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**STUDIES IN
PERUVIAN
INDIAN LANGUAGES: I**

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Editor's Note

The seven articles which comprise this volume describe, in part, the structures of some of the languages spoken in eastern Peru. The data were gathered and the articles written as part of the Summer Institute of Linguistics field program in that country. The Institute currently has 31 languages under investigation in eastern Peru, so additional studies of these languages will be forthcoming.

Five of the articles are syntactic studies cast in the tagmemic format developed by Kenneth L. Pike; indeed, his influence is apparent in all of the articles. The last two articles deal with the phonology of the languages under attention.

Mary Ruth Wise served as consultant on many of the articles. Viola Waterhouse has served as Assistant Editor for the volume, and Lucille Schneider gave valuable assistance in preparing the manuscripts for printing.

For convenience of composing the book the symbol Δ has been used where the authors of the manuscripts used \bar{i} .

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NONCONTINGENT DECLARATIVE CLAUSES IN MACHIGUENGA (ARAWAK)

by

Betty A. Snell and Mary Ruth Wise

0. Introduction

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0. Introduction. Noncontingent clauses in Machiguenga¹ are independent in structure and distribution and are not immediately contingent upon a specific linguistic or nonlinguistic context.² Contingent clauses may be either independent or dependent in structure and distribution but are contingent upon a specific context. For example, a response-type clause occurs only in response to interrogation, previous utterance, or a particular nonlinguistic situation.

0.1. In order to point out the contrast between contingent and noncontingent clause types, a few of the characteristics of contingent clauses are discussed before the description of noncontingent clauses with which the main body of the paper is concerned. The examples of contingent clause types are not intended to be exhaustive.

Some items obligatory to the nuclei of noncontingent clauses may be omitted in contingent clauses or replaced by substitution items. For example, the obligatory affixal referent, included in the verb, in intransitive active clause B₁ (see 1.1112) may be replaced by a clause-level pronominal referent in the corresponding contingent clause. In the fol-

¹ For a classification of Machiguenga as Arawak, see Tax (1960).

Machiguenga is spoken by several thousand Indians living in the provinces of Cuzco and Madre de Dios in southern Peru. The principal informants used for this study are speakers of the Pangoa dialect.

For a description of the phonemes used in the citing of examples, see Snell (n.d.). The phoneme of stress cited in that article is not marked in this paper.

The data were gathered by Mrs. Snell, and the analysis is largely hers. The paper was organized and written by both Mrs. Snell and Miss Wise.

² The division between contingent and noncontingent is not always clear cut: it could be argued that every utterance depends in some sense upon a context. Since the division is useful in distinguishing transitive, intransitive, and neutral classes in Machiguenga, it is used in this analysis.

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lowing example, the affixal referent in the noncontingent clause is the final suffix -ro 'third-person-feminine', cited with underline. It is replaced in the contingent clause by the pronoun iroro-tari 'she/it--being':³ no-poka-šita-k^ye-ro 'I--came--for--nrefl--her/it'; iroro-tari no-poka-šita-k^ye 'she/it--being I--came--for--nrefl' (that's what I came for).

Certain clause margin tagmemes, e.g. the affirmative slot filled by an affirmation particle or a pronoun with affirmation suffix, and the contrastive slot filled by an auxiliary verb, occur only in contingent clauses. Examples of the affirmative, cited with underline are: arisanoniroro g^ya-ga-k^ye-na-t^yo 'truly he--got--nrefl--me--emphasis' (he really did get [it] for me); iroro-tari tera pa-ma-kota-e 'it--being not you--bring--contained--incompletive' (so that's why you don't bring [so many things] any more). Examples of the contrastive are: o-nti-t^yo počarok^yi o-ntaika-bag^yeta-ka 'it--is--emphasis fruit it--lying--

³ In the citation of examples, hyphens indicating morpheme breaks in the vernacular are matched by dashes in the literal translation. Morphemes which are not pertinent to the level of the discussion are indicated only when necessary in the translation. For example, the verb construction no-poka-ši-ta-k^ye-ro 'I--came--with-reference-to--vl--nrefl--her', could be further tentatively broken down as follows: no-po-ka-ši-ta-k^y-e-ro 'I--came--stem-former--with-reference-to--vl--nonrepetitive--nonreflexive--her/it'. Hyphens are used in the literal translations when more than one English word is required to translate a section of the vernacular. Free translations are enclosed in parentheses. The abbreviations nrefl and refl (nonreflexive and reflexive), as well as others listed in 0.2 are used in translations as well as formulas due to the difficulty encountered in trying to equate certain morphemes with an English word. For example, in the verb i-pasata-ka 'He--hit--refl', the word 'himself' is an adequate translation of the reflexive. In the verbs i-raga-ka 'he--cried--refl' and i-sekata-ka 'he--ate--refl', however, the reflexive is not translatable by such a pronoun.

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distributed--refl' (but the fruit was lying around); o-nti
i-maga-k^{ye} 'it--is he--sleeping--nrefl' (he's asleep
[not dead]).

Two contingent clause types which have no noncontingent parallels are the noun clause and the identification clause. The noun clause consists of an obligatory subject slot filled by an adjective, and an obligatory predicate slot filled by a nominalized verb form of class 1:⁴ pašini taan-ang^{yici} 'another falling-over--one' (and then another one collapses [in an epidemic]). The identification clause consists of an obligatory predicate slot filled by an auxiliary verb or a personal pronoun, an obligatory identification 2 slot filled by a noun, a participle 2,⁵ or a dependent noun clause (DNCI),⁶ and an optional subject slot filled by a noun or pronoun. Note that the identification 2 tagmeme and the identification tagmeme in noncontingent clauses (see 1.1114 and 1.42) differ from each other in that the fillers of the two variants contrast.

⁴For the purposes of this discussion, those nominalized verb forms which may fill the predicate slot of a contingent noun clause are designated as class 1.

⁵Participle 2 differs from participle 1 in composition and distribution. Participle 1 may fill the predicate slot of a noncontingent equative clause 1 (see 1.13). No pronominal object suffix may be included in this form. Participle 2 may fill the identification 2 slot of a contingent identification clause. A pronominal object suffix is obligatory.

⁶A dependent noun clause occurs as the filler of a slot in another clause or phrase. It has an obligatory predicate filled by a nominalized verb and optional nuclear and marginal tagmemes. In the example cited in the text, the dependent noun clause is perata-ka-ri-rira macig^{yenga} kamisea-kanirira 'ordering--refl--him--one people Camisea-living-ones (the one who gives the orders to the people who live on the Camisea River). It consists of an obligatory predicate filled by a nominalized verb and an optional clause-level object tagmeme filled by a noun phrase 4. For examples of dependent noun clauses occurring as the filler of the apposition slot in noun phrase 4, see 1.4224.

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Constituents are identified in parentheses in the following examples. (See 0.2 for abbreviations and symbols used.) Examples are: *i-nti* (+ P:Ax) *seripigari* (+ Id₂:Nn) *ir-iri* (+ S:Nn) 'he--is shaman his--father' (his father is a shaman); *i-nti* (+ P:Ax) *tominta-ka-ri* (+ Id:Part₂) *hoa* (+ S:Nn) 'he--is fathered--refl--him John' (it's John who is his father); *iriro* (+ P:PersPro) *seripigari* (+ Id₂:Nn) *ir-iri* (+ S:Nn) 'he shaman his--father' (his father is a shaman); *iriro* (+ P:PersPro) *mig^yiri* (+ S:Nn) *perata-ka-ri-rira macig^yenga kamiseakanirira* (+ Id₂:DNnCl) 'he Miguel ordering--refl--him--one people Camisea-living-ones' (Miguel is the one who gives the orders to the people who live on the Camisea River).

0.2. The following abbreviations are employed in the formulas and examples: Act = active; Adj = adjective; Ax = auxiliary; ben = benefactive; C = core; caus = causative; Cl = clause; con = contained; D = dependent; dir = directional; Eq = equative; H = head; I/i = instrument; Id = identification; il = instrumental; In = intransitive; IS/is = indirect subject; N = neutral; Nn = noun; nrefl = nonreflexive; O/o = object; P = predicate; Part = participle; Pass = passive; pass = passive suffix; Pers = personal; Pro = pronoun; R/r = referent; rec = reciprocal; refl = reflexive; rl = referential; S/s = subject; T = transitive; Th = theme; V = verb; vl = verbal. In the abbreviations I/i, IS/is, O/o, R/r, S/s, a capital letter indicates a clause-level tagmeme, and a small letter, an affixal tagmeme included in the verb.

The following symbols are employed: + indicates obligatory constituent; + indicates optional constituent; [] enclose the entire verb construction; () enclose the theme or they enclose parallel affixal and clause-level tagmemes when the occurrence of one is dependent upon the occurrence

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of the other; { } enclose a suffix complex; < > indicate a member of a class of substitutable items within the verb construction; colon, in formulas, is to be read 'filled by', the virgule / 'or', and the equal sign = 'consisting of'. For samples of interpretation of formulas, see the verbalized formulas at the beginning of 1.1111, 1.1112, and 1.1113.

1. Clause nuclei. Each clause nucleus includes a predicate and other clause-level tagmemes which are directly related to the predicate, i. e. which occur in apposition to pronominal affixes included in the verb or which obligatorily or optionally occur with that type of predicate. The clause nuclei are contrastive in each clause class and the clause margins (see 2) are noncontrastive. The clause classes are, therefore, the same as the clause nucleus classes which are listed below.

Three main classes of noncontingent declarative clause nuclei occur: active, passive, and equative. In addition to the contrastive fillers of the predicate slots (the lists of fillers of the predicate slot of each clause nucleus class do not overlap, and they contrast in internal composition), the particular clause-level tagmemes which may occur with the predicate are also contrastive features of these main classes. Active clause nuclei may include subject, object, referent, instrument, identification, and indirect subject⁷ tagmemes; the clause-level subject is optional, but an included affixal

⁷For the term indirect subject, we are indebted to our colleague Rolland Rich. This term is used here to designate the subject caused to perform an action. For example, in the expression 'he caused it to chase me', the indirect subject is 'it'. This term is particularly useful in that certain verbs which would otherwise have been classed as transitive, had this item been called object 2, now remain as intransitive which seems to be more in keeping with the intransitive fillers of their core slots. For examples of these verb constructions, see 1.1115.

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subject tagmeme in the verb is obligatory. Passive clause nuclei may include object, referent, instrument, identification, and indirect subject tagmemes; no subject tagmeme occurs. Equative clause nuclei may include subject and object tagmemes; the clause-level subject tagmeme is obligatory, but no affixal subject is included in the verb.

Active and passive clause nuclei are further subdivided into classes of intransitive, transitive, and neutral. Equative clause nuclei are subdivided into intransitive and neutral. Intransitive clauses do not include an object. Transitive clauses must include an object, which may be an affix included in the verb and/or a clause-level tagmeme. Neutral clauses contrast with intransitive and transitive clauses in that an object is optional.

Lists of intransitive, transitive, and neutral verbs are determined on the basis of presence or absence of a clause-level or included affixal object tagmeme. Similarly, the core and theme levels within the total verb construction are each divided into intransitive, transitive, and neutral classes on the basis of external distribution and internal composition.

An intransitive core or theme occurs only in an intransitive verb. A transitive or neutral core or theme can occur in an intransitive verb by the addition of the reflexive or of another suffix which may function as an intransitivizer. Transitive cores are divided into groups A, B, and D. (See 1.111 and 1.112 regarding corresponding groups of clause nuclei.) Transitive core A occurs in the theme of the predicate in clause nucleus groups A, B, C, and E. Transitive core B occurs only in the theme of the predicate in B₂. Transitive core D occurs only in the theme of the predicate in group D and in E₂. Transitive core TC-A includes all A transitive cores except 'to-say' designated TC-A₂. Neutral core NC includes all neutral cores except 'to-eat', designated NC₂.

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1.1. Clause nucleus formulas. The formulas given in the following sections are intended to show possibility of occurrence of clause-level tagmemes rather than position of occurrence which may be changed for emphasis, contrast, or stylistic variation. Note, however, that both possibility of occurrence and position of occurrence are shown for tagmemes included in the verb. (See 1.3 regarding the position of occurrence of clause-level tagmemes.)

Due to the impossibility of showing all mutually co-occurring combinations of verb theme types and clause nucleus tagmemes in one formula, the intransitive, transitive, and neutral classes of clause nuclei have been further subdivided into groups which show the relationship between the verb theme types, the pronominal affixal tagmemes included in the verb construction, and the clause-level tagmemes which are either required by the verb theme or optionally occur in apposition to pronominal affixal tagmemes required by the verb theme.

In formulas, the enclosure of pronominal affixal tagmemes and clause-level tagmemes in a single set of parentheses indicates co-occurrence restrictions across word boundaries. For example, in intransitive active clause nucleus B_2 in 1.1112, the occurrence of a referent tagmeme is optional. If, however, a clause-level referent occurs, an affixal referent is required.

1.11. Active clauses. The active clause nuclei are presented for intransitive, transitive, and neutral classes.

1.111. Intransitive active clauses. The subtypes of the intransitive active clause nuclei are presented in five groups which differ from each other in their clause-level constituents. All groups include a contrastive obligatory predicate and an optional subject. Group A is limited to

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these items. Group B also includes an optional referent and group C an instrument, obligatory in C_1 and optional in C_2 . Group D has an obligatory identification. Group E has an optional indirect subject.

In this section, as well as in succeeding sections, the fillers of the tagmeme slots are not indicated in the formulas except where word-level tagmemes are directly related to clause-level tagmemes. Therefore, while the breakdown formulas of the verbs filling predicate slots are given, items that may occur in the verb but are not directly related to clause-level items, are omitted. For example, the continuative suffix which occurs in the second example in 1.1111 is not listed in the formula since it is not related to the other tagmeme of the clause. For the description of verb phrases which may also fill the predicate slots, see 1.41. For fillers of slots other than predicate, see 1.42.

1.1111. Group A. There are three variants of A, differing from each other in the internal composition of the verb. The first has an intransitive core in an intransitive theme in an intransitive verb. The second has either a transitive or neutral core with an obligatory directional and reciprocal resulting in an intransitive theme in an intransitive verb. The third has a transitive core in a transitive theme with an obligatory reflexive resulting in an intransitive verb.

The formula of the first variant of A below is to be read as follows: 'Clause-level tagmemes are an obligatory intransitive active predicate A filled by an intransitive active verb A, and an optional subject. Intransitive verb A consists of an obligatory subject prefix, an obligatory intransitive theme A, and an obligatory nonreflexive or reflexive suffix. Intransitive theme A consists of an obligatory intransitive core.'

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$$\begin{aligned}
 A &= + \text{InActP-A:} [\text{InActV-A} = + s + (\text{InTh-A} = + \text{InC}) \\
 &\quad + \text{nrefl/refl}] \quad \underline{+ S} \\
 / + \text{InActP-A:} [\text{InActV-A} = + s + (\text{InTh-A}_2 = + \text{TC-A/NC} \\
 &\quad + \{ + \text{dir} + \text{rec} \}) + \text{refl}] \quad \underline{+ S} \\
 / + \text{InActP-A:} [\text{InActV-A} = + s + (\text{TTh-A} = + \text{TC-A}) \\
 &\quad + \text{refl}] \quad \underline{+ S}
 \end{aligned}$$

Examples are: A = i-poka-k^ye (+ InActP-A) no-tomi (+ S) 'he--to-come--nrefl my--son'; i-raga-ka (+ InActP-A) 'he--to-cry--refl'; / i-pasata-ba-kaga-na-ka (+ InActP-A) no-tomi-eg^yi (+ S) 'they--to-hit--toward--each-other--continuative--refl my--son--s' (my sons were hitting each other); / i-pasata-ka (+ InActP-A) 'he--to-hit--refl' (he hit himself).

1.1112. Group B. In addition to differences in the core of the verb, B₁ differs from B₂ in that in B₁ the affixal referent is obligatory and the clause-level referent, R, is optional whereas in B₂ a referent is not obligatory but an affixal referent is obligatory if a clause-level referent occurs. The variants of B₁ differ from each other in the composition of the theme of the verb.

The formula of the first variant of B₁ below is to be read as follows: 'Clause-level tagmemes are an obligatory intransitive active predicate B₁ filled by intransitive active verb B₁, an optional referent, and an optional subject. Intransitive verb B₁ consists of an obligatory subject prefix, an obligatory intransitive theme B_{1a}, an obligatory non-reflexive suffix and an obligatory referent suffix. Intransitive theme B_{1a} consists of an obligatory intransitive core

and an obligatory complex⁸ composed of a member of the referential class of suffixes with an obligatory member of the verbal class of suffixes.¹

$$\begin{aligned}
 B_1 &= + \text{InActP-B}_1: \{ \text{InActV-B}_1 = +s + (\text{InTh-B}_{1a} = + \text{InC} \\
 &\quad + \{ + \langle \text{rl} \rangle + \langle \text{vl} \rangle \}) + \text{nrefl} + \text{rl} \quad \pm R \quad \pm S \\
 / &+ \text{InActP-B}_1: \{ \text{InActV-B}_1 = +s + (\text{InTh-B}_{1b} = + \text{NC} \\
 &\quad + \{ + \langle \text{rl} \rangle / \langle \text{con} \rangle + \langle \text{vl} \rangle \}) + \text{nrefl} + \text{rl} \quad \pm R \quad \pm S \\
 B_2 &= + \text{InActP-B}_2: \{ \text{InActV-B}_2 = +s + (\text{InTh-B}_2 = + \text{TC-A} \\
 &\quad + \{ + \langle \text{rl} \rangle / \langle \text{con} \rangle + \langle \text{vl} \rangle \}) + \text{refl} \quad \pm (+ \text{rl}) \quad \pm R \quad \pm S
 \end{aligned}$$

Examples are: $B_1 = i\text{-poka-}\check{s}i\text{-ta-k}^ye\text{-ro} (+ \text{InActP-B}_1)$ *no-šinto* ($\pm R$) 'he--to-come--with-reference-to--vl--nrefl--her my--daughter' (he came to see my daughter); / $g^ya\text{-tagata-}\check{s}i\text{-ta-k}^ye\text{-ro} (+ \text{InActP-B}_1)$ 'he--to-climb-up--with-reference-to--vl--nrefl--her (he climbed up after her); $g^ya\text{-tagata-ko-ta-k}^ye\text{-ro} (+ \text{InActP-B}_1)$ *tinti* ($\pm R$) 'he--to-climb-up--because-of--vl--nrefl--it pa-paya' (he climbed up to get the papaya); $B_2 = i\text{-k}^yisa\text{-}\check{s}i\text{-ta-ka-ro} (+ \text{InActP-B}_2)$ *no-šinto* ($\pm R$) *hoa* ($\pm S$) 'he--to-be-angry--with-reference-to--vl--refl--her my--daughter John' (John was angry with my daughter); / $i\text{-k}^yisa\text{-ko-ta-ka-ro} (+ \text{InActP-B}_2)$ 'he--to-be-angry--because-of--vl--refl--her' (he was resentful because of her).

1.1113. Group C. C_1 contrasts with C_2 in that in C_1 , in which the theme of the verb is intransitive or neutral, a

⁸ Evidence that this is best treated as a complex unit is morphological and beyond the scope of this paper. For evidence in a related language, see Wise (n.d.).

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clause-level instrument, I, is obligatory. In C_2 , in which the theme of the verb is transitive with no obligatory instrumental suffix, the clause-level instrument is optional. It is, however, obligatory if an optional affixal instrumental occurs. The variants of C_1 differ from each other in the composition of the theme. The formula of the first alternate of C_1 below is to be read as follows: 'Clause-level tagmemes are an obligatory intransitive active predicate C_1 filled by intransitive active verb C_1 , an obligatory instrument, and an optional subject. Intransitive active verb C_1 consists of an obligatory subject prefix, an obligatory intransitive theme C_1 , an obligatory reflexive suffix, and an optional instrument suffix. Intransitive theme C_1 consists of an obligatory intransitive core and an obligatory complex composed of an obligatory instrumental and an obligatory verbal.'

$$C_1 = + \text{InActP-}C_1: [\text{InActV-}C_1 = + s + (\text{InTh-}C_1 = + \text{InC} \\ + \{ + \text{il} + \text{vl} \}) + \text{refl} \quad \underline{+} \text{il} \quad + \text{I} \quad \underline{+} \text{S}$$

$$/ + \text{InActP-}C_1: [\text{InActV-}C_1 = + s + (\text{NTh-}C_1 = + \text{NC} \\ + \{ + \text{il} + \text{vl} \}) + \text{refl} \quad \underline{+} \text{il} \quad + \text{I} \quad \underline{+} \text{S}$$

$$C_2 = + \text{InActP-}C_2: [\text{InActV-}C_2 = + s + (\text{TTh-}C_2 = + \text{TC-A}) \\ + \text{refl} \quad \underline{+} (\underline{+} \text{il} \quad + \text{I}) \quad \underline{+} \text{S}$$

Examples are: C_1 = no-at-an-ta-ka (+ InActP- C_1) pitoci (+ I) 'I--to-go--by-means-of--vl--refl canoe'; no-at-an-ta-ka-ro (+ InActP- C_1) pitoci (+ I) 'I--to-go--by-means-of--vl--refl--it canoe'; / no-kamarang-an-ta-ka (+ InActP- C_1) seri (+ I) 'I--to-vomit--by-means-of--vl--refl tobacco'; C_2 = no-pašita-ka (+ InActP- C_2) no-mančak^yi ($\underline{+}$ I) 'I--to-cover--refl my--cushma' (I cover myself with my cushma); no-pašita-ka-ro (+ InActP-

C₂) no-mančak^{Yi} (+ I) 'I--to-cover-- refl--it my--cushma'
(I cover myself with my cushma).

1.1114. Group D. In addition to the obligatory clause-level identification tagmeme, Id, which occurs in each variant of group D, D₂ also includes an obligatory affixal indirect subject and an optional clause-level indirect subject. D₃ also includes an obligatory indirect subject, an obligatory affixal referent, and an optional clause-level referent. Although the theme of the verb in D₃ does not differ from the theme in D₂, the verbs differ in that the combination of non-reflexive suffix and affixal referent in D₃ is obligatory if the optional clause-level referent occurs. These would be enclosed in parentheses except that they are noncontiguous, being separated by the affixal and/or clause-level indirect subject tagmemes.

The variants of D₃ differ from each other in that the first has an obligatory affixal indirect subject and an optional clause-level indirect subject, and the second has an obligatory clause-level indirect subject. This variation is occasioned by the occurrence of a first or second person pronominal suffix as referent in the first variant and a third person pronominal suffix in the second variant.⁹

$$\begin{aligned}
 D_1 &= + \text{InActP-D}_1: [\text{InActV-D}_1 = +s + (\text{TTh-D}_1 = \\
 &\quad + \text{TC-D}_2) \quad + \text{refl}] \quad \quad \quad \pm S \quad + \text{Id} \\
 D_2 &= + \text{InActP-D}_2: [\text{InActV-D}_2 = +s + (\text{TTh-D}_2 = \\
 &\quad + \text{TC-D}_1 + \text{caus}) \quad + \text{refl} \quad + \text{is}] \quad \pm \text{IS} \quad \pm S \quad + \text{Id}
 \end{aligned}$$

⁹The following restrictions apply to sequences of pronominal suffixes. Two third person pronominal suffixes may not occur. The only permitted sequences are first or second person followed by third person.

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$D_{3a} = + \text{InActP-}D_{3a} : [\text{InActV-}D_{3a} = + s + (\text{TTh-}D_2 = + \text{TC-}D_1 + \text{caus}) + \text{nrefl} + r:1/2 + \text{is}] \quad \pm \text{IS}$
 $\pm R \quad \pm S \quad + \text{Id}$

$D_{3b} = + \text{InActP-}D_{3b} : [\text{InActV-}D_{3b} = + s + (\text{TTh-}D_2 = + \text{TC-}D_1 + \text{caus}) + \text{nrefl} + \{+ \text{ben} + r:3\}] + \text{IS}$
 $\pm R \quad \pm S \quad + \text{Id}$

Examples are: $D_1 = i\text{-paita-ka} (+ \text{InActP-}D_1)$ mario (+ Id) 'he--to-name--refl Mario' (his name is Mario); $D_2 = \text{mario} (+ S) i\text{-pega-kaga-ka-ro} (+ \text{InActP-}D_2)$ no-šinto (+ IS) $k^Y\text{emari} (+ \text{Id})$ 'Mario he--to-change-into--caused--refl--her my--daughter tapir' (Mario caused my daughter to change into a tapir); $D_{3a} = i\text{-pega-kaga-}k^Y\text{e-na-ro} (+ \text{InActP-}D_{3a})$ no-šinto (+ IS) $k^Y\text{emari} (+ \text{Id})$ 'he--to-change-into--caused--nrefl--me--her my--daughter tapir' (he caused my daughter to change into a tapir for me); $D_{3b} = i\text{-pega-kaga-}k^Y\text{e-ne-ri} (+ \text{InActP-}D_{3b})$ iri-šinto (+ IS) $k^Y\text{emari} (+ \text{Id})$ 'he--to-change-into--caused--nrefl--for--him his--daughter tapir' (he caused his daughter to change into a tapir for him).

1.1115. Group E. Each variant of group E includes an obligatory affixal and an optional clause-level indirect subject tagmeme. E_2 also includes optional affixal and clause-level referent tagmemes. E_3 includes an optional affixal referent and an obligatory clause-level instrument required by the affixal instrumental included in the theme. The class of causatives indicated in the formulas as <caus> includes both prefixal and suffixal members.

Note that groups D and E overlap in that certain variants of both groups include indirect subject and referent

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tagmemes. They contrast, however, in that the identification tagmeme is obligatory to group D and does not occur in group E and in that the cores of the verbs are different.

$E_1 = + \text{InActP-}E_1: [\text{InActV-}E_1 = + s + (\text{InTh-E} = + \text{InC}$
 $+ <\text{caus}>) + \text{nrefl/refl} + \text{is}] \pm \text{IS} \pm \text{S}$

/ $+ \text{InActP-}E_1: [\text{InActV-}E_1 = + s + (\text{InTh-E} = + \text{NC}$
 $+ <\text{caus}>) + \text{nrefl/refl} + \text{is}] \pm \text{IS} \pm \text{S}$

$E_2 = + \text{InActP-}E_2: [\text{InActV-}E_2 = + s + (\text{InTh-E} = + \text{InC}$
 $+ <\text{caus}>) + \text{nrefl} \pm r + \text{is}] \pm \text{IS} \pm R \pm \text{S}$

/ $+ \text{InActP-}E_2: [\text{InActV-}E_2 = + s + (\text{InTh-E} = + \text{NC}$
 $+ <\text{caus}>) + \text{nrefl} \pm r + \text{is}] \pm \text{IS} \pm R \pm \text{S}$

$E_3 = + \text{InActP-}E_3: [\text{InActV-}E_3 = + s + (\text{InTh-}E_2 = + \text{NC}$
 $+ <\text{caus}>) + \{+ \text{il} + \text{vl}\} + \text{nrefl/refl} \pm r: 1/2$
 $+ \text{is}] \pm \text{IS} + \text{I} \pm \text{S}$

Examples are: $E_1 = \text{mario} (+ \text{S}) \text{ i-šiga-kaga-k}^{\text{Y}}\text{e-ro}$
 $(+ \text{InActP-}E_1) \text{ no-šinto} (\pm \text{IS})$ 'Mario he--to-run-away--
cause--nrefl--her my--daughter' (Mario caused my
daughter to run away); / $\text{g}^{\text{Y}}\text{o-g}^{\text{Y}}\text{i-kamaranga-k}^{\text{Y}}\text{e-ri}$
 $(+ \text{InActP-}E_1) \text{ no-tomi} (\pm \text{IS})$ 'he--cause--to-vomit--
nrefl--him my--son' (he caused my son to vomit); $E_2 =$
 $\text{i-k}^{\text{Y}}\text{eng}^{\text{Y}}\text{isArea-kaganta-k}^{\text{Y}}\text{e-na-ri} (+ \text{InActP-}E_2)$ 'he--
to-be-sad--cause--nrefl--me--him' (he caused him to be
sad for me); / $\text{g}^{\text{Y}}\text{o-g}^{\text{Y}}\text{i-kamaranga-k}^{\text{Y}}\text{e-na-ri} (+ \text{InActP-}E_2)$
'he--cause--to-vomit--nrefl--me--him' (he caused him to
vomit for me); $E_3 = \text{g}^{\text{Y}}\text{o-g}^{\text{Y}}\text{i-kamarang-an-ta-k}^{\text{Y}}\text{e-na-ri}$
 $(+ \text{InActP-}E_3) \text{ no-tomi} (\pm \text{IS}) \text{ seri} (+ \text{I})$ 'he--cause--to-
vomit--by-means-of--vl--nrefl--me--him my--son tobac-
co' (he caused my son to vomit for me by using tobacco).

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1.112. Transitive active clauses. The subtypes of the transitive active clause nuclei are presented in five groups paralleling the groups of intransitive active clauses. These groups differ from each other in their clause-level constituents. All groups include an obligatory predicate, an optional or obligatory object, and an optional subject. Group A is limited to these items. Group B also includes an optional referent. The division between groups A and B is less clear in the transitive clauses than in the intransitive clauses because of the optional nature of referent in B_1 and B_3 . Since an affixal referent is obligatory in B_2 , group B has been set up.

In addition to predicate, object, and subject, group C also includes an obligatory instrument. Group D includes an identification tagmeme, and group E includes an indirect subject tagmeme.

1.1121. Group A. In A_1 an object tagmeme is obligatory, and either an affixal or clause-level object may meet this requirement. In A_2 a clause-level object is obligatory since no affixal object may occur with the core TC- A_2 'to say' which occurs in the theme.

$A_1 = + \text{TActP-}A_1: [\text{TActV-}A_1 = + s + (\text{TTh-}A_1 = + \text{TC-A})$
 $+ \text{nrefl/refl} + (\pm o) \pm O \pm S$

$A_2 = + \text{TActP-}A_2: [\text{TActV-}A_2 = + s + (\text{TTh-}A_2 = + \text{TC-}A_2)$
 $+ \text{nrefl}] + O^{10} \pm S$

Examples are: $A_1 = i\text{-toga-iga-k}^V\text{e-ro} (+ \text{TActP-}A_1)$

¹⁰ The object slot in A_2 and B_2 may be filled by a direct quotation of speech or motion. The latter occurs as in the idiomatic expression $okantanak^Ve (+ \text{TActP-}A_2) irok^V_i (\pm S) magoriri magoriri (+ O)$ 'they-said his-eyes blink blink'.

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iiroeg^y_i (+ S) 'they--to-cut--plural--nrefl--it they';
 i-toga-iga-k^y_e (+ TActP-A₁) camairinci (+ O) 'they--to-
 cut--plural--nrefl field'; g^y_o-ga-ka-ro (+ TActP-A₁)
 'he--to-eat--refl--it'; A₂ = i-kanta-k^y_e (+ TActP-A₂)
 came (+ O) 'he--to-say--nrefl, "let's-go"'.

1.1122. Group B. In B₁, an affixal and/or clause-
 level object may occur except when the occurrence of a
 third person referent suffix precludes the occurrence of
 an affixal object (cf. footnote 9), e.g. formulas B_{1b} and
 B_{2b}. In such variants, containing a third person referent
 suffix, a clause-level object is obligatory for these clauses
 to be considered noncontingent. In B₃, a clause-level ob-
 ject is obligatory since TC-A₂ occurs in the theme of the
 verb. B₁ and B₂ differ from each other in that the cores of
 the verbs are different and in that an affixal referent is
 obligatory in B₂ whereas it is optional in B₁.

B_{1a} = + TActP-B_{1a}: [TActV-B_{1a} = + s + (TTh-A =
 + TC-A) + nrefl + (+ {+ r:1/2 + o})] ± O
 ± R ± S

B_{1b} = + TActP-B_{1b}: [TActV-B_{1b} = + s + (TTh-A =
 + TC-A) + nrefl ± (+ {+ ben + r:3})] ± R
 + O ± S

B_{2a} = + TActP-B_{2a}: [TActV-B_{2a} = + s + (TTh-B =
 + TC-B) + nrefl + r:1/2 + (± o) ± O] ± R ± S

B_{2b} = + TActP-B_{2b}: [TActV-B_{2b} = + s + (TTh-B =
 + TC-B) + nrefl + r:1/2/3] ± R + O ± S

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$$B_3 = + \text{TActP-B}_3: [\text{TActV-B}_3 = + s + (\text{TTh-A}_2 = + \text{TC-A}_2) + \text{nrefl} \pm (+ r] \pm R) + O \pm S$$

Examples are: $B_{1a} = i\text{-toga-k}^ye\text{-na-ro} (+ \text{TActP-B}_{1a})$ mario ($\pm S$) 'he--to-cut--nrefl--me--it Mario' (Mario cut it for me); $B_{1b} = i\text{-toga-k}^ye\text{-ne-ri} (+ \text{TActP-B}_{1b})$ i-camaire ($+ O$) 'he--to-cut--nrefl--for--him his--field'; $B_{2a} = i\text{-pa-k}^ye\text{-na-ro} (+ \text{TActP-B}_{2a})$ 'he--to-give--nrefl--me--it'; $B_{2b} = i\text{-pa-k}^ye\text{-na} (+ \text{TActP-B}_{2b})$ kamisa ($+ O$) 'he--to-give--nrefl--me cloth'; $B_3 = i\text{-kanta-k}^ye\text{-ro} (+ \text{TActP-B}_3)$ came ($+ O$) 'he--to-say--nrefl--her let's-go' (he said to her, "let's go").

1.1123. Group C. In addition to the obligatory clause-level instrument, C_{1a} also includes an obligatory affixal (C_{1a1}) or clause-level (C_{1a2}) object and an obligatory affixal referent. C_{1b} also includes an obligatory affixal object and an optional affixal instrument. C_2 includes an obligatory affixal instrument and an obligatory clause-level object in addition to the obligatory clause-level instrument.

$$C_{1a1} = + \text{TActP-C}_{1a1}: [\text{TActV-C}_{1a1} = + s + (\text{TTh-C}_1 = + \text{TC-A} + \{+ il + vl\}) + \{+ \text{nrefl} + r: 1/2\} + o] \pm O \pm S + I$$

$$C_{1a2} = + \text{TActP-C}_{1a2}: [\text{TActV-C}_{1a2} = + s + (\text{TTh-C}_1 = + \text{TC-A} + \{+ il + vl\}) + \{+ \text{nrefl} + \text{ben} + r: 3\}] + O \pm S + I$$

$$C_{1b} = + \text{TActP-C}_{1b}: [\text{TActV-C}_{1b} = + s + (\text{TTh-C}_1 = + \text{TC-A} + \{+ il + vl\}) + \{+ \text{nrefl} + o: 1/2 \pm i\}] \pm O \pm S + I$$

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$$C_2 = + \text{TActP-C}_2: [\text{TActV-C}_2 = + s + (\text{TTh-C}_1 = + \text{TC-A} + \{+ \text{il} + \text{vl}\}) + \text{refl} + \text{il}] + \text{O} + \text{S} + \text{I}$$

Examples are: $C_{1a1} = \text{o-pašit-an-ta-k}^{\text{ve}}\text{-na-ri}$ (+ TActP- C_{1a1}) no-tomi ($\pm \text{O}$) no-mančak^{vi} (+ I) 'she--to-cover--by-means-of--vl--nrefl--me--him my--son my--cushma' (she covered my son for me using my cushma); $C_{1a2} = \text{i-tog-an-ta-k}^{\text{ve}}\text{-ne-ri}$ (+ TActP- C_{1a2}) no-ačane (+ I) i-camaire (+ O) 'he--to-cut--by-means-of--vl--nrefl--for--him my--axe his--field' (he cut his field for him using my axe); $C_{1b} = \text{i-pašit-an-ta-k}^{\text{ve}}\text{-na-ro}$ (+ TActP- C_{1b}) i-mančak^{vi} (+ I) mario ($\pm \text{S}$) 'he--to-cover--by-means-of--vl--nrefl--me--it his--cushma Mario' (Mario covered me with his cushma); $C_2 = \text{i-tog-an-ta-iga-ka-ro}$ (+ TActP- C_2) ača (+ I) camairinci (+ O)¹¹ 'they--to-cut--by-means-of--vl--plural--refl--it axe field' (they cut the field with an axe).

1.1124. Group D. Transitive core D_1 and transitive core D_2 each include only one member. In formula D_1 the clause-level identification tagmeme is obligatory. In D_2 it is optional. The second variant of D_2 differs from the first in that a causative tagmeme included in the theme requires an indirect subject tagmeme to be included in the verb construction.

¹¹ Though this order is acceptable, a more frequent and preferred order would be either object, predicate, instrument, or the breaking down of this clause into two clauses of which one may be contingent. Examples are: camairinci (+ O) i-tog-an-ta-iga-ka-ro (+ TActP- C_2) ača (+ I) 'field they--to-cut--by-means-of--vl--plural--refl--it axe'; i-toga-iga-k^{ve}-ro (TActP- A_1) camairinci ($\pm \text{O}$), i-tog-an-ta-iga-ka-ro (+ TActP- C_2) ača (+ I) 'they--to-cut--plural--nrefl--it field, they--to-cut--with--vl--plural--refl--it axe'.

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$$\begin{aligned}
 D_1 &= + \text{TActP-D}_1: [\text{TActV-D}_1 = + s + (\text{TTh-D}_1 = \\
 &\quad + \text{TC-D}_1) + \text{nrefl} + o] \pm O \pm S + \text{Id} \\
 D_{2a} &= + \text{TActP-D}_{2a}: [\text{TActV-D}_{2a} = + s + (\text{TTh-D}_{2a} = \\
 &\quad + \text{TC-D}_2) + \text{nrefl} + o] \pm O \pm S \pm \text{Id} \\
 D_{2b} &= + \text{TActP-D}_{2b}: [\text{TActV-D}_{2b} = + s + (\text{TTh-D}_{2b} = \\
 &\quad + \text{TC-D}_2 + \text{caus}) + \text{nrefl} + \text{is:1/2} + o:3] \pm O \\
 &\quad \pm S \pm \text{Id}
 \end{aligned}$$

Examples are: $D_1 = i\text{-pega-}k^ye\text{-ri} (+ \text{TActP-D}_1)$ *ir-iri* (+ Id) *mario* ($\pm S$) 'he--to-change--nrefl--him his--father Mario' (Mario referred to him as his father); $D_{2a} = i\text{-paita-}k^ye\text{-ri} (+ \text{TActP-D}_{2a})$ 'he--to-name--nrefl--him'; $D_{2b} = i\text{-paita-kaga-}k^ye\text{-na-ri} (+ \text{TActP-D}_{2b})$ *no-tomi* ($\pm O$) *perero* ($\pm \text{Id}$) 'he--to-name--cause--nrefl--me--him my--son Peter' (he caused me to name my son Peter).

1.1125. Group E. All members of group E include indirect subject tagmemes. In addition, E_1 includes an obligatory affixal object, E_2 an obligatory clause-level object, and E_3 an obligatory affixal and optional clause-level object. Note that groups D and E overlap in that an affixal indirect subject occurs in one variant of D_2 . They contrast, however, in that the identification tagmeme occurs in group D and does not occur in group E and in that clause-level indirect subjects optionally occur in E_1 and E_2 but do not occur in D. Although TC-D_1 occurs in the theme of the verb in E_2 , the addition of a causative suffix results in a TTh-E and no identification tagmeme occurs.

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$E_1 = + \text{TActP-}E_1: [\text{TActV-}E_1 = + s + (\text{TTh-E} = + \text{TC-A}$
 $+ \langle \text{caus} \rangle) + \text{nrefl} + o: 1/2 + is: 3] \quad \pm IS \quad \pm S$
 $E_2 = + \text{TActP-}E_2: [\text{TActV-}E_2 = + s + (\text{TTh-E} = + \text{TC-D}_1$
 $+ \langle \text{caus} \rangle) + \text{nrefl} \quad + is] \quad \pm IS + O \quad \pm S$
 $E_3 = + \text{TActP-}E_3: [\text{TActV-}E_3 = + s + (\text{TTh-E}_2 = + \text{NC}$
 $+ \langle \text{caus} \rangle + \{ + \langle \text{con} \rangle + \langle \text{vl} \rangle \}) + \text{nrefl} + is: 1/2$
 $+ o: 3] \quad \pm O \quad \pm S$

Examples are: $E_1 = \text{mario} (\pm S) \text{ i-patimata-ga-k}^Y\text{e-na-ro}$ (+ TActP- E_1) masero ($\pm IS$) 'Mario he--to-chase--cause--nrefl--me--it toad' (Mario caused the toad to chase me); $E_2 = \text{i-peg-a-kaga-k}^Y\text{e-ro}$ (+ TActP- E_2) anita ($\pm IS$) no-gocirote (+ O) 'he--to-change--cause--nrefl--her Anita my--knife' (he caused Anita to lose my knife); $E_3 = \text{g}^Y\text{o-g}^Y\text{i-kamaranga-ko-ta-ga-k}^Y\text{e-na-ro}$ (+ TActP- E_3) no-seka ($\pm O$) 'he--cause--to-vomit--contained--vl--cause--nrefl--me--it my--food' (he caused me to vomit my food).

1.113. Neutral active clauses. The clauses included in the class of neutral clause nuclei, i.e. clause nuclei in which an object tagmeme is optional, could be included in the intransitive and transitive classes. Since, however, the division into intransitive and transitive classes is made on the basis of the obligatory occurrence or absence of an object tagmeme, the inclusion in either of these classes of a subtype with an optional object tagmeme, creates a problem. For this reason, a class of neutral clause nuclei is set up. The following subtypes, in which the A, B, and C groupings parallel those of the intransitive and transitive active clauses, have been noted:

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- $A_1 = + \text{NActP-A}_1: [\text{NActV-A}_1 = + s + (\text{NTh-A}_1 = + \text{NC}) + \text{nrefl } \pm \text{ol } \pm \text{O } \pm \text{S}$
 $A_2 = + \text{NActP-A}_2: [\text{NActV-A}_2 = + s + (\text{NTh-A}_2 = + \text{NC}_2) + \text{refl } \pm \text{ol } \pm \text{O } \pm \text{S}$
 $B_{1a} = + \text{NActP-B}_{1a}: [\text{NActV-B}_{1a} = + s + (\text{NTh-A}_1 = + \text{NC}) + \text{nrefl } \pm \{+ r: 1/2 + o\}] \pm \text{R } \pm \text{O } \pm \text{S}$
 $B_{1b} = + \text{NActP-B}_{1b}: [\text{NActV-B}_{1b} = + s + (\text{NTh-A}_1 = + \text{NC}) + \text{nrefl } \pm \{+ \text{ben} + r: 3\}] \pm \text{R } + \text{O} \pm \text{S}$
 $B_2 = + \text{NActP-B}_2: [\text{NActV-B}_2 = + s + (\text{NTh-B} = + \text{NC} + \{+ <\text{con}> + <\text{vl}>\}) + \text{nrefl } + r] \pm \text{R } \pm \text{O } \pm \text{S}$
 $C = + \text{NActP-C}: [\text{NActV-C} + s + (\text{NTh-C} = + \text{TC-A} + \{+ \text{il} + \text{vl}\}) + \text{refl } \pm \text{ol } \pm \text{O } + \text{I } \pm \text{S}$

Examples are: $A_1 = i\text{-kaema-k}^{\text{Y}}\text{e-ri} (+ \text{NActP-A}_1)$ no-tomi ($\pm \text{O}$) 'he--to--invite--nrefl--him my--son'; $i\text{-kaema-k}^{\text{Y}}\text{e} (+ \text{NActP-A}_1)$ 'he--to--scream--nrefl'; $A_2 = i\text{-sekata-ka-ro} (+ \text{NActP-A}_2)$ no-tomi ($\pm \text{S}$) pan ($\pm \text{O}$) 'he--to--eat--refl--it my--son bread' (my son is eating bread); $i\text{-sekata-ka} (+ \text{NActP-A}_2)$ 'he--to--eat--refl'; $B_{1a} = i\text{-kaema-k}^{\text{Y}}\text{e-na-ri} (+ \text{NActP-B}_{1a})$ 'he--to--invite--nrefl--me--him' (he invited him for me); $B_{1b} = i\text{-kaema-k}^{\text{Y}}\text{e-ne-ri} (+ \text{NActP-B}_{1b})$ i-gok^Yine ($\pm \text{O}$) mario ($\pm \text{S}$) 'he--to--invite--nrefl--for--him his--uncle Mario' (Mario invited his uncle for him); $B_2 = i\text{-kaema-ko-ta-k}^{\text{Y}}\text{e-ri} (+ \text{NActP-B}_2)$ came ($\pm \text{O}$) 'he--to--call--out--to--vl--nrefl--him, 'let's-go''; $C = \text{no-pašit-an-ta-ka-ro} (+ \text{NActP-C})$ no-šinto ($\pm \text{O}$) no-bašikaro ($+ \text{I}$) 'I--to--

cover--by-means-of--vl--refl--her my--daughter my--blanket' (I covered my daughter with my blanket); no-pašit-an-ta-ka (+ NActP-C) no-bašikaro (+ I) 'I--to-cover--by-means-of--vl--refl my--blanket' (I covered myself with my blanket).¹²

1.12. Passive clauses. Clause-level object, referent, instrument, identification, and indirect subject tagmemes occur in addition to the predicate in the passive clause nucleus classes. Passive clause nucleus classes contrast with active classes in that no subject tagmeme occurs in the passive. They contrast further in that the predicates differ: in the predicates of active clause nuclei, suffixal variants of the object, referent, instrument, and indirect subject tagmemes occur. In contrast, prefixal variants of these tagmemes occur in the predicates of passive clause nuclei.

The term 'passive' is used in the sense that none of the tagmemes which occur with (or included in) the predicate are active but rather are acted upon. Whereas many of the clauses can be translated in a traditional meaning of passive, e.g. i-pasatan-gani 'he--to-hit--pass' (he was hit), others have a slightly different sense. Thus, o-ga-gani 'it--to-eat--pass' does not mean a certain food has been eaten but that it is edible.

Passive clause nuclei do not parallel the more traditional use of passive in that they are not merely a transform or variant of active clauses but a contrastive class: no agent or actor can be expressed. They also differ from the traditional use in that not only transitive but also intransi-

¹² Note that although this example translates the same as the second example of intransitive clause C₂ (see 1.1113), the inclusion of the instrumental tagmeme in the theme of the neutral clause makes possible an optional object, as in the preceding example, which does not occur in the intransitive clause.

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tive and neutral classes occur. A further difference in the use of the term is that referent, instrument, and indirect subject affixal tagmemes, as well as object, have variants which are conditioned by their occurrence in passive constructions: only third person masculine or feminine pronominal prefixes occur in these slots. The clause-level parallels of these tagmemes differ from the variants which occur in active clause nuclei in that only third person variants of the classes of fillers occur.

The formulas of intransitive, transitive, and neutral clause nucleus classes are each presented in groups paralleling the groups of active clause nuclei. (Not all of the parallel groups occur in the data.)

1.121. Intransitive passive clauses. Examples of groups C, D, and E occur in our data.

Group C. The variants of group C differ from each other in that the themes in the verbs are different.

C = + InPassP-C: [InPassV-C = + i:3 + (InTh-C = + InC
+ { + il + vl }) + refl + pass] ± I

/ + InPassP-C: [InPassV-C = + i:3 + (NTh-C = + NC
+ { + il + vl }) + refl + pass] ± I

/ + InPassP-C: [InPassV-C = + i:3 + (TTh-A = + TC-A
+ refl + pass] ± I

Examples are: C = o-at-an-t-a-gani (+ InPassP-C) pitoci (± I) 'it--to-go--by-means-of--vl--refl--pass canoe' (the canoe is a means of transportation); / o-kamarang-an-t-a-gani (+ InPassP-C) seri (± I) 'it--to-vomit--by-means-of--vl--refl--pass tobacco' (tobacco is an emetic); / o-pašit-a-gani (+ InPassP-C) pašikaronci

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(+ I) 'it--to-cover--refl--pass blanket' (blankets are used for covering oneself).

Group D. Group D includes only one member.

D = + InPassP-D: [InPassV-D = + is:3 + (TTh-D₂ = + TC-D₁ + caus) + nrefl + pass] + Id + IS

An example is: i-pega-kag- Λ n-gani (+ InPassP-D) i-tomi (+ IS) k^yemari (+ Id) 'he--to-change-into--cause--nrefl--pass his--son tapir' (his son was caused to turn into a tapir).

Group E. Both members of group E include optional clause-level indirect subject tagmemes. In addition, E₂ includes an obligatory instrument tagmeme since an instrumental suffix is included in the theme of the verb.

E₁ = + InPassP-E₁: [InPassV-E₁ = + is:3 + (InTh-E = + InC + <caus>) + nrefl + pass] + IS

/ + InPassP-E₁: [InPassV-E₁ = + is:3 + (InTh-E = + NC + <caus>) + nrefl + pass] + IS

E₂ = + InPassP-E₂: [InPassV-E₂ = + is:3 + (InTh-E₂ = + NC + <caus> + { + il + vl}) + nrefl + pass] + IS + I

Examples are: E₁ = o-šiga-kag- Λ n-gani (+ InPassP-E₁) 'she--to-run-away--cause--nrefl--pass' (she was caused to run away); / g^yo-g^yi-kamarang- Λ n-gani (+ InPassP-E₁) 'he--cause--to-vomit--nrefl--pass' (he was caused to vomit); E₂ = g^yo-g^yi-kamarang-an-t- Λ n-gani (+ InPassP-E₂) ananek^yi (+ IS) seri (+ I) 'he--cause--to-vomit--by-means-of--vl--nrefl--pass child tobacco' (the child was caused to vomit by using tobacco).

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1.122. Transitive passive clauses. Transitive passive clauses include groups A, B, C, D, and E.

Group A. The variants of group A differ only in that the themes of the verbs are different.

A = + TPassP-A: [TPassV-A = + o:3 + (TTh-A₁ =
+ TC-A) + nrefl/refl + pass] \pm O
/
+ TPassP-A: [TPassV-A = + o:3 + (TTh-A₂ =
+ TC-A₂) + nrefl + pass] \pm O

Examples are: A = o-g-a-gani (+ TPassP-A) 'it--to-eat--nrefl--pass' (it's edible); / o-kani-a-gani (+ TPassP-A) 'it--to-say--nrefl--pass' (it is said).

Group B. The two variants of group B differ from each other in the fillers of the core slots and in the themes of the verbs, each list of fillers being composed of only one member. The transitive core -ama- 'to-bring' is designated as TC-A₃ for the purposes of the formula below. In the active clauses it is included with the transitive cores designated as TC-A.

B = + TPassP-B: [TPassV-B = + r:3 + (TTh-A₃ =
+ TC-A₃) + nrefl + pass] \pm R + O
/
+ TPassP-B: [TPassV-B = + r:3 + (TTh-B =
+ TC-B) + nrefl + pass] \pm R + O

Examples are: B = g^y-am- Λ n-gani (+ TPassP-B) no-hime (\pm R) i-seka (+ O) 'he--to-bring--nrefl--pass my--husband his--food' (my husband was brought food); / g^yoga ananek^yi (\pm R) i-p- Λ n-gani (+ TPassP-B) cengoci (+ O) 'that child he--to-give--nrefl--pass trousers' (that child was given trousers).

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Group C. An optional clause-level object and an obligatory clause-level instrument occur in group C.

C = + TPassP-C: [TPassV-C = + o:3 + (TTh-C =
+ TC-A + {+ il + vl}) + refl + pass] \pm O¹³ + I

An example is: o-tog-an-t-a-gani (+ TPassP-C)
camairinci (\pm O) ača (+ I) 'it--to-cut--by-means-of--
vl--refl--pass field axe' (the [big trees in the] field are
cut down with an axe).

Group D. The identification tagmeme differs from the
object, referent, instrument, and indirect subject tagmemes
in that it does not transform as a pronominal prefix in a
passive clause. It remains a clause-level identification
tagmeme, and an affixal object is obligatory.

D = + TPassP-D: [TPassV-D = + o:3 + (TTh-D =
+ TC-D) + nrefl + pass] + Id \pm O

An example is: o-pait-an-gani (+ TPassP-D) rosa
(+ Id) i-hina ig^ye (+ O) 'she--to-name--nrefl--pass
Rose his--wife my-brother' (my brother's wife was named
Rose).

Group E. An optional clause-level indirect subject
and an obligatory clause-level object occur in group E.

E = + TPassP-E: [TPassV-E = + is:3 + (TTh-E =
+ TC-D₁ + caus) + nrefl + pass] \pm IS + O

¹³ When the affixal object slot is filled by a third person feminine
pronominal prefix, and the noun filling the instrument or indirect subject
slot is feminine, the clause-level object is obligatory. Otherwise, the
clause would be ambiguous with a parallel intransitive passive clause
nucleus of group C in which the pronominal prefix fills the instrument
slot.

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An example is: o-peg-a-kag-an-gani (+ TPassP-E) anita (+ IS) no-gocirote (+ O) 'she--to-lose--cause--nrefl--pass Anita my--knife' (Anita was caused to lose my knife).

1.123. Neutral passive clauses. Group A neutral passive clause nuclei differ from neutral active clause nuclei in that (1) an affixal subject is obligatory in neutral active but absent in neutral passive, and (2) an affixal object is obligatory in neutral passive whereas in neutral active it is optional. Although this clause could be considered transitive, it is classified as neutral to parallel the distribution of NTh-A₁ in active clauses.

A = + NPassP-A: NPassV-A = [+ o:3 + (NTh = + NC)
+ nrefl + pass] + O

An example is: i-kaem-an-gani (+ NPassP-A) 'he--to-call-out--nrefl--pass' (he was called).

1.13. Equative clauses. Two main types of equative clause nuclei occur: equative 1, in which the predicate slot is filled by a participle 1 (see footnote 5); and equative 2, in which the predicate slot is filled by an adjective construction rather than by any type of verb. The clause-level subject tagmeme is obligatory in both.

Both intransitive and neutral equative types have been noted. The formula for the intransitive equative clause nucleus is:

InEq₁ = + InEqP₁: [InPart₁ = + (InTh = + InC)
+ nrefl/refl] + S

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$$\begin{aligned} / + \text{InEqP}_1: [\text{InPart}_1 = + (\text{NTh} = + \text{NC}) \\ + \text{nrefl/refl}] + \text{S} \end{aligned}$$

Examples are: $\text{InEq}_1 = \text{kama-k}^{\text{Ye}} (+ \text{InEqP}_1) \text{ no-tomi} (+ \text{S})$ 'to-die--nrefl my--son' (my son is dead); / $\text{kamaranga-na-k}^{\text{Ye}} (+ \text{InEqP}_1) \text{ no-hina} (+ \text{S})$ 'to-vomit--continuative--nrefl my--wife' (my wife is vomiting).

The formula for the neutral equative clause nucleus is:

$$\begin{aligned} \text{NEq}_1 = + \text{NEqP}_1: [\text{NPart}_1 = + (\text{NTh} = + \text{NC}) + \text{refl}] \\ + \text{S} \pm \text{O} \end{aligned}$$

An example is: $\check{\text{sintota-a}} (+ \text{NEqP}_1) \text{ oribia} (+ \text{S}) \text{ i-}\check{\text{sinto}} (+ \text{O})$ 'to-daughter--refl Olive her--daughter' (Olive has had a baby daughter).

The formula for equative 2 is:

$$\text{Eq}_2 = + \text{EqP}_2: \text{Adj}_{1/2}^{14} + \text{S}$$

Examples are: $\text{o-mara-a-rika} (+ \text{EqP}_2) \text{ eni} (+ \text{S})$ 'it--big--liquid--adj-marker Urubamba' (the Urubamba River is swollen); $\text{mameri} (+ \text{EqP}_2) \text{ sekaci} (+ \text{S})$ 'none manioc' (there isn't any manioc).

1.2. Criteria for separating nuclear tagmemes. In

¹⁴ The classification of adjectives according to their distribution in the clause or phrase is not complete. For the purposes of this paper, however, adjectives which may fill only the predicate slot of an equative clause nucleus are designated adjective 1. Adjectives which may fill the predicate slot of an equative clause nucleus or the auxiliary slot in an auxiliary verb phrase (see 1.413) are designated adjective 2. Adjectives which may fill clause nucleus slots other than predicate are designated adjective 3. Adjectives which may occur only in the modification slot of a noun phrase are designated adjective 4. Adjective 2 and 3 may also fill the modification slot of a noun phrase (see 1.4222).

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Machiguenga, no contrastive slot markers are included in the fillers of either the affixal or clause-level subject, object, referent, instrument, indirect subject, and identification slots.¹⁵ (Note that there is no affixal identification tagmeme.) In active clauses, however, the filler of the affixal subject slot is a prefixal allomorph of the pronominal affixes, whereas the fillers of the other slots are suffixal allomorphs of the pronominal affixes. In passive clauses only prefixal allomorphs of the pronominal affixes occur. These slots and their fillers are considered separate tagmemes on the following grounds:¹⁶

(a) There are certain restrictions on the fillers of clause-level slots although the lists of fillers are highly overlapping. No adjective, pronoun, nor personal noun, i.e. man, woman, etc., may fill the instrument slot of a noncontingent clause; only a personal noun or a third person pronoun may fill the referent slot when the benefactive morpheme occurs in the verb; the identification slot cannot be filled by a pronoun. The fillers of the affixal object, referent, instrument, and indirect subject slots are homophonous: no- ∞ na- 'first person'; pi- ∞ pa- ∞ po- 'second person'; i- ∞ g^ya- ∞ g^yo- 'third person masc.'; o- ∞ a- 'third person fem.' The identification tagmeme is unique in that it has no affixal counterpart.

¹⁵ For an example of a language in which such markers do occur, see "Contrastive Features of Candoshi Clause Types," page 67.

¹⁶ An alternate solution to the problem of homophonous tagmemes would be to consider the referent, indirect subject, instrument, and object tagmemes all as objects. In this case all of the clauses now included in groups B, C, and E, and part of group D, of intransitive clauses would be considered transitive. This analysis would result in up to three object tagmemes occurring in a single clause, each object having a different semantically conditioned function. We, therefore, have chosen to consider them separate tagmemes marked by the theme construction in the verb rather than by contrastive slot markers in the fillers of the slots.

(b) They are semantically contrastive. Note, for example, the following: (1) *i-pasata-k^ye-na-ro* 'he--hit--nrefl--me--her' (he hit her for me); (2) *i-patima-kaga-k^ye-na-ro* 'he--to-chase--caused--nrefl--me--her' (he caused her to chase me); (3) *i-pašit-an-ta-k^ye-na-ro* 'he--covered--with--vl--nrefl--me--it' (he covered me with it). In example (1), the third person feminine pronominal suffix *-ro* is the recipient (object) of the action performed for the benefit of the first person pronominal suffix *-na* (referent). In example (2), *-ro* is the one caused to perform the action (indirect subject) upon *-na* (object). In example (3), *-ro* is the means employed (instrument) by the subject, the third person masculine pronominal prefix *i-*, to perform the action upon *-na* (object).

(c) As many as four of these semantically contrastive tagmemes may be represented in a single active clause nucleus. Note the following example in which subject occurs as a prefixal tagmeme, referent and object occur as suffixal tagmemes, and object and instrument occur as clause-level tagmemes: *i-pašit-an-ta-k^ye-na-ro no-šinto i-mančak^yi* 'he--to-cover--by-means-of--vl--nrefl--me--her my--daughter his--cushma' (he covered my daughter for me with his cushma).

(d) Object, referent, instrument, identification, and indirect subject each occur in conjunction with different theme classes in the verb. The theme classes are distinguished according to specific core classes such as *D₁*, or specific affixes, such as referential, which occur in a theme. The identification tagmeme occurs only with verb constructions containing a specific core, *D₁* or *D₂*, in a Th-D. In intransitive active clause nuclei, the referential, in a Th-B₁, and referent tagmemes are mutually obligatory as seen in examples in 1.1112. The instrumental, in a Th-C₁, and clause-level instrument are mutually obligatory

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as seen in examples in 1.1113 and 1.1123. The causative, in a Th-E, and indirect subject tagmemes are mutually obligatory as seen in examples in 1.1115 and 1.1125.

(e) The clauses in which they occur transform differently. For the purpose of using transforms as a criterion for the separation of the above listed tagmemes, 'transform' will be defined as the rewriting of intransitive active clause nucleus groups B, C, and E as one or more group A clauses; i.e. the elimination of the referential, contained, and referent tagmemes in group B, the instrumental and instrument tagmemes in group C, and the causative and indirect subject tagmemes in group E. (No transform of the identification tagmeme of group D has been discovered.)

In the transform of group B to group A, the referent tagmeme of B becomes the object of a type A transitive active clause preceded by a type A intransitive active clause with the same core in the theme of the predicate as the type B clause. An example is: intransitive active clause B₁, i-poka-ši-ta-k^{ye}-ro no-šinto 'he--to-come--with-reference-to--vl--nrefl--her my--daughter' transforms to intransitive active clause A₁ followed by transitive active clause A₁, i-poka-k^{ye}; i-ne-e-ro-ra no-šinto 'he--to-come--nrefl; he--to-see--incompletive--her--conditional my--daughter' (he came to see my daughter).

In the transform of certain members of group C to group A, the instrument tagmeme of group C becomes an optional marginal location tagmeme in an intransitive active clause A₁ with the same core in the theme of the predicate as the type C clause. An example is: intransitive active clause C₁, no-at-an-ta-ka pitoci 'I--to-go--by-means-of--vl--refl canoe' transforms to intransitive active clause A₁, no-ata-k^{ye} pitoci-ka 'I--to-go--nrefl canoe--in'.

In the transform of group E to group A, the indirect

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subject tagmeme of group E becomes the subject of an intransitive active clause A_1 followed by a transitive active clause A_1 in which the same indirect subject tagmeme becomes the object. In the following example, intransitive active clause E_1 , *i-šiga-kaga-k^ye-ro no-šinto* *hoa* 'he--to-run-away-(by-taking-with-him)--cause--nrefl--her my--daughter John' (John caused my daughter to run away) transforms to intransitive active clause A_1 followed by transitive active clause A_1 , *o-šiga-ka no-šinto; i-tenta-ka-ro* *hoa* 'she--to-run-away--refl my--daughter; he--took-(with-him)--refl--her John' (my daughter ran away; John took her with him).

1.3. Apposition of pronominal affixes and clause-level tagmemes. As seen in the formulas in the preceding sections, pronominal suffixes paralleling clause-level object, referent, instrument, and indirect subject tagmemes, one or two of which may occur in a particular active clause in addition to subject and predicate tagmemes, may occur included in the verb. When two of these clause-level tagmemes occur following the predicate, the last pronominal suffix is in apposition with the closest clause-level tagmeme, other than subject, unless the person of the pronominal suffix precludes any possible ambiguity.

Note the following examples: (1) *i-tog-an-ta-iga-ka-ro sabari i-camaire* 'he--to-out--with--vl--plural--refl--it machete his--field' (he cut his field with a machete); (2) *o-pašit-an-ta-k^ye-na-ro no-šinto o-bašikaro* 'she--to-cover--with--vl--nrefl--me--her my--daughter her--blanket' (she covered my daughter with her blanket for me); (3) *i-pasat-an-ta-k^ye-na no-hime inčak^yi* 'he--to-hit--with--vl--nrefl--me my--husband stick' (my husband hit me with a stick). In example (1), the predicate includes a third person feminine pronominal instrument suffix *-ro* and

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is followed by an appositional clause-level instrument and a clause-level object. In example (2), the predicate includes a first person referent suffix *-na* and a third person feminine object suffix *-ro*, and is followed by an appositional clause-level object and a clause-level instrument. In example (3), the predicate includes a first person object suffix *-na*, and is followed by clause-level subject and instrument. The first person affixal object cannot be confused with the subject or instrument tagmemes.

The occurrence of more than two nuclear clause-level tagmemes is relatively infrequent in legendary material. In approximately 9,150 words of such text material both subject and object clause-level tagmemes occur, in addition to the predicate, in only 19 clauses. Five of these are direct quotations. Occurrence of more than two nuclear clause-level tagmemes seems to be more frequent in conversation.

1.4. Fillers of clause nucleus slots.

1.41. Verb phrase fillers of predicate slots. The minimum forms of the simple verb fillers of the predicate slots have been described in the breakdown formulas in 1.1. A predicate slot may also be filled by a verb phrase.¹⁷ The following types have been noted:

1.411. Verb phrase 1--negation. The formula for this phrase type is: + Negation: Negative + H: Negative V. A negative verb differs from the verbs given in the formulas

¹⁷ Verb phrases may be continuous, as illustrated in 1.41, or discontinuous. In the first example below the negation and the head tagmemes of verb phrase 1 are separated by an object. In the second example the manner and the head tagmemes of verb phrase 2 are separated by an object: *tera iroro nongante* 'not it i-said' (that isn't what I said); *g^yogaka sekaci kogapag^ye* 'he-ate manioc aimlessly'.

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in 1.1 in that an incomplete or complete suffix is obligatory. Furthermore, when the negative *tera* is the filler of the negation slot, and the stem begins in p, t, or k, an obligatory incomplete prefix also occurs. The incomplete and complete affixes are underlined in the following examples: *tera* no-at-e 'not I--to-go--incomplete' (I didn't go); *gara* no-at-i 'not I--to-go--complete' (I won't go); *tera* no-m-pok^y-e 'not I--incomplete--to-come--incomplete' (I didn't come); *gara* no-pok^y-i 'not I--to-come--complete' (I won't come).

1.412. Verb phrase 2--manner.¹⁸ Three subtypes of verb phrase 2 have been noted. In subtype (a), the optional manner slot always precedes the obligatory head and is filled by adverb 1.¹⁹ In subtype (b), the manner slot may either precede or follow the head and is filled by adverb 2 or adjective 3. In subtype (c), the manner slot always follows the head and is filled by conjunction 1.²⁰ Examples, with fillers of manner slot underlined, are: (a) = panik^yat^yo ingamanak^yera 'almost he-will-die'; cik^yani ikontetanak^ye

¹⁸ A combination of verb phrase 1 and verb phrase 2 occurs in which the negation slot occurs phrase initial and the head slot is filled by a negative verb. Examples: *tera* no-n-gant-e *kogapag^ye* 'not I--incomplete--said--incomplete for-nothing' (I wasn't kidding); *tera* *kameti* no-n-tim-e 'not well I--incomplete--live--incomplete' (I'm not living well).

¹⁹ Adverb 1 and adverb 2 differ in the list of items comprising each class.

²⁰ Classes of conjunctions are not discussed in this paper. Conjunction 1, of which *alk^yiro* is the only member, has been distinguished here since it is the only class of conjunctions which may fill the manner slot in a verb phrase. When it fills the manner slot the meaning is modified to 'again'. When it fills a connective slot preceding the verb, it joins two clauses and the meaning is modified to 'also'. It may also fill the connective slot in a compound noun phrase (see 1.4225).

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'carefully he-came-out'; (b) = notimaigak^{ye} kameti 'we-live well'; kametik^{ya} intimaigae 'well they-will-live'; (c) = ipiganaa aik^yiro 'he-returned again'.

1.413. Verb phrase 3--auxiliary. The auxiliary slot may be filled by adjective 2, the participial form of the verb atak^{ye} 'to-go', or the intransitive verb ok^yenak^{ye} 'to-go-by-means-of' which, when it occurs as the simple filler of the predicate slot, requires either a nuclear clause-level instrument tagmeme, or a marginal clause-level location tagmeme. The auxiliary is followed by the head slot filled by a declarative active verb. Examples, with the fillers of the auxiliary slot with underline, are: ain^{yo} imagak^{ye} 'there-is he-sleeping' (he's asleep); atak^{ye}²¹ išiganaka 'gone he-running away' (he has already run away); ok^yenak^{ye} opinganak^yeri 'she-went she-feared-him' (immediately she was afraid of him).

1.42. Fillers of slots other than predicate. The simple fillers of clause-level subject, object, referent, instrument, identification, and indirect subject slots are presented with reference to the particular slots they fill. Complex fillers are presented without reference to particular slots.

1.421. Simple fillers. The slots listed in the above paragraph may be filled by a noun, pronoun, or adjective 3, with the following exceptions: (1) No example of an identification slot filled by a pronoun has been found. (2) In non-contingent clauses, the instrument slot may be filled only by a noun. Three examples of each slot, except instrument and

²¹ This full form of the auxiliary is shortened to ata in fast speech and is then phonologically tied to the head. The same is true of the intransitive verb filler of the auxiliary slot in the next example, which then becomes ok^ye.

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identification, will be given with the fillers underlined. The slots will be filled by a noun, pronoun, and adjective 3, in that order. Examples are: Subject slot = okonteanak^ye oani 'it-came-out its-liquid'; iragaka irirori 'he-cried he'; iaigak^ye maganiro 'they-went all'. Object slot = nobiikaka nia 'I-drank water'; nompasatak^yeri irirori 'I-will-hit-him him'; nopang^yitak^ye pašini 'I-planted another'. Referent slot = ikantanak^yero icinanete came 'he-said-to-her his-wife, "let's-go"'; iatašitak^yeri irirori 'he-went-with-reference-to-him him'; nopatiri piteniro 'I-gave-him both' (I gave to both of them). Instrument slot = nopasatantakari inčak^yii 'I-hit-with-him stick' (I hit him with a stick). Identification slot = ipaitak^yeri mig^yiri 'he-named-him Miguel'; katari opegaka k^yiraari 'white it-turned-itself red'; Indirect subject slot = g^yog^yišineak^yeri notomi 'he-caused-to-be-happy-him my-son'; g^yog^yikamarangak^yena naro 'he-caused-to-vomit-me me'; g^yog^yišigak^yeri maganiro 'he-caused-to-run-away-him all' (he made them all run away).

1.422. Complex fillers. The slots listed above may also be filled by a noun or pronoun phrase of the types listed below.²²

1.4221. Noun phrase 1--possession. Noun phrase 1 consists of a possessed slot filled by a noun stem affixed for possession and a possessor slot filled by a noun. An example is: o-k^yicok^yi ampei 'its--seed cotton'. An example of this phrase, underlined, filling the instrument slot

²² Noun phrases may be continuous, as illustrated in 1.422, or discontinuous. In the following example, the modification and head tag-memes of noun phrase 2 are separated by the predicate: maganiro g^yogakaro obaca 'all he-ate-it her-flesh' (he ate all of her flesh).

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follows: isemiantaigakari ok^yicok^yi incipa 'they-peppered-him ¹²⁵-seed guava' (they peppered him with guava seeds).

1.4222. Noun phrase 2--modification 1. Noun phrase 2 consists of a head slot filled by a noun and a modification slot filled by an adjective 2, 3, or 4. The head may also be filled by a pronoun in which case the modification slot must be filled by an adjective 3. The modification slot may either precede or follow the head. Examples are (modification filler is underlined): inčato omarane 'tree big'; imarane šima 'big fish'; maganiro g^yoga 'all those'; naroeg^yi maganiro 'we all'. Examples of this phrase occurring in the object slot: g^yagašitak^yero kobiti omarane 'he-got-for-it pot big' (he got a big pot [to mix it in]); noncongataerira maganiro g^yoga 'I-will-finish-him all those'.

1.4223. Noun phrase 3--modification 2. Noun phrase 3 consists of a head filled by a noun or pronoun 1 or 2,²³ and a modification slot filled by a pronoun 3. The modification slot may either precede or both precede and follow the head. When it both precedes and follows, the filler of both slots must be identical. Examples are: g^yoga pišiti 'that tucan'; oka pibocote oka 'this your-annatto this'; oga naši 'that mine'; g^yokari g^yoka 'this this' (this one [in contrast to others]). Examples of this phrase occurring in the object slot are: ineapaak^yero oga šing^yi 'he-saw-it that corn'; ogari naši namanak^yero katonko 'that mine I-took-it upriver'; g^yokari g^yoka ipakagantak^yempi pitomi 'this this he-sent-to-you your-son'.

²³For the purposes of this paper, personal pronouns are designated pronoun 1, possessive pronouns are designated pronoun 2, and demonstrative pronouns are designated pronoun 3.

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1.4224. Noun phrase 4--apposition. Noun phrase 4 consists of a head slot filled by a noun or pronoun 2 and an apposition slot filled by a noun. Examples are (apposition filler underlined): iraniri g^yairi 'his-brother-in-law bee' (his brother-in-law [whose name was] Bee); naši nobašikaro 'mine my-blanket'. Examples of this phrase occurring in object and instrument slots, respectively, are: ineirira iraniri g^yairi 'he-saw-him his-brother-in-law bee'; nompasitantak^yempari naši nobašikaro 'I'll-cover-with-him mine my-blanket' (I'll cover him with my blanket).

The head of an appositional phrase may also be filled by a noun phrase and the apposition slot may be filled by a dependent noun clause (see footnote 6). Examples are: iripokapaak^ye g^yoka kasavarerini gak^yeririra 'he-will-come this demon killed-him-one' (the demon that killed him will come); aganairo išinto timang^yicirira impok^yiroka 'she-took-again-her her-daughter living-one star-with' (she took again her daughter, the one who had lived with the star).

1.4225. Noun phrase 5--compound. Noun phrase 5 consists of a series of items, simple or complex, and optional connectives which fill a single clause-level slot. Examples are (noun phrase underlined): ontikabak^yeri g^yoga kamagarini aik^yiro kamacirini 'it-will-obstruct-him that devil also demon'; ain^yo piteni itomi intiri iritineri intiri iraniri 'there-are two his-sons, and his-nephew, and his-brother-in-law'.

2. Clause margins. The clause margin includes optional clause-level items which are not directly related to items included in the predicate. These optional marginal items are time, location, and onomatopoeia. Any one or all of these may occur with any of the clause nucleus types

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described above with the exception that the onomatopoeia tagmeme does not occur with an equative 2 clause nucleus. The time tagmeme usually precedes the nucleus, the location tagmeme usually follows the nucleus, and the onomatopoeia tagmeme is always clause-final.

2.1. The tagmeme of time. The filler of the time slot may be a simple temporal particle, a noun phrase 2 (with a very limited list of fillers of the head and modification slots due to semantic restrictions), or a dependent active or passive clause consisting of nucleus with optional margin.²⁴ Examples are: paita pintinaanaera 'later you-will-get-up-again'; omiringa katag^yiteri ongaemabaitak^ye 'every day she-will-call-out'; g^yogotagaigak^yenara kilometro quince gotaganarira ikanti omarpag^yerika kato kan^yovag^yetaka clavos 'he-taught-us-when kilometer fifteen taught-us-one he-said big thorns like nails' (when the one who taught us in kilometer fifteen taught us, he said that the thorns were big like nails).

2.2. The tagmeme of location. The filler of the location slot may be simple, phrasal, clausal, or compound.

2.21. Simple location slot fillers. Simple location slot fillers are of two types: (1) a locative particle, or (2) a

²⁴A dependent active or passive clause differs from the independent clauses described in 1.11 and 1.12 in that dependent clauses fill a slot in an independent clause or sentence. In addition, the conditional suffix -ra is obligatorily affixed to the predicate filler of all dependent clauses. In the example given in the text of a dependent transitive clause filling the time slot of an independent transitive clause, g^yo-gotaga-iga-k^ye-na-ra 'he--to-teach--plural--nrefl--us--when' (when he taught us) fills the dependent predicate slot; kilometro quince 'kilometer fifteen' fills the location slot of the dependent clause; and gotaga-na-rira 'to-teach--us--one' (the one who taught us) fills the subject slot.

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noun or pronoun with an obligatory locative suffix *-ka*. Examples of clauses containing a location slot filled by a locative particle are: *itentanakari kamatik^{ya}* 'he-took-him downriver'; *og^{yi}kontetatiri soci* 'she-caused-to-go-out-him outside'. Examples of clauses containing a location slot filled by a noun or pronoun with an obligatory locative suffix are: *piatak^{ye} pangoci-ka* 'you-went house--to'; *omagak^{ye} naro-ka* 'she-slept me--with'.

2.22. Phrasal location slot fillers. Three types of noun phrases, 1, 2, and 4, including an obligatory locative suffix, may fill the location slot. In noun phrase 1, possession, the locative is suffixed to the possessed tagmeme: *ipokak^{ye} ocapia-ka eni* 'he-came its-edge--to Urubamba' (he came to the edge of the Urubamba River). In noun phrase 2, modification, the locative is suffixed to the filler of the modification slot: *pimponatak^{vero} k^{yi}viraari-ka kamisa* 'you-will-wrap-it red--in cloth' (you will wrap it up in red cloth). In noun phrase 4, apposition, the locative is suffixed to the filler of the head. (When noun phrase 4 occurs in the location slot, only pronoun 2 fills the head of the phrase.) An example is: *pimpašitak^{veri} naši-ka nobašikaro* 'you-will-cover-him mine--in my-blanket'.

2.23. Clausal location slot fillers. Clausal location slot fillers consist of a dependent active or passive clause nucleus (see footnote 24) with optional margin. Examples are: *noatae otimira ina* 'I-go-again she-lives-where mother' (I'm going back where my mother lives); *pogak^{vero} ik^{yi}itatanganira* 'you-put-it he-buried-is-where (you put it where he is buried).

2.24. Compound location slot fillers. Compound location slot fillers are of two types. The first consists of a

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series of locatives and obligatory connectives, and indicates plurality of locations. An example is: itimi ing^yenišika aik^yiro otišika 'he-lives woods-in also hill-in'. The second consists of a string of simple, phrasal, or clausal locatives of equal rank indicating a single location. Each member of the string contributes to the description of the location; usually the first is general and the following are more specific. Examples are: oatai anta kamatik^ya 'she-went there downriver'; itimi kara ing^yenišika kara 'he-lives there woods-in there'; oatanak^ye kamatik^ya kara ocitiaka 'she-went downriver there its-mouth-to' (she went down to the mouth of the river); ik^yentakotak^yerira anta katongo og^yašiaka eni 'he-crucified-him there upriver its-headwaters-at Urubamba' (he crucified him there upriver at the headwaters of the Urubamba River); g^yogak^yero anta imag^yira ik^yitatanganira 'he-put-it there he-sleeps-where he-buried-is-where' (he put it there where he sleeps where he is buried).

2.3. The tagmeme of onomatopoeia. The onomatopoeia tagmeme adds colour to Machiguenga speech. Two types of fillers occur in the onomatopoeia slot. The first includes the words used in imitation of the sound of the action expressed in the predicate. The second includes verb stems, otherwise bound, used to describe the motion or effect of the action. Examples are: ipotakoigak^yeri hiririririri 'they-burned-him sound-of-fire-burning'; iponiakat^yo saatirign tiron tiron tiron tiron 'he-came sound-of-rushing-out sound-of-running-away sound-of-running-away sound-of-running-away sound-of-running-away'; itibag^yitak^yero tibag^yi tibag^yi tibag^yi 'he-stirred-seeds-it stirring-seeds stirring-seeds stirring-seeds'; ošipetiapacatanak^yera šipetiapaca 'it-became-fine-grained-mass fine-grained-mass'.