone'.

with first person singular with second and third person

N-Ø-in-ka nanansing.
I-sg-Isol-Inty I.went
'I myself went.'

 $B-a-\theta-ka$ $b-a-\theta-ka-mai'$ poru'uing. him-sg-Isol-Inty him-sg-Isol-Inty-IE he.carried.it 'He carried it by himself.'

B-ii-'-ka biikana' nkoariru'nung.
they-pl-Isol-Inty their.way they.acted
'They behaved according to their own customs.'

4.4.4 Personal pronouns consist of:

- (1) a pronominal person marker
- (2) a pronominal number marker
- (3) the isolative marker:

-ing with first person singular
-' elsewhere

(4) an optional personal elaborator (PE) which may occur with first and second persons and dual or plural numbers only.

The third person personal pronouns, rather than conforming to the regular pronominal format, consist of projectives with number CGNs as listed in section 1.

Examples:

n-Ø-ing 'I' or 'me'
I-sg-Isol

d-a-' 'you'
you-sg-Isol

te-e 'he/him' or 'the man'
def-one

The personal elaborators are a small class of suffixes which are strikingly similar to certain

social CGNs as listed in section 1. Elaborated personal pronouns followed by their corresponding counterparts in definitive projectives make viable sentences and show the relationship that exists between them.

Examples:

<i>N-ee-'-naanka</i> We-dl-Isol-dl	te-naanka. the-dl/two	'We are the pair.'
D-ii-'-dovo You-pl-Isol-mother.and. children	te-vo. the-mother.and. child	'You are the mother and children.'
D-ee-'-doong You-dl-Isol-mother.and. child	<pre>te-kong. the-mother.and. child</pre>	'You are the mother and child.'
N-ii-'-daang We-pl-Isol-father.and. family	<pre>te-kang. the-father.and. family</pre>	'We are the father and family.'
D-ii-'-maia' You-pl-Isol-siblings	te-maia'. the-siblings	'You are the siblings.'
D-ee-'-mainta You-dl-Isol-two. siblings	te-mainta. the-two.siblings	'You are the two siblings.'
N-ii-'-mentu We-pl-Isol-brothers. in.law	te-mentu. the-brothers. in-law	'We are the brothers- in law.'
N-ee-'-daring We-dl-Isol-couple	te-ring. the-couple	'We are the engaged couple.'
<i>D-ii-'-darin-tu</i> You-pl-Isol-couple-pl	te-rin-tu. the-couple-pl	'We are the engaged couples.'

The personal elaborators are also used as suffixes following names and kin term pronouns.

Examples:

baren-taring	¹a	pair	of	birds'
bird-couple		-		

Piita-daang
Peter-father.and.family

'Peter's family (with Peter being either the father or one of the children)' or 'Peter and his wife'

Teresia'-daang
Theresa-father.and.family

'Theresa, her husband, and their children possibly (but not necessarily)' or

'Theresa, her father, and any other family members that might be present, if any'

bauma-daang
his.father-father.and.
family

'his father and other members of the family'

n-i-ete-dovoo-ri
our-pl-grandmothermother.and.children-pl

'our matrilineal ancestors'

Sion-naanka John-dl 'John and his friend'

APPENDIX

5.1 CGNs listed in Nasioi alphabetical order. Nasioi words in parentheses indicate the possible source from which the CGN was formed.

General:

- (1) -a'/-'/ro'/-oo'/-po' Locative
- (2) -e'/-kee'/-ri'/-' Manner
- (3) -ung/-ra/-e/-rung/-aa/-ung/-ing Substantive

Specific:

- (4) -'moo 'day, earlier part of day, time'
- (5) -'mung 'day--evening to evening (muung, night)'
- (6) -va/-va' 'house (pava); tens of possums'
- (7) -vaara' 'smoking rack (baaro', to smoke)'
- (8) -vaang 'archery bow (mpaang), fern tree boughs'
- (9) -vaatang 'ladder, stairs (paatang)'
- (10) -vara' 'utility leaf (para'), a food portion set out on such a leaf during a feast'

(11)	-varang	'one's peer group, a generation of people'
(12)	-vareng	'stalk of bananas'
(13)	-vari	'tree'
(14)	-varo	'room, door; hunk of meat'
(15)	-varong	'window, hole, hall'
(16)	-varu'/-vuru'	'string of fruit'
(17)	-vaku'	'bundle of bamboo; dancing/singing group'
(18)	-ve	'a horizontal timber in or for a building, a horizontal limb of a tree'
(19)	-ve'	'hillside (be'a)'
(20)	-veku'	'coconut frond basket (beku' or peku')
(21)	-veng	'broken off end of something hard and flat, either the fragment or the remainder, as a broken tooth, broken off board, blaze mark or chip there- from'
(22)	-vero'	'length of split or flattened bamboo, also the division between major cracks of a piece of flattened bamboo'
(23)	-vento'	'board, plank'
(24)	-veru	'bed, food rack'
(25)	-vete	'section, area, side'
(26)	-veu	'large tree branch'
(27)	-vi'	'strand of hair'
(28)	-vireng	'fingers, toes'
(29)	-viri'	'dry valley, gulch, ravine, crack (biri')'
(30)	-virong	'limb of one's body'
(31)	-ving	'vine, rope, string'
(32)	-vine	'side of one's body, side of any carcass'
(33)	-vio'	'piece of food (bio', meat)'
(34)	-vito	'nest (bito), bundle'
(35)	-vitu	'congregation, assembly'

```
-vo9
(36)
                       'mother and children'
                       'countryside (pora'), or section
(37)
      -vora'
                         thereof'
(38)
     -voraari9
                       'two sisters with children'
(39)
     -voro'
                       'animal (pooro', pig, whole pork)'
(40)
     -voka
                       'road, path'
(41)
     -vona
                       'tens of pigs and cows'
(42)
     -voonku
                       'clumps of banana or taro plants'
     -vou9
(43)
                       'children of a common grandmother'
                       'stand of bamboo'
(44)
     -vu
(45) -vu'
                        'piece of anything, animal specimen'
(46) -vuru'/-varu'
                       'bunches of nuts, oranges, tomatoes'
(47)
                        'road, path, way'
     -vung
                       'village, kingdom (Roman Catholic term)'
(48)
     -vuntu'
                        'aperture (busi), hole, hostril'
(49)
     -vusi
(50)
                        'palm frond torch (puu), light, color'
     -บนน
                        'breast, milk (buu')'
(51)
     -υuu'
(52)
     -ra'
                        'bag, fishnet, string bag (toora'),
                         a tightly woven garden produce bag'
(53) -raa'
                        'bamboo sitting bench'
(54) -raampu
                        'ten sago shingles'
(55) -raanga'
                        'span (daanga'), length or rope or arm
                         span used for measuring'
                        'string of coconuts as found in the
(56) -rang
                         tree'
(57) -rang/-ranto'
                        'sago frond, sago shingle'
(58)
     -rau
                        'season of year'
(59)
     -re'
                        'stone'
(60)
     -rempo'
                        'litter of pigs, any patrilineage or
                         matrilineage'
(61) -reng
                        'container, box, tin can, car, pipe'
(62) -ri
                        'stream, river, people of a certain
                          vallev'
(63) -ri'
                        'bone, tooth, tool; direction'
(64) -rime'
                        'tooth, tusk, horn'
```

(65)	-ring	'engaged or married couple'
(66)	-rinkung	'hole in the ground (dinkung)'
(67)	-riong	'some of a group of people'
(68)	-ripi'	'sarif (saaripi'), grass whip, knife'
(69)	-ripung	'basket of taro pudding'
(70)	-ro'	'length of bamboo, discarded and split bamboo cooker, empty bottle, antona' basket'
(71)	-rome'	'ear (dome') both outer and inner'
(72)	-rong	'section of log or pole, short round timber'
(73)	-roong	'day (doong), time'
(74)	-roope'	'coconut shell bowl or half section with or without its meat'
(75)	-ru'	'still water, puddle, lake, container of liquid'
(76)	-ruta	'eye (duta)'
(77)	-ruung	'spear, arrow with separate shaft and head, rib'
(78)	-ing	'plural people, dual and plural things'
(79)	-kararoong	'dish of taro pudding'
(80)	-kang	'father with one or more members of his family'
(81)	-kong	'mother with one child'
(82)	-marang	'set of friends, half, section'
(83)	-mare'	'year'
(84)	-maku	'possums (sometimes other small animals too)'
(85)	-maia'	'siblings (three or more)'
(86)	-mainta	'two siblings'
(87)	-mang	'hand of bananas, cluster of betel nuts'
(88)	-manto	'small group of anything'
(89)	-meensi'	'area, section of country'
(90)	-meng	'side, division, part'
(91)	-mentu	'brothers-in-law'

```
(92)
                        'mountain, ridge (mii)'
      -mii
 (93)
       -miku
                        'package, roll of money (often K10
                          worth)'
 (94)
       -mo'
                        'column of smoke (ka'mo'), fire,
                          firewood'
 (95)
                        'canyon, rough valley, hard place to
       -morinku
                          cross'
 (96)
                        'hamlet, large piece of something'
       -mono
       -moora'/-mooru' 'bight, turn or turns of a rope around
 (97)
                          the object to which it is hitched'
 (98)
                        'time. times'
       -mu'
 (99)
                        'part of a string of betelnuts or
       -muri'
                          coconuts'
(100)
                        'kind of'
       -murii'/muriau
(101)
      -mui'
                        'island'
(102)
      -muu'/muiaang
                        'clan, kingdom (United Church term)'
(103)
      -naa'
                        'cloth, garment'
(104)
      -naare
                        'word, sermonette, a gripe'
(105)
                        'arm, hand'
       -naang
(106)
                        'two people, but not related maritally'
       -naanka
(107)
                        'garden plot with log boundaries; ten
      -nai'
                          people in counting; an opposing team,
                          opponents in court; an argument.
                          issue, case'
(108)
                        'locality'
       -nairu
(109)
                        'time, particularly time of day'
       -nana
(110)
                        'grove, garden containing one kind of
       -nau
                         plant'
(111)
      -nau'
                        'leg, foot (kau')'
(112)
       -naung
                        'strata, layer, stage, aspect'
                        'paper, leaf, feather'
(113)
      -ne'
(114)
                        'stacks of paper, leaves; books'
       -ne'/-rane'/
         -rone'/-rene'
(115)
                        'woman, feminine singular (manii',
       -ni
(116) -noo'
                        'a single spear, arrow, shingle,
                         banana'
```

- (117) -u 'individual animals, coins (particularly ten toea pieces), fruits, nuts, sweet potatoes, Chinese taro, pills, sores'
- (118) -u' 'individual taro (bau'); vertical timber--trees, posts, poles, studs'
- 5.2 An exhaustive list of numbers one through five with CGNs listed alphabetically as found in the 'one' column.

Asterisks indicate irregular counting--either the CGNs vary in form, or the affixation is irregular, or both.

An 'x' in the left-hand column points out each number system that does not abbreviate according to the rules given in section 4.2.

Alternative number forms are given immediately under one another.

One	Two	Three	Four	Five	Gloss
na-rung na-rung	ke-naanka kenaankara'ka	bee-naumo bee-naura'	kare-naumo kare-naura'	pa'noko' pa'noko'	Gen. Substantive Gen. Substantive
					(Kong-ara dia- lect)
* na-1moo	;	;	;	;	'dav'
na-'mung	ke-'mun-ta	bee-naang	kare-naang	pa'noko' (P.)	'day'
* na-va	ke-vaa-ra	bee-vaa-ri	kare-vaa-ri	P.na-vaa-ri	'house'
na-vaara'	ke-vaara'-ka	bee-vaara'-pi	kare-vaara'-pi	P.na-vaara'-pi	'smoke rack'
na-vaang	ke-vaan-ta	bee-vaan-tu	kare-vaan-tu	P.na-vaan-tu	'bow'
* na-vaatang	ke-vaatan-ta	bee-vaanta	kare-vaanta	P.na-vaanta	'ladder'
		bee-vaatam-pi	kare-vaatam-pi	P.na-vaatam-pi	
		bee-vaatan-tu	kare-vaatan-tu	P.na-vaatan-tu	
		bee-vaatang	kare-vaatang	P.na-vaatang	
na-vara'	ke-vara'-ka	bee-vara'-pi	kare-vara'-pi	P.na-vara'-pi	'leaf plate'
		bee-vara- i	kare-vara-i	P.na-vara-i	ı
na-vaku'	ke-vaku'-ka	bee-vaku'-pi	kare-vaku'-pi	P.na-vaku'-pi	'troupe'
na-varang	ke-varan-ta	bee-varan-tu	kare-varan-tu	P. na-varan-tu	'generation'
na-vareng	ke-varen-ta	bee-varen-tu	kare-varen-tu	P. na-varen-tu	'banana stalk'
na-vari	ke-vari-ra	bee-vari-ru	kare-vari-ru	P.na-vari-ru	'tree'
na-varo	ke-varo-ra	bee-varo-ri	kare-varo-ri	P.na-varo-ri	'area'
		bee-varo-i	kare-varo-i	P.na-varo-i	
na-varong	ke-varon-ta	bee-varon-tu	kare-varon-tu	P.na-varon-tu	'window'
na-varu'	ke-varu'-ka	bee-varu'-pi	kare-varu'-pi	P.na-varu'-pi	'fruit cluster'
* na-ve	ke-ve-ra	bee-ve-ruri	kare-ve-ruri	P.na-ve-ruri	'beam'
x na-ve'	ke-ve'-ka	bee-ve'-pi	kare-ve'-pi	P.na-ve'-pi	'hillside'
na-veku'	ke-veku'-ka	bee-veku'-pi	kare-veku'-pi	P.na-veku'-pi	'basket'
* na-veng	ke-ven-ta	bee-ven-to'pi	kare-ven-to'pi	P.na-ven-to'pi	'broken bit'
		bee-ven-toi	kare-ven-toi	P.na-ven-toi	
		bee-ven-tu	kare-ven-tu	P. na-ven-tu	

One	Тwo	Three	Four	Five	Gloss
na-vero'	ke-vero'-ka	bee-vero'-pi bee-vero-i	kare-vero'-pi kare-vero-i	P.na-vero'-pi P.na-vero-i	'bamboo strips'
na-vento'	ke-vento'-ka	bee-vento'-pi bee-vento-i	kare-vento'-pi kare-vento-i	P.na-vento'-pi P.na-vento-i	'planks'
na-veru	ke-veru-ra	bee-veru-ri	kare-veru-ri	P. na-veru-ri	'beds, racks'
na-vete	ke-vete-ra	bee-vete-ri	kare-vete-ri	P.na-vete-ri	'sides'
na-veu	ke-veu-ra	bee-veu-ri	kare-veu-ri	P. na-veu-ri	'branches'
x na-vi'	ke-vi'-ka	bee-vi'-pi	kare-vi'-pi	P.na-vi'-pi	'strands'
na-vireng	ke-viren-ta	bee-viren-tu	kare-viren-tu	P.na-viren-tu	'fingers'
na-viri'	ke-viri'-ka	bee-viri'-pi	kare-viri'-pi	P.na-viri'-pi	'ravines'
		bee-viri'	kare-viri'	P.na-viri'	
na-virong	ke-viron-ta	bee-viron-tu	kare-viron-tu	P.na-viron-tu	'body limbs'
na-ving	ke-vin-ta	bee-vin-tu	kare-vin-tu	P.na-vin-tu	'vines'
na-vine	ke-vine-ra	bee-vine-ri	kare-vine-ri	P.na-vine-ri	'body sides'
na-vio'	ke-vio'-ka	bee-vio'-pi	kare-vio'-pi	P.na-vio'-pi	'food pieces'
		bee-vio-i	kare-vio-i	P.na-vio-i	•
na-vito	ke-vito-ra	bee-vito-ri	kare-vito-ri	P.na-vito-ri	'nests'
		bee-vito-i	kare-vito-i	P.na-vito-i	
na-vito'	ke-vito'-ka	bee-vito'-pi	kare-vito'-pi	P.na-vito'-pi	'nests'
na-vitu	ke-vitu-ra	bee-vitu-ri	kare-vitu-ri	P.na-vitu-ri	'assemblies'
* na-vo/	ke-vo-raa-ri	bee-vo-raa-ri	kare-vo-raa-ri	P. na - vo - raa - ri	'mothers with
na-voraa-ri	•2				children'
na-vora'	ke-vora'-ka	bee-vora'-pi	kare-vora'-pi	P.na-vora'-pi	'properties'
		bee-vora-i	kare-vora-i	P.na-vora-i	
na-voro'	ke-voro'-ka	bee-voro'-pi	kare-voro'-pi	tapiu	'pigs/animals'
		bee_voro_i	kare-voro-i	P.na-voro-i	
				tapiu-na-voro-i	
				P.na-voro'-pi	
				tapiu-na-voro'-pi	

	One	Тжо	Three	Four	Five	Gloss
	na-voka	ke-voka-ra	bee-voka-ra	kare-voka-ri	P.na-voka-ri	'roads'
*	* na-vona	ke-von-ta	bee-von-tu	kare-von-tu	tapiu-na-von-tu	'tens of pigs
					P.na-von-tu	and cows,
	na-voonku	ke-voonku-ra	bee-voonku-ri	kare-voonku-ri	P.na-voonku-ri	'taro clumps'
	מס-מח	ke-vou-ra	bee-vou-ri	kare-vou-ri	P.na-vou-ri	'grandmother
						and children'
*	* na-vu	ke-vuu-ra	bee-vuu-ri	kare-vuu-ri	P.na-vuu-ri	'bamboo clumps'
	na-vu'	ke-vu'-ka	bee-vu'-pi	kare-vu'-pi	P.na-vu'-pi	'pieces'
			bee-vu-i	kare-vu-i	P.na-vu-i	
	na-vuru'	ke-vuru'-ka	bee-vuru'-pi	kare-vuru'-pi	P.na-vuru'-pi	'fruit bunches'
*		ke-kun-ta	bee-vun-tu	kare-vun-tu	P.na-vun-tu	'roads'
	na-vuntu'	ke-vuntu'-ka	bee-vuntu'-pi	kare-vuntu'-pi	P.na-vuntu'-pi	'villages'
	na-vusi	ke-vusi-ra	bee-vusi-ri	kare-vusi-ri	P.na-vusi-ri	'apertures'
	na-nn	ke-vuu-ra		kare-vuu-ri	P.na-vuu-ri	'colors'
	na-na	ke-vuu'-ka		kare-vuu'-pi	P. na-vuu'-pi	'breasts'
	na-ra'	ke-ra'-ka		kare-ra'-pi	P.na-ra'-pi	'bags'
				kare-ra-i	P.na-ra-i	
	na-raa'	ke-raa'-ka	-pi	kare-raa'-pi	P.na-raa'-pi	'bamboo benches'
			bee-ra-i	kare-ra-i	P. na-raa-i	
	na-raampu	ke-raampu-ra	bee-raampu-ri	kare-raampu-ri	P.na-raampu-ri	'tens of sago shingles'
	na-raanga'	ke-raanga'-ka	bee-raanga'-pi	kare-raanga'-pi	P.na-raanga'-pi	'spans'
	•		bee-raanga-i	kare-raanga-i	P.na-raanga-i	
	na-rang	ke-ran-ta	bee-ran-tu	kare-ran-tu	P.na-ran-tu	'coconut clusters'
		1.	Transfer of mo	Town name of	D na_manto!_ni	'sago fronds'
	na-rang	Ke-ranto -ka	pee-ranco -pr	rare-rance	T. The state of th	
	na-ran	ke-rau-ra	bee-rau-ri	kare-rau-ri	F, $na-rau-rr$	seasons
	na-re'	ke-re'-ka	bee-re'-pi	kare-re'-pi	P.na-re'-pi	stones
	na-rempo'	ke-rempo'-ka	bee-rempo'-pi	kare-rempo'-pi	P.na-rempo'-pi	'litters'
	4		bee-rempo-i	kare-rempo-i	P.na-rempo-i	

	One	Тио	Three	Four	Five	Gloss
	na-reng	ke-ren-ta	bee-ren-tu	kare-ren-tu	P.na-ren-tu	'containers'
*	na-ri	ke-rii-ra	bee-rii-ru	kare-rii-ru	P.na-ri(i)-ru	'streams'
	na-ri'	ke-ri'-ka	bee-ri'-pi	kare-ri'-pi	P.na-ri'-pi	'stones'
	na-rime'	ke-rime'-ka	bee-rime'-pi	kare-rime'-pi	P.na-rime'-pi	'teeth'
	na-ring	ke-rin-ta	bee-rin-tu	kare-rin-tu	P.na-rin-tu	'couples'
	na-rinkung	ke-rinkun-ta	bee-rinkun-tu	kare-rinkun-tu	P.na-rinkun-tu	'holes'
	na-riong	ke-rion-ta	bee-rion-tu	kare-rion-tu	P.na-rion-tu	'some'
×	x na-ripi'	ke-ripi'-ka	bee-ri'-pi	kare-ri'-pi	P.na-ri'-pi	'grass whips'
	na-ripung	ke-ripun-ta	bee-ripun-tu	kare-ripun-tu	P.na-ripun-tu	'baskets of
	708	20 200 100	7	1		taro pudding'
	0.7	01-av	100-10-1	tare-10 -pr	F. M-FO -Pr	. Daliboos .
	1 cmcm-nu	10-10mon-01	100-10-1 100-10-10-10-10-10-10-10-10-10-10-10-10-	have nome! no	Dug nomo 'n'	
	יומ-ד-סוומ	י בייטוופי	שבת-זיטוופ -דיני ז	אמייפ-ייטוופ -ףיי	ביומ-ויטוופ -ףיי	ears
		ke-ron-ta	bee-ron-tu	kare-ron-tu	P.na-ron-tu	'dowels'
*	na-roong	ke-roon-ta	bee-roon-turi	kare-roon-turi	P.na-roon-turi	'days'
	na-roope'	ke-roope'-ka	bee-roope'-pi	kare-roope'-pi	P.na-roope'-pi	'coconut shell
			bee-roope-i	kare-roope-i	P.na-roope-i	bowls'
	na-ru	ke-ru'-ka	bee-ru'-pi	kare-ru'-pi	P.na-ru'-pi	'lakes'
*	* na-ruta	ke-rutaa-ra	bee-rutaa-ri	kare-rutaa-ri	P.na-rutaa-ri	'eyes'
			bee-ruta-ri	kare-ruta-ri	P.na-ruta-ri	•
*	* na-ruung	ke-ruun-ta	bee-ruun-turi	kare-ruun-turi	P.na-ruun-turi	'spears'
	na-ing	ke-in-ta	bee-rin-tu	kare-rin-tu	P.na-rin-tu	'plurals'
	na-kararoong	B				'dish of taro
						pudding
*	* na-kang	ke-kan-ta	bee-kakan-tu	kare-kakan-tu	P.na-kan-tu	'father and
•	,	,	•	•	•	family
: c	* na-kong	ke-koraroong	bee-kavo	kare-kavo	F.na-vo-raari	'mothers and one child each'
	na-marang	ke-maran-ta	bee-maran-tu	kare-maran-tu	P.na-maran-tu	'halves'

•	One	Тwo	Three	Four	Five	Gloss
,-	na-mare'	ke-mare'-ka	bee-mare'-pi bee-mare-i	kare-mare'-pi kare-mare-i	P.na-mare'-pi P.na-mare-i	'years'
	na-maku	ke-maku-ra	bee-maku-ri	kare-maku-ri	P. na-maku-ri	'smissou'
	na-maia'	ke-maia'-ka	bee-maia'-pi	kare-maia'-pi	P.na-maia'-pi	'siblings'
			bee-maia'	kare-maia'	P.na-maia'	Ò
	na-mainta	ke-mainta-ra	bee-maia'-pi	kare-maia'-pi	P.na-maia'-pi	'pairs of
			bee-maia'	kare-maia'	P.na-maia'	siblings'
-	na-mang	ke-man-ta	bee-man-tu	kare-man-tu	P.na-man-tu	'hands of
						bananas'
	na-manto	ke-manto-ra	bee-manto-ri	kare-manto-ri	P.na-manto-ri	'groups'
	na-meensi'	ke-meensi'-ka	bee-meensi'-pi	kare-meensi'-pi	P.na-meensi'-pi	areas
			bee-meensi'	kare-meensi'	P.na-meensi'	
*	* na-meng	ke-men-ta	bee-men-turi	kare-men-turi	P.na-men-turi	'parts'
*	* na-mentu	ke-mentu-ra	bee-mentuu-ri	kare-mentuu-ri	P.na-mentuu-ri	'brothers-in-
	;					law'
•	na-mi	ke-mii-ra	bee-mii-ri	kare-mii-ri	P.na-mii-ri	'ridges'
1	na-miku	ke-miku-ra	bee-miku-ri	kare-miku-ri	P.na-miku-ri	'packages'
1	na-mo'	ke-mo'-ka	bee-mo'-pi	kare-mo'-pi	P.na-mo'-pi	fires
			bee-mo-i	kare-mo-i	P.na-mo-i	
	na-morinku	ke-morinku-ra	bee-morinku-ri	kare-morinku-ri	P.na-morinku-ri	'canyons'
*	na-mono	ke-mono-ra	bee-monoo-ri	kare-monoo-ri	P.na-monoo-ri	'hamlets'
			bee-mono- i	kare-mono-i	P.na-mono-i	
^	na-moora'	ke-moora'-ka	bee-moora'-pi	kare-moora'-pi	P.na-moora'-pi	'turns of rope'
			bee-moora-i	kare-moora-i	P.na-moora-i	1
×	× па-ти'	ke-mu'-ka	bee-mu'-pi	kare-mu'-pi	P.na-mu'-pi	'times'
1	na-muri'	ke-muri'-ka	bee-muri'-pi	kare-muri'-pi	P.na-muri'-pi	'parts of
			bee-muri'	kare-muri'	P.na-muri'	clusters of
	,					nuts,
•	na-murii'	ke-murii'-ka	bee-murii'-pi	kare-murii'-pi	P.na-murii'-pi	'kinds'
			bee-murii'	kare-murii'	P.na-murii'	

One	Two	Three	Four	Five	Gloss
na-murian	ke-muriau-ra	bee-murii'-pi	kare-murii'-pi	P.na-murii'-pi	'kinds'
na-mi'	ke-mui'-ka	bee-muri bee-mui'-pi	kare-muru kare-mui'-pi	F.na-murui P.na-mui'-pi	'islands'
* na-muiaang	ke-muiaan-ta	bee-na-mut bee-muiaana	kare-na-mur kare-muiaang	F.na-mur P.na-muiaang	'clans'
x na-mun'	ke-muu'-ka	bee-muu'-pi	kare-muu'-pi	P.na-muu'-pi	'clans'
** na-naa'	ke-naa'-ka	bee-ka-i	kare-ka-i	P.naa'-pi	'cloths'
		bee-naa'-pi	kare-naa'-pi	ı	
* na-naare	ke-naare-ra	bee-naare	kare-naare	P.naare	'words'
na-naang	ke-naan-ta	bee-naan-tu	kare-naan-tu	P.na-naan-tu	arms'
na-naanka	ke-naanka-ra	bee-naanka-ri	kare-naanka-ri	P.na-naanka-ri	'pairs'
				P.na-raanka-rı	
* na-nai'	ke-nai'-ka	bee-kai'-pi	kare-kai'-pi	P.nai'-pi	'plots'
		bee-kar'	kare-kar'		
* na-nairu	ke-nairu-ra	bee-nairu-ri	kare-nairu-ri	P.nairu-ri	'localities'
na-nang	ke-nan-ta	bee-nan-tu	kare-nan-tu	P.na-nan-tu	'times'
na-nan	ke-nau-ra	bee-nau-ri	kare-nau-ri	P. nau-ri	'groves'
x na-nau'	ke-nau'-ka	bee-nau'-pi	kare-nau'-pi	P.nau'-pi	'legs'
na-naung	ke-naun-ta	bee-naun-tu	kare-naun-tu	P.naun-tu	'layers'
na-ne'	ke-ne'-ka	bee-ne'-pi	kare-ne'-pi	P.na-ne'-pi	'feathers'
na-ne'	ke-rane'-ka	bee-rane'-pi	kare-rane'-pi	P.na-rane'-pi	'books'
* na-ni	ke-ni-ra	bee-ni-ra	kare-ni-ra	P.na-ni-ra	'women'
na-noo'	ke-noo'-ka	bee-noo'-pi	kare-noo'-pi	P. noo'-pi	'spears'
		bee-ko-i	kare-ko-i		
* na-n	ke-u-ra	bee-ku-ri	kare-ku-ri	P.n-u-ri	'individuals'
na-n'	ke-u'-ka	bee-ku'-pi	kare-ku'-pi	P.n-u'-pi	'taros'

5.3 An exhaustive list of general category demonstratives

5.3.1 General substantive demonstrative projectives

a-ung 'this'

a-un-ka-' 'that nearby north or south' a-un-ka-to 'further away or moving away north or south though not very far away, really'

a-un-ka-peto 'the nearer one or approaching one from north or south nearby'

a-un-taang 'that inland'

a-un-taan-to 'that further or moving inland'

a-un-taam-peto 'that nearer or approaching from inland'

a-un-tang 'that seaward'

a-un-tan-to 'that further or moving seaward'

a-un-tam-peto 'that nearer or approaching from seaward'

a-un-te-i' to the south or way inland'

a-un-te-to 'that up there or 'that further or ascending up from speaker'

a-un-te-peto 'that nearer or descending from above or south'

a-un-toong 'that down there or to the north'

a-un-toon-ko 'that further down or descending from us or flying north'

a-un-toom-peto 'not so far down or ascending from below us or flying in from the north'

5.3.2 General locative demonstrative projectives

a-a' 'here'

a-n-ka-' 'there nearby north or south'

 \emptyset -ka-to'further north or south but relatively near!

Ø-ka-peto 'nearer still from north or south'

Ø-daan-to Ø-daam-peto a-'-daang 'further inland' 'inland' 'not so far inland' a-'-dang Ø-dan-to Ø-dam-peto 'seaward' 'further seaward' 'not so far seaward' a-'-de-i' Ø-de-to Ø-de-peto 'up there' 'further up' 'not so far up' a-'-doong doon-ko doom-peto 'down there' 'further down' 'not so far down'

5.3.3 General manner demonstrative projective

e-e'
'like this'

e-e'-ka-to e-e'-ka-peto 'moving nearer from (There are no 'moving away a a short distance north short distance nonrelative north or south' distance manner or south' projectives.) e-e'-daan-to e-e'-daam-peto 'going inland' 'approaching from inland' e-e'-dan-to e-e'-dam-peto 'approaching from 'going seaward seaward' e-e'-de-to e-e'-de-peto 'going upward' 'approaching from above 1 e-e'-doon-ko e-e'-doom-peto 'going downward' 'approaching from below'

5.4 Technical definitions of Nasioi kin terms

The code: В brother W wife Ch child sister D daughter man speaking m F father W woman speaking Н husband sss same sex as speaker М mother е elder than ego S son younger than ego V

FM, MM, (MMZ, FMZ, FFBW, MFBW) teete'

kaaka! FF, MF (FFB, MFB, FFZH, MFZH, also an honorific)

nko' M (MZ, FBW, all great grandmothers)

F (FB, MZH, FZS, all great grandfathers) mma!

noovari mWM, mWF

kaampo' FZ, MBW, wHM paapa' MB, FZH, wHF

baankanung mWMB, mWFZH, mZDH, mWBDH

W, also fiancée nnaang inung H, also fiancé

maasi' wFZD, wMBD, wHZ, wBW noori mFZS, mMBS, mWB, mZH nnaikang mFZD, mMBD, wFZS, wMBS

nnai (same as above) nnoraa DH, mWM, mWF

maama' eZ (MZeD, FBeD, FZeD, MBeD, wHeZ, wBW, mBeW)

taata! eB (MZeS, FBeS, FZeS, MBeS, wZeH, wHF) mmari mZ wB (mMZD, mFBD, wMZS, wFBS, mBW, wHF)

mmaiko' fellow clan-mate with extended meaning of 'friend'

mmarana fellow clan-mates

niuma literally 'our father' and embracing the above relationships for mma'; also used by a woman in

referring to her husband

Junior kin:

ntarama'nang yZ (MZyD, FByD, mZChD, mWBChD, FZyD, MByD, mByW) ntarama'nung yB (MZyS, FByS, mZChS, mWBChS, FZyS, MByS, wZyH) ntara! (same relationships as for both ntarama'nang

and ntarama'nung)

nnorang D (wZD, mBD, mMBD, also great granddaughters)

nnuring S (wZS, mBS, mMBS, also great grandsons) nnampuru'nang wBD, mZD, SW

nnampuru'nung wBS, mZS

nnompeng SCh, DCh (BChCh, ZChCh)

nmurukaa' literally 'my children' and embracing the

above relationships for *nnuring* and *nnorang*, but also meaning 'my wife' or 'my wife and

children'

NOTES

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 $^2 \mbox{Some use these terms interchangeably.}$

 3 These use the demonstrative mode marker e- to indicate the present and a- to indicate a recent past. Elsewhere only a- is used, meaning present.

"Most substantive CGNs could be said to be essentially 'one', not just the two forms here. These are, however, the most common. They are also mutually exclusive.

 5 These are quasi CGNs. They are used only with the following derived projectives:

associatives (-upoong being restricted to associatives dealing with location and order only)

inverse possessives
partitives

independent verbs (upoong only).

⁶This is a demonstrative general locative projective embedded in a derived general substantive projective.

 $^{7}\mbox{It}$ could be argued that temporals are only time-oriented locative or manner projectives.

⁸The only instance of -keta used with a feminine ending: in this case it takes the place of -kaara which is otherwise universal.

 $^{9}\mbox{Some}$ language helpers hold that these terms and their meanings are interchangeable.