

## DERIVATIONAL RESOURCES IN P'URHEPECHA: MORPHOLOGICAL COMPLEXITY AND VERB FORMATION\*

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**Abstract:** This article explores the derivational morphology of P'urhepecha, especially with regard to verbal forms. P'urhepecha, or Tarascan, is an isolated Mesoamerican language of Central-Western Mexico, with about 200,000 speakers. An agglutinative type of language where suffixes are attached to the stem in a fairly regular fashion, P'urhepecha also has an extensive inflectional morphology with a system of cases, including genitive, locative, and residential. The present work presents an overall picture of the linguistic complexity of this intriguing language and its rich morphological resources through a review of some of the most common and productive types of derivational morphemes that occur as part of the verbal complex in P'urhepecha, including body-part suffixes, causatives, deictic suffixes, and other adverbial suffixes.

**Keywords:** P'urhepecha, morphology, derivational suffixes, verb morphology, Mexican indigenous languages

### I. Introduction

This paper explores the derivational morphology of P'urhepecha, especially with regard to verbal forms. P'urhepecha—also known as Tarascan—is an isolated Mesoamerican language of Central-Western Mexico, spoken today by about 200,000 people in the state of Michoacan, Mexico. It constitutes one of the approximately 60 indigenous languages

\* Field work for this paper was supported by a grant from the Division of Sponsored Research at Florida Atlantic University.

remaining in present-day Mexico. P'urhepecha is an agglutinative type of language where word formation proceeds along rather systematic lines; suffixes are attached to the stem in a fairly regular fashion (there is little in terms of morphophonemic variation), and the order of the suffixes follows a predictable path. Linguistic complexity arises especially from the diverse types of derivational morphemes that exist and the various combinations they can participate in. P'urhepecha also has extensive inflectional morphology with a system of cases, including the genitive, the locative, and the residential (cf. French *chez*). There are three major areas of P'urhepecha speakers in Michoacan: the area around Lake Pátzcuaro, the Tarascan Plateau, and the area known as the Ravine of the Eleven Towns. The P'urhepecha dialect described here is the one spoken in the Tarascan Plateau, or *meseta tarasca*.

The languages of Mesoamerica most definitely constitute an understudied area in contemporary linguistics, and P'urhepecha is no exception. Furthermore, for the most part, the sparse studies that exist have concentrated especially on locative suffixes (cf. Brugman 1983; Brugman–Macaulay 1986; Hollenbach 1995; Levy 1999; MacLaury 1989), which represent an extremely productive feature of Mesoamerican languages. Given that Mesoamerican languages are especially noteworthy with respect to their derivational morphology, there is a distinct need for linguistic descriptions to include some of the other types of suffixes that are found in these languages. P'urhepecha constitutes a very rich source for the study of derivational morphology, in general, and verbal morphology, in particular.

The present work focuses on the following main types of verbal suffixes: (1) causative suffixes involved in the expression of causation; (2) “adverbial” suffixes, used to convey various adverbial notions which, in other languages, are usually expressed not through suffixes but full, independent, words; (3) deictic verbal suffixes, which essentially denote movement away from or towards some deictic center; and (4) the spatial suffixes based on body parts; also, consideration is given to one of the most productive “modal” suffixes (the desiderative *-ncha*). P'urhepecha also exhibits a great number of deverbal noun formations, and these nominalizations will be referred to when appropriate. What follows is a rather descriptive account of these suffixes, as more theoretical approaches should emerge from a better understanding of the data.

P'urhepecha employs morphological means for the encoding of a number of grammatical notions, such as causation, direction, manner,

repetition, relative orientation, volition, voice, and others, which other languages (cf. Western-European) may accomplish using adverbs, prepositions, or auxiliary verbs. A small sample of the large number of derivational resources the language possesses is displayed in the following examples.

From the verbal root *piré* 'sing', it is possible to derive: *piré-pa-ni* 'to go/move along singing', *piré-pu-ni* 'to come singing', *piré-pu-ngua-ni* 'to return (homewards) singing', *piré-ncha-ni* 'to wish to sing, to feel like singing', *piré-kueka-ni* 'to want to sing', *piré-pa-ncha-ni* 'to wish to go singing', *piré-pu-ncha-ni* 'to wish to come singing', or *piré-piré-ni* 'to sing and sing, to go on singing', among many others.

In what follows, as in the preceding examples, morpheme boundaries are shown by the use of dashes; *-ni* is the verbal infinitive ending. In addition, P'urhepecha has no prefixes to speak of; therefore, the verbal root or stem is the first element that appears in the verbal complex.

## 2. The causative suffixes

The main means to express causation in P'urhepecha is through suffixation. The most common causatives are: *-ra*, *-ta*, and the combination of the two, *-tara*. There is a clear distribution of labor among these markers, as they select specific verbal bases and, with a few exceptions, they do not attach to the same base (or at least not with the same function). As can be observed in the examples below, these suffixes attach to both transitive and intransitive roots. Regarding their distribution, Maldonado and Nava observe that the use of *-ra* and *-ta* depends on a progression from direct to indirect causation according to the volitional strength of the causer, whereas *-tara* is employed in indirect causation in cases where an intermediary causer exists (2001, 189–90). Note that the application of the causative may border on lexicalization for some of these verbs (as in the case of *exe-ra-ni*, which can mean 'to show' (< *exe* 'see'), and *t'iré-ra-ni*, which can mean 'to feed' (< *t'iré* 'eat')). The following are examples of the use of these suffixes:

### The causative *-RA*:

*ch'ana-ra-ni* 'to make (someone) play' < *ch'ana* 'play'; *exe-ra-ni* 'to make (someone) see, to show' < *exe* 'see'; *jua-ra-ni* 'to make (someone) bring' < *jua* 'bring'; *ju-ra-ni* 'to make (someone) cough' < *ju* 'cough'; *kará-ra-ni* 'to make (someone) write' < *kará* 'write'; *kua-ra-ni* 'to make (someone)



- (2) Juchiti tati kurhinda u-ra-siram-p-ti nandi-ni  
 poss.1 father bread make-caus-hab-past-asser.3 mother-obj  
 'My dad made my mother make bread'
- (3) Ji kará-ra-siña Maria-ni p'urhepecha jimbo  
 I write-hab+asser.1/2 Maria-obj p'urhepecha in  
 'I make María write in P'urhepecha'
- (4) Ji exe-ra-siña kats'íkua jimbañi juchiti uap'a-ni  
 I see-caus-hab+asser.1/2 hat new poss.1 child-obj  
 'I show my new hat to my child'
- (5) Juchiti uap'a pia-ra-sin-di amañenchakua amamba-ni  
 poss.1 child buy-caus-hab-asser.3 candy mother-obj  
 'My child makes her mother buy candy'
- (6) Nandi ichuskuta-ra-siram-p-ti ma iurhitskiri-ni  
 mother tortilla-make-caus-hab-past-asser.3 a girl-obj  
 'My mom made a girl make tortillas'
- (7) Ji kua-ra-siña ma achati-ni tarheta  
 I take care-caus-hab+asser.1/2 a man-obj corn field  
 'I make a man take care of the corn field'
- (8) Juchiti erachi kanikua uirhia-ta-sin-di imeri tekenchu-ni  
 poss.1 brother much run-caus-hab-asser.3 his horse-obj  
 'My brother makes his horse run a lot'
- (9) Ji arhinta-tara-s-ka Juanu-ni p'urhepecha jimbo  
 I read-caus-perf-asser.3 Juan-obj p'urhepecha in  
 'I made Juan read in P'urhepecha'
- (10) Kauikua uandontskuarhi-tara-sin-di k'uiripuecha-ni  
 wine talk-caus-hab-asser.3 people-obj  
 'Wine makes people talk'
- (11) Maria kanikua anchi-tara-sin-di komputadora-ni  
 much work-caus-hab-asser.3 computer-obj  
 'Maria makes her computer work a lot'

- (12) Tsinap'iri jaua-ta-sin-di                    ma p'amenchati-ni  
 doctor    get.up-caus-hab-asser.3 a    patient-obj  
 'The doctor makes a patient get up'

Causative sentences mark the causee with the objective case: *-ni* (homophonous with the infinitive ending *-ni*). The causee is in general an animate being, human or animal. The causer may also be inanimate, as in sentence (10) above.

Given that in P'urhepecha a large number of nouns derive from verbs, causatives appear in many nouns, having undergone a process of lexicalization. The following are some examples: *ch'ana* 'play' > *ch'ana-ra* 'make (someone) play' > *ch'ana-ra-kua* 'toy'; *p'ame* 'hurt' > *p'ame-ra* 'make (someone) hurt' > *p'ame-ra-kua* 'illness'; *tsarha* 'sift' > *tsarha-ra* 'make (someone) sift' > *tsarha-ra-kua* 'sieve, colander'; *uaxaka* 'sit' > *uaxaka-tara* 'make (someone) sit' > *uaxaka-tara-kua* 'chair'; *urhu* 'grind' > *urhu-ra* 'make (someone) grind' > *urhu-ra-kua* 'grinder'.

### 3. The deictic suffixes: coming and going in derivation

Among the most fascinating features of P'urhepecha we find the directional or deictic verbal suffixes that are attached to the verbal base to express movement away from or towards a 'deictic center', which usually coincides with the speaker's location or place of residence.<sup>3</sup> In general terms, the use of these suffixes relates to the speaker's point of view with respect to the event he/she is describing. The main suffixes in question are: *-pa*, *-nta*, *-pu*, and *-ngua*.<sup>4</sup> *-Pu* and *-ngua* refer to action directed towards the deictic center, whereas *-pa* and *-nta* relate to action initiated at the center and leading away from it (the former type of suffix has been termed *centripetal*, the latter *centrifugal*).<sup>5</sup> The suffixes *-pu* and *-ngua* and *-pa* and *-nta* may form two-morpheme combinations: *-pungua*, and *-panta*. The meanings of *-nta* and *-ngua* in isolation are linked to the notion of 'returning', and, evidently, the crucial difference between the two lies in the fact that the former refers to movement away from the deictic

<sup>3</sup> Shibatani (2003) discusses a number of features that are correlated with the notion of deictic center, with special reference to Japanese directional verbs.

<sup>4</sup> Swadesh (1969) mentions a few other deictic suffixes, including *-ia* 'arrive there' and *-io* 'arrive here'.

<sup>5</sup> See also Chamoreau (2003).

center, the latter to movement towards the deictic center. All of these suffixes can appear with transitive or intransitive bases. In the examples below, the verbal base appears first, followed by the deictic suffix and then the infinitive marker. There is little in terms of morphophonemic variation; nevertheless, the base (by itself) is also provided.

**PA:**

The semantics of *-pa* can be characterized as 'to move away from the deictic center while performing the action of the base, to move from one place (deictic center) to another while performing the action of the base'; thus: *arhintapa-ni* 'to go reading, to read while going somewhere, to read while moving/going away' < *arhinta* 'read'; *ch'ana-pa-ni* 'to go playing, to play while moving/going away' < *ch'ana* 'play'; *exe-pa-ni* 'to go seeing/looking, to see/look while moving' < *exe* 'see, look'; *kará-pa-ni* 'to go along writing, to write while moving' < *kará* 'write'; *kauipa-ni* 'to go drinking wine, to drink wine while moving' < *kauí* 'drink wine'; *k'ui-pa-ni* 'to go sleeping, to sleep while moving (for instance, as a passenger in a vehicle)' < *k'ui* 'sleep'; *k'uimu-pa-ni* 'to go whistling, to whistle while moving' < *k'uimu* 'whistle'; *piré-pa-ni* 'to go singing, to sing while moving' < *piré* 'sing'; *t'iré-pa-ni* 'to go eating, to eat while moving' < *tiré* 'eat'; *uandontskuarhi-pa-ni* 'to go talking, to converse while going somewhere' < *uandontskuarhi* 'converse, talk'; *uarha-pa-ni* 'to go dancing, to dance while going somewhere' < *uarha* 'dance'; *uirhia-pa-ni* 'to go running, to move along running' < *uirhia* 'run'; *u-pa-ni* 'to go making, to make while moving' < *u* 'make'; *xarara-pa-ni* 'to go walking, to move along walking' < *xarara* 'walk'; *xarhia-pa-ni* 'to go swimming, to move along swimming' < *xarhia* 'swim'.

**PU:**

The meaning of *-pu* may be described as 'to move towards the deictic center while performing the action of the base', as in: *arhintapu-ni* 'to come reading'; *ch'ana-pu-ni* 'to come playing'; *exe-pu-ni* 'to come seeing'; *kauipu-ni* 'to come drinking wine'; *k'uipu-ni* 'to come sleeping, to come while asleep (as a passenger in a vehicle)'; *piré-pu-ni* 'to come singing'; *t'iré-pu-ni* 'to come eating'; *uarhapu-ni* 'to come dancing'; *uirhiapu-ni* 'to come running'; *xararapu-ni* 'to come walking'; *xarhiapu-ni* 'to come swimming'.

The two suffix combinations that follow add the meaning 'back' to that of movement towards (*pu-ngua*) or away from (*pa-nta*) the deictic center:

**PU-NGUA:**

*ch'ana-pu-ngua-ni* 'to come back playing'; *exe-pu-ngua-ni* 'to come back seeing/looking'; *kawi-pu-ngua-ni* 'to come back drinking wine'; *k'uimu-pu-ngua-ni* 'to come back whistling'; *k'ui-pu-ngua-ni* 'to come back sleeping'; *piré-pu-ngua-ni* 'to come back singing'; *t'iré-pu-ngua-ni* 'to come back eating'; *uarha-pu-ngua-ni* 'to come back dancing'; *uirhia-pu-ngua-ni* 'to come back running'; *xanara-pu-ngua-ni* 'to come back walking'

**PA-NTA:**

*ch'ana-pa-nta-ni* 'to go back playing'; *exe-pa-nta-ni* 'to go back seeing/looking'; *kawi-pa-nta-ni* 'to go back drinking wine'; *k'uimu-pa-nta-ni* 'to go back whistling'; *k'ui-pa-nta-ni* 'to go back sleeping'; *piré-pa-nta-ni* 'to go back singing'; *t'iré-pa-nta-ni* 'to go back eating'; *uarha-pa-nta-ni* 'to go back dancing'; *uirhia-pa-nta-ni* 'to go back running'; *xanara-pa-nta-ni* 'to go back walking'

Given the distinction illustrated above, the following sentences form a minimal pair with respect to verbal deixis:

- (13) Ji piré-pa-nta-s-ka                      Morelia  
I sing-go-back-perf-asser.1/2 Morelia

- (14) Ji piré-pu-ngua-s-ka                      Morelia  
I sing-come-back-perf-asser.1/2 Morelia

The first sentence can be translated as 'I went back to Morelia singing'; here the implication is that the speaker does not live in Morelia but someplace else and returned to Morelia singing. By contrast, the second sentence conveys something like 'I came back to Morelia singing', which indicates that the speaker actually lives in Morelia and came back to it engaged in the act of singing.

Below are some further examples, which, in addition, nicely illustrate the one-word sentences that are possible in P'urhepecha:

- (15) Xanara-ncha-pa-nta-siram-p-ka-ni  
walk-desire-go-back-hab-past-asser.1/2-pron.1  
'I wished to go back walking'
- (16) Exe-ncha-pa-siram-p-ka-ni  
see-desire-go-hab-past-asser.1/2-pron.1  
'I wished to go seeing/engaged in the act of seeing'



- (17) Uanda-pa-nta-siram-p-ka-ni  
 I talk-go-back-hab-past-asser.1/2-pron.1  
 'I went back talking'

Combinations with a number of other suffixes occur easily, as in the following examples: *ch'ana-ncha-pu-ni* 'to wish to come playing'; *exe-ncha-panta-ni* 'to wish to go back seeing/looking'; *piré-pa-ncha-ni* 'to wish to go singing'; *piré-pu-ncha-ni* 'to wish to come singing'. It seems that there is no strict order for suffixes like *-ncha* and *-pu* as they appear to be interchangeable, as in the examples *ch'ana-ncha-pu-ni* and *piré-pu-ncha-ni*; whether this is true for other such suffixes or combinations of suffixes remains to be investigated.

#### 4. Some other adverbial suffixes

In P'urhepecha, there are other derivational suffixes that clearly possess an adverbial function; for example, the suffix *-p'a* adds the sense of 'suddenly, unexpectedly' to verbal roots, as in: *ma-p'a-tse-ni* 'to get stuck in the mud suddenly' (< *ma* 'stick (to)'; *tse* is a morpheme that indicates 'ground, soil'); *ué-p'a-tse-ni* 'to come out of the ground suddenly'; *ué-p'a-ndi-ku-ni* 'to come out of a corner suddenly' (as, for example, a mouse would do; *ndi* 'ear, corner'); *ué-p'a-me-ni* 'to come out of the water or a liquid suddenly' (*me* refers to 'liquid'); these last few verbs all derive from the verb *uérani* 'to come out, to leave, to get out'.

There is another suffix that also can be translated as 'suddenly': *-k'ama*: *aŋa-k'ama-ni* 'to stand up suddenly' (< *aŋa* 'be standing, be upright'); *che-k'ama-ni* 'to be frightened suddenly' (< *che* 'be frightened, be afraid'); *exe-k'ama-ni* 'to see suddenly' (< *exe* 'see'); *p'i-k'ama-ni* 'to take out suddenly' (< *p'i* 'take out'), *xarha-k'ama-ni* 'to appear suddenly' (< *xhara* 'appear'); *ura-k'ama-ni* 'to become white suddenly' (< *ura* 'white').

#### **-nta: the indication of repeated action**

*-nta*<sup>6</sup> is a morpheme that indicates repetition of an action or movement and can be attached to transitive and intransitive roots: *exe-ni* 'to see'

<sup>6</sup> This suffix has the same form as the deictic centrifugal *-nta* seen earlier.

> *exe-nta-ni* 'to see again, to find'; *k'ui-ni* 'to sleep' > *k'ui-nta-ni* 'to sleep again'; *incha-ni* 'to get in, to enter' > *incha-nta-ni* 'to get in again, to re-enter'; *jani-ni* 'to rain' > *jani-nta-ni* 'to rain again'; *jikua-ni* 'to shower, to take a bath' > *jikua-nta-ni* 'to shower again'; *piré-ni* 'to sing' > *piré-nta-ni* 'to sing again'; *uaxaka-ni* 'to sit (down)' > *uaxaka-nta-ni* 'to sit (down) again'; *uerá-ni* 'to cry' > *uerá-nta-ni* 'to cry again'; *u-ni* 'to do, to make' > *u-nta-ni* 'to do again, to make again, to remake'.

In combination with certain bases, the resulting meaning may vary from the basic sense of repeated action; for example, *ué-nta-ni* (< *uéra-ni* 'to leave, to get out') means simply 'to leave, to get out', but reference is made to any place that is not the habitual residence of a person; *uéntani* also means 'to leave work, to leave the office' and 'to leave school at the end of the day or at the end of the school year'. With verbs such as *piré-ni* 'to sing', *uarha-ni* 'to dance', *k'uinchi-ni* 'to celebrate, to party', and *t'iré-ni* 'to eat', the addition of *-nta* implies that there is some reason or specific motivation for performing the action. We also get various lexicalizations, as in the case of *exe-ni* 'to see' > *exe-nta-ni* 'to see again, to find'; *intsku-ni* 'to give' > *intsku-nta-ni* 'to return'; *p'iku-ni* 'to pick' > *p'iku-nta-ni* 'to harvest'; *nira-ni* 'to go' > *ni-nta-ni* 'to go back'; *jarhá-ni* 'to be, to exist' > *ja-nta-ni* 'to lie (down), to be buried'.<sup>7</sup> Some examples follow:

- (18) Ji xarhintki jauara-siŋa                      ka menchani k'ui-nta-siŋa  
 I early      get.up-hab+asser.1/2 and sometimes sleep-again-hab+asser.1/2  
 'I get up early and sometimes I go back to sleep'
- (19) Ji ué-nta-siŋa                                      terhuxutini anchikuarhi-ni ka menderu t'amu  
 I leave-again-hab+asser.1/2 noon              work-inf              and again four  
 atakuarhu incha-nta-siŋa  
 hour              go.in-again-hab+asser.1/2  
 'I leave work at noon and I go in again at four'

<sup>7</sup> There is a small class of irregular verbs, among them *jarháni* 'to be, exist', *jurhani* 'to come', and *nirani* 'to go', which modify their form in contact with a number of morphemes, such as *-nta*, the reflexive *-kuarhi*, and the desiderative *-ncha* (see section 5 below).

- (20) T'u jikua-rini smogi jaxe-siŋa joperu menderu  
 you shower-after pollution get.dirty-hab+asser.1/2 but again  
 jikua-nta-siŋa  
 shower-again-hab+asser.1/2  
 'After showering you get dirty because of pollution, but then you shower again'
- (21) T'u-ri tsita-s-ka reloji joperu exe-nta-s-ka-ri  
 you-pron.2 lose-perf-asser.1/2 watch but see-again-perf-asser.1/2-pron.2  
 'You lost your watch but you found it'
- (22) Ji ni-nta-a-ka Morelia materu kutsi jimbo  
 I go-again-fut-asser.1/2 Morelia another month in  
 'I will go back to Morelia next month'
- (23) Juchiti tati ixu ja-nta-s-ti  
 poss.1 father here be-again-perf-asser.3  
 'My father is buried here'

### 5. A modal suffix: the desiderative suffix *-ncha*

*-ncha* is a highly productive suffix that expresses the notion of 'desiring, feeling like (doing)'. It can be used with transitive and intransitive bases. It may also even be applied to non-humans, in which case it is rather grammaticalized to the extent that it loses its desiderative sense and instead functions as a proximative marker, as in *jani-ni* 'to rain' > *jani-ncha-ni* 'to be about to rain'. In this function, *-ncha* resembles another desiderative marker, *-kueka* 'want'. This last suffix has also grammaticalized further, becoming another proximative: *iesta-ni* 'to snow' > *iesta-kueka-ni* 'to be about to snow'; *jani-ni* 'to rain' > *jani-kueka-ni* 'to be about to rain'; *tsande-ni* 'to be sunny' > *tsande-kueka-ni* 'to be about to be sunny'. It appears that *-ncha* and *-kueka* differ only in the intensity of the desire expressed. Chamoreau (2003, 303) characterizes *-kueka* as implying a "deep and long lasting" desire.

Here are some further examples involving *-ncha* with straightforward meanings: *ch'ana-ncha-ni* 'to wish to play, to feel like playing' < *ch'ana* 'play'; *k'ui-ncha-ni* 'to wish to sleep, to feel like sleeping' < *k'ui* 'sleep'; *exe-ncha-ni* 'to wish to see/look, to feel like seeing/looking' < *exe* 'see, look'; *kará-ncha-ni* 'to wish to write, to feel like writing' < *kará* 'write'; *junje-ncha-ni* 'to feel like coming, to wish to come' < *jurha* 'come'; *ninje-ncha-ni* 'to feel like going, to wish to go' < *nira* 'go'; *pa-ncha-ni* 'to wish

to take, to feel like taking' < *pa* 'take'; *piré-ncha-ni* 'to wish to sing, to feel like singing' < *piré* 'sing'; *t'iré-ncha-ni* 'to wish to eat, to feel like eating' < *tiré* 'eat'; *uandontskuarhi-ncha-ni* 'to wish to talk/converse, to feel like talking/conversing' < *uandonts-kuarhi* 'talk, converse'; *uaxaka-ncha-ni* 'to wish to sit down, to feel like sitting down' < *uaxaka* 'sit down'; *uéra-ncha-ni* 'to wish to go out/leave, to feel like leaving/going out' < *uéra* 'go out, leave'; *ueye-ncha-ni* 'to feel like crying, to wish to cry' < *uerá* 'cry'; *uirhia-ncha-ni* 'to feel like running, to wish to run' < *uirhia* 'run'; *xarhia-ncha-ni* 'to wish to swim, to feel like swimming' < *xarhia* 'swim'.

Reduplication of the root is possible, in which case the meaning gets intensified: *ch'ana-ch'ana-ncha-ni* 'to feel so much like playing, to greatly desire to play'; *piré-piré-ncha-ni* 'to feel so much like singing', and so on.

## 6. The spatial suffixes: location, grammar, and body parts

P'urhepecha is specially known for its rich and complex spatial morphology, where a great variety of body-part suffixes, grammaticalized into positional-orientational markers, combine with verbal roots to encode detailed spatial relationships between objects or the locus of affects or experiences. For instance, from the root *p'ame* 'feel pain, ache,' we derive: *p'ame-cha-ni* 'to feel pain in the throat,' *p'ame-k'u-rha-ni* 'to feel pain in the hand(s),' *p'ame-a-rha-ni* 'to feel pain in the stomach,' *p'ame-ndi-ni* 'to feel pain in the ear(s),' *p'ame-t'a-rha-ni* 'to feel pain in the leg(s),' *p'ame-ɲarhi-ni* 'to feel pain in the face or eyes,' and so on.

P'urhepecha possesses about thirty-two spatial suffixes; in comparison, Totonac, another Mesoamerican language, has around thirty (Levy 1999, 135). The suffixes may refer to a single body part such as *k'u* 'hand', a single non-body part such as *ru* 'road, street', or have multiple meanings, like the highly productive suffixes *ɲarhi* 'face' and *parha* 'back', which extend into several physical and psycho-social domains. Spatial suffixes in P'urhepecha constitute a formal class of bound morphemes that combine with verbal roots to form more complex bases. They do not function as independent nouns as separate lexical items exist for this purpose; for instance, *jak'i* 'hand', *t'etekua* 'buttocks'.

In the verbal complex, the order of the various suffixes is as follows: the root, an adverbial type of suffix (if one is employed), the body-part/spatial suffix, one of several voice morphemes (*ku*, *kurhi*, *ra*, *ta*), plus another adverbial suffix, in this case indicating motion, repetition, direc-

tion, etc. (*pa, pu, ma, mu, ngua, nu, nta*). At the end of the morphological chain, inflectional suffixes of various kinds (tense, aspect, person, number, mood, and so forth) are present. The spatial suffixes form a substitution class and may appear only one at a time as part of the verbal chain (Friedrich 1971). Also, it should be noted that body-part suffixes are applied to animals and objects based on the overall configuration of the human body; by contrast, non-body parts are never used to designate body parts.

The following table (Mendoza 2006) shows the main body-part suffixes, along with their corporeal meaning and, on the second column, some of the other extended meanings they can display:

Table 1

1.	<i>a</i> 'stomach, intestines'	central area, interior, field, yard, body of fruit or vegetable
2.	<i>ch'a</i> 'neck, throat'	neck of objects, narrowing, (inner) eaves
3.	<i>ch'u</i> 'buttocks, genitals'	bottom of objects, underside, underneath, roofed passageway
4.	<i>k'u</i> 'hand'	hands of objects, tree or plant leaves
5.	<i>mu</i> 'mouth, lip'	opening, orifice, edge, entrance, door, window, language, speaking
6.	<i>ndi</i> 'ear, top of shoulder'	ear of objects, handle, inside corner, interior surface of an angle, ground surface, branch, hearing, understanding
7.	<i>ndu</i> 'foot, leg below knee'	base of plants or trees, exterior base, field
8.	<i>ŋa/ŋe</i> 'chest, thoracic area'	interior, interior enclosure, cavity
9.	<i>ŋarhi</i> 'face, eye'	anterior surface of an object, interior surface, interior wall, flat (frontal) surface, flat area of the chest or of the stomach, shin, facade, emotion, mental states
10.	<i>parha</i> 'back'	posterior surface of objects, exterior surface, outside wall, belly of objects, tree trunk
11.	<i>rhu</i> 'nose, forehead'	point, tip, projection, end of object, edge, fruit, flower, seed
12.	<i>t'a</i> 'leg, side of body'	thigh, side of objects, floor, bounded flat surface
13.	<i>ts'ĩ</i> 'head'	top of objects, above, exterior upper surface

As mentioned before, body-part morphemes serve not only to refer to body parts but, as grammaticalized elements, one of their most prevalent uses is their occurrence as part of partitive and locative constructions, where they serve to situate the action or state expressed by the verb with respect to a particular location either on/in the body or some other

object or area, as illustrated by the following three examples (Mendoza 2006)—the body-part suffix is given in bold:

- (24) Mikua kapa-**rhu**-ku-s-ti mesa-rhu  
 cover container+upside down-**nose**-intr-perf-asser.3 table-loc  
 ‘The lid is upside-down on the edge of the table’
- (25) Libru echu-**ts’i**-ku-s-ti mesa-rhu  
 book flat-**head**-intr-perf-asser.3 table-loc  
 ‘The book is (lying) flat on the table’
- (26) Eréndira tsíreri ma-**k’u**-rha-s-ti jak’i-rhu  
 corn+dough stick-**hand**-intr-perf-asser.3 hand-loc  
 ‘Eréndira has corn dough stuck on her hand’

In the examples above, the body-part suffix determines the specific area of space that is involved on the object considered as ‘ground’. That is, the suffix encodes the exact location of the object acting as ‘figure’; or the specific part of the body that is affected. Note that in constructions such as these, the suffix is strictly obligatory and can never be omitted. Overall, the spatial suffixes constitute a powerful and multifaceted apparatus for the grammatical expression of location.<sup>8</sup>

Besides the partitive and locational senses just illustrated, body-part suffixes display intricate subtleties of meaning in combination with other morphemes, such as the voice or valence morphemes (*ta*, *ku*, and *ra*). Most complex body-part suffixes occur before both *ku* and *ta* to form transitive verbs based on transitive roots; with intransitive stems *ta* has a causative function, while *ku* denotes state, property or location. Table 2 presents examples of such combinations where body parts act as formatives in the derivation of verbs and nouns (Friedrich 1971)—the body part in question appears in square brackets. As can be inferred from the table, body-part suffixes are some of the most highly productive in the language; moreover, they are versatile formatives, not only of verbs and nouns but also of other word classes such as adverbs and adjectives.

<sup>8</sup> For more on the role of these suffixes in the grammar of P’urhepecha, see Mendoza (2006).

Table 2

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1.	<i>sunu-a-rha-ni</i> 'to have indigestion', <i>amba-a-ta-ni</i> 'to clean a yard or field', <i>kako-a-rha-ni</i> 'to be empty' [ <i>a</i> 'stomach']
2.	<i>p'ira-ch'a-ku-ni</i> 'to strangle, to hang', <i>k'embe-ch'a-kua</i> 'neck of a pot' [ <i>ch'a</i> 'neck']
3.	<i>incha-ch'u-ta-ni</i> 'to put into a cave', <i>jani-ch'u-ta-ni</i> 'to rain into the passageway or porch' [ <i>ch'u</i> 'bottom, genitals']
4.	<i>puti-mu-ku-ni</i> 'to kiss', <i>as-pi-mu-ni</i> 'to have a good taste in the mouth', <i>jatsi-mu-ta-ni</i> 'to place in the door', <i>uarha-mu-ku-ni</i> 'to sharpen a blade or some edge', <i>tsi-tsi-mu-ni</i> 'to enjoy the food one eats' [ <i>mu</i> 'mouth, lip']
5.	<i>ata-ndi-ku-ni</i> 'to hit the ear/shoulder of another', <i>amba-ndi-ta-ni</i> 'to clean an inside corner', <i>k'arhi-ndi-kua</i> 'dry branch' [ <i>ndi</i> 'ear, shoulder']
6.	<i>kurhu-ŋa-ku-ni</i> 'to smoke a person or animal out of a tree', <i>jiu-ŋa-ni</i> 'to scrape out the inside of a pot', <i>p'itu-ŋa-ni</i> 'to strum a guitar', <i>o-ŋe-kua</i> 'room' [ <i>ŋa/ŋe</i> 'heart, chest']
7.	<i>apo-ŋarhi-ni</i> 'to have large cheek bones', <i>charho-ŋarhi-ni</i> 'to redden or flush from embarrassment', <i>uarhi-ŋarhi-ni</i> 'to die in another's arms', <i>ua-ŋarhi-ku-ni</i> 'to bang one's shin', <i>ch'eno-ŋarhi-ni</i> 'to fall of the inner side' (as of glaze inside a pot), <i>etsa-ŋarhi-ku-ni</i> 'to spread over a flat surface', <i>k'ua-ŋarhi-kua</i> 'apron' [ <i>ŋarhi</i> 'face, eye']
8.	<i>jurhu-parha-ni</i> 'to hunch the back', <i>u-parha-ta-nta-ni</i> 'to repair a roof', <i>p'iku-parha-ku-ni</i> 'to prune fruits' [ <i>parha</i> 'back']
9.	<i>epe-rhu-ku-ni</i> 'to lasso the snout', <i>p'iku-rhu-ta-ni</i> 'to pick fruit', <i>antsi-rhu-ta-ni</i> 'to pull on a string', <i>ete-rhu-ku-ni</i> 'to light the end' (as of a cigarette) [ <i>rhu</i> 'nose']
10.	<i>uana-t'a-ku-ni</i> 'to pass another on the road', <i>jatsi-t'a-ku-ni</i> 'to give a shot into the thigh', <i>ma-t'a-ta-ni</i> 'to stick to the floor of a room', <i>incha-t'a-ta-ni</i> 'to enter a room, to stick into the floor of a room', <i>siri-t'a-kua</i> 'skirt' [ <i>t'a</i> 'leg, side']
11.	<i>epe-ts'ï-ku-ni</i> 'to lasso the horns, the head', <i>ua-ts'ï-ku-ni</i> 'to hit the top or head' (as of a nail), <i>xarhia-ts'ï-ni</i> 'to float', <i>o-ts'ï-ta-nta-ni</i> 'to (re)roof' [ <i>ts'ï</i> 'head']

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## 7. Conclusion

The morphological resources displayed by P'urhepecha are vast and intricate, a fact that makes the investigation of its derivational morphology an important area of linguistic inquiry. The present work presents some of the most common and productive types of derivational morphemes that occur as part of the verbal complex in this language, including body-part suffixes, causatives, deictic suffixes, and some other adverbial suffixes. While a lot more remains to be investigated, this work seeks to constitute a point of departure towards a more complete and detailed analysis than what exists so far regarding verbal derivation in this most intriguing

language and, at the same time, contribute to the advancement of our current cross-linguistic understanding of the morphology of the indigenous languages of the Americas.

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