Nominalization in Sikuani

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The Alpha Supreme *One* is – has always been – a vengeful *hater*. ¹

1. Introduction

Spoken in the savannah areas of the middle Orinoco (Colombia and Venezuela) by between 20,000 and 30,000 people, Sikuani belongs to the small Guahibo family, which also comprises Hitnü, Cuiba and Guayabero. It is an accusative, head-marking polysynthetic language with rather loose constituency and well-defined parts of speech. Basic word order is, in pre-theoretical terms, S(O)V. Nominal predicates do not require copula elements. Particles provide the expression of aspect and modality, as well as evidentiality. Aspect and modality also surface through auxiliaries, as do space distinctions such as cardinality and deixis. Tense distinctions are few.

In this work² I intend to highlight three remarkable features of nominalization in this language: 1) the lack of specific morphemes dedicated to the production of nominalizations; 2) the high morphological complexity of nominalized forms, particularly with regard to the retrieval

¹ T. Givón, Sasquatch, Durango, White Cloud Publishing, 2011, p. 368 [italics mine, FQ].

² Many thanks to Tomas Givón, Michel Launey and Masayoshi Shibatani for several insightful comments.

of participants; and 3) the straightforward regularity and productivity of the nominalization process, which will lead me to challenge the adequacy of a notion such as 'derivation' in reference to it.

2. Parts of speech

The parts of speech in Sikuani are: verbs (with subclasses), nouns (with subclasses), adverbs, adjectives (about two dozen), postpositions and particles. Only the first two of these may head a predicate phrase.

The only syntactic position available for verbs is at the head of predicate phrases. Any other position requires some morphological incrementation, as we will see. The first subcategorization of verbs is between true verbs and verboids. The latter lack finiteness as it is typically marked on verbs: 1) they bear no mood suffix, and 2) the expression of TAM and participants looks rather like that found on nominal predicates. The meaning of verboids includes qualities, states, and processes involving little or no physical change. A few denote events and even actions. Like (true) verbs, they are split into monovalent, divalent and trivalent (e.g. 'say') classes. Two morphological slots are available for arguments³ within the verb form: a nominative suffix and an accusative prefix. On trivalent verbs the goal, and not the patient, participant is mapped on to the accusative argument. The following are a few examples of how predicate categories are expressed depending on the lexical properties of the head.

Mood and nominative person suffixes (set 1) on a monovalent true verb.

- (1) nakuena-ba-me pabi-tha
 work-factual-2nominative garden-locative
 You worked in the garden.
- (2) Nusalia nakuena-ba-ø pabi-tha
 Nusalia work-factual-3nominative garden-locative
 Nusalia worked in the garden.

Nominative person suffixes (set 2) on a monovalent verboid. No mood morphology.

- (3) *abehe-mü* be.bad-2nominative You are bad.
- (4) Nusalia abehe-ø
 Nusalia be.bad-3nominative
 Nusalia is bad.

³ "Argument": the linguistic expression of a core participant.

Nominative person suffixes (set 2) on a monovalent noun. No mood morphology.

(5) *pebi-mü* man-2nominative You are a man.

(6) Nusalia pebi-ø
Nusalia man-3nominative
Nusalia is a man.

Mood, nominative person suffixes (set 1) and accusative person prefixes on a *divalent true verb*.

(7) *ne-upaxua-ba-me*1ACCUSATIVE-Spear-FACTUAL-2NOMINATIVE
You speared me.

(8) Nusalia metsaha ø-upaxua-ba-ø
Nusalia tapir 3accusative-spear-factual-3nominative
Nusalia speared a tapir.

Nominative person suffixes (set 2) and accusative person suffixes on a divalent verboid.

(9) *ne-itoya-mü*1ACCUSATIVE-hate-2NOMINATIVE
You hate me.

(10) Nusalia Yokopi Ø-itoya-Ø Nusalia Yokopi 3accusative-hate-3nominative Nusalia hates Yokopi.

Possessive prefixes and nominative person suffixes (set 2) on a *divalent* (relational, inalienable) *noun*.

(11) ta-xünato-mü 1POSSESSIVE-SON-2NOMINATIVE You are my son.

(12) Yokopi (Kopipito) pe-xünato-ø Yokopi Kopipito 3possessive-son-3nominative Yokopi is <Kopipito's> >his< son.⁴

⁴ The notation <*x>* y >*z*< stands for disjunctive occurrence of *x* and *z*. That is, given a context *y*, the sequences *xy* and *yz* are allowed, but not *y* or *xyz*. Third person prefixes will be translated according to their contextualized occurrence, in order to avoid the repetition of cumbersome sequences like [his / her / its / their / someone's / something's] in example after example.

In terms of order, phrases like *Kopipito pexünato*, 'Kopipito's son', in (12) are far more internally rigid than phrases like *metsaha upaxuaba*, 'speared a tapir', in (8) or *Yokopi itoya*, 'hates Yokopi', in (10).

Possession on monovalent nouns (i.e. proper, or alienable, possession) is expressed through the same internal noun phrase order but here the possessive marker belongs to a set of long prefixes.

- (13) taha-wihanü-mü 1POSSESSIVE-trade.partner-2NOMINATIVE You are my trade partner.
- (14) Banamatonoto Amaro piha-wihanü-ø
 Banamatonoto Amaro 3Possessive-trade.partner-3Nominative
 Banamatonoto is Amaro's trade partner.

Additional verb subclasses include ten morphological groups of true verbs, based on the form taken by their factual/virtual mood suffixes: -ba/-bi, as already seen, but also -ka/-kae, -ta/-tsi, -ane/-ae and so on. Among noun sub-classes, special mention should be made to the quantificational properties of lexical roots that determine the grammatical behaviour of nouns. Discrete nouns denote individualized entities, as opposed to mass nouns. Among the discrete nouns, an individual noun may denote a single entity but also a (sub)class of such entities, e.g. awiri 'dog', i.e. 'a dog', 'dogs in general' and 'a pack of dogs', whereas generic nouns may only denote (sub)classes of entities, the latter being either little individuated, e.g. amai 'ants', or clearly individuated, e.g. sikuani. The distinction between the two kinds of entities expressed by generic nouns is grossly reflected in the morphology used to build an individual noun on the basis of the relevant generic stem: a singulative suffix is required for the former, e.g. amai-to 'an ant', and for the latter either a gender suffix, e.g. sikuani-wa 'a Sikuani woman', or a classifier suffix, e.g. kowara-bo 'a piranha fish'. 5 Mass nouns denote substances, such as *yaho*, 'salt'. Discretization of mass nouns is achieved by using a gender suffix, -hawa, inanimate, e.g. yaho-hawa 'a lump of salt'.

3. Predicate Categories

We have already seen mood, marked exclusively on true verbs, and cross-referencing morphology. Tense, aspect and modality are expressed through inflectional morphology, auxiliaries and particles. I will focus on the first two of these, since they display different properties depending on

⁵ See section 5.2 for the paradigms.

the class membership of the predicate's lexical head, thus contributing to the distinction between classes of heads. Repetitive aspect is marked by the auxiliary *-biaba*, whose last syllable is the mood suffix (while the mood suffix of the preceding lexical verb is 'frozen' in place and no longer fulfills any function).

(15) Nusalia nakuenaba-bia-ba-ø pabi-tha
Nusalia work-merative-factual-3nominative garden-locative
Nusalia used to work in the garden.

On verboid and noun predicates, the auxiliary takes a gerundival form.

(16) Nusalia ne-itoya-ø tsa-bia-bi
Nusalia 1accusative-hate-3nominative gerundive-iterative-virtual
Nusalia used to hate me.

(17) Nusalia tahawihanü-ø tsa-bia-bi
Nusalia my.trade.partner-3nominative Gerundive-iterative-virtual
Nusalia used to be my trade partner.

Commiserative modality is expressed through the auxiliary *boka*, which as a full verb means 'lie down'.

(18) Nusalia nakuenaba-bo-ka-\(\nabla\) pabi-tha
Nusalia work-lie.down-factual-3nominative garden-locative
Nusalia works in the garden, poor guy.

On verboid and noun predicates:

(19) Nusalia ne-itoya-\varphi tsa-bo-kae
Nusalia 1accusative-hate-3nominative Gerundive-lie.down-virtual
Nusalia hates me, poor guy.

(20) Nusalia nihawihanü-ø tsa-bo-kae Nusalia your.trade.partner-3nominative gerundive-lie.down-virtual Nusalia is your trade partner, poor guy.

Tense is overtly marked only in the future.

(21) Nusalia nakuena-bi-ena-ø pabi-tha
Nusalia work-virtual-future-3nominative garden-locative
Nusalia will work in the garden.

Verboid and noun predicates mark future tense with a free form, which can plausibly be linked diachronically to a gerundival form in *tsa-....

(22) Nusalia ne-itoya-ø tsane
Nusalia 1accusative-hate-3nominative future
Nusalia will hate me.

(23) Nusalia nihawihanü-ø tsane
Nusalia your.trade.partner-3nominative future
Nusalia will be your trade partner.

Since the virtual (irrealis) mood appears obligatorily in all circumstances where the verb denotes a non-fact, it is required on non-finite forms such as negated, gerundival, participial, and nominalized verbs, as well as in the future tense.

A functional equivalent of the passive is made available by a non-referential reading of the nominative suffix for first inclusive plural, which I will call 'fourth person'. Two conditions are to be satisfied: 1) both participants in the event are third person, and 2) the patient participant is high in saliency hierarchies. The passive agent can surface as a right periphery adjunct (as a kind of afterthought).

- (24) $Nusalia_1$ $Hialai_2$ \emptyset_2 -huna-ta- \emptyset_1 Nusalia Hialai 3accusative-call-factual-3nominative Nusalia called Hialai.
- (25) *Hialai*₁ \emptyset_1 -huna-ta-tsi₀
 Hialai 3accusative-call-factual-4nominative
 Someone called Hialai / Hialai was called.
- (26) $Hialai_1 \quad \emptyset_1$ -huna-ta-tsi_0 $Nusalia_2$ $Hialai \quad 3$ accusative-call-factual-4nominative Nusalia $Hialai \quad was \quad called, \quad Nusalia \quad [called her]^7$

4. Syntactic Functions

A natural position for nouns and verbs is at the head of a predicate. Respectively:

- (27) Nusalia taxuanü Nusalia my.uncle Nusalia is my uncle.
- (28) Nusalia naxuana hotatsia Nusalia sing up.there Nusalia is singing up there.

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Throughout this work I will be using the terms 'passive', 'antipassive', and 'inverse' in a functional rather than a formal sense, that is, none of the forms thus labelled meets its canonical typological definition in terms of morphological and syntactic paraphernalia. But all display the function(s) usually associated with such construction types. As for 'agent' and 'patient', they mean simply 'mapping onto linguistic form identically to prototypical agent and patient participants', respectively.

⁷ Zero index stands for non-referentiality.

The head of an argument phrase is also a natural position for nouns, (27) and (28), but a derived position for verbs, (29), as are participle position, 'dancing' in (30), and gerundive position, 'singing' in (31).8

- (29) penaxüanaenü ahibi singer be.missing The singer is missing.
- (30) peyawahibi-pexi ahibi dancing-children be.missing
 The dancing children are missing.
- (31) Nusalia naxüanae-ya nakueneba Nusalia sing-gerundive work Nusalia works while singing.⁹

Noun phrases comprise both predicate phrases headed by a noun and argument phrases. Now, since nominative person suffixes, which form a component of the predicate morphology (Section 2), can be explicitly marked on nouns in argument positions, (32), and since $-\phi$ is the suffix for third person on predicates, we must assume that nouns are in fact predicates in all their syntactic positions – both at the head of predicate phrases and at the head of argument phrases, i.e. whenever they stand at the head of noun phrases – and that their occurrence as head of an argument phrase is merely a particular instance of this general property, whether the noun in question is marked with an explicit nominative suffix as in (32), or with zero as in (33).¹⁰

- (32) *newüthü-mü aitahibi-mü* jaguar-2nomnative be.drunk-2nomnative You jaguar are drunk [you jaguar you are drunk].
- (33) *newüthü-ø aitahibi-ø* jaguar-3nominative be.drunk-3nominative The jaguar is drunk.

The genitive (a noun phrase in a modifier position within another noun phrase) precedes its head, and realizes lexically either the internal argument of possessed nouns or some kind of adjunct. Possessed nouns take different prefix person paradigms depending on their inherent valency: divalent (inalienable) nouns obligatorily govern an internal argument, cross-referenced on its head by a possessive prefix belonging to

⁸ I.e. verb forms in adjective and adverb positions respectively.

⁹ As can be inferred from this example and others above, gerundives for auxiliaries and gerundives for lexical verbs are built in different ways, the former requiring the prefix *tsa*-, the latter the suffix *-ya*.

¹⁰ However, Sikuani lacks important features of non-configurationality / omnipredicativity.

the short set, (34); monovalent (alienable) nouns *can* take an internal argument, cross-referenced on their head by a possessive prefix belonging to the long set, (35). Lexicalized [genitive + head] sequences often drop the intervening possessive suffix; compare (36) and (37). Adjuncts are not cross-referenced by prefixes, (38).

- (34) *malumalu pe-putato* plant.*sp.* 3POSSESSIVE-fibre plant *sp.* fibre
- (35) Sikuani piha-nakua Sikuani 3possessive-country the Sikuani country
- (36) *owebi pe-matateto* deer 3POSSESSIVE-horn the deer's horn
- (37) *owebi-mataeto*deer-horn
 deer horn (a musical instrument)
- (38) wayapha hara savannah turtle savannah turtle

5. Deverbal Forms

The two main characteristics of nominalization in this language are 1) the paucity of morphological material involved, since no morpheme in the language has the nominalization of verbs as its primary function: as we will see, the deverbalizing morphology used is taken from paradigms expressing mood, possession and gender/class; and 2) the total regularity and productivity of this device. Let us first address those partially nominalized forms which function as adjectives.¹¹

5.1. Participles

Adjectives are bound forms. They modify a noun within the noun phrase by preceding it and forming with it a single prosodic word, as identified by the hierarchical stress assignment which results:12

¹¹ I will focus on one- and two-place verbs only. The consideration of three-place verbs would expand the size of this paper beyond reasonable limits.

¹² Until we reach section 5.2.3, and in order to help the reader's attention focus on their internal structure, more often than not forms will be given in isolation from their syntactic context.

- (39) tsikiri-homo small-snake small snake
- (40) pexania-liwaisi nice-story nice story
- (41) *kae-tsemabo nerahure* one-cigarette give.me Give me a cigarette!

A participle, or verbal adjective, is based on a verb root, inflected for virtual mood¹³ and preceded by the paradigm of possessive prefixes attached to divalent nouns. In the noun phrase it fills the adjective slot.

(42) [pe-nakuene-bi]-petiriwa
3possessive-work-virtual-woman
working woman

It is likely that a significant proportion of the small class of adjectives result diachronically from the lexical freezing of third person participialized verboids (showing no trace of the mood suffix). Potential examples include: *pekanua*, 'middle sized, adolescent', *pemania*, 'fond of the white man's ways', *peruhu*, 'old', *pexania*, 'pretty, nice'.

In all deverbal forms, every core argument of the original verb must receive overt expression, either lexical, or morphological, or both. The referent of the person prefix is the nominative argument of the finite verb, as in the example above. The computation of possible co-indexing between the prefix and the modified noun rests crucially on the semantic role of the participant expressed by the latter, that is, its compatibility with the verb's argument structure. There is co-indexation in (42) and (43), but not in (44) and (45).

- (43) *pa-ta*₁-yawahi-bi-pexi₁ plural-1POSSESSIVE-dance-VIRTUAL-children we dancing children
- (44) *pe*₁-*po*-nae-namuto₂
 3POSSESSIVE-walk-VIRTUAL-path his walking path

¹³ Hereafter, and unless made explicit in the relevant places, any nominalized verb unsegmented for mood contains a verboid root.

(45) *ta*₁-po-nae-namuto₂
1POSSESSIVE-Walk-VIRTUAL-path
my walking path

A non-referential reading of the prefix is allowed, as in

(46) *pe*₀-*pitsa-pae-wohoto*3POSSESSIVE-go.out-VIRTUAL-hole exit hole

Participles built on divalent verbs retain their accusative argument unchanged. Coindexing between the modified noun and the personal prefixes is established on the basis of a hierarchy of arguments nominative > accusative: for a given verb, the noun will be coreferent with the higher argument its own semantic properties allow it to be mapped to.

- (47) *pe*₁-*ka*₂-*hitsi-pae-petiriwa*₁
 3Possessive-2ACCUSATIVE-want-VIRTUAL-woman woman loving you
- (48) $pe_1-\phi_2$ -itahü-tsi-unu₂ 3Possessive-3ACCUSATIVE-point-VIRTUAL-forest forest pointed at by him

Otherwise, the participant expressed by the modified noun is interpreted as a circumstance.

(49) pe_1 - ϕ_2 -xua-bi- $matakabi_3$ 3POSSESSIVE-3ACCUSATIVE-throw.away-VIRTUAL-day the day he abandoned it

Two more points can be made concerning coreference on two-place verbs. 1) Any type of third person participant may corefer with the accusative prefix, even though its intrinsic semantic properties would allow it - given an appropriate verb - 14 to corefer with the nominative prefix, as in (47); but in this case the fourth person must be added as in divalent verb passives.

(50) pe_0 - ϕ_I -hitsi-pae-petiriwa_I-tsi₀ 3possessive-3accusative-want-virtual-woman-4nominative woman loved by someone

Since the passive blocks the reference to the agent, the possessive *pe*-, referring to the third person participant expressed by the nominative in the

¹⁴ This qualification is intended as a reminder that the formal properties of a core participant's linguistic expression are a product of both its semantic role and the argument structure of the verb in question.

finite verb, is automatically dereferentialized (hence, its zero index). The only participant left for coreference with the noun is the one in the accusative prefix position. 2) If the accusative prefix is first person, coindexing between the modified noun and the possessive prefix is blocked, since the latter automatically switches to first person. So, $*[pe_{3\text{POSSESSIVE}}-ne_{1\text{ACCUSATIVE}}-...]$ and $*[ne_{2\text{POSSESSIVE}}-ne_{1\text{ACCUSATIVE}}-...]$ both become $[ta_{1\text{POSSESSIVE}}-ne_{1\text{ACCUSATIVE}}-...]$, a literally anomalous sequence (in which the two prefixes are coindexed), since the reflexive is expressed by other formal means. Ambiguity is avoided by the presence of the set 2 nominative suffix for second person on the output of $[ne_{2\text{POSSESSIVE}}-ne_{1\text{ACCUSATIVE}}-...]$. On the basis of its assumed functional motivation, I will refer to this sequence of morphemes as *first person preemption*.

- (51) *ta-ne-hitsi-pae-petiriwa*1Possessive-1ACCUSATIVE-Want-VIRTUAL-Woman woman loving me
- (52) *ta-ne-hitsi-pae-petiriwa-mü*1Possessive-laccusative-want-virtual-woman-2nominative you woman loving me

Resorting to a nominative suffix in (52) helps in the disambiguation of this kind of construction, since the need for overt expression of arguments is satisfied by the presence of a lexical noun plus an accusative person prefix.

5.2. Nominalizations

These forms are perfectly parallel to participles, showing in place of the modified noun a suffix extracted from the gender paradigm

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-nü masculine
-wa feminine
-hawa neuter<sup>15</sup>
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or the classifier paradigm

-bo	cylinder
-bü	sphere
-pana	flat surface
-ru	bunch
-ra	liquid
-mo	vehicle
etc.	

¹⁵ More precisely, inanimate.

Another mark that can occur in this morphological slot is the collective animate -wi, which neutralizes the masculine / feminine distinction. Respectively

- (53) pe_1 -po-nae-n \ddot{u}_1 3possessive-walk-virtual-masculine walker
- (54) ta_1 - ϕ_2 -a-pae- ra_2 1POSSESSIVE-3ACCUSATIVE-drink-VIRTUAL-liquid my drink
- (55) pa-ne₁-wara-pae-wi₁ plural-2possessive-keep.moving.from.one.place.to.another-virtual-collective you nomads

5.2.1. Retrieval of Arguments

5.2.1.1. Indexical

The issue of how coindexing between the gender/class suffix and the possessive prefix is computed appears to be far more complex than that just seen for participles. As a first step, let us say that the computation is based on the same principle in both cases. For one-place verbs, if the inherent semantic properties of the entity represented by the suffix are compatible with the participant represented by the possessive prefix (nominative in the finite verb), then both are coindexed, as in (53), (55). Otherwise, the suffix represents no core participant and thus reference is disjoint, as in

(56) *pe*₁-*mahi-tsi-pana*₂
3POSSESSIVE-sleep-VIRTUAL-flat.surface his sleeping board

'Action nouns' are an important subset of forms which lack coindexing. For a noticeable proportion of verbs – those subcategorizing animates for their sole, nominative, argument – the neuter suffix prevents these nominalizations from being participant-oriented, (57)-(61), and allows for total dereferentialization of the prefix, (62). With verbs subcategorizing inanimates as their nominative argument, ambiguity can arise between the readings of 'action noun' and participant noun, (63).

(57) *pe-tü-pae-hawa*3possessive-die-virtual-neuter
his death

- (58) *ne-nakoxi-tsi-hawa*2possessive-be.pregnant-virtual-neuter
 your pregnancy
- (59) *pe-nabihia-nae-hawa*3possessive-become.spoiled-virtual-neuter its metamorphosis
- (60) *pe-aura-hawa*3POSSESSIVE-feel.ashamed-NEUTER her shame
- (61) *ta-koikoihai-hawa*1possessive-talk-neuter
 my talk
- (62) *pe*₀-*atahu-hawa*3POSSESSIVE-be.hot-NEUTER
 heat
- (63) *pe-tsaba-nae-hawa*3POSSESSIVE-rot-VIRTUAL-NEUTER
 (its) putrefaction / rotten thing

Conditions on coindexing become substantially more complicated for two-place verbs. In fact, this is probably the most intricate part of the morphological structure of the language.

The accusative argument takes the same form as in the finite verb, and first person preemption is at work, (65)-(66). I begin with three examples of 'action nouns', which are simpler in terms of reference.

- (64) *pe*₁-*ka*₂-*itoya-hawa*3possessive-2accusative-hate-neuter
 his₁ hatred of you₂
- (65) ta_1 - ne_1 -itoya-hawa- $m\ddot{u}_2$ 1POSSESSIVE-1ACCUSATIVE-hate-NEUTER-2NOMINATIVE your₂ hatred of me₁
- (66) ta_1 - ne_1 -itoya-hawa- ϕ_2 1POSSESSIVE-1ACCUSATIVE-hate-NEUTER-3NOMINATIVE his₂ hatred of me₁

We are left with no fewer than four potentially referring morphological slots in fully nominalized two-place verbs. As long as they are semantically compatible, the gender/class suffix and the possessive prefix are coindexed, (67), except in cases of first person preemption, where the possessive prefix automatically switches to first person, and the gender/class suffix picks up its reference in the nominative suffix, (68).

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- (67) ta_1 - ka_2 -itoya- wa_1 1Possessive-2accusative-hate-feminine lit. I_1 (woman), your₂ hater₁
- (68) ta_1 - ne_1 -itoya- wa_2 - $m\ddot{u}_2$ 1POSSESSIVE-1ACCUSATIVE-hate-FEMININE-2NOMINATIVE lit. you₂ (woman), my₁ hater₂

In passive nominalizations, the gender/class suffix is coindexed neither with the possessive prefix nor with the nominative suffix, since no reference is available for the agent. By default, it is coindexed with the accusative prefix, (69)-(70). In non-oriented nominalizations, only one affix, the accusative, is liable to refer, (72) and (73).

- (69) pe_1 - ϕ_2 -itoya- wa_1 3POSSESSIVE-3ACCUSATIVE-hate-FEMININE lit. she₁, his₂ hater₁
- (70) pe_0 - ϕ_1 -itoya- wa_1 - tsi_0 3POSSESSIVE-3ACCUSATIVE-hate-FEMININE-4NOMINATIVE the hated one₁ (woman)
- (71) pe_1 - ϕ_2 -itoya-hawa 3POSSESSIVE-3ACCUSATIVE-hate-NEUTER her₁ hatred of him₂
- (72) pe_0 - \emptyset_1 -itoya-hawa- tsi_0 3POSSESSIVE-3ACCUSATIVE-hate-NEUTER-4NOMINATIVE hatred of him₁
- (73) \emptyset -yapütane- \emptyset_1 pe_0 - \emptyset_1 -koxi-x-ae-hawa-tsi_0 3ACCUSATIVE-know-3NOMINATIVE 3POSSESSIVE-3ACCUSATIVE-children-eat-VIRTUAL-NEUTER-4NOMINATIVE He was aware of being the victim of someone eating his children.

In addition to the nominalized passive just seen, a partially inverse voice seems to operate on nominalized forms, and on these alone. 'Inverse' since both fully-fledged arguments (core status, referents, semantic roles) are retained. 'Partially', since while nominative and gender suffixes switch to indexation of the patient, the possessive prefix retains its connection with the agent. 'Voice', since no real constraint based on the correlation between animacy hierarchies and semantic roles obtains: the choice between 'direct' (*i.e.* active), (67) and (69), and 'inverse', (74), seems to rest exclusively on the speaker's empathy strategies (see Givón 1994 for the notion of inverse voice). Unlike in the passive, there is no person restriction on arguments, but, whatever the person of the accusative argument, its prefix is frozen as a third person zero. The referent of the

originally accusative argument is coded in gender and nominative suffixes, the latter being obligatory. A promoting effect is thus produced.¹⁶

- (74) ta_1 - ϕ_0 -itoya- wa_2 - $m\ddot{u}_2$ 1Possessive-3accusative-hate-feminine-2nominative you₂ (woman), my₁ hated one₂
- (75) *ta-ka-itoya-wa-mü
 1possessive-2accusative-hate-feminine-2nominative

The inverse is the only available device that allows the whole two-place nominalization to be oriented toward a low-saliency (inanimate) patient (remember that the passive requires high-saliency patients). The neuter gender and class suffixes provide this reading, (76) and (77) respectively. Through the dereferentialization of the third person possessive prefix, ¹⁷ it also allows for the expression of facilitative notions, (78).

- (76) pe_1 - ϕ_0 -yaki-nae-hawa₂- ϕ_2 3POSSESSIVE-3ACCUSATIVE -incise-VIRTUAL-NEUTER-3NOMINATIVE his incised thing
- (77) $pe_1-\phi_0$ -yaki-nae-pana $_2-\phi_2$ 3possessive-3accusative-sleep-virtual-flat.surface-3nominative his incised board
- (78) $pe_0-\phi_0-a-pae-ra_2-\phi_2$ 3possessive-3accusative-drink-virtual-liquid-3nominative beverage

The next and final nominalized form to be considered is the antipassive. ¹⁸ Like the inverse, it is exclusively found in nominalizations. Also like the inverse, its accusative prefix is frozen in a third person form. But at the same time it resembles the passive in that its possessive prefix is also frozen in the third person form. We would be left with no truly indexing material ¹⁹ were it not for the nominative suffix, which is obligatorily present and refers to the agent. So does the gender suffix, which, for its part, remains morphologically active. In sum, the antipassive nominalization rules out any reference to the patient.

(79) $pe_0-\phi_0-itoya-wa_1-m\ddot{u}_1$ 3possessive-3accusative-hate-feminine-2nominative you₁ (-woman) hater₁

¹⁶ Which led Queixalós (2000) to wrongly assume a promotional passive here.

¹⁷ In this respect it does, in fact, come closer to a promotional passive.

¹⁸ In Queixalós (2000), 'depersonalized nominalization'.

¹⁹ Gender and class are not properly referring categories to the extent that personal forms are.

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It is unclear why this antipassive nominalization should be compatible with one-place verbs, as it seems to be, at least in some cases.²⁰ One possibility would be its propensity to yield lexicalized nominalizations, that is, forms based on the least marked person (the third), which are morphologically frozen and behave like any primitive noun. Compare (81)-(82). Such a useful lexicogenic device could have spread beyond the two-place verbs. Instances of lexicalized nominalizations are

(80)a. with two-place verbs

teach *pekuharubiwi* teachers heal by singing *pematawahibinü* kind of shaman heal by administering beverages *pewaübinü* kind of shaman

b. with one-place verbs

heal by blowing *penahorobinü* kind of shaman lead a file of people *pematakaponaenü* leader (in a nomadic society) menstruate for the first time *penahapatsiwa* nubile girl

- (81) [deha]- wa_1 - $m\ddot{u}_1$ piapoco.indian-feminine-2nominative you₁, Piapoco woman₁
- (82) $[pe_0-\phi_0-kuharu-bi]-wa_1-m\ddot{u}_1$ 3possessive-3accusative-teach-virtual-feminine-2nominative you₁, teacher woman₁

Notice that for a third person agent we find a form (83), superficially identical to all third person active and inverse nominalizations (I will address this issue below).

(83) $[pe_0-\phi_0-kuharu-bi]-wa_1-\phi_1$ 3POSSESSIVE-3ACCUSATIVE-teach-VIRTUAL-FEMININE-3NOMINATIVE she₁, teacher woman₁

So far, we have explored the fundamentals of nominalization morphology in this language. For a more complete picture (trivalent verbs, impersonal passive nominalizations, medio-passive nominalizations, fourth person idiosyncrasies, first person preemption idiosyncrasies, partial nominalizations, and others) see Queixalós (2000). Before proceeding, I wish 1) to give a couple of synoptic tables showing the way morphological slots retrieve, or fail to retrieve, the participant referents of two-place verbs, 21 and 2) to pinpoint a few instances of plausible referential ambiguity, so as to put forward some of the formal mechanisms helping

Whose class, if any, is yet to be established.

²¹ Setting aside first person preemption.

reduce the statistical probability of ambiguities which would hinder effective communication.

	possessive prefix	accusative prefix	gender/class suffix	nominative suffix
active	agent	patient	agent	/
passive		patient	patient	
inverse	agent		patient	patient
antipassive			agent	agent

Table 1: The retrieval of referents

The basic principles can now be laid out more clearly:

- the possessive prefix refers to the agent
- the accusative prefix refers to the patient
- the nominative suffix refers either to the agent (antipassive) or to the patient (inverse)
- the gender/class suffix refers either to the agent (active, antipassive) or to the patient (passive, inverse); it is the head of the deverbal form, and as such decides the orientation of the whole -i.e. whom/what we are talking about when using a noun phrase headed by a deverbal form (compare the participial nominalizations above, whose orientation is determined by the head noun).

Table 2: The mechanics of non-referentiality

As for alignment, the first line of Table 1 displays the situation for one-place verb nominalization, provided we erase the accusative prefix and replace 'agent' with 'unique argument'. Hence, nominalizing morphology aligns accusatively.

Turning to ambiguity, I will focus on cases involving third person patients, which concentrate most of the instances of potential reference mismatches.

If the agent is non-third person, the hearer faces ambiguity between two interpretations: active-'direct', (84), and inverse, (85). This is the case because 1) except in first person preemption – readily identifiable from the coindexed possessive and accusative prefixes – it is the disjoint reference between the nominative suffix and the possessive prefix which re-orients

the nominalization toward the patient, and 2) this suffix, as we know, is phonologically null for the third person.

ACTIVE

(84) ta_1 - ϕ_2 -itoya- wa_1 1POSSESSIVE-3ACCUSATIVE-hate-FEMININE I_1 (woman), his₂ hater₁

INVERSE

(85) ta_1 - ϕ_0 -itoya- wa_2 - ϕ_2 1POSSESSIVE-3ACCUSATIVE-hate-FEMININE-3NOMINATIVE she₂, my₁ hated one₂

Ambiguity can be avoided in three ways. First, an optional, redundant, nominative suffix follows active-'direct' forms. That is, (86) is an un-ambiguous variant of (84).

(86) $ta_1-\phi_2-itoya-wa_1-n\ddot{u}_1$ 1POSSESSIVE-3ACCUSATIVE-hate-FEMININE-1NOMINATIVE I_1 (woman), his₂ hater₁

Second, if it occurs as the unique argument of a one-place verb, the whole nominalized form is cross-referenced by the person suffix on the predicate verb:

ACTIVE

(87) ta_1 - ϕ_2 -itoya- wa_1 anaepana- $h\ddot{u}_1$ be angry-1nominative I_1 (woman), his hater I_1 , I_1 am angry.

INVERSE

(88) $ta_1-\phi_0-itoya-wa_2-\phi_2$ anaepana- ϕ_2 be.angry-1nominative She₂, my₁ hated one₂, she₂ is angry.

Third, the speaker can opt to make the orientation explicit by means of an initial personal pronoun, at all persons. This appositive pronoun will necessarily be coindexed with the gender/class (and nominative) suffix(es), giving:

ACTIVE

(89) $xan\ddot{u}_1 ta_1-\phi_2-itoya-wa_1$ 1 1Possessive-3accusative-hate-feminine I_1 (woman), his_2 hater₁

INVERSE

(90) $powa_1$ ta_2 - ϕ_0 -itoya- wa_1 - ϕ_1 3SINGULARFEMININE 1POSSESSIVE-3ACCUSATIVE-hate-FEMININE-3NOMINATIVE she₁, my₂ hated one₁

None of these three devices is of any use when the agent is also third person, a situation which, of course, bears the highest rate of potential ambiguity in real communicative interaction. Here, the hearer faces ambiguity between active-'direct', (84) renumbered as (91), inverse, (85) renumbered as (92), and antipassive, (93).

ACTIVE

(91) $pe_1-\phi_2$ -itoya-wa₁ 3possessive-3accusative-hate-feminine she₁, his₂ hater₁

INVERSE

(92) pe_1 - ϕ_0 -itoya- wa_2 - ϕ_2 3POSSESSIVE-3ACCUSATIVE-hate-FEMININE-3NOMINATIVE she₂, his₁ hated one₂

ANTIPASSIVE

(93) pe_0 - ϕ_0 -itoya- wa_1 - ϕ_1 3possessive-hate-virtual-feminine-3nominative she₁, hater woman₁

Further research is needed to unveil the semantic, discursive, and situational clues to the speaker's capacity for keeping ambiguity below critical rates. But there is no doubt that the complexity of reference tracking and the potential ambiguities it entails represent the cost of Sikuani's lack of any dedicated nominalizing morphology.

5.2.1.2. Lexical

Only one argument can surface through lexical instantiation, and its properties are – at first sight – those of the genitive in a noun phrase headed by a divalent noun: pre-head position and cross-referencing on the head (see Section 4). On nominalizations of one-place verbs, the genitive expresses the verb's unique argument, cross-referenced on the deverbal form. Compare (94) and (95) (renumbered).

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- (94) *newüthü*₁ *pe*₁-*phia-bi-hawa* jaguar 3possessive-whistle-virtual-neuter the whistling of the jaguar
- (95) $malumalu_1 pe_1$ -putato plant.sp. 3POSSESSIVE-fibre plant sp. fibre

On two-place verbs, the patient has privileged access to the genitive position. But indexation on the deverbal form remains as in nominalizations without a lexical genitive, the patient being cross-referenced by the accusative prefix and the agent by the possessive prefix.

- (96) $tulikisi_1$ $pe_2-\phi_1-komua-kae-wi_2$ bead.collar 3possessive-3accusative-buy-virtual-collective collar buyers
- (97) $kopai_1$ ne_2 - \emptyset_1 -xai-nae- $n\ddot{u}_2$ metal 2possessive-3accusative-own-virtual-masculine you metal owner
- (98) $mapa_1$ $pe_2-\phi_1$ -phara-bi-hawa tree.sp.fiber 3possessive-3accusative-beat-virtual-neuter loincloth making
- (99) $mapa_1$ ta_2 - ϕ_1 -phara-bi-hawa tree.sp.fiber 1Possessive-3accusative-beat-virtual-neuter my loincloth making

Thus, unlike in nominalized verb morphology, lexical arguments are recovered on an ergative basis.

Before turning to the possibility of genitive marking for the agent, let us briefly consider the retrieval of clause adjuncts inside the deverbal phrase. In noun phrases, adjuncts to the noun head are allowed, although they are rare in discourse. They retain the relational marking exhibited in clauses, either case suffix or postposition, (101). They do the same – with the same statistical infrequency – in noun phrases headed by a deverbal form, (102).²²

(100) baharaxua yaniwa tomatawahiba this PREVENTIVE he.performs.an.incantation.upon.him He chants over him to protect him against this [a disease].

Two issues are passed over in silence here, due both to lack of space and incomplete analysis of the data: the interplay between short and long possessive paradigms (for instance *wahi* is a divalent noun despite occurring here with a long possessive form), which is sometimes used to distinguish between 'subjective' vs. 'objective' genitives, as in *Sikuani piha-liwaisi vs. Sikuani pe-liwaisi*, respectively 'the story the Sikuani tell' *vs.* 'the story about the Sikuani'; and the possibility of coreference between the possessive prefix and the adjunct noun (cf. the example with *wahi*).

- (101) yahewi yaniwa piha-wahi
 malevolent.entities.of.the.forest PREVENTIVE 3POSSESSIVE-incantation
 a chant to protect oneself against the malevolent entities of the forest
- (102) paira-yahawa pe-pitsa-pae-wi this.earth-comitative 3possessive-go.out-virtual-collective those who were created along with this earth

It is extremely rare to find the agent expressed as a genitive. Anticipating the next section, I give the whole clause in order to help identify the issue that is raised here, namely coreference. See the sequence between square brackets:

(103) $peruhun\ddot{u}_1$ apotae $[penakueton\ddot{u}yo_2]$ $pe_2-\phi_1-kotokae-wi-hawa]$ elder he.did.not.see small.boy 3possessive-3accusative-follow -virtual-neuter

The elder₁ didn't see the small boy following him₁.

The setting is the childhood of a future demiurge: the boy is running after his father and begging for acknowledgement as his son. An agent genitive would weaken the ergative alignment of lexical arguments were it not for the possibility that (103) is an instance of an antipassive deverbal (see 5.2.1). In this case the genitive agent would be the sole argument of the head, like *newüthü* in (94), cross-referenced by the possessive prefix. This entails that the zero accusative prefix is, in its turn, void of reference. Certainly, the discourse context shows clearly that the father – subject of the finite clause – is the one being followed here. But this does not involve necessary referentiality for φ -, and we have to seek more formal clues. A change in patient person, giving something along the lines of (104), would help to discard the antipassive reading, leaving us with a weakened ergative alignment. No instance of agent noun phrase plus non-third person accusative prefix is available in the data. An alternative account for the agent noun phrase in the deverbal phrase would be to allow it adjunct status. (This is the reason for the short detour through adjuncts in noun phrases above.) We have already come across unmarked adjunct agents in passives (Section 3 in fine, example (26)), and they do occur even in nominalized passives, (105).

- (104) ?peruhunii₁ apotae [penakuetoniiyo₂ pe₂-ka₃-kotokae-wi-hawa] elder he.did.not.see small.boy 3possessive-2accusative-follow-virtual-neuter The elder didn't see the small boy following you.
- (105) $Munuan\ddot{u}_1$ $pe_0-\phi_2-tai-kae-n\ddot{u}_2-tsi_0$ $Munuan\ddot{u}$ 3Possessive-3accusative-catch-virtual-masculine-4nominative man kidnapped by Munuan \ddot{u}

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In short, the lexical instantiation of arguments is ergatively oriented, with apparent exceptions which can be accounted for by assuming either the presence of an antipassive deverbal, or an adjunct status for the agent noun phrase. Of course more data and analysis are needed, particularly since the lexical instantiation of arguments in inverse and antipassive deverbals has not yet been the object of serious study. Another topic in need of further analysis is the nominalized passive. One would expect that, as the only extant participant, the passive patient should be liable to surface lexically as the genitive of a nominalized passive. However, no such occurrence is present in the data.²³ An obvious reason for this gap could be that merely the absolutive bias of lexical arguments in Sikuani nominalized verbs in itself provides an instantiation of the patient.

5.2.2. Nominal and verbal Categories

Several verbal categories are present on nominalized verbs. On morphotactic grounds, let us label as *borders* the possessive prefix on the left, and the gender/class suffix on the right. All the material between these borders is retained from verbs as heads of main predicates. All the material beyond these borders – including the borders themselves – is nominal. We will examine them in that order.

Among the verbal categories, I will mention first of all the accusative person paradigm and the virtual mood (on true verbs), which we have met in a number of previous examples and need not recapitulate here. Nominalized verbs retain applicative preverbs (106) and several tense-aspect-mood-space markers such as allative (107) and replicative (108) prefixes, as well as auxiliaries (109).

- (106) xanii raha itsakuene ta-ø-to-itsi-hawa apohitsipaenii 1 assertive something 1possessive-3accusative-applicative-do-neuter I.do.not.want.it As for me, I don't intend to do anything to them.
- (107) pakuhirutha Keleto pe-be-ponapo-nae-nü
 This.way Keleto 3possessive-allative-live-virtual-masculine
 That is the way Keleto lived.²⁴
- (108) *ta-na-bihiobit-ae-wa*1POSSESSIVE-REPLICATIVE-be.poor-VIRTUAL-FEMININE
 me, one more poor woman

²³ And, I must confess, this possibility was not tested for in elicitation.

²⁴ 'Allative' is a nominal spatial prefix combining with verbs to express several meanings including basic allative ('do something toward something (not necessarily expressed)'), comparison ('act as if doing something'), and deontic modality ('do something which must be done').

(109) *apohitsipae pe-ø-rahuta-po-nae-hawa* he.does.not.want.it 3possessive-3accusative-give-go-virtual-neuter They did not want to keep giving it to him.

Recall that the borders – the possessive prefix and the gender/class suffix – are themselves nominal categories. Other nominal categories occur outside these borders, with a few complications. To the left, we have the restrictive, (110); the demonstrative (111), which, as for nouns (112), is incompatible with the possessive prefix; and even the possessive prefix proper of monovalent ('alienable') nouns (see above Section 4), provided the deverbal form is lexicalized (113).

- (110) wü-pe-nab-e-hawa, wü-pe-ø-tseko-nae-hawa namatawenona RESTRICTIVE-3POSSESSIVE-fight- RESTRICTIVE-3POSSESSIVE-3ACCUSATIVE- he.is.fond.of.it spear-virtual-neuter He was fond of just fighting and spearing people.
- (111) *pa-ta-ne-koto-thi-bi-hawa-xi

 DEMONSTRATIVE-1POSSESSIVE-1ACCUSATIVE-belly-flickVIRTUAL-NEUTER-DIMINUTIVE.PLURAL
 these little flicks on my belly'25
- (112) *pa-pe-wünü \rightarrow pa-wünü this name
- (113) *taha-pe-ø-x-ae-hawa*1possessive-3possessive-3accusative-eat-virtual-neuter
 my food

Let us turn to the right side. We are now familiar with nominative person suffixes, taken from set 2, as is typical of nominal predicates (see Section 2). Auxiliaries, when they occur outside the right-hand border, surface in their gerundive form, as is also typical with nominal predicates. Compare the two following examples describing the same scene. The first – with the auxiliary bound to the lexical verb – denotes an entity characterized by the process of decaying away *together with* its location, the hammock. Meanwhile, the second – in which the auxiliary appears as an independent word following the nominalized form – first characterizes an entity in terms of the process of decaying, and then locates the decaying entity in the hammock by means of additional information.

(114) *pe-tsabana-ru-kae-wa!*3possessive-putrefy-be.hanging-virtual-feminine
There is a woman decaying away in the hammock!

²⁵ We will see below, Section 6, an instance of a proximal demonstrative on deverbal forms.

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(115) *pe-tsaba-nae-wa tsa-rukae!*3POSSESSIVE-putrefy-VIRTUAL-FEMININE GERUNDIVE-be.hanging
There is a woman decaying away in the hammock!²⁶

Future tense adopts its nominal predicate form. Compare

- (116) *pe-tsabana-ru-kae-wa-ø tsane* 3possessive-putrefy-be.hanging-virtual-feminine-3nominative future There will be a decaying woman in the hammock.
- (117) xuipaxaenü-ø tsane shaman-3nominative future He will be a shaman.
- (118) *rukae-ena-ø* be.hanging-future-3nominative He will hang in the hammock.

Diminutive (119), plural (120)-(121), portmanteau plural-diminutive (122), dual (123), and obsolete (124), are the nominal affixes found to the right. They follow the functional head (gender-class suffix, see 5.2.1.1 *circa* Table 1) as they follow the lexical stem in noun morphology, see 2 *in fine*). In Section 6 we will see how the semantic (inherent) case suffixes also combine with deverbal forms.

- (119) *pe-nahetabihiri-bi-wa-yo*3possessive-runaway-virtual-feminine-diminutive the little runaway girl
- (120) *pe-pitsa-pae-hawa-nü*3possessive-go.out-virtual-neuter-plural
 his / the exit²⁷
- (121) waha-nakuene-bi-wa-nü 4possessive-work-virtual-feminine-plural we (including you) working women
- (122) *pe-tsaba-nae-hawa-xi*3possessive-decay-virtual-neuter-diminutive.plural his small pimples

²⁶ The different ending of the verb 'decay' is conditioned by its occurrence as a lexical verb (with this particular auxiliary) *vs.* its occurrence as a nominalized verb.

particular auxiliary) *vs.* its occurrence as a nominalized verb.

Up to this point we have met three homophonous suffixes taking the form *-nü*: they bear the values of masculine, first person nominative (on noun and verboid predicates), and plural. They show different distributions; moreover, the plural *-nü* has distinctive morphophonological behaviour not shared by the other two suffixes.

- (123) *pe-nahetabihiri-bi-wa-behe*3possessive-runaway-virtual-feminine-dual the two little runaway girls
- (124) *pe-tsaba-nae-hawa-xi-mi duhai naexana* 3POSSESSIVE-decay-VIRTUAL-NEUTER-DIMINUTIVE.PLURAL-OBSOLETE fish it.becomes.it His former small pimples became fishes.

Negation and habitual aspect are marked by prefixes common to verbs, verboids and nouns, including nouns as non-predicative constituents, in which context they entail a focalizing effect, as in (125). For an illustration of the fluidity across nouns and verbs which characterizes inflectional categories in Sikuani – a phenomenon which is certainly not unrelated to the productivity of nominalization processes –, see examples of these prefixes on nominalized forms: negation on a lexical noun (125), on a deverbal predicate (126), and on a deverbal argument (127), and habitual on a deverbal predicate (128).

- (125) apo-duhaixi ø-kanaheta-ø
 NEGATION-fish 3ACCUSATIVE-bring-3NOMINATIVE
 It is not small fishes that he brought.
- (126) *apo-pe-tü-pae-wi-* \emptyset NEGATION-3POSSESSIVE-die-VIRTUAL-COLLECTIVE-3NOMINATIVE They were immortal.
- (127) emasia ponü apo-pe-ø-humekat-ae-nü naükotaxuaba-ø alone this.one NEGATION-3POSSESSIVE-3ACCUSATIVE- wake.up-3NOMINATIVE imitate-virtual-masculine

 Only the one who hadn't imitated him (the owl) woke up.
- (128) wüduhaisi ba-ø-kaponapo-nae-nü-ø mere.fish.bones Habitual-3accusative-bring-virtual-masculine-3nominative He used to bring merely fish bones [he was a bringer of mere fish bones].

(Note that the occurrence of the habitual has the effect of deleting the possessive prefix, an idiosyncrasy of nominalized forms, since on lexical nouns both prefixes are compatible:

(129) *ba-pe-sitoxi-ø*HABITUAL-3POSSESSIVE-SMAll.bones-3NOMINATIVE
They are usually small bones.

5.2.3. Syntactic Functions

Any clause position which can be filled by a noun phrase is equally accessible to a phrase whose lexical head is a verb surrounded by nominalizing morphology.

As core arguments, we have subject (130)-(131), direct object (132), and indirect object (133).

- (130) [ta-atane-wa]₁ raha ruke-ka-h \ddot{u}_1 1POSSESSIVE-feel.pain-feminine ASSERTIVE be.hanging.for.a.while-factual-1nominative I, the suffering one, am lying in the hammock.
- (131) $[ta\text{-}nax\ddot{u}a\text{-}nae\text{-}n\ddot{u}]_1$ $\emptyset_2\text{-}hitsi\text{-}pa\text{-}h\ddot{u}_1$ 1Possessive-sing-virtual-masculine 3accusative-want-factual-1nominative I, the singer, love her.
- [pe-\(\theta\)-beyaxua-bi-hawa-tsi] [pe-t\(\text{ii}\)-pae-hawa]_1...

 3possessive-3accusative-kill-virtual-neuter-4nominative 3possessive-die-virtual-neuter

 ikuli and \(\theta\) hitsi nac \(\theta\)

... $ikuli_2$ $apo-\phi_1$ -hitsi- $pae-\phi_2$ turtle.sp. NEGATION-3ACCUSATIVE-Want-VIRTUAL-3NOMINATIVE

The turtle *sp.* doesn't want to be killed, to die [its being killed, its dying].

The following is a fine instance of the expression of all core arguments by nominalized verb phrases.

(134) $[pihawa \quad pe-\phi-xai-nae-nii]_1$ $[pe-n-ue-hawa]_2$ $\phi_2-kopa-ta-\phi_1$ his.wife 3possessive-3accusative- 3possessive-cry-virtual- 3accusative-leave-have-virtual-masculine neuter Factual-3nominative The husband stopped crying [the wife owner stopped his crying].

Oblique marking puts nominalized verb phrases in adjunct adverbial positions (a). Compare this with noun-headed phrases (b).

- (135)a bahara-pa-[ø-itsi-hawa]-tha hororoto phiaba
 PROXIMAL-DEMONSTRATIVE-3ACCUSATIVE-do-NEUTER-LOCATIVE owl it.sings
 Meanwhile [during these deeds of theirs], the owl sang.
 - b baharapa-[puka]-tha hororoto phiaba demonstrative-lake-locative owl it.sings The owl sang in this lake.
- (136)a *itaxutotsoniatanihi [ta-nabihiobit-ae-wa]-xae*I.do.favours 3possessive-be.poor-virtual-feminine-cause
 I do favours because I am a poor woman.
 - b *itaxutotsoniatanihi* [tamono]-xae
 I.do.favours my.husband-cause
 I do favours because of my husband.

Interestingly, 'action nouns' can be transparent to verb valence: in conditions which so far remain unclear – perhaps linked to the inherent low

referentiality of 'action nouns' – they do not count as core arguments despite lacking an oblique marker. In the following examples, with a monovalent main verb in (137) and a divalent verb in (138), we might have expected to find the apparently "more grammatical" renderings which are reconstructed in (b).

(137)a [ta-ne-t-ae-hawa] baauranü

1POSSESSIVE-1ACCUSATIVE-See-VIRTUAL-NEUTER I.am.usually.ashamed
I am usually ashamed at being seen.

b ?[ta-ne-t-ae-hawa]-tha baauranii
1POSSESSIVE-1ACCUSATIVE-See-VIRTUAL-NEUTER-LOCATIVE I.am.usually.ashamed
idem

(138)a [ne-ø-woko-bi-hawa] ka-taetabanu-ka-tsi
2possessive-3accusative-chopvirtual-neuter 2accusative-watch.for.a.whileFactual-4nominative

I'll be watching you as you chop (wood) [I'll be watching you (during) your chopping].

b ?[ne-ø-woko-bi-hawa]-tha ka-taetabanu-ka-tsi
2POSSESSIVE-3ACCUSATIVE-chop-VIRTUALNEUTER-LOCATIVE 4NOMINATIVE
idem

The assumption that this phenomenon is connected with low referentiality receives some support from the following observation: on a two-place verb, when a non-core participant is promoted to direct object, the verb takes applicative morphology provided that the demoted participant – originally expressed as a direct object – is referred to by means of a noun-headed phrase (139), or a participant-oriented nominalization (140); but the verb morphology is left unchanged, with no applicative employed, if the demoted participant is expressed by means of an 'action noun' (141).

(139) [penakueto] ne-to-kopa-re! little.boy laccusative-applicative-leave²⁸-imperative Leave me the little boy!

(140) [pe-n-ue-nü-yo] ne-to-kopa-re!

3POSSESSIVE-CRY-VIRTUAL-MASCULINE-DIMINUTIVE Leave me the crying little one!

²⁸ This is the same verb *kopata* as seen above. Imperative suffixes combine in rather idiosyncratic ways with verbal endings.

(141) [ta-po-nae-hawa] ne-kopa-re!

1possessive-go-virtual-neuter 1accusative-leave-imperative
Let me go [leave me my going]!

As a noun modifier within the noun phrase, the full nominalized verb is an alternative to participial forms. Compare

(142) [pe-ø-u-bi-hawa] matakabi 3possessive-3accusative-sow-virtual-neuter day the time for sowing it

to (49), renumbered,

(143) [pe-ø-xua-bi-]matakabi
3possessive-3accusative-throw.away-virtual-day
the day he abandoned it

No difference in meaning has yet been identified between the two structures (the difference between the translations 'time' and 'day' in (142) and (143) is irrelevant).²⁹

We now turn to the last, but by no means the least important, function of noun phrases: predication. Both types of nominal predication known to Sikuani can be handled by nominalizations: existential predication, yielding single-constituent clauses, (144), and inclusive predication, (145)-(146), whereby inclusion in a class of entities is predicated of an entity, which thus surfaces as the clause subject. When the class of entities is co-extensive with that denoted by the subject constituent, we have equative predication as seen in (147). (Notice in (145) an instance of the nominalized passive, and in (147) - cf. (74) – an instance of the inverse deverbal form, with the non-referential accusative prefix.)

(144) *pe-tsabana-ru-kae-wa-he*3POSSESSIVE-putrefy-be.hanging-VIRTUAL-FEMININE-MIRATIVE Hey, there is a woman decaying in the hammock!

(145) *pe-akue* [*pe-\phi-ma\vec{u}-bi-wa-yo-tsi*]

3POSSESSIVE-Grandmother 3POSSESSIVE-JACCUSATIVE-handicap.by.means.of.witchcraft
-VIRTUAL-FEMININE-DIMINUTIVE-4NOMINATIVE

Their grandmother is a handicapped little woman.

True relative clauses are based on a quite different structure. Their main properties are: head external, postnominal, no 'relative' pronominal form, demonstrative on head noun, total finiteness.

[pa-petiriwa₁ [Ø₁-hitsi-pa-me]] Ø₁-pi-ta-me

DEMONSTRATIVE-woman 3ACCUSATIVE-want-FACTUAL-2NOMINATIVE 3ACCUSATIVE-take-FACTUAL-2NOMINATIVE

You took the woman you wanted [that woman₁ you-wanted-her₁ you-took-her₁].

- (146) baharaponü [pexanialiwaisi apo-pe-ø-xai-nae-nü] this.man nice.talk NEGATION-3POSSESSIVE-3ACCUSATIVE-have-VIRTUAL-MASCULINE This man is a tough fellow [this man is one lacking nice talk].
- (147) *tahawa-mü* [*ta-\phi-asiwa-wa-mü*] my.wife-2nominative 1possessive-3accusative-love-feminine-2nominative You my wife, you are my beloved one.

An obvious entailment of such deverbal predicates is that, in this language, nominalization generates nouns, not dependent clauses: otherwise the clauses in (144)-(147) would have to be seen as subordinate to an unrealized higher predicate, whose existence cannot be motivated by any independent factor. What might seem to be dependent clauses – as in (130)-(136) – are in fact nouns, that is, forms heading noun phrases.³⁰

5.2.4. Coreference

This is the final aspect of nominalization to be addressed here.³¹ With respect to speech act participants, morphology supplies the explicit clues needed for referent tracking.

- (148) \emptyset -kopata-h \ddot{u}_1 kalawa ta $_1$ - \emptyset -ukubi-hawa 3accusative-leave-1nominative fruit.sp. 1possessive-3accusative-cut-neuter I stopped cutting fruits sp.
- (149) ne_1 -naxüanae-wa ka_1 -hitsipa- ϕ 2Possessive-sing-feminine 2ACCUSATIVE-want-3NOMINATIVE He loves you, you singer woman.

The basic coreference pivot for third persons obtaining in argument deverbals is between the main predicate subject and the deverbal 'possessor' or deverbal 'patient' of the passive, both participants mapping on to the subject of the corresponding active or passive finite verbs. The controller is subject either of a monovalent predicate as in the active, (150), and the passive, (151), or of a divalent verb, as in (152), (153). As for the controlled argument, the single example (152), ((134) above), shows control of the deverbal 'possessor' as unique argument (*penuehawa*) and as 'agent' of a divalent verb (*pexainaenii*), whereas in (153), ((132) above), we have, besides the controlled deverbal 'possessor' as unique argument (*petipaehawa*), a controlled 'patient' of a passive (*pebeyaxuabihawatsi*).

Moreover, I draw no distinction between nominalization of a verb and nominalization of a clause. Suffice it to say that argument structure is seen as one of the facets of the verb that undergo nominalization.

³¹ For simplicity, I will not show the mood segmentation in this section.

- (150) $patahopa-\phi_1$ baha $pe_1-\phi-tae-wi$, pihawahiwi $pe_1-\phi-yapühaitsi-wi$ arrive- Perfective 3possessive-3accusative women 3possessive-3accusative -look.at-collective The ones who were looking (around), who looked for women, had arrived.
- (151) pe_1 - \emptyset - $p\ddot{u}yanatsi$ - $n\ddot{u}$ \emptyset_1 -bihatane-tsi 3possessive-3accusative-follow-masculine 3accusative-scold-4nominative The follower was scolded.
- pihawa pe₁-ø-xainae-nü pe₁-nue-hawa ø-kopata-ø₁
 his.wife 3possessive-3accusative 3possessive-cry-neuter 3accusative-leave-3nominative
 -have-masculine
 The husband stopped crying [the wife owner₁ stopped his₁ crying].
- (153) $pe-\theta_1$ -beyaxuabi-hawa-tsi, pe_1 -tüpae-hawa ikuli $_1$ apo- θ -hitsipae- θ_1 3possessive-3accusative-kill-neuter-4nominative and 5possessive-die-neuter turtle.sp. Negation-3accusative -want-3nominative The turtle sp. doesn't want to be killed, to die [the turtle $_1$ doesn't want its $_2$ being killed, its $_2$ dying].

The coreference pattern between main predicate argument(s) and nominalized verb argument(s) is, thus, accusatively aligned for complement clauses in a straightforward way. On the other hand, no restriction obtains between a main predicate and deverbals appearing in adverbial positions: in the following examples we observe disjoint reference in (154) (renumbered from (135)*a* above), and (155), but subject and object controlled coreference in (156) and (157) respectively.

- (154) $bahara-pa-(pe_2-)$ ϕ -itsi-hawa-tha $bororoto_1$ phiaba- ϕ_1 proximal-demonstrative-3possessive- <math>bararan owl bararan bararan
- (155) $Tsamani_1 baha$ \emptyset_2 -paeba- \emptyset_1 pexi $_4$ pe $_3$ - \emptyset_4 -xainae-wi-hawa beria: [...] $_2$ Tsamani perfective 3accusative-say children 3possessive-3accusative directional -3nominative -have-collective-neuter Tsamani said to the parents [to the children owners]: [...].
- (156) $muxubar \ddot{u}yan \ddot{u}$ tsane! \emptyset -hai- \emptyset_1 ...
 I'll.be.happy.at.hearing future 3accusative-say-3nominative
 I'll be happy at hearing (that)! said...

...pina baharaponü $_l$ pe $_l$ -nabihianae-hawa-tha QUOTATIVE this.man 3POSSESSIVE-metamorphose-NEUTER-LOCATIVE '...that man as he metamorphosed [during his metamorphosis].

³² The mutual incompatibility of demonstrative and possessive prefixes has the effect of erasing the latter, as seen in (111) and (112).

- (157) Adai₁ bitso piakuhirubehenü, hiwi₂ ø₂-bihiana-ø₁...
 Adai much bad.man people 3accusatīve-metamorphose-3nominatīve
 Adai was a very bad man, he metamorphosed people...
 - ...pe₂-nawailabi-hawa-tha saya tsabiabi 3possessive-dance-neuter-locative with.no.reason iterative ...each time they danced, just for fun.

6. Conclusion

The reader will have noticed the scarcity of typological or theoretical issues explicitly mentioned or addressed in he body of this paper. The reason for this lies in the fact that, in writing this text, my main concern was to make available a profuse and complex mass of data while giving the basics of the morphosyntactic structure that underlies it. Of course, as with any piece of empirical reality, linguistic or otherwise, not only are important theoretical questions raised by the phenomena under scrutiny, but the very way they are looked upon is informed by certain epistemological choices. In this conclusion, I will limit myself to first reviewing the findings, then briefly outlining the venues to be pursued in future work so as to take advantage of the contribution Sikuani may be able to make to the typology of verb nominalization.

The nominalization of verbs in Sikuani is completely productive – no verb has yet been discovered which is not able to undergo nominalization – and regular, in that procedures for nominalized verb formation apply along identical lines to entire classes of items (true verbs, verboids, one-place and two-place verbs); furthermore, the semantic result is perfectly compositional.

No morpheme has as its primary function the building of nominal forms from verbs. This is achieved through the combination of two affix paradigms belonging to noun morphology, with the verb as inflected for virtual mood. These paradigms are the divalent noun person prefixes (i.e. 'possessive' prefixes on divalent, 'inalienable', nouns) and the gender/class suffixes. The prefix codes a referent, while the suffix – the functional head of the deverbal form – codes the type of entity the referent belongs to. Predicative person suffixes – nominative, from nominal-verboidal predication – are used either to upgrade or to downgrade a referent (for disambiguation or the passive construction respectively).

The 'disambiguation' just mentioned is sometimes needed because such a paucity of morphological devices can plausibly be taken to make more complex the hearer's computing algorithm for reference tracking, thus leading to several surface configurations which are potentially ambiguous as to the identity of the participants. In fact, when considered in their syntactic context, not to mention their discourse context, more often than not these expressions do not give rise to any ambiguity.

In the basic form of nominalizations, both the two-place verb agent and the unique participant of a one-place verb are referred to by the possessive prefix. The two-place verb patient is expressed in the same way as in finite verbs, namely as an accusative person prefix. This accusative alignment is echoed by the coreference pivots: 1) the controller of nominalized verb person prefixes is the main predicate subject – the unique argument of a one-place verb or predicate noun, the agent of a two-place verb, the patient of a passivized verb; 2) the controlled argument within the deverbal form is the subject of the finite counterpart – either the unique argument of one-place verbs or the agent of two-place verbs, both coded in the possessive prefix, or the patient of passivized verbs, coded in the accusative prefix.

On the other hand, the lexical retrieval of arguments shows a very neat preference for the patient of two-place verbs, along with, of course, the unique argument of one-place verbs. Note that this ergative alignment does not seem to be a straightforward rule – very few instances of nominalized active verb agents are attested – unless we assume adjunct status instead of genitive status for the agent phrase. Future research should clarify this point.

The existence of accusative alignment for indexical morphology and coreference alongside, ergative alignment for noun phrases, seems to be in keeping with familiar splits in main clause alignments (Dixon 1994), as well as with the common claims that there exists something of a natural correlation between nominalization and ergative alignment, based on the putative passive nature of the resulting nouns (see Alexiadou 2001, for discussion). Aside from the fact that such a privileged correlation does not seem particularly well supported by cross-linguistic statistical data (e.g. Koptjevskaja-Tamm 1993), ergative alignments in nominalizations should, perhaps, rather be subsumed under the notion of *ubiquitous ergativity* (ergative patterns occurring in a language irrespective of its primary clause alignment, see Queixalós & Gildea 2010). This means that this particular brand of ergativity is not significant as regards to the question of alignment typology: that is, it

cannot be used to distinguish between different sub-classes of languages on the basis of their fundamental syntactic behaviour.³³

Sikuani nicely confirms Shibatani's (2009) point that much of what has been often seen in descriptive or typological work as subordination – complement and relative clauses – is in fact nominalization. In this paper we therefore see one more instance of the need to take seriously form *and* function in a variety of languages and, relatedly, to put an end to the prevalent practice of seeking *how little-known languages do what well-known languages do*. In this respect, it is worth considering the facts concerning voice adduced above. While passive nominalizations can safely be seen as the nominalized counterparts of passive finite verbs, inverse and antipassive are, as we have seen, genuine deverbal voices. This makes nominalization an even more active and powerful syntactic tool.

Notwithstanding the widespread occurrence – mostly in theoretically oriented syntactic frameworks – of expressions of the type 'Y is derived from X' in the context of sentence generation, the term 'derivation' is no less commonly used in its more traditional and strictly morphological sense, as a phenomenon distinct from 'inflection'. Accordingly, nominalization, due to its category-changing output, is most often seen as a kind of derivation. But Sikuani shows that if 'derivation' refers to a phenomenon related to lexicalization and its usual characteristics of low regularity, low productivity, and low semantic compositionality – as it does in reference to nominalization in familiar European languages -, the nominalization mechanism this language displays should be considered anything but derivational. The distinction between grammatical nominalization and lexical nominalization (Shibatani & Makhashen 2009) is a step towards the recognition of two clearly different kinds of 'derivation'. ('Clausal' vs. 'lexical' nominalization, and 'syntactic' vs. 'lexical' derivation, are current distinctions along the same lines found in other frameworks). Interestingly enough, Haspelmath (1996) - who, to my knowledge, has made the strongest argument in favour of what he calls 'word-class-changing inflection' – puts forward the term 'masdar', loaned from the tradition of Semitic and Caucasian studies, for the result of these inflection-like nominalizing processes. Some equivalent of Tesnière's term 'translation' – doomed to oblivion because of its English homophone – would be most welcome as a label for the kind of rule-governed, totally productive, and perfectly compositional nominalization observed in Sikuani.

³³ Setting aside the diachronic trend whereby the dependent clause structure expands to independent clauses, giving rise to genuinely ergative patterns (Gildea 1998).

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