

# CAMPA (ARAWAK) MORPHOLOGY

By Willard Kindberg

## Introduction

This paper on Campa<sup>1</sup> morphology is meant to be companion to one on Campa syntax by Lee Kindberg. There is not always a clear-cut dichotomy between the morphology and syntax levels, and so the two papers overlap somewhat with each other. Where possible, this paper will attempt to describe the morphological construction of the various word classes (defined in the syntax paper), leaving their distribution in higher levels to the syntax paper. Where necessary for the proper understanding of certain morphological constructions and their higher-level distribution, I shall invade the area described in the syntax paper.

## Morphophonemics

There are three general types of morphophonemic change involved in Campa morphology: (1) phonologically predictable changes of phonemic form in

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<sup>1</sup>The tribe speaking this language is called Campa by the Spanish-speaking Peruvians, but the tribe refers to itself and its members as Ashaninka, or, in the Apurimac River area, as Amatsenka Ashaninka. These people are sparsely scattered in an area from the Pachitea River on the north, to some 40 miles south of the junction of the Mantaro and Apurimac Rivers, on the Apurimac, and from the foothills of the Andes east to the Peruvian border at Puerto Pardo. (This large area is shared with other ethnic groups such as the Amuesha, Piro and Amahuaca.) Some sections of the tribe have been acculturated to a large degree by the Spanish-speaking Peruvians, in other areas the Campas live untouched by civilization.

The dialect described in this paper is that spoken on the Apurimac River. While there are some phonological, morphological, and lexical differences, this dialect is intelligible in large portions of the geographic area outlined above. The exact delineation of dialect areas and areas of mutual intelligibility we hope to study in the near future.

The material for this paper was gathered during field trips under the auspices of the Summer Institute of Linguistics from 1953 - 1957, principally from two young men informants (though others were used), and conversational sources. In my preparation of this paper I was greatly helped by the criticisms and suggestions of Viola Waterhouse and Kenneth Pike at the Summer Institute of Linguistics of the University of Oklahoma, Norman, Oklahoma, in the summer of 1958. I was also helped in Peru by my SIL colleagues James Lauriault, Paul Powlison, and Helen Hart.

The Campa phonemes are p, t, k, c, č, s, š, m, n, r, ɲ, v, y, i, e, a, o, as described by Pike-Kindberg in *A Problem In Multiple Stresses*, *Word* 12. 415 - 428 (1956). In this paper we are using v to represent the phoneme symbolized as b in the *Word* article. Also in *Word* we described multiple stress in Campa as phonemic, but for the purposes of this paper I have not indicated stress since it does not affect the morphological system herein described.

combinations of two adjoining morphemes; (2) changes in verb stems following causative prefix 031, and in nouns following possessive prefix class 010;<sup>2</sup> (3) generating of a or t between morphemes in verb bases. In addition, there are certain changes involving specific morphemes which are not covered in this section, but are covered in the discussion of the particular morpheme involved.

Predictable changes of the phonemic form in combinations of two adjoining morphemes are illustrated below.

- o + e > oye. noyeri **I will kill him** (n 011, o **kill** VS1,<sup>3</sup> e 1002B, ri<sup>4</sup> 1203).
- o + ea > oya. noyaro **I will eat it** (n 011, o **eat** VS1, ea 1002A, ro 1204).
- a + io > ayo. ayotiro **we know it** (a 012, io **know** VS1, t D+,<sup>5</sup> i 1001B, ro 1204).
- a + oa > ava. avaro **we eat it** (a 012, o **eat** VS1, a 1001A, ro 1204).
- aa + i > ai. ineapairi **on arriving he saw him** (i 014, ne **see** VS1, apaa 701, i 1001B, ri 1203).
- aa + a > aa. ihatakaakeri **he went with him / he caused him to go** (i 014, ha **go** VS1, t D+, akaa 171, ak 801, e 1002B, ri 1203).
- aa + e > aye. nayero **I will carry it** (n 011, aa **carry** VS7, e 1002B, ro 1204).
- aa + ea > aya. nonihayari **I will appear to him** (no 011, nihaa **appear** VS1, ea 1002B, ri 1203).
- C + C > CaC. taharonči **blunt arrow** (tah **blunt arrow** NS1,<sup>6</sup> a, ro 14, nči 28).
- čaa + ee > cee. noviceero **I will make a clay bowl (by coil method)** (no 011, vičaa **make clay bowl** VS7, e 1002B, ro 1204).
- s + i > ši. ikiširi **he is angry with him** (i 014, kis **angry** VS1, i 1001B, ri 1203).
- s + ea > šaa. nonkišaa **I will become angry** (no 011, n 021, kis **angry** VS1, ea 1002A).

Changes in noun and verb roots beginning with p or k following causative 031 and possessive prefix class 010. In noun roots following possessive prefixes

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<sup>2</sup>Any reference to an order of morphemes will end in numeral O; any reference to specific morphemes will end in numerals 1 through 9.

<sup>3</sup>VS = verb stem.

<sup>4</sup>The inclusion of an object in many verb constructions may change the verb from intransitive to transitive, and an affirmation of intransitive activity (AA) to affirmation of activity toward goal (AAG). Therefore, though a particular verb stem may occur without object or causative, the object or causative is considered obligatory in an AAG sentence type, since its exclusion would change the verb and sentence type. Where we consider it helpful, on some verb breakdowns we shall indicate the sentence type in which they occur. Abbreviations for sentence types are those which are used in the syntax paper.

<sup>5</sup>See discussion of generated t and a below for the meaning of this symbol.

<sup>6</sup>NS = noun stem.

of class 010, and in verb roots following the o allomorph of the causative morpheme 031, there are the following morphophonemic changes:

(a) p becomes v, as in novičine **my bee** (no 011, piči **bee** NS1, ne 23); povariakero **you caused it to fall / you dropped it** (p 013, o 031, pari **fall** VS1, ak 801, e 1002B, ro 1204).

(b) k before a, i, and o is lost, before e it becomes y as in noanire **my manioc** (no 011, kanir **manioc** NS1, e 25); poisotero **tighten it** (p 013, o 031, kiso **tight** VS1, t D+, e 1002B, ro 1204); noyeeke **my face pimple** (no 011, keeki **face pimple** NS1).

Generating of t and a between morphemes in verb base. All morphemes with verb bases, and the verbals of order 1000 (the first order in verb margin) have either a plus or minus determinant relationship to the preceding and/or following morpheme which determines the generating of either t or a between them. Two morphemes with plus determinants generate t between them. Two morphemes with minus determinants generate a between them. Combinations of unlike determinants generate nothing. Where generated t and a occur in examples in this paper, they are represented in the morphemic breakdowns as t D+, and a D-. For simplicity of notation, the specific determinant characteristics of individual morphemes are omitted here, but they would of necessity be indicated in a dictionary. Order 1000 has only pre-determinants, since the phenomenon of generated t and a never occurs following this order. Compare the following pairs of examples:

(a) ikoavetakari **he looked for him in vain** (i 014, ko **look for** VS7, a D-, ve 301, t D+, ak 801, a 1001A, ri 1203), ikovetakari **he cooked it in vain** (i 014, ko **cook** VS7, ve 301, t D+, ak 801, a 1001A, ri 1203). Note that the two verb stems are overtly identical, but one generates a between it and 301, and the other does not. This is the result of the combination of minus determinants.

(b) yaatakero **he perched on it** (y 014, aa **perch** VS1, t D+, ak 801, e 1002B, ro 1204); yaakero **he carried it** (y 014, aa **carry** VS7, ak 801, e 1002B, ro 1204). Again note that the two verb stems are overtly identical, but that t is generated by one VS and 801 combination, and not by the other.

The phenomena described above could be described on the basis of allomorphs (with as many as four allomorphs for many morphemes) but the above description appears to me to be simpler. A fuller discussion of the problems involved is presented in an unpublished paper of mine written in May, 1957.

## Verbs

There are two classes of verbs — transitive and intransitive. Verbs of either class consist usually of three main parts: prefix(es), base, and margin. Each part is discussed in detail below. There are two orders of peripheral prefixes (010 and 020) and a third order of prefixes (030) which are considered as

part of the base. The base also includes the verb stem and up to five optional morphemes from satellite suffix orders 100-900. The margin consists of an obligatory verbal suffix (order 1000) add up to four optional suffixes from margin suffix orders 1100-2100.

### Subject Prefixes

There are two orders of prefixes occurring before verb base in Campa: order 010 indicating subject, and order 020 indicating incomplete.

Order 010 consists of the following morphemes:

011 no-~n-<sup>7</sup> **First person singular or plural (inclusive or exclusive).**

012 a-~[#~a-] **First person plural inclusive** (freely alternates with 011 used as inclusive).

013 pi-~p- **Second person singular or plural.**

014 i-~[y-~#] **Third person masculine-animate<sup>8</sup> (or mixed group), singular or plural.**

015 o-~# **Third person feminine-inanimate, singular or plural.**

The first allomorph of each set occurs before sequences beginning with consonants: nohati **I go** (no 011, ha **go** VS1, t D+, i 1001B); pihati **you go** (pi 013, ha **go** VS1, t D+, i 1001B); ihati **he goes, they go** (i 014, ha **go** VS1, t D+, i 1001B); ohati **she goes, they go** (o 015, ha **go** VS1, t D+, i 1001B).

The second allomorph of each set occurs before sequences beginning with vowels: nantiro **I, we do it** (n 011, ant **do** VS7, i 1001B, ro 1204); antiro **we do it** (# 012, ant **do** VS7, i 1001B, ro 1204); pantiro **you do it** (p 013, ant **do** VS7, i 1001B, ro 1204); yantiro **he does it** (y 014, ant **do** VS7, i 1001B, ro 1204); antiro **she does it** (# 015, ant **do** VS7, i 1001B, ro 1204).

When stems beginning with o- (other than an -oa- combination, treated above under morphophonemics) are prefixed by a- **we** 012, the a- replaces the o-, as in airi **we kill him** (a 012, o **kill** VS1, i 1001B, ri 1203).

Before stems beginning with i-, the # allomorph of the third person masculine prefix 014 occurs, as in iraaka **he is crying** (# 014, iraa **cry** VS1, ak 801, a 1001A).

In stems beginning with in-, the i is replaced by prefixes 011, 012, and 015,

<sup>7</sup> A subject prefix from order 010 has a high degree of probability of occurrence in all verb constructions except for the stative verb (StV) construction, where there is a lower degree of probability of occurrence. Under certain conditions there may be alternate transform constructions where the subject may be represented in other ways, as described under **Other subject constructions**.

<sup>8</sup> Masculine-animate morphemes refer to all human males, most animals unless referring to a specific female animal, and the sun, moon, and stars which have male personalities, according to Campa lore. Feminine-inanimate refers to all human females, a specific female animal, inanimate objects, and a few species of animals such as the frog and alligator which are considered women in Campa folk lore.

as in onkahareti **it became a lake** (o 015, inkahare **lake** VS1, t D+, i 1001B); nonkine **my peanuts** (n 011, inki **peanuts** NS1).

### Other subject constructions

There are certain constructions in which the subject of a verb is overtly expressed in some form other than that of 010 prefixes with that verb.

One construction expresses the subject of a verb with morphemes from order 1200, i.e. 1201 and 1202. This is done with a relatively limited number of commonly used words, and generally in conversation. nopokahi **I have come** (no 011, pok **come** VS1, ah 802, i 1001B) AA may be transformed to pokahana **I have come** as a response form in conversation (pok **come** VS1, ah 802, a 1001A,<sup>9</sup> na 1201) ARsp. Note that these transforms function in two different sentence types. The response construction is dependent upon the query poka-himpi **have you come?** (pok **come** VS1, ah 802, i 1001B, mpi 1202) Inter. That is to say, the action slot in the query may be optionally filled by a verb with the subject represented by order 010 or order 1200. However, if the query uses order 1200, the response must use order 1200.

Occasionally in narration the subject may be expressed by the use of order 1200, as in karahakena noveane **I broke my bow** ([karah **break** VS1, ak 801, e 1002B, na 1201] [no 011, veane **bow** NS1])AAG.

Another construction is a head-verb auxiliary-verb construction in which order 010 is obligatorily absent in the head verb, and obligatorily present in the auxiliary verb. This construction is only used in affirmations of activity. kamake inake **he died** ([kam **die** VS1, ak 801, e 1002B i 014, n **be** VS1, ak 801, e 1002B])AA. Note that the auxiliary verb always has the same representatives of orders 700, 800, and 1000 as does the head verb.

When the subject of a sentence is expressed by a noun or pronoun, or both, the subject prefix 010 may occasionally be omitted. irinti pokake ašaninka **the person came** ([ir 014,<sup>10</sup> inti **person** pr.r.1] [pok **come** VS1, ak 801, e 1002B] ašaninka **person** NS1)AA.

Verbs filling the state slot in affirmations of state form the largest number of verbs unaffixed by order 010. These verbs are composed of verb stem class 6:<sup>11</sup> aritake **it is o.k.** (ari **o.k.** VS6, t D+, ak 801,<sup>12</sup> e 1002B)AS; narotake **it is I** (naro **I** VS6, t D+, ak 801, e 1002B)AS.

<sup>9</sup>The change of the verbal from 1001B to 1001A is conditioned by the presence of morpheme 1201. The conditioning of verbal morphemes, class 1000, is discussed in the section called **Verbals**.

<sup>10</sup>See discussion of pronoun class 1 under **Pronouns**.

<sup>11</sup>See discussion under **Verb stems**.

<sup>12</sup>Morpheme 801 occurs obligatorily in all stative verb constructions, though normally it is optional in other verb constructions.

### Incompletive prefix

Prefix order 020, incompletive, consists of the following sets of allomorphs (021): [-ri~r-]~[-n~m-]~#, which are partly in complementary distribution, and partly co-occurent. Morpheme 021 always occurs with 1002A or 1002B, which also indicate incompletive.

Allomorphs -ri~r- occur only with third person masculine, 014.

Allomorph -ri- occurs before bases beginning with consonant, as in *irimatero he will finish it* (i 014, ri 021, ma **do** VS7, t D+, e 1002B, ro 1204)AAG; tee *irimatero he did not do (finish) it* (tee **negative** P6 i 014, ri 021, ma **do** VS7, t D+, e 1002B, ro 1204)DNg.

Allomorph -r- occurs before bases beginning with vowel: *iravisanake he will pass by* (i 014, r 021, avis **pass** VS1, an 703, ak 801, e 1002B)AA; tee *iravisanake he did not pass by* (tee **negative** P6 [i 014, r 021, avis **pass** VS1, an 703, ak 801, e 1002B]) DNg.

Allomorphs -m~n- co-occur with any member of class 010, but only occur immediately before stops or affricates which begin the first or second syllable of the verb base.

-m- occurs before bases beginning with p as in *impoke he will come* (i 014, m 021, pok **come** VS1, e 1002B)AA.

-n- occurs before bases beginning with affricates and stops other than p, as in *inkemero he will hear it* (i 014, n 021, kem **hear** VS1, e 1002B, ro 1204)AAG; tee *inkemero he doesn't hear* (tee **negative** P6 [i 014, n 021, kem **hear** VS1, e 1002B, ro 1204]DNgG.

The [ri~r] and the [m~n] allomorphs may be co-occurent when third person masculine 014 is subject, and when one of the first two syllables of the base begins with an affricate or a stop. *irančikero he will bite it* (i 014, r 021, n 021, ačik **bite** VS7, e 1002B, ro 1204) AAG.

The zero allomorph of 021 occurs when the subject is other than third person masculine, and when there is no stop or affricate in the first two syllables of the verb base. In such cases, negative particles help convey the idea of incompletive, as well as 1002A and 1002B. *nohate I will go* (no 011, ha **go** VS1, t D+, e 1002B)AA; tee *nohate I did not go* (tee **negative** P6 [no 011, ha **go** VS1, t D+, e 1002B])DNg.

### Verb bases

There are two classes of verb bases. A verb base may be either transitive or intransitive and is composed of verb stem plus or minus satellites 030 and 100-900. A transitive base (VBT) always requires an object. Almost every transitive verb construction has at least one (or possibly two) morphemes from order 1200. In any sentence in which 1200 does not occur the object will be expressed by N1, N2, Pr1, or Pr3. There may be redundancy with the object

expressed by both the bound order 1200 and some free form(s). An intransitive base (VBI) never takes an object.

### Verb stems

There are seven classes of verb stems (VS).

Verb stem class 1 (VS1) is composed of root class 1 (R1).<sup>13</sup> *nohati I go* (no 011, ha **go** VS1, t D+, i 1001B)AA.

Verb stem class 2 (VS2) is composed of:

- (a) Simple reduplication of R1 as in *pimamatero do it quickly* (pi 013, [ma **do** R1, ma **do** R1] **do quickly** VS2, t D+, e 1002B, ro 1204)GG.
- (b) Reduplication of +010+020 R1 as in *pimpapimpaatatieriri keep giving him more and more!* ([pi 013, m 021, p **give** R1], a,<sup>14</sup> [pi 013, m 021, p **give** R1], aa 157, t D+, ati 901, e 1002B, [ri 1204, ri 1204])GG.

Reduplication indicates urgency, repetition, or intensity.

Verb stem class 3 (VS3) is composed of R1 + R2<sup>15</sup> as in *okitamarotonkiti*

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<sup>13</sup> Campa has certain roots which are clearly members of a single root category, such as noun. Many roots, however, belong to one subclass or another of neutral roots which enter into more than one type of construction. For this reason, a separate classification of root classes is set up on the basis of occurrence in certain constructions and distributions. These classes are presented in footnotes where pertinent to the discussion of the stem classes. The traditional root classes are designated by abbreviations such as n.r. for noun root, and include the following:

Noun roots (n.r.): *maniro deer*.

Verb roots, intransitive (v.i.r.): *-pok- come* as in *ipokake he came*.

Verb roots, transitive (v.t.r.), requires an object: *-pas- hit* as in *ipasatiri he hit him*.

Pronoun roots (pr.r.): *-o- demonstrative pronoun* as in *oka this*.

Particle roots (p.r.): *aisati also*.

Interjection roots (i.r.): *aya- groan or moan* as in *ayave oh!*

Sound action roots (s.a.r.): *tironk thud!*

Campa also has the following neutral roots (neut.r.). A neutral root may serve as root to two or more word classes.

Neutral roots of subclass 1 (neut.r.1) may serve as roots in nouns or verbs: *-ako-hand. nako my hand* is a noun, *akotakena she signals me with her hand* is a verb.

Neutral roots of subclass 2 (neut.r.2) may serve as roots in pronouns or verbs: *-aši-own. naši mine* is a pronoun 4, and *našitaro I own it* is a verb. *-ro* indicates **subject**. *naro I* is Pr1; *narotake it is I* is a verb.

Neutral roots of subclass 3 (neut.r.3) may serve as roots in particles, nouns, or verbs: *kameeca good* is a particle, *noameecatane my goodness* is a noun, and *ikameecati he is good* is a verb.

Neutral roots of subclass 4 (neut.r.4) may serve as roots in sound action words or in verbs: *hekiririri (the water) fell and fell* is a sound action word and *ohikirinkake it (water) fell heavily* is a verb.

Root class 1 (R1), then, is composed of intransitive verb roots and neutral roots of any subclass.

<sup>14</sup> Result of phonological process  $C + C > CaC$ .

<sup>15</sup> Root class 2 (R2) is composed of basic noun roots, intransitive roots, and neutral roots of subclass 1. These roots modify the action, function, or meaning of R1. None of

**the bone is white** (o 015, [kitamaro **white** R1, tonki **bone** R2] VS3, t D+, i 1001B)AS.

Verb stem class 4 (VS4) is composed of R1 + R3<sup>16</sup> as in **ihokavantapaakaro arriving, he landed on the peak of the roof** (i 014, [hok **land / drop** R1, a D-, vant **peak of roof** R3] VS4, apaa 701, ak 801, a 1001A, ro 1204)AAG.

Verb stem class 5 (VS5) is composed of:

(a) +R1 ± R2 + nt ∞ nk as in **itasonkiro he blew on it** (i 014, [taso **blow** R1, nk **stem formative for VS5**] VS5, i 1001B, ro 1204)AAG; **yaašinton-takari he married his daughter** (y 014, [aa **marry** R1, šinto **daughter** R2, nt **stem formative for VS5**] VS5, ak 801, a 1001A, ri 1203)AAG.

(b) Complex noun stems (NS) + nt ∞ nk as in **išintocorintakaro he took**

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these roots may function as a free form in any utterance. They all require a possessive prefix, nominalizer, or verbal inflections to form a free word form. Root class 2 has a large membership which is divided into the following groupings:

(a) Body parts, as -vori- alternating freely with -pori- **leg**, as in **ičorivoritake he has a lame leg** (i 011, [čori **lame** R1, vori **leg** R2] VS3, t D+, ak 801, e 1002B).

(b) Natural objects, as -vane- alternating freely with -pane- **sandy**, as in **ikiavanetake he dug in the sand** (i 014, [ki **dig** R1, a D-, vane **sand** R2] VS3, t D+ ak 801, e 1002B). Some roots may belong to more than one grouping, and indicate for example, body parts (a) and natural objects (b), as -tamako- of **otamako the brink of a precipice**, and **notamako my supraorbital ridges**.

(c) Cultural products, as -vanko- alternating freely with -panko- **house**, as in **yovečikavankoti he made a house** (y 014, o 031, [večik **make** R1, a D-, vanko **house** R2] VS3, t D+, i 1001B).

(d) Arrangements, as -vio- alternating freely with -pio- **pile** as in **noankepiotakero I lift it into a pile** (n 011, [oanke **lift up** R1, pio **pile** R2] VS3, t D+, ak 801, e 1002B, ro 1004).

(e) Shapes, as -menki- **chunky** in **okitamaromenkitake it is white and chunky** (o 015, [kitamaro **white** R1, menki **chunky** R2] VS3, t D+, ak 801, e 1002B).

(f) Materials, as -ha- **liquid** in **okitamarohati the liquid is white** (o 015, [kitamaro **white** R1, ha **liquid** R2] VS3, t D+, i 1001B)

(g) Characteristics, as -kovenka- **fearful** in **ineakovenkatakari he considered him fearful** (i 014, [ne **consider** R1, a D-, kovenka **fearful** R2] VS3, t D+, ak 801, a 1001A, ri 1203).

(h) Kinship relations, as -čiro- **sister** in **yaačirontakeri he married his (another's) sister** (y 014, [aa **marry** R1, čiro **sister** R2, nt **stem formative of VS5**] VS5, ak 801, e 1002B, ri 1203).

<sup>16</sup>Root class 3 (R3) is composed of morphemes which have the same characteristics and functions as members of root class 2, except that while R2 members are roots of grammatical word classes as described in footnote 14, R3 members do not function alone as roots of words. A larger corpus may eventually dictate the inclusion of some or all of R3 members into class R2 membership. In common with R2, R3 morphemes refer to body parts, natural objects, cultural objects, shape, material, and characteristics, but R3 differ from R2 in that they do not refer to kinship or arrangement. For an example of R3 note -mao- **cloth** in **ocereamaotaka the cloth ripped** (o 015, [cere **rip** R7, a D-, mao **cloth** R3] VS4, t D+, ak 801, a 1001A).



her as his niece (i 014, [šinto daughter R2, cori collateral relations nt stem formative of VS5] VS5, ak 801, a 1001A, ro 1204)AAG.

Verb stem class 6 (VS6) is stative, and is composed of:

(a) Complex noun bases (NB) as in okimohaancitake **it is high-water (season)** (o 015, [<kimo **big** R1, ha **liquid** R2, aanči **nominalizer** 12>NB] VS6, t D+, ak 801, e 1002B)AS.

(b) Pronoun base 1A as in narotake **it is I** (naro Pr1A I VS6, t D+, ak 801, e 1002B)AS.

(c) Neutral root 3 ± person indicator, as in aritake **it is all right** (ari neut. r3 **all right** VS6, t D+, ak 801, e 1002B)AS; yantiaritake **he is big** (y 014, [antiar **big** neut. r3 i 3rd person masc. 014T] VS6, t D+, ak 801, e 1002B)AS. Note that 010 and 010T must agree in gender.<sup>17</sup>

Verb stem class 7 (VS7) is composed of transitive verb roots (VRT) which require either direct or indirect object, or both, as in nopimpiro **I give it to you** (no 011, p **give** VS7, i 1001B [mpi 1202, ro 1204])AAG.

### Intransitive verb base

The intransitive verb base (VBI) is composed of one obligatory verb stem chosen from stem classes 1 - 6, with optional satellites, minus transitivity morphemes 112, 141, 171 (unless used with 161), 182, and 183. It never takes an object. Example: nohaneiti **we all went** (no 011, ha **go** VS1, hei 202, t D+, i 1001B)AA.<sup>18</sup>

There are two general types of limitations on the use of satellite morphemes, applicable to transitive bases as well as to intransitive:

(a) Lexical incompatibility between morphemes, such as between nink **action at night** 143, and aman **action early in the morning** 503.

(b) Practical statistical limits to the number of morphemes which may be used at one time. From satellite order 100 the general practical limit to the number of morphemes in one word is four, as in išinkitakotanatavakaaka **they got drunk together / made each other drunk** (i 014, šinki **drunk** VS1, t D+, ako 113, t D+, ana 144, t D+, [av 161, akaa 171], ak 801, a 1001A)AA. From orders 200 - 900 the practical numerical limit is four morphemes as in noneventayevetanakarimpa **we saw them from a distance** (no 011, ne **see** VS1, vent<sup>19</sup> 104, a D-, ye 201, ve 301, t D+, an 703, ak 801, a 1001A, ri 1203, mpa 1905)AAG. The two preceding examples also illustrate that the total practical limit to the occurrence of satellite morphemes 100 - 900 is five in one word.

<sup>17</sup> The 010T morphemes are third person masculine and feminine morphemes 014 and 015 which are transposed to contain particle, pronoun, and special noun types.

<sup>18</sup> The verb filling the action slot of any sentence with action toward a goal has a transitive base. The verb filling the action slot of any other sentence type has an intransitive base.

<sup>19</sup> See footnote 22, which discusses with reference to morpheme 104 and 183 the absence of generated -a-.

### Transitive verb base

The transitive verb base (VBT) is composed of any one stem chosen from stem classes 1 - 7, optionally preceded by the causative 031 and/or followed by satellites from orders 100 - 900, except for the reciprocal 161. which does not occur with transitive base.

The causative, order 030, is, within our corpus, prefixed to verb stem classes, 1, 3, and 4, and forms part of transitive verb base, since it always requires an object of order 1200.

The causative morpheme 031 has the following allomorphs: oi ∞ o ∞ [oim/om] ∞ ([oimin/omin] ~ [oimi/omi]).<sup>20</sup> The morpheme indicates that the subject of the verb either causes another (represented by order 1200) to do something, or that the subject does something with another (represented by order 1200). Note the usage of the various allomorphs below:

Allomorph oi: noikontetakero **I take it out / I cause it to come out** (n 011, oi 031, konte **come out** VS1, t D+, ak 801, e 1002B, ro 1204)AAG.

Allomorph o: poačihatakena **you caused my eye to hurt** (p 013, o 031, [kači **hurt** R1, ha **eye** R2] VS3, t D+, ak 801, e 1002B, na 1201)AAG.

Allomorph oim/om: poimiraakeri/pomiraakeri **you cause him to cry** (p 013, oim/om 031, iraa **cry** VS1, ak 801, e 1002B, ri 1203)AAG.

Allomorph [oimin/omin]. The first set of alternants occurs before stops and affricates; the second set of alternants occurs elsewhere. poiminkiakero/pominkiakero **you put it in** (p 013, oimin/omin 031, ki **enter** VS1, ak 801, e 1002B, ro 1204)AAG; poimišiakeri **you caused him to run** (p 013, oimi/omi 031, ši **run** VS1, ak 801, e 1002B, ri 1203)AAG.

Order 1200 has a high probability of occurrence in transitive verb constructions as in nopasatiro **I hit it** (no 011, pasa **hit** VS7, t D+, i 1001B, ro 1204)AAG. There are two alternate forms of affirmation of activity toward goal in which object order 1200 is not employed in the head verb:

(a) Where the object is expressed by N1, N2, Pr1 or Pr3 in the object slot of AAG. yai ihina **he married her (his wife)** ([y 014, aa **marry** VS1, i 1001B] [i 014, hina **wife** NS1])AAG.

(b) Where R2 in verb stem class 3 expresses the object, being mutually exclusive with object order 1200, but not mutually exclusive with objects filling the object slot as described in (a). nokivakota nako **I wash my hands** ([no 011, [kiv **wash** R1, ako **hand** R2] VS3, t D+, a 1001A] [n 011, ako **hand** NS1])AAG.

Many verb bases may function as either transitive or intransitive with no

<sup>20</sup> The allomorphs oi and o occur much more frequently than do the other allomorphs, some of which occur with only one, two, or three words. Within our present corpus all the allomorphs could be phonologically defined, but the definition would include the phonemic structure of the first two syllables of the prefixed morpheme(s), and the rules would not tend toward clarity of presentation.

change in form. The change in function is signalled by the presence of the object. Compare nohati **I go** (no 011, ha **go** VS1, t D+, i 1001B)AA, with nohati **I go to it** (no 011, ha **go** VS1, t D+, i 1001B, ro 1204)AAG.

### Satellites

There are nine orders of satellite morphemes which may be affixed to verb stems to form verb base.

Satellite orders 100 to 900 may be optionally affixed to the verb stem in accordance with the limits stated above.

The century numbers represent fixed relative orders;<sup>21</sup> but the decade numbers in the 100 century, while comparatively fixed, are subject to some variation in relative position.

The inventory of satellite decade orders 100 - 190 is as follows:

Order 100: Affix 101, re, reverses or undoes the meaning or action of the stem. našitareahiro **I open it** (n 011, ašit **close** VS7, a D-, re 101, ah 802, i 1001B, ro 1204)AAG.

Affix 102, aani, indicates action performed continuously over a long period of time. itimaaniti **he lived here a long time (i.e., for years), without leaving** (i 014, tim **live** VS1, aani 102, t D+, i 1001B)AA.

Affix 103, nitaa, indicates the action is done well, or completed. noameni-taakeri **I trained him (taught him well)** (n 011, oame **teach** VS7, nitaa 103, ak 801, e 1002B, ri 1003)AAG.

Affix 104, vent,<sup>22</sup> indicates the object of the action is distant. noneventakotiri **I saw him at a distance** (no 011, ne **see** VS7, vent 104, ako 113, t D+, i 1001B, ri 1003)AAG.

Affix 105, ampe, indicates the action is circular. yarampei **he (bird) flies in circles** (y 014, ar **fly** VS1, ampe 105, i 1001B)AA.

Affix 106, atink, indicates fixed, or hovering, action. yaratinkake **he (bird) flew, hovering in the air** (y 014, ar **fly** VS1, atink 106, ak 801, e 1002B)AA.

Affix 107, mace, indicates derogatory opinion of person considered. ikantakamaarimacetake **he is demonlike** (i 014, [kant **to be, to do** R1, a D-, kamaari **demon, devil** R2] VS3, mace 107, t D+, ak 801, e 1002B)AS.

<sup>21</sup> The following criteria were used in determining relative orders of all Campa morphemes: (a) position in relation to surrounding morphemes, (b) mutual exclusion with other morphemes of the same order, except for 121, 122, 123, (c) common areas of meaning, and/or function, (d) and similarities in phonemic shape. In addition, where criteria a - d still left some morphemes uncertain as to order in morphemes 100 - 900, determinant quality was also used as a criterion.

<sup>22</sup> Morphemes 104 and 183 have the same phonemic form, same determinant characteristics, and never occur together. However they function in two different relative orders, and in these orders have different meanings, and so are treated as two morphemes. They are the only morphemes with a minus pre-determinants which do not generate an a following a minus post-determinant morpheme, as seen in the word noneventakotiri **I saw him at a distance**.

Affix 111, *ee*, indicates unknown actor, and is always used with subject prefix 014, whether the actor is masculine or feminine. This morpheme is mutually exclusive with any positive identification of the actor in the context. *tee inkamanteetero he (or she), unknown, didn't tell her* (*tee* P6, [i 014, n 021, kamant **tell** VS1, *ee* 111, t D+, e 1002B, ro 1214]) DN<sub>g</sub>G.

Affix 112, *imo*, indicates action performed by the actor with someone else, who is represented by a member of affix order 1200. *icameetimotana he is working with me* (i 014, camee **work** VS1, t D+, imo 112, t D+, a 1001A, na 1201)AAG.

Affix 113, *ako*, represents action respecting, concerning, or containing something. It may refer to:

(a) subject, as in *yarakoti he flies (in an airplane)* (y 014, ar **fly** VS1, ako 113, t D+, i 1001B)AA or (b) direct object as in *ikamantakotakenaro he told me about it* (i 014, kamant **tell, advise** VS1, ako 113, t D+, ak 801, e 1002B, na 1201, ro 1204)AAG.

Affix 121,<sup>23</sup> *asano*, indicates the action is performed well, intensely, or genuinely. *ihatasanotake he really went* (i 014, ha **go** VS1, t D+, asano 121, t D+, ak 801, e 1002B)AA. Other dialects have an alternate form, *apero*. Very occasionally this alternant may be used in the Apurimac dialect also.

Affix 122, *aši*, indicates reason or purpose. In a query sentence type the yet unknown purpose is represented by 1501. *paita pipokašitiri why did you come (i.e., for what unknown reason)?* (*paita* Pr2, [pi 013, pok **come** VS1, aši 122, t D+, i 1001B, ri 1501])Inter. The response sentence may employ: (a) + 122 + direct object as in *nopokašiti kaniri I came for manioc* ([no 011, pok **come** VS1, aši 122, t D+, i 1001B] kaniri N2)ARG; or (b) + negative + 122, as in *tee, nopokašiti I just came (with no purpose)* (*tee* P6 [no 011, pok **come** VS1, aši 122, t D+, i 1001B])AR.

Affix 123, *ant*,<sup>24</sup> is used:

(a) To indicate reason or purpose, sometimes also indicating a little impatience. *paita piraantari (why in the world are you crying)?* (*paita* Pr2, [p 013, iraa **cry** VS1, ant 123, a 1001A, ri 1501])Inter. Strong anger may be expressed by the use of 122 and 123 together. *paita pipokašitantanari aka why have you come here after (to) me!* (*paita* Pr2, [pi 013, pok **come** VS1, <aši 122, t D+, ant 123> a 1001A, na 1201, ri 1501] [a pr.r 2B, ka 1701])Inter.

(b) To indicate result, *ikamake apa nopokantakari aka because Father died, I came here / Father died, therefore I came here.* ([i 014, kam **die** VS1, ak

<sup>23</sup> Affix class 120 may follow the stem or any 100 morpheme, and may be used with each other, but may not precede decades 100 and 110. In addition, affix 123 may also follow orders 200 and 300.

<sup>24</sup> Affixes 123, 151, 153, and 301 always require the A subclasses of the verbals, 1001A and 1002A.

801, e 1002B] apa N2 [no 011, pok **come** VS1, ant 123, a 1001A, ri 1203] [a pr. r.2B, ka 1701])AA-ARst.

Affix 131, se, augments the action of the verb. piraakosetana **you cried a great deal because of me** (p 013, iraa **cry** VS1, ako 113, se 131, t D+, a 1001A, na 1201)AAG.

Affix 132, aarant, indicates some, but not all, of either the subjects or the objects are involved in the action. ikamaarantake **some of them died** (i 014, kam **die** VS1, aarant 132, ak 801, e 1002B)AA.

Affix 141, apica, always requires an object, and indicates:

(a) action of the actor away from the direct object, generally with emphasis or suddenness. ošiapicatanakari **she quickly ran away from him** (o 015, ši **run** VS1, apica 141, t D+, an 703, ak 801, a 1001A, ri 1203)AA).

(b) a prompting of an action. novečikapicatanakaro inkani **I made it (shelter) because of the rain** ([no 011, večik **make** VS1, apica 141, t D+, an 703, ak 801, a 1001A, ro 1204] inkani N2)AAG.

Affix 142, ima, indicates the action is only partially accomplished, just started or to be done only a little. pihatimatake nianki **you only went part way** ([pi 013, ha **go** VS1, t D+, ima 142, t D+, ak 801, e 1002B] nianki P4)AA.

Affix 143, nink, indicates that action is performed at night. pimpokaninkake **come after dark / at night** (pi 013, m 021, pok **come** VS1, a D-, nink 143, ak 801, e 1002B)C.

Affix 144, na,<sup>25</sup> indicates that the action is done frequently, or intensely. ipasanatiri **he kept hitting him / he beat him up** (i 014, pasa **hit** VS7, na 144, t D+, i 1001B, ri 1203)AAG.

Affix 151, it, indicates:

(a) habitual action, nohatita **I go all the time / frequently** (no 011, ha **go** VS1, t D+, it 151, a 1001A)AA.

(b) urgent action, ipišonkakotitaro **he quickly threw it away**. (i 014, pišonk **throw** VS7, ako 113, t D+, it 151, a 1001A, ro 1204)AAG.

Affix 152, ite, indicates:

(a) emphasis, finality. avisaitetanake **the rain has finally passed by** (# 015, avis **pass by** VS1, a D-, ite 152, t D+, an 703, ak 801, e 1002B)AA.

(b) augmentation. inkahareitetanake **the lake is very large / expansive** (inkahare **lake** VS1, ite 152, t D+, an 703, ak 801, e 1002B)AS.<sup>26</sup>

Affix 153, aa, requires verbal subclass A, and indicates intensity of action. inintaakaro **he likes it very much** (i 014, nint **like** VS7, aa 153, ak 801, a 1001A, ro 1204)AAG.

Affix 154, vinca, indicates:

(a) repetition of action, or action over a long period of time. ikisavincatiro

<sup>25</sup> The pre-determinant of this morpheme is not consistent.

<sup>26</sup> Note the absence of 010 prefix in affirmation of state sentence type.

he is angry with her a great deal (i 014, kis **angry** VS1, a D-, vinca 154, t D+, i 1001B, ro 1004)AAG.

(b) an action completed after a long time. okaravincatahi **she got well after a long time (of illness)** (o 015, kara **get well** VS1, vinca 154, t D+, ah 802, i 1001B)AA.

Affix 155, pee ∞ vee, indicates action distributed over time or place, or at random. The allomorph pee we have found used only with -kači- **hurt** as in ikačipeeeti **he hurts all over** (i 014, kači **hurt** VS1, pee 155, t D+, i 1001B)AA; the allomorph vee occurs elsewhere, as in itačinkaveetiro **he pushed her all around** (i 014, tačink **push, shove** VS7, a D-, vee 155, t D+, i 1001B, ro 1004)AAG.

Affix 156, aa, indicates action over a period of time, repeated or habitual. poameaatakana **you teach me continually** (p 013, oame **teach** VS7, aa 156, t D+, ak 801, e 1002B, na 1201)AAG.

Affix 161, av, indicates reciprocal action, and can be used only constituent to affix 171. This affix (161) is mutually exclusive with any object 1200. ikisavakaaka **they are angry with each other** (i 014, kis **angry** VS1, [av 161, akaa 171] ak 801, a 1001A)AA.

Affix 171, akaa, indicates causation or united action, and requires either the reciprocal 161 or an object 1200. imaakaakeri **he slept with him**, or **he caused him to sleep** (i 014, maa **sleep** VS1, akaa 171, ak 801, e 1002B, ri 1203)AAG.

Affix 181, mempe, indicates:

(a) pretense. inintamempeakena **he pretends he likes me** (i 014, nint **like** VS7, a D-, mempe 181, ak 801, e 1002B, na 1201)AAG.

(b) bad results. aamempeakena kamaanči **I caught cold, and got sick (literally, the cold overcame me)** ([# 015, aa **overcome** VS7, a D-, mempe 181, ak 801, e 1002B, na 1201] kamaanči **cold** N2)AAG.

Affix 182, anont, indicates action on behalf of another or of oneself. This morpheme, as well as morphemes 183 and 184, requires the A subclass of verbal 1000; is mutually exclusive with morpheme 1101; and requires an object 1200, except when action is on behalf of oneself, okirikanontiri **she is spinning it for him** (o 015, kirik **spin** VS1, anont 182, i 1001B, ri 1203)AAG. amenanonta **she looks (for something) for herself** (# 015, amen **look for** VS1, anont 182, a 1001A)AA.

Affix 183, vent, indicates action because of, concerning, or on behalf of someone. nokaraventakeri **we got together because of him (to kill him)**. (no 011, kara **number, gather together** VS1, vent 183, ak 801, e 1002B, ri 1203)AAG; noneakoveentiri **I spoke concerning him, on his behalf** (no 011, ne **speak** VS1, ako 113, vent 183, i 1001B, ri 1203)AAG.

Affix 184, iment, indicates an action resulting from another cause. nokišimentakempiri pikošitakena **I am angry with you because you stole from**

**me.** ([no 011, kis **angry** VS1, iment 184, ak 801, e 1002B, mpi 1202, ri 1501] [pi 013, koši **steal** VS1, t D+, ak 801, e 1002B, na 1201])AAG.

Affix 191, apini, indicates action repeated frequently or done habitually. icameetapiniti **he works (clearing land) all the time** (i 014, camee **work** VS1, t D+, apini 191, t D+, i 1001B)AA.

Affix 192, naite, indicates action is useless or unsuccessful. nošianaiteta **I ran, but it was useless.** (no 011, ši **run** VS1, a D-, naite 192, t D+, a 1001A)AA.

Affix 193, aseint, indicates an action is incorrect, or wrong. novirataseintari **I was wrong in making a pet of him** (no 011, vira **pet** VS1, t D+, aseint 193, a 1001A, ri 1203)AAG.

Affix 194, niro, indicates either the actor, action, or the object is bad or evil. pimpaniroteri **give it to him (the evil, or bad one)** (pi 013, m 021, p **give** VS7, a D-, niro 194, t D+, e 1002B, ri 1203)CG.

The inventory of satellite century orders 200 - 900 is as follows:

Affix 201, ye, indicates many, or all of either subjects or objects of the verb are involved. pamenayero **look at them all / you look at it** (p 013, amen **look** VS1, a D-, ye 201, t D+, e 1002B, ro 1204)AAG.

Affix 202, hei, indicates all of either the subjects or objects are involved. nohaheiti **we all went** (no 011, ha **go** VS1, hei 202, t D+, i 1001B)AA.

Affix 301, ve, indicates incompleting or frustrated action, or action in vain. nokentavetakari **I shot him in vain (he didn't die)** (no 011, kent **shoot (with arrow)** VS7, a D-, ve 301, t D+, ak 801, a 1001A, ri 1203)AAG.

Affix 401, i, indicates completed action. nohaiti **I went** (no 011, ha **go** VS1, i 401, t D+, i 1001B)AA.

Affix 501, apan, occurs only constituent to affix 601, and indicates that the subject is returning to do something. yamenapanahantiri **he returned to see him again** (y 014, amen **look** VS1, [apan 501, ahant 601] i 1001B, ri 1203)AAG.

Affix 502, apaint, indicates speed or urgency of action. yaapaintiro **he grabbed it quickly** (y 014, aa **take/carry** VS7, apaint 502, i 1001B, ro 1204)AAG.

Affix 503, aman, indicates action is performed in early morning. nompoka-manahe **I will come early in the morning** (no 011, m 021, pok **come** VS1, aman 503, ah 802, e 1202B)AA.

Affix 601, aha/ahant (pronunciation varies among speakers), indicates that the subject is going (away) to perform the action. noneahatero / noneahantero **I will go to see her** (no 011, ne **see** VS7, [aha 601, t D+, / ahant 601] e 1002B, ro 1204)AAG.

Affix 602, ai, indicates that the action was performed at some distance. nohataiti eniki **I went a distance to the river** ([no 011, ha **go** VS1, t D+, ai 602, t D+, i 1001B] [eni **river** NS1, ki 1601])AAG.

Affix 701, *apaa*, indicates action performed by actor upon arrival. This morpheme is generally followed by morphemes 801 or 802.<sup>27</sup> *ineapaakero upon arrival he saw it* (i 014, ne **see** VS7, *apaa* 701, ak 801, e 1002B, ro 1204)AAG.

Affix 702, *av*, requires the occurrence of a morpheme from order 800 or 900, and indicates that the action is:

(a) performed in receiving someone. *ipavakeri he gave (it) to him, receiving him* (i 014, p **give** VS7, *av* 702, ak 801, e 1002B, ri 1203)AAG.

(b) a response or reaction. *ikantavakeri he (answered, and) spoke to him* (i 014, kant **say** VS1, *av* 702, ak 801, e 1002B, ri 1003)AAG.

Affix 703, *an*, requires the occurrence of morpheme 801 or 802, and indicates action performed going away. *ihatanake he went away* (i 014, ha **go** VS1, t D+, an 703, ak 801, e 1002B)AA.

Affix 801, *ak*,<sup>28</sup> is inceptive, indicating that an action has been started for the first time or done again after culturally accepted time limits between actions. (Compare following examples with those of 802). *nohatake I am going / went (after an undefined period of time in one place)* (no 011, ha **go** VS1, t D+, ak 801, e 1002B)AA; *yoaka he is eating / he ate (after a reasonable time between meals)* (y 014, o **eat** VS1, ak 801, a 1001A)AA.

Affix 802, *ah*, is continuative, or repetitive indicating that the action is continued unduly, repeated, or renewed. *nohatahe I will go again* (no 011, ha **go** VS1, t D+, ah 802, e 1002B)AA; *yoaha he is eating again / he is still eating* (y 014, o **eat** VS1, ah 802, a 1001A)AA.

Affix 803, *ač*, indicates a present condition or action. The verb constructions using this morpheme are relatively rare ones, and are of the type which have subject expressed in some way other than by prefix 010. Morpheme 803 occurs with the completive morpheme 1001A/1001B, never with the incomplete 1002A/1002B. *oáčimpi are you eating?* (o **eat** VS1, *ač* 803, i 1001B, mpi 1202)Inter.

Affix 901, *aiti* ∞ *ati*, indicates impatience, excitement, or anger on the part of the speaker. The allomorph *aiti* occurs only following morphemes 702 and 703, as in *pinkantavaitiena tell me!* (pi 013, n 021, kant **tell** VS7, *av* 702, *aiti* 901, e 1002B, na 1201)CG; the allomorph *ati* occurs elsewhere, as in *pankahatiena answer me!* (p 013, ank **answer** VS7, ah 802, *ati* 901, e 1002B, na 1201)CG.

<sup>27</sup> This morpheme, when followed by e 1002B, is an exception to the general morphophonemic rule of *aa + e > aye*. Note that *apaa + e > apee noneapeero, when I arrive I will see her* (no 011, ne **see** VS7, *apaa* 701, e 1202B, ro 1204).

<sup>28</sup> Because of frequency of occurrence of morpheme 801, much of the weight of meaning seems to have been lost from it. In verb constructions 801 seems to be used very freely, whereas 802 is used less frequently, and with more significance.



## Verb margin

Verb margin is minimally composed of an obligatory verbal suffix, order 1000, and maximally of verbal suffix plus four suffixes of orders 1100-2100. Morpheme 1101 and morphemes 1200 are obligatory in transitive verbs, as described in the following outline. Order 1400 morphemes are employed in negative sentence types. The occurrence of morpheme 1501 is conditioned by the verb base and by sentence type. The occurrence of other morphemes following order 1000 are optional and are not determined by construction types, but by style and the emotional context of the utterance.

## Verbals

Order 1000, the verbal, is required in all verbs and N1<sup>29</sup> constructions. Verb stems are divided into two major classes, A and B, on the basis of the subclass of verbals 1001 and 1002 used to complete a verb construction. The two subclasses of 1001 and 1002 are A (a 1001A and ea 1002A) and B (i 1001B and e 1002B). The contrast between a class A verb and a class B verb may be seen by comparing the two forms following: yoari **he eats him** (n 011, o **eat** VS1 (class A), a 1001A, ri 1203)AG; yoiri **he kills him** (n 011, o **kill** VS1 (class B), i 1001B, ri 1203)AG.

Certain rare stems are intransitive when they occur with the A subclass of verbals and transitive with the B subclass of verbals. ikicaata **he dresses** (i 014, kicaa **dress** VS1, t D+, a 1001A)AA; ikicaatiri **he dresses him** (i 011, kicaa **dress** VS1, t D+ i 1001B, ri 1203)AAG. Most verb stems, however, occur with only one subclass of verbal, and there appears to be no consistent correlation between verbal subclass and transitivity of verb stem.

Verbal 1001 (A or B) indicates: (a) past or present initiative or completive, as in nohati **I went / I am going** (no 011, ha **go** VS1, t D+, i 1001B)AA; noa **I eat / I ate** (n 011, o **eat** VS1, a 1001A)AA; (b) future initiative incomplete, or negative command, as in eiro nohatiči **I won't go** (eiro P6 [no 011, ha **go** VS1, t D+, i 1001B, či 1401])DNg; eiro noači **I won't eat** (eiro P6 [n 011, o **eat** VS1, a 1001A, či 1401])DNg; ato pihatiči **don't go** (ato P6 [pi 013, ha **go** VS1, t D+, i 1001B, či 1401]) NgC; ato poači **don't eat** (ato P6 [p 013, o **eat** VS1, a 1001A, či 1401]) NgC.

Verbal 1002 (A or B) indicates (a) future initiative completive, as in nohate **I will go** (no 011, ha **go** VS1, t D+, e 1002B)AA; noya **I will eat** (n 011, o **eat** VS1, ea 1002A)AA; (b) past initiative incomplete, as in tee nohatehi **I didn't go** (tee P6 [no 011, ha **go** VS1, t D+, e 1002B, hi 1402])DNg; tee noyahi **I didn't eat** (tee P6 [n 011, o **eat** VS1, ea 1002A, hi 1402])DNg.

The form of the A and B subclasses of verbals is conditioned by the following factors in addition to the class of verb stem: (a) the absence or presence of an object 1200. (Each object takes one subclass of verbal or the other, depend-

<sup>29</sup> See **Actor nouns** for a description of N1 constructions.

ing upon the other contributing factors described below), (b) the occurrence of morphemes 801 and 802.

Morphemes 123, 151, 153, and 301 always require the subclass A of the verbal, whether the stem would otherwise require it or not.

The chart which follows should help the reader to understand the relationship of these variables to each other in their effect upon the verbals.

	I	II	III	VI	V	VI	VII	VIII
<b>VERBAL SUBCLASS A</b>								
1	—	y		o	a	a	—	çi
2	eiro			eat	e	a	na	
3					e	i	mpi	
4					a	a	ro/ri	
<hr/>								
5	—	i	r	o	ea	ea	—	hi
6	tec			eat	e	e	na	
7					e	e	mpi	
8					ea	ea	ro/ri	
<hr/>								
<b>VERBAL SUBCLASS B</b>								
1	—	y		o	e	i	—	çi
2	eiro			sting	e	a	na	
3					e	i	mpi	
4					e	i	ro/ri	
<hr/>								
5	—	i	r	o	e	i	—	hi
6	tee			sting	e	e	na	
7					e	e	mpi	
8					e	e	ro/ri	

On the chart, column I lists negative particles, or the absence of them; column II gives a subject prefix;<sup>30</sup> column III gives an incompletive; column IV gives sample verb stems (o **eat**; o **sting**); column V gives the form of the verbal which occurs after morpheme 801; column VI gives the form of the verbal used following 802, or when no 800 morpheme is used; column VII gives the object suffixes, or the absence of any object morpheme; and

<sup>30</sup>Third person masculine 014 is the only subject pronoun listed on the chart because it is the only personal pronoun which can be used in all of the paradigms charted. Also, the negative particle ato is not listed because it cannot be used with 014. It is only used in negative commands with second person subject pronoun 013, and then it would be employed in rows 1 - 4 of the chart.

column VIII gives the negative suffixes which may co-occur with the negative particles of column I.

Reading across columns IV, V, and VI, rows 1 and 5 show the forms of the verbals which occur when there is no object; rows 2 and 6, the forms preceding first person object; rows 3 and 7, the forms preceding second person object; and rows 4 and 8, the forms preceding third person objects. In any verb construction, only one form of the verbal will occur. There are, then, three possible readings across the first row, if the negative forms are excluded: yoaka (y 014, o **eat** VS1, ak 801, a 1001A), yoaha (y 014, o **eat** VS1, ah 802, a 1001A), and yoa (y 014, o **eat**, a 1001A). All forms mean **he ate** or **he eats**. An example of a negative form is eiro yoači **he will not eat** (eiro P6 [y 014, o **eat**, a 1001A, či 1401]).

The first line of possibilities from subclass B would be yoake, yoahi, and yoi, meaning, **he stung**, **he stings**; eiro yoiči **he will not sting**. Notice the only difference in the form of the two sets of words is in the form of the verbals. It will be noted, however, that in lines 2 and 3, and 6 and 7 there is no difference in form of verbal subclasses A and B. Forms filling these spots of either class of verbs will be homophonous, as yoana **he eats me** and yoana **he stings me**.

Any word may be fitted into this chart, but one must first know which verbal subclass is required for the verb; which members of orders 800 and 1200 are to be employed; whether the word is completive or incomplete; and whether the action has been initiated or is to be initiated.

Verbals 1003 and 1004, ee and ai, are used with transitive verb bases, but they exclude objects 1200, and they have no A and B subclasses. They are used with great emotion. Our present data contains very few examples of these morphemes, and complete analysis is not possible at this time.

Verbal 1003, ee, appears to function as a completive, as does 1001. itika-keenoka **he's trapped (us)!** (i 014, tik **trap** VS7, ak 801, ee 1003, noka 1802)AA.

Verbal 1004, ai, functions as incomplete as does 1002. iraapaakai **he'll capture (us)!** (i 014, r 021, aa **grab, hold** VS7, apaa 701, ak 801, ai 1004)AA.

### Restricted affixes

Affixes 1100 - 1500 are for the most part limited in distribution to verbs and noun class 1. Any exceptions to this generalization will be noted in later sections of this paper.

Affix 1101, ne~na~ni, is a benefactive, indicating action completed on behalf of another. The vowel following the n of the benefactive is the same vowel as the verbal, as in yovečikiniro **he made (it) for her** (y 011, o 031, večik **make** VS7, i 1001B, ni 1101, ro 1204)AAG. The benefactive 1101 is never used with 1201 and 1202 only with 1203 and 1204.

Affix 1102, mpaa, indicates incompleted action, as in teekera inkempeem-

paari **he is not yet like him** [(tee P6, kera 1805] [i 014, n 021, kemphe **like**, **similar** VS7, e 1002B, mpaā 1102, ri 1203])DNgG.

Object affix order 1200 is composed of four morphemes. These morphemes may be used to express direct or indirect object. Two morphemes from order 1200 may be co-occurrent in one verb construction if direct and indirect objects are both expressed. In such instances, the indirect object is closest to the base, and the direct object is second in order. In some cases, though the sense of the particular verb construction may imply both direct and indirect objects, only one or the other is expressed. The choice of which will occur depends on the verb and the general situational context. Affixes 1201 and 1202 never occur in the direct object slot if an indirect object is expressed.

Affix 1201, na, is the first person object, either direct or indirect. ipasatana **he hit me** (i 014, pasa **hit** VS7, t D+, a 1001A, na 1201)AAG. ipakenaro **he gave it to me** (i 014, p **give** VS7, ak 801, e 1002B, na 1201, ro 1204)AAG.

Affix 1202, mpi, is the second person object, either direct or indirect. ipasatimpi **he hit you** (i 014, pasa **hit** VS7, t D+, i 1001B, mpi 1202)AAG: ipakempiro **he gave it to you** (i 014, p **give** VS7, ak 801, e 1002, mpi 1202, ro 1204)AAG.

Affix 1203, ri, is the third person masculine-animate object, either direct or indirect. ipasatiri **he hit him** (i 014, pasa **hit** VS7, t D+, i 1001B, ri 1203)AAG; ipakeriri **he gave it to him** (i 014, p **give** VS7, ak 801, e 1002B, ri 1203, ri 1203)AAG.

Affix 1204, ro, is the third person feminine-inanimate object, either direct or indirect.<sup>31</sup> ipasatiro **he hit her** (i 014, pasa **his** VS7, t D+, i 1001B, ro 1204)AAG; ipakerori **he gave it to her** (i 014, p **give** VS7, ak 801, e 1002B, ro 1204, ri 1203)AAG.

In addition to person, or thing, affixes 1203 and 1204 may also represent a location object, as in ari otimiri anta **she lives here** (ari P2, [o 015, tim **live** VS1, i 1001B, ri 1203] [a pr.r. 2B, nta 1703])AAG; nohatiro eniki **I went to the river** ([no 011, ha **go** VS1, t D+, i 1001B, ro 1204] [eni **river** NS1, ki 1601])AAG.

Affix 1301, ni, indicates action was performed long ago, or for a long time. The indication that an action was performed long ago sometimes implies that the actor is now dead or separated from the speaker. otimini **she lived long ago, or for a long time (and might be dead)** (o 015, tim **live** VS1, i 1001B, ni 1301)AA.

Affix 1303, ta / čita indicates action which is urgent or imminent. impoketa / impokečita **he's coming now** (i 014, m 021, pok **come** VS1, e 1002B, ta / čita 1303)AA; pamakerota / pamakeročita **bring it now** (p 013, am **bring** VS7, ak 801, e 1002B, ro 1204, ta / čita 1303)CG.

<sup>31</sup> Morpheme 1204, ro, may never fill the direct object slot following 1203 or 1204 as an indirect object. In such cases 1203, ri, replaces 1204, ro.

Affix 1401, *či*, indicates negative fulfillment in the future. *eiro nohatiči I will not go* (*eiro* P6 [no 011, ha **go** VS1, t D+, i 1001B, *či* 1401])DNg. *ato pihatiči do not go* (*ato* P6 [pi 013, ha **go** VS1, t D+, i 1001B, *či* 1401])NgC. Note that *či* is optional in the first sentence type, and obligatory in the second.

Affix 1401a, *čia*, has the same meaning as affix 1401, but when 1401a occurs, the negative particle is obligatorily absent. *pihatičia do not go* (*pi* 013, ha **go** VS1, t D+, i 1001B, *čia* 1401a)NgC. Compare this with the example under 1401.

Affix 1402, *hi*, indicates negativity as in *tee nohatehi I did not go* (*tee* P6 [no 011, ha **go** VS1, t D+, e 1002B, *hi* 1402])DNg. Affix 1402 does not usually occur in the same construction in which morpheme 801 occurs, as in *tee nohatake I did not go* (*tee* P6 [no 011, ha **go** VS1, t D+, ak 801, e 1002B])DNg.

Affix 1411, *me*, is a conditional, indicating what would have, or might have happened under other circumstances. This morpheme is placed in class 1400 because of its relative order, but in extent of distribution it is more like the general affixes of classes 1600 - 2200. It occurs with all parts of speech except noun class 2, pronouns, and sound action words. It is different from the general affixes, however, in that in a given sentence it may occur on every word except for Pr, N2 or SA words. *arime pihatimatakeme pineakerime šintori well, if you had gone even part way, you would have seen the (wild) pigs* ([*ari* P2, *me* 1411] [*pi* 013, ha **go** VS1, t D+, *ima* 142, t D+, ak 801, e 1002B, *me* 1411] [*pi* 013, ne **see** VS7, ak 801, e 1002B, *ri* 1203, *me* 1411] *šintori* N2)AA-AAG.

Affix 1412, *niketi*, is a negative, indicates incomplete fulfillment, sometimes with emotion. This morpheme always requires an incomplete construction. *pimpokeniketi you didn't come!* (*pi* 013, m 021, *pok come* VS1, e 1002B, *niketi* 1412)DNg.

Affix 1501, *ri*, is used in two ways, (a) to indicate cause or object (direct or locational) unknown (usually in query): *paita pipankitiri what are you planting?* (*paita* Pr2 [*pi* 013, *panki plant* VS7, t D+, i 1001B, *ri* 1501])Inter.: (b) to indicate result, (in conjunction with -ant- **reason** 123). *ikisaakavitantari therefore / for that reason his leg-muscle is dark.* (*i* 014 [*kisaa black / dark* R1, *kavi bunch / leg muscle* R2] VS3, t D+, ant 123, a 1001A, *ri* 1501)A Rt.

### General affixes

Affixes 1600 - 2200 are general affixes which occur on most word classes. Under the description of each word class will be a listing of which general affixes have been noted with that particular class. The following affixes have been found to occur with verbs.

The locative affix 1702,<sup>32</sup> *ra*, indicates action performed a short distance away. *imaakera he slept there (close by)* (i 014, *maa sleep* VS1, ak 801, e 1002B, *ra* 1702)AA. Both locative affixes 1702 and 1703 have very limited distribution with verbs.

The locative affix 1703, *nta*, indicates action performed a long distance away. *imaakenta he slept there (at a distance)* (i 014, *maa sleep* VS1, ak 801, e 1002B, *nta* 1703)AA.

Affix orders 1800 through 2000 are comparatively fixed in their relative orders, but occasionally material is found which makes a hard and fast statement of relative orders impracticable. Many of these morphemes are subjective indicating temperament and disposition, and some are difficult to define semantically.

Affix 1801, *rika* (pronounced *rinka* by some speakers), indicates doubt or uncertainty on part of the speaker. *impokerika perhaps he will come* (i 014, m 021, *pok come* VS1, e 1002B, *rika* 1801)AA.

Affix 1802, *noka*, indicates emphasis or impatience. *pihatenoka go then! (what are you waiting for?)* (pi 013, *ha go* VS1, t D+, e 1002B, *noka* 1802)C.

Affix 1803, *tari*, indicates conclusive action, action which is accomplished completely. *ikaratanahitari he got all better* (i 014, *kara end / get better* VS1, t D+, an 703, ah 802, i 1001B, *tari* 1803)AA.

Affix 1804, *keti*, indicates urgency. *pamakeroketi bring it quickly* (p 013, am *bring* VS7, ak 801, e 1002B, ro 1204, *keti* 1804)CG.

Affix 1805, *kera*, *still, yet*. *oacinakera I am still eating* (o *eat* VS1, ač 803, i 1001B, na 1201, *kera* 1805)AA.

Affix 1806, *kari*, *careful*, is a warning. This morpheme is used only with completive verb construction. *pipariikari be careful, or you'll fall* (pi 013, *pari fall* VS1, i 1001B, *kari* 1806)AA.

Affix 1807, *itači*, indicates proffered suggestion as to what is happening or has happened. *yovečikiroitačimpa they must be fixing it* (y 014, o 021, *večik make* VS7, i 1001B, ro 1204, *itači* 1807, mpa 1906)AAG.

Affix 1901, *sa*, indicates impatience, emphasis. *noyasa (now) I'm going to eat!* (n 011, o *eat* VS1, ea 1002A, *sa* 1901)AA.

Affix 1902, *nea*, indicates strong affirmation, or directions, as in *pirakenea niha drink water* ([p 013, *ir drink* VS1, ak 801, e 1002B, *nea* 1902] *niha water* N2)AAG.

Affix 1903, *te*, indicates impatience or urgency. *pamakerote bring it quickly* (p 013, am *bring* VS7, ak 801, e 1002B, ro 1204, *te* 1903)CG.

Affix 1904, *teemi*, indicates emphasis or anger. *pameneriteemi look at them!* (p 013, *amen look / see* VS1, e 1002B, ri 1203, *temi* 1904)CG.

<sup>32</sup> Affix class 1600 and affix 1701 are not affixed to verbs, but to nouns and pronouns, and so are not considered in the verb section of the paper.

Affix 1905, aacaa, indicates a sense of certainty and a reaction due to the assurance. noyaacaa **therefore (since it is really good) I'll eat (it)** (n 011, o eat VS1, ea 1002A, aacaa 1905)AA.

Affix 1906, mpa, indicates uncertainty or doubt. inkamerikampa **perhaps he'll die** (i 014, kam die VS1, e 1002B, rika 1801, mpa 1906)AA.

Affix 1907, ata, indicates surprise or disdain. ipasatakeriata **they went and hit him!** (i 014, pasa hit VS7, t D+, ak 801, e 1002B, ri 1203, ata 1907)AAG.

Affix 2001, kea, frequently indicates a question as in pimaakekea **did you sleep?** (pi 013, maa sleep VS1, ak 801, e 1002B, kea 2001)Inter. It also occurs in affirmative sentences, where its function is as yet undetermined. ya-menakekea **he is looking** (y 014, amen look VS1, ak 801, e 1002B, kea 2001)AA.

Affix 2002, yee, indicates perplexity. ihatimpayee **has he really gone?** (i 014, ha go VS1, t D+, i 1001B, mpa 1906, yee 2002)Inter.

Affix 2101, me, indicates (a) a question: pihatimpame **did you go?** (pi 013, ha go VS1, t D+, i 1001B, mpa 1906, me 2101)Inter.; (b) an assertion of something unexpected: noneapaahirokeame **I saw her (though I didn't expect to)** (no 011, ne see VS7, apaa 701, ah 802, i 1001B, ro 1204, kea 2001, me 2101)AAG.

Affix 2102, ve / vea. ve indicates action in the superlative. okahenitakeve **they itch very much** (o 015, kaheni itch VS1, t D+, ak 801, e 1002B, ve 2102)AA. vea is a stylistic variant of ve, used when the speaker is excited, or enthusiastic in his speech. okahenitakevea **they itch very, very, very much.**

## Nouns

There are two classes of nouns in Campa: class 1 (N1, or actor noun), consisting of nominalized verb bases indicating that which, or he who, does something, and not inflected for possession; Noun class 2 (N2), formed from noun stems which in most cases can be inflected for possession. All nouns can fill subject, direct object, indirect object, or item spots.

### Actor nouns

Noun class one (N1, or actor noun) is composed of words constructed from verb complexes which have been nominalized to function as actor — that is, he who, or that which, performs an action. The N1 construction does not occur with any possessive prefix of order 010. There are two basic N1 constructions: intransitive and transitive.

### The intransitive N1 construction

The minimal intransitive N1 is composed of three types of constructions. The first minimal intransitive construction type is symbolized +VS (any

VS except VS7) +803 +1001 (A or B) +1501. An example is: **hatačiri the one who went** (ha go VS1, t D+, ač<sup>33</sup> 803, i 1001B, ri 1501<sup>34</sup>).

The second minimal intransitive construction type is symbolized +P6 +[+VS +803 +1001 (A or B) -1501]. **kaari hatači the one who did not go** (kaari P6 [ha go VS1, t D+, ač 803, i 1001B]). Note that the difference between construction one and construction two is the negative particle, P6, which is mutually exclusive with -ri, 1501.

The third minimal intransitive construction is one in which the N1 construction is complemented by a free noun or pronoun, either before or after the N1 construction. With the noun or pronoun complement -ri 1501 is optionally absent. +N2/Pr+ [+VS+803+1001(A or B) ± 1501] + N2/Pr. **hatači činane the woman is the one who went** ([ha go VS1, t D+, ač 803, i 1001B] činane **woman** N2).

Expanded forms of an intransitive N1 construction may optionally use any satellite permissible in any intransitive verb construction except 801, 802, and 901, which are mutually exclusive with 803. Morpheme 803, as is indicated in minimal formulas, is obligatory in all intransitive N1 constructions. **hatačari the one who started to go / the one who went in vain** (ha go VS1, ve 301, t D+, ač 803, a 1001A, ri 1501).

Morpheme 1101 **benefactive**, and order 1200 **objects** are obligatorily absent from intransitive N1 constructions, but are used in transitive N1 constructions.

Morphemes 1102 **incomplete**, 1303 **now**, 1401, 1402, and 1412 **negatives** are obligatorily absent from all N1 constructions.

Affix 1301, ni, indicates one who performed an action long ago or for a long time, or that the actor is now dead. **hatačiniri the one who went long ago / for a long time, the dead one who went** (ha go VS1, t D+, ač 803, i 1001B, ni 1301, ri 1501). -ni-, 1301 may also follow 1501 as in **hatačirini**. The meaning is the same.

Affix 1302, ne, is not used as a verb affix, but occurs only with N1. It indicates one who recently, or presently performs an action. **hatačineri the one who recently went / the one who goes** (ha go VS1, t D+, ač 803, i 1001B, ne 1302, ri 1501).

Affix 1411, me, functions with N1 to indicate that the action is not performed. That is, it reverses the meaning of a sentence, as mentioned in the discussion of morpheme 1411 in the verb section. **hatačimeri the one who did not go** (ha go VS1, t D+, ač 803, i 1001B, me 1411, ri 1501).

<sup>33</sup> In N1 constructions, ač 803 has an allomorph ainč which frequently freely alternates with ač, and never occurs in verb constructions. I have spent a great deal of study trying to find a distinction in function or meaning, but with no success, though I feel there is some slight distinction somewhere.

<sup>34</sup> In N1 constructions -ri, 1501 represents he who/that which does something, and serves as a nominalizer.



Of the general affix orders 1600 - 2100 we have noted only the following morphemes affixed to N1, either transitive or intransitive:

Affix 2001, -kea, in oihahenkatanakeririkea **the one who followed him (in making the sounds)** (oi 021 [ha go R1, henka R2] VS3, t D+, an 703, ak 801, e 1002B, ri 1203, ri 1501, kea 2001).

Affix 2002, yee, in tamačimpa antiririye **could it be that there is someone who did this to him?** ([tim live / be VS1, ač 803, i 100B, mpa 1906] [ant do VS1, i 1001B, ri 1203, ri 1501, yee 2002]).

Affix 2101, me, in nenkečitačirime **the beads-ones** (nenkečiki beads VS3, t D+, ač 803, i 1001B, ri 1501, me 2101).

Affix 2102, ve, pokačirive **those many who have come** (pok come VS1, ač 803, i 1001B, ri 1501, ve 2102).

The general affix morphemes 1600 - 2200 have the same area of meaning or function with all parts of speech. Note the use of 2102 -ve- **superlative** with N2 and with verb, as follows: hatačirive **there were very many who went** (ha go VS1, t D+, ač 803, i 1001B, ri 1501, ve 2102); ikisakave **he is very angry** (i 014, kis VS7, ak 801, a 1001A, ve 2102).

### The transitive N1 construction

The minimal transitive type N1 is composed of four types of construction.

The first minimal transitive construction type is symbolized VBT<sup>35</sup> +1001 (A or B) ± 1101+1200+1501 komatirori **the one who paddles it, the paddler of it** (koma paddle VS1, t D+, i 1001B, ro 1204, ri 1501); komatinirori **the one who paddles (it) for her** (koma paddle, t D+, i 1001B, ni 1101, ro 1204, ri 1501). Note that the 1204 morpheme in the first example is the direct object. With the -ni- benefactive 1101, the 1204 morpheme is the indirect object.

The second minimal transitive construction type is symbolized VBT (VS7) +1001(A or B)+1200 ± 1200+1501. Note that the transitive base is composed of VS7 only. panarori **the one who gave it to me** (p give VBT, a 1001A, na 1201, ro 1204, ri 1501).

The third minimal transitive construction type is symbolized +P6+[+VBT +1001(A or B) ± 1101+1200 - 1501]/+P6+[+VBT (VS7)+1001 (A or B) - 1101+1200 ± 1200+1501. kaari komatiro **the one who did not paddle** (kaari P6 [koma paddle VBT, t D+, i 1001B, ro 1204]); kaari panaro **the one who did not give it to me** (kaari P6 [p give VBT, a 1001A, na 1201, ro 1204]). Note that, as was the case with the intransitive N1, the P6 kaari **negative** is mutually exclusive with 1501, -ri.

The fourth minimal transitive construction type is one in which the N1 construction is complemented by a free noun 2 or a pronoun either before or after the N1 construction. +N2/Pr +[+VBT + 1001(A or B) ± 1101 +

<sup>35</sup> In VBT of transitive N1 construction, morpheme 803, ač is obligatorily absent.

1200 ± 1501] + N2/Pr; or + N2/Pr + [VBT (VS7) + 1001(A or B) - 1101 + 1200 ± 1200 ± 1501]. irinti komatiro **he is the one who paddles it** (irinti Pr1 [koma **paddle** VBT, t D+, i 1001A, ro 1204]). čionti panaro **sister is the one who gave it to me** (čionti N2 [p **give** VBT, a 1001A, na 1201, ro 1204]).

The expanded forms of the transitive N1 constructions may employ any of the satellite morphemes except 801. It may use all other morphemes as noted under expanded intransitive constructions.

### Other nouns

Noun class 2 (N2) is composed of all nouns other than the actor-nouns (N1).

### Noun stems

Class 2 noun stems are divided into five subclasses. Stem subclass 1 is composed of simple stems. The other subclasses are composed of complex stems. Noun stems 1 - 5 may be inflected for possession,<sup>36</sup> but some specially derived forms are not so inflected.

Noun stem 1 (NS1) is composed of Root 4.<sup>37</sup> tivi **salt**.

Noun stem 2 (NS2) is composed of Root 4 + Root 2. parentipesi **stalk of bananas** (parenti **banana** R4, pesi **cluster** R2).

Noun stem 3 (NS3) is composed of R4 + R2 + R2. panaropanaki **the hollow part of the panaro-pod tree** (panaro **a type of tree** R4, pa **pod** R2, naki **hollow / empty** R2).

Noun stem 4 (NS4) is composed of R4 + cori<sup>38</sup> nohinacori **my female cross cousin (legitimate mate)** (no 011 [hina **wife** R4, cori **cross relation**] NS4).

Noun stem 5 (NS5) is composed of bound root (BR) + R2. The bound roots of NS5 are all unique morphemes, having no meaning apart from the total construction. ivirica **string / rope** (+iviri BR, ca **long, stringy** R2).

<sup>36</sup> Noun possessive prefixes are the same morphemes which serve as subject prefixes with verbs, and are used as described under **Subject prefixes** and **Morphophonemics**. Kinship terms provide almost all of the irregularities in noun possession. These are described in an unpublished paper on Campa Kinship which I wrote in 1955. We have noted only two other irregularities in noun possession prefixation. In kehiči **fat** the initial k is replaced by r when inflected for possession. irehi **his fat** (i 014, kehi **fat** NS1). The initial k of koi **barbasco** is replaced by y when prefixed for possession noyoine **my barbasco** (no 011, koi **barbasco** NS1, ne **possession** 17).

<sup>37</sup> Root 4 is composed of noun roots as mapi **stone, rock**, and neutral roots 1 and 3 as tivi **salt**, notivitiro **I salt it**. There is an overlap between R2 and R4. All members of R2 may serve as roots, and as members of R4, but not all members of R4 serve as R2. The first root of a complex noun stem will always be treated as R4.

<sup>38</sup> This morpheme is the only one of its kind in this construction, and so it is treated individually, rather than as a member of a class.

## Noun bases

Noun bases are composed of noun stems with inflections indicating nominalization and/or possession or non-possession.

There are two principal sets of noun alloclasses (A and B) distinguished on the basis of possession or non-possession indicators.

Noun alloclass set A is composed of nouns which require a possession indicator when possessed. There are four alloclasses, determined by four possession indicators, 21 - 24.

Alloclass A1 is composed of words requiring possession indicator -te 21. This morpheme is used with many noun roots which are natural objects or events. noipačite **my dirt** (no 011, kipači **dirt, ground** NS1, te **possession** 21); noimohaancite **my years** (literally, **my high waters**) (no 011 [kimo **big** R4, ha **liquid** R2] NS2, aanči **nominalizer** 12, te **possession** 21).

Alloclass A2 is composed of words requiring possession indicator -ane 22. This morpheme is used with many abstract nouns. nonintane **my love** (no 011, nint **love/like** NS1, ane **nominalizer** 22).

Alloclass A3 is composed of words requiring possession indicator -ne 23. This morpheme is used with a limited number of nouns, including some things edible. notivine **my salt** (no 011, tivi **salt** NS1, ne **nominalizer** 23).

Alloclass A4 is composed of words requiring possession indicator -re 24. This morpheme is used with numerous cultural products. nošintipare **my (balsa wood) raft** (no 011, šintipa **raft** NS1, re 24).

Noun alloclass set B is composed of nouns which require a non-possession indicator when nonpossessed. There are three alloclasses, determined by non-possession indicators, 27, 28, and 29.

Alloclass B1 is composed of words requiring non-possession indicator -či 27. This morpheme is used with some body parts. kontači **sole of (one's) foot** (konta **sole of foot** NS1, či 27). One member of alloclass B1 replaces 27 by a unique possession indicator -ma 26. čiči **fire** (či **fire** n.r.l, či 27) becomes nočima **my fire** (no 011, či **fire** n.r.l, ma 26).

Alloclass B2 is composed of words requiring non-possession indicator -nči 28. This morpheme freely alternates with -či 27 on a few words, but with most words the two morphemes are mutually exclusive and unpredictable. Morpheme 28 is used with many words for body parts, and some body functions and cultural items. kempitanči **ear** (kempita **ear** NS1, nči **non-posessed** 28); veanenči **bow** (veane **bow** NS1, nči **non-posessed** 28).

Alloclass B3 is composed of words requiring non-possession indicators 29a, -i and 29b -o in non-possessed forms and possession indicator 25, -e, in possessed forms. koviti **clay bowl** (kovit **bowl** n.r.l, i **non-possessed** 29a) becomes noovite **my clay bowl** (no 011, kovit **bowl** n.r.l, e **possessed** 25). carato **man's pocketbook** (carat **pocketbook** n.r.l, o **non-possessed** 29b) becomes nocarate **my pocketbook** (no 011, carat **pocketbook** n.r.l, e **possessed** 25).

When something is possessed by other than its natural owner, the non-possessed base construction can function as alloclass A1, and be inflected for possession with possessive prefix 010 and possession indicator 21. For example, *iito* means **his head** (of man or animal); *iitoči* is **head** (*iito head* NS1, *či non-possessed* 27). If someone possesses an unattached head of an animal, as one might when an animal is divided up for eating purposes, the head would then be *noitoči* **my head (of a decapitated animal)** (no 011, *iito head* NS1, *či non-possessed* 27, *te possessed* 21).

There are eight subclasses of nouns divided on the basis of the type of nominalizer employed, or the lack of any nominalizer.

Noun subclass 1 is composed of nouns which have no nominalizer, either in possessed or non-possessed forms. *cota* **drinking gourd**, *nocotane* **my gourd** (no 011, *cota gourd* NS1, *ne possessed* 23). Subclass 1 occurs with possession or non-possession indicators 21, 23, 24, 27, and 28.

Noun subclass 2 is composed of nouns which have nominalizer *-ri* 11 in both possessed and non-possessed forms. *tonkari* **hill** (*tonka rise/hill* NS1, *ri nominalizer* 11); *notonkarite* **my hill** (no 011, *tonka rise/hill* NS1, *ri nominalizer* 11, *te possessed* 21). Subclass 2 occurs only with noun possession indicator 21.

Noun subclass 3 is composed of nouns which have nominalizer *-aanči* 12 in both possessed and non-possessed forms. *kamaanči* **cold** (*kam cold* NS1, *aanči nominalizer* 12) *noamaanči* **my cold** (no 011, *kam cold* NS1, *aanči nominalizer* 12, *te possessed* 21). Subclass 3 occurs only with possession indicator 21 in the possessed form.

Noun subclass 4 is composed of nouns which have nominalizer *-aanči* 12, only in non-possessed forms. *kisaanči* **anger** (*kis anger* NS1, *aanči nominalizer* 12); *noisane* **my anger / the one with whom I am angry** (no 011, *kis anger* NS1, *ane possessed* 22). Subclass 4 occurs only with possession indicator 22 in the possessed form.

Noun subclass 5 is composed of nouns which have nominalizer *-ro* 13, which occurs on both possessed and non-possessed form. *noomaro* **my paddle** (no 011, *koma paddle* NS1, *ro nominalizer* 13), *komaronči* **paddle** (*koma paddle* NS1, *ro nominalizer* 13, *nči non-possessed* 28). Subclass 5 occurs only with non-possession indicator 28 in the non-possessed form.

Noun subclass 6 is composed of nouns which have nominalizer *-mento* 16, which occurs on both possessed and non-possessed forms. *nomaamento* **my bed** (no 011, *maa sleep* NS1, *mento nominalizer* 14), *maamentonči* **bed** (*maa bed* NS1, *mento nominalizer* 14, *nči non-possessed* 28). Subclass 6 occurs only with non-possession indicator 28 in the non-possessed form.

Noun subclass 7 is composed of nouns which have nominalizer *-re* 15, which occurs on both possessed and non-possessed forms. *noicaare* **my clothing** (no 011, *kicaa clothe* NS1, *re nominalizer* 15), *kicaarenči* **clothing** (*kicaa clothe*

NS1, re **nominalizer** 15, **nči non-possessed** 28). Subclass 7 occurs only with non-possession indicator 28 in the non-possessed form.

Noun subclass 8 is composed of nouns which have nominalizer -ne 16, which occurs on both possessed and non-possessed forms. noamane **my death** (no 011, kam **die** NS1, ne **nominalizer** 16), kamanenči **death** (kam **die** NS1, ne **nominalizer nči non-possessed** 28). Subclass 8 occurs only with non-possession indicator 28 in the non-possessed form.

### Noun margin

The N2 Base may be followed by eleven optional orders of marginal, or inflectional suffixial morphemes, of which no more than three may occur in any one form. Some of these suffixes have already been discussed in the verb section. Wherever a morpheme has already been assigned a number in a previous section, the number is retained in whatever construction it may occur.

The first order<sup>39</sup> of noun 2 suffixes are as follows:

Affix 121, -sano **genuine**, as in mapisanori **a true rock** (mapi **rock** NS1 [sano **genuine** 121, ri 40<sup>40</sup>]).

Affix 194, -niro **bad/evil**, as in manironiro **the evil deer** (maniro **deer** NS1, niro **bad/evil** 194).

Affix 31, -hani **small/little**, as in mapihaniki **tiny rock** (mapi **rock** NS1 [hani **small** 31, ki **tiny** R2]).

The second order of noun 2 suffixes consists of morphemes -ri 40, and -ki R2, as illustrated above.

The third order of noun 2 suffixes consists of the morpheme -hi 51, **diminutive / tiny / a little bit**. When this morpheme occurs, there is usually some change in the form of the morpheme to which it is added. There is a wide variety of possible changes, and no definite pattern is discernible. Note, however, that palatalization, addition of i somewhere in the word, and loss of r are among the most usual changes. Compare the following words with their diminutive forms: pearenči **masato**, peainčihi **a little bit of masato**; katonko **up river**, kationkohi **a little ways up river**; henoki **up**, heniokihi **a**

<sup>39</sup> Noun suffix order one also contains the morphemes -mente, -ča, and others, which are used in joking relationship terms, or as nicknames, as in pavačorimente **paternal uncle** and aniča **male cross cousin of male ego**. These morphemes, along with morphemes employed in forming given names are the subject of a contemplated paper on Campa given names. In this paper I have also not attempted to describe the morphemes which seem to recur with similar connotations, but which are not productive forms. For instance the names of many snakes end in -nke. kintaronke a large green snake, kintaro is a green parrot. Not all snake names end in -nke, however, e.g. kempiro **a type of snake**.

<sup>40</sup> Morpheme -ri 40 is required whenever -sano **genuine** 121 is affixed to nouns, though it is not required with -sano when -sano is affixed to other parts of speech. -ri also occurs with kera **yet, still** 1805 when affixed to nouns. There is also a -ri on pronoun 1. I do not find sufficient evidence to identify this -ri with either -ri 11 or -ri 1501. I shall identify the unanalyzed morpheme(s) -ri 40 whenever it is (they are) encountered.

little ways up; icarate **his bag**, ičariatehi **his tiny bag**. Affixes -hani 31, -ki R2, and -hi 51, from noun suffix orders 1 - 3 may all occur in some constructions as in oihanikihi it (is) **tiny** (o 015, ri [with loss of r] **small** P5 [hani **small** 31, ki **tiny** R2] hi **diminutive** 51).

The fourth order of noun 2 suffixes consists of plural indicators. These morphemes are mutually exclusive in any one construction, but may occur with all N2 constructions except for limitations described below. Any noun construction uninflected by morphemes of this order may still be either singular or plural.

Affix 201, ye, **plural/many**, ašaninkaye **the numerous people** (ašaninka **person/people** NS1, ye **plural** 201).

Affix 202, hei, **plural/all**, ašaninkahei **all the people** (ašaninka **person/people** NS1, hei **all/plural** 202).

Affix 152, ite, **many, or expansive**, impokiroite **the many stars** (impokiro **star/stars** NS1, ite **many** 152); impanekiite **large expanse of sand** NS1, ite **expansive** 152). This morpheme is limited to affixation to nouns which are natural objects.

Affix 61, pee, **plural/numerous**, iyentipee **my numerous brothers** (iyenti 36 **my brother(s)** NB, pee **numerous** 61).

Affix 62, ši, **plural/many**, inčatoši **jungle, woods** (inčato **tree(s)** NS1, ši **many** 62).

The fifth order of noun 2 suffixes consists of morpheme 1301, ni, and indicates either **distant**; **dead**, **abandoned**, or **destroyed**. otarini **the distant otari-stream** (otarini **name of stream** NS1, ni **distant** 1301); pankočini **the abandoned house(s)** (pankoči **house** NB, ni **abandoned** 1301).

The sixth order of noun 2 suffixes consists of morpheme 1601, ki, which indicates **motion to / motion from**. nohate pankočiniki **I am going to the abandoned house** ([no 011, ha **go** VS1, t D+, e 1002B] [pankoči **house** NB, ni 1301, ki 1601]).

The sixth through eleventh orders of N2 suffixes consist of certain morphemes from orders 1700 - 2100 which may occur optionally with N2. The following morphemes have been noted to occur with N2: 1701, 1702, 1703, 1801, 1802, 1805, 1901, 1902, 1904, 1905, 1906, 2001, 2101, 2102.

### Special noun constructions

There are five specially derived noun constructions which are limited in number of members in each form, and in the number of alternate morphemic constructions.

Special noun construction one is composed of pronoun base 2A (Pr2A) + kero 01 + 1700. ontakeronta **that side (of stream or river) over there** (onta **that there** Pr2A [o pr.r.2A, -nta 1703], kero **side of river** 01, nta 1703). In this construction there are always two occurrences of some member of mor-

pheme order 1700 — one as part of the pronoun base 2A (Pr2A) i.e. *onta*, and the other as the last morpheme of the sequence. Both these occurrences must always be of the same morpheme; note that both are 1703 in the example above.

Special noun construction two is derived from + R4 + *či* 27 + R2 as in *avočinampi the side of the trail* (*avo trail* R4, *či non-possessed* 27, *nampi side* R2).

Special noun construction three is composed of all regular noun 2 bases, and special construction type 2, plus *sati* 02/*nari* 03/*niri* 04.

The morpheme *sati* 02 indicates one who dwells (somewhere). *kanohasati those who live high up in the hills* (*kanoha high, barren hill tops* NS1, *sati those who dwell* . . . 02).

The morpheme *nari* 03 indicates one who stays at, dwells at, or is native to (someplace). *omoronari etini the armadillo dwells in/is native to holes* (o 015, *moro hole* NS 1, *nari native to* 03).

The morpheme *niri* 04 indicates one who is native to (someplace). This morpheme frequently occurs with -ki 1601. *inkaharekiniri those (fish) which live in the lake* (*inkahare lake* NS1, *ki* 1601, *niri* 04); *yontakerontakinirinta those who live there on the other side there* (y 014, *onta* Pr3, *kero* 01, *nta* 1703, *ki* 1601, *niri* 04, *nta* 1703).

Special noun construction four is derived from NB + *čovihi* 05/*ririnteni* 06/*roronteni* 07.

The morpheme *čovihi* 05, indicates one with whom the speaker is acquainted. *kirinkačovihi my acquaintance from down river* (*kirinka down river* P4, *čovihi* 05).

The morpheme *ririnteni* 06, and *roronteni* 07 indicate something which is in common with the obligatory order 010.<sup>41</sup> Morpheme 06 occurs when there is a masculine possessor in the construction; and 07 when the possessor is feminine. These morphemes may actually be complex, but there is insufficient data to be certain of the component parts, so they are treated as simple. *ončatororonteni this tree's kind* (o 015, *inčato tree* NS1, *roronteni* 07). *noirinkasatiririnteni those down river with whom I have something in common*. (no 011, *kirinka down river* P4, *sati* 02, *ririnteni* 06). Note the first two vowels of 06 are *i*, indicating a masculine possessor represented by 011.

Special noun construction five consists of completely verb-like constructions which function as nouns. The verb-like construction is one specialized type in which *ant* 123 and *ri* 1501 are obligatory. *pamakenaro nosetantari, bring me my wiper (that with which I wipe)* ([p 013, *am bring* VS7, *ak* 801, *e* 1002B, *na* 1201, *ro* 1204] [no 011, *se wipe* VS7, *t* D+, *ant* 123, *a* 1001A, *ri* 1501] specially derived noun, type 5)CG.

<sup>41</sup> See note 17.

## Pronouns

There are six classes of pronouns (Pr) in Campa, as follows.

Pronoun class 1 (Pr1) is composed of two personal pronoun bases which may fill subject, object, indirect object, agent of action, and vocative spots.

Pronoun base 1A (Pr1A) is composed of  $+ 010 + \text{pr.r.1} \neq \text{ri } 40$ .  $\text{pr.r.1}$  is  $\text{ro} \in [\text{iro} \in \text{i}] \in [\text{i} \in \text{io}] \in \text{o}$  combining with morphemes 011 and 012, 013, 014, 015, respectively. The allomorphs of 010 morphemes occurring in Pr1A are distinct in form from those employed with nouns and verbs. They are as follows: na 011 **first person singular or plural, exclusive**, *naro I, we, me, us* (na 011, ro pr.r.1); av 013 **second person singular or plural**, *aviro you* (av 013, iro pr.r.1); ir 014, **third person masculine, singular or plural**, *iri he, they* (ir 014, i pr.r.1); iro 015 **third person feminine, singular or plural** *iroo she, her, they, them* (iro 015, o pr.r.1). Of the pr.r.1 allomorphs ( $\text{iro} \in \text{i}$ ) used with 013, the longer form is always used in non-inflected constructions, but the shorter form may be used when the base is inflected by morpheme 32 (see below) or when verbalized. The choice of pr.r.1 allomorphs ( $\text{i} \in \text{io}$ ) used with 014 is also conditioned by the morpheme following. The second allomorph occurs with morpheme 40 as in *iriori he*, etc. (ir 015, io pr.r.1, ri 40), and with suffix yaa 33, **emphasis**, as in *irioyaampa it should be he* (ir 015, io pr.r.1, yaa 33, mpa 1906); the first allomorph occurs elsewhere.

The minimal pronoun 1 base  $010 + \text{pr.r.1}$  may be verbalized by the affixation of  $+ 800 + 1000$  with other optional satellites and inflections. *narotake it is I* (na 011, ro pr.r.1, t D+, ak, e 1002B).AST.

Pronoun base 1B (Pr1B) is composed of  $+ 010 + \text{Pr2}$ . The same set of pronominal allomorphs are used with pr.r.2 as with pr.r.1. *nainti me, we, us* (na 011, inti pr.r.2). There is no change in the phonemic form of pr.r.2 -inti.

The only apparent difference between Pr1A and Pr1B is one of emphasis, and inflectability. Pr1B is apparently more emphatic in its uninflected forms, while Pr1A is frequently and heavily inflected, and so more expressive.

Pronoun 1 employs two inflectional morphemes which have not yet been described in this paper. They are first order affixes to the pronoun base.

The first morpheme is -sati 32 **also** *avisati you also* (av 013, pr.r.1, sati 32).

The second morpheme is -yaa 33, used for **emphasis**. *aviroyaa that's up to you* (av 013, iro pr.r.1, yaa 33).

The following morphemes have been observed to occur with Pr1A, in the same relative orders as with nouns and verbs, and with the same areas of meaning: [121  $\neq$  40], 1301, 152, 1601, 1801, 1803, 1804, 1805, 1901, 1902, 1904, 1905, 1906, 2001, 2101, 2102.

The following morphemes have been noted to occur with Pr1B: 194, 1303, 1801, 1903, and 2101.

Pronoun class 2 (Pr2) is composed of two demonstrative pronouns, Pr2A and Pr2B.



Pr2A is a demonstrative pronoun referring to either a person or a thing and is always in third person, either masculine or feminine. The minimal construction is of three parts + 010 + pr.r.2A + 1700. aka **it, she, her** (# 015, o **demonstrative (person, thing)** pr.r.2A, ka 1701); yoka **he here** (y 014, o **demonstrative (person, thing)** pr.r.2A, ka 1701) ora **she, it, there, nearby** (# 015, o **demonstrative** pr.r.2A, ra 1702); onta **she, it, there, at a distance** (# 015, o **demonstrative** pr.r.2A, nta 1703).

The morpheme -nki 34 is used with Pr2A to clarify or define clearly that which is spoken of, oranki pivanko **it is that, your house (I was referring to)**. ([# 015, o pr.r.2A, ra 1702, nki 34] [pi 013, vanko **house** n.r.1])A Rsp.

Pr2B is a demonstrative pronoun referring to place, not contrasting between masculine and feminine (animate and inanimate) forms. The minimal construction is + a **demonstrative (place)** pr.r.2B + 1700. aka **here** (a **demonstrative, place** pr.r.2B, ka 1701); anta **there** (a **demonstrative, place** pr.r.2B, nta 1703). Order 1700 is usually obligatory, but occasionally this order may be absent if the location is understood. pihate a **go there** ([pi 013, ha go VS1, t D+, e 1002B] a **there** Pr2)CG.

The following morphemes have been noted to occur with Pr2: 33, 34, 40, 1801, 1902, 1905, 1906, 2001, 2101, 2102.

Pronoun class 3 (Pr3) is a possessive pronoun. The maximum-minimum base constructions is + 010 + aši **own** pr.r.3. naši **mine** (n 011, aši **own** pr.r.3); iraši **his** (ir 014, aši **own** pr.r.3). Note in the second example that the allomorphic form of 014 is ir-, the same form as is employed with Pr1.

The following morphemes have been noted to occur with Pr3: 32, [191 ± 40], 194, 1301, 1802, 1804, 1901, 1902, 1904, 1906, 2001.

Pronoun class 4 (Pr4) is composed of teekači **nothing, no one**, a negative pronoun replacing a noun in a subject or object spot. teekači pokačine **no one has come** ([tee **negative** P6, kači **pronominalizer**] Pr4, [pok **come** VS1, ač 803, i 1001B, ne 1302])DNg.

The following morphemes have been noted to occur with Pr4: 1411, 1902, 1903, 1906, 2001, 2102.

Pronoun class 5 (Pr5) is an attention pronoun. The base construction is composed of + ner /her pr.r.5 i/o 014T and 015T. The alternate forms of the base are apparently dialectical alternants. The 010T morphemes agree with the gender of noun being called attention to. hero mapi **look at the rock/here is the rock** ([her **attention** pr.r.5, o 015T] mapi **rock** NS1); heri očiti **look at the dog** ([her **attention** pr.r.5, i 014T] očiti **dog** NS1).

The following morphemes have been noted to occur with Pr5: 1804 and 2001.

Pronoun class 6 (Pr6) is composed of three interrogative pronouns, serving in interrogative constructions: paita **what?** Pr6, haoka **where?** **what?** Pr6, and hanika **who?** Pr6. paita pantiri **what are you doing?** (paita **what?** Pr6,

[p 013, ant **do** VS1, t D+, i 1001B, ri 1501])Inter.; haoka pihatiri **where are you going?** (haoka **where?** Pr6, [pi 013, ha **go**, t D+, i 1001B, ri 1501])Inter.; haoka pipahitiri **what are you called/what is your name?** (haoka **what?** Pr6, [pi 013, pahi **be named** VS1, t D+, i 1001B, ri 1501])Inter.; hanika pokačiri **who is it who has come?** (hanika **who?** Pr6, [pok **come** VS1, ač 803, i 1001B, ri 1501])Inter.

The following morphemes have been noted to occur with the interrogative pronouns: 40, 61, 1801, 1902, 1904, 1906, 1907, 2001, 2002.

## Particles

There are six classes of particles (P) in Campa, as follows.

Particle class 1 (P1) is introductory to either sentence or phrase. haa ipokake iriori **well, he came** (haa **well** P1, [i 014, pok **come** VS1, ak 801, e 1002B] [ir 014, io pr.r.1, ri 40]AA.

Particle class 2 (P2) consists of modal particles. The most common word of this class is ari **O.K.** P2. There is no complexity of base but the particle ari may be inflected by members of R2 or R3, in which case ari indicates augmentation, or **large**. aripati čakopi **a large bundle of arrows** ([ari augmentation P2, pati **bunch, bundle** R2] [čako BR, pi R2])AS. Only ari takes R2 and R3 as affixes.

The morpheme, nivani **only, still, yet remaining** 35, is a morpheme occurring with particles, but not with verbs, nouns, or pronouns. arinivani apitenivani **there (are) only a couple left**. ([ari P2, nivani 35] P2, [apite **two, a couple** P6, nivani 35] P6).

The following morphemes have also been noted to occur with P2: 33, 40, 121, 194, 1202, 1301, 1303, 1411, 1801, 1802, 1803, 1804, 1805, 1901, 1902, 1903, 1904, 1905, 1906, 2001, 2101, 2102.

The morpheme ari freely varies with ario- when affixed by some morphemes as 1801, 1903, 1904, 1906, 2101, and 2102. arimpa/ariompa **ok** P2 (ari/ario **ok** Pr2, mpa 1906).

Particle class 3 (P3) indicates time, as perani **long ago** P3. The following morphemes have been noted to occur with P3: 40, 194, 1301, 1303, 1801, 1802, 1901, 1902, 1903, 1905, 1906, 2001, 2101, and 2102.

Particle class 4 (P4) indicates location, as katonko **up-river** P4. The following morphemes have been noted to occur with P4: 51, 61, 152, 1601, 1701, 1702, 1703, 1801, 1803, 1902, 1905, 1906, 2001.

Particle class 5 (P5) is composed of attributives, which modify nouns, verbs, or pronouns. The base of P5 may be composed of p.r./neut.r.3 ± R2. kapiča **a little, a little bit** (kapiča **a little** p.r.) P5; kameecahenka **good-smelling, or good-sounding** (kameeca **good** neut.r.3, henka **atmospheric** R2) P5.

The following morphemes have been noted to occur with P5: 33, 35, 40,

51, 61, 121, 152, 194, 1301, 1302, 1411, 1601, 1801, 1802, 1804, 1805, 1904, 1905, 1906, 2001, 2101, 2102.

Particle class 6 (P6) is composed of negatives tee **negative past complete**, as in tee irihatehi **he didn't go**; eiro **negative future inceptive**, eiro ihatič **he won't go**; ato **negative command**, ato pihatiči **don't go**; and kaari **one who, that which, did not complete**, kaari hatač **the one who did not go**. All of these particles may occur as response forms except for ato which occurs only in complete negative command sentence construction.

When they are used with verbs or N1 constructions, negatives take very few affixes, including 1411, 1801, 1805, 1902, and 2001.

In free response forms however, negatives have been observed to occur with: 33, 40, 1301, 1303, 1802, 1803, 1804, 1901, 1903, 1904, 1905, 1906, 2101, and 2102.

### **Sound action words**

Sound action words (SA) are uninflected forms which characterize or portray an action. Sound action base (SAB) are derived from the first two syllables of R4 or from SAR. Sound action words are the only Campa words which may end in consonants, as in poŋ<sup>42</sup> **splash!** SAB and haraŋ<sup>43</sup> **thud!** (of a fallen tree) SAB (derived from haraa- **fall** neut.r.4).

The second syllable of a sound action word may be repeated several times to convey a continuous action. isoronkaka sorororororo **he (snake) glided along, glide, glide, glide, glide**.

The SA word requires no verb to describe or define an action. It takes no inflections.

### **Interjections**

Interjections (I) indicate either emotional or physical distress. inave **oh!** is an expression used when someone is very frightened. ayave is an expression similar to a groan when someone is in pain or tired. Interjections take no inflections.

Yarinacocha, Perú

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<sup>42</sup> Extrasystematic voiced velar nasal implosive, occurring only word-finally on SA words.

<sup>43</sup> Extrasystematic voiced velar nasal stop, occurring only word-finally on SA words.