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## Valency-increasing suffixes in Huichol (Uto-Aztecan): The overlap of functions

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#### **Abstract**

Huichol, a Uto-Aztecan language from the Corachol branch, has four suffixes that increase the verb's valency: The causatives -tia, -ta, -ya, and the applicative -ri(e). The suffix -tia commonly encodes a causative event where the actor has direct, physical contact with the undergoer (Givón 2001). The suffix -ta (Grimes 1964), on the other hand, encodes an indirect causative where the effect brought about is indirect, and the patient has more control of the action. The suffix -ya (Grimes 1964) introduces a 'causer' in an inchoative/causative relation (Haspelmath 1993). Finally, the suffix -ri(e) is an applicative (Grimes 1964) that introduces oblique arguments as core participants in the clause. Interestingly, the suffix -tia can introduce a recipient argument in transitive clauses and the applicative suffix -ri(e) a causer in certain contexts, phe-nomenon known as 'causative/applicative syncretism' (Shibatani & Pardeshi 2002: 116). Overall, the chapter aims to analyze the different morphosyntactic contexts of each suffix, describe the semantic nuances of the events derived from their use, and explain possible diachronic developments of the different suffixes and their relation to the polysynthetic characteristics of the language.

**Keywords**: Valence-increasing suffixes; causative-applicative syncretism; Huichol; Uto-Aztecan.

#### 1. Introduction

The argument structure of verbs can be changed in various ways depending on communicative needs. The changes in argument structure are known as *alternations* (Kittilä 2002; Haspelmath 2015; Malchukov & Comrie 2015), which can be grouped into *valency increasing* or *valency decreasing* alternations (Drossard 1991; Dixon & Aikhenvald 2000; Kittilä 2002; Haspelmath & Müller-Bardey 2004; Malchukov & Comrie 2015). This paper provides an analysis of the different suffixes that Huichol uses to increase the number of arguments in the clause. The focus is not only on the change of the argument structure, but also on the semantic effects. Typically, valency increasing stra-

tegies add an argument with morphological markings, or only by a change in the case frames of arguments (Drossard 1991; Dixon & Aikhenvald 2000; Kittilä 2002). Semantically speaking, the process has direct consequences for the nature of events, since it encodes the raising of a participant that is not normally part of a scene onto the center stage in an event (Comrie 1981; Haspelmath 1993; Payne 1997; Haspelmath & Müller-Bardey 2004).

Huichol has two ways to increase the valency in a clause, which license additional core arguments: via morphological changes (e.g., suffixes, vowel alternation) to the verb and via a semantic shift in verb choice (e.g., suppletion). Huichol mainly uses morphological changes to the verb, especially suffixes, so I will focus on these and their combinatorial properties.<sup>1</sup>

I have identified two strategies marked in the verbal complex: the causatives -tia, -ta, -ya and the applicative -ri(e). Most of these suffixes present additional functions depending on the type of root they attach to, and consequently derive different meanings. For instance, the suffix -tia and -ta behave as mere transitivizers without a causative meaning when attached to nonverbal roots. Similarly, the suffix -ri adopts a causative function, while the suffix -tia adopts an applicative function in different semantic classes of verbs. Thus, the aim of this paper is threefold. Firstly, this chapter analyzes the different morphosyntactic contexts where the valency-increasing suffixes occur. Secondly, the chapter describes the different semantic nuances of the events that derive from the use of the suffixes. Thirdly, this study explores the context where additional functions or functional overlapping of these suffixes occur. Overall, the chapter explains the possible diachronic development of the different suffixes and their relation to the polysynthetic characteristics of the language.

The corpus of this chapter mainly consists of natural data comprising a sample of different speech genres (e.g., stories, description of rituals and ceremonies, conversations, and monologues) given by men and women of varying ages.<sup>2</sup> This data was collected in the city of Tepic as well as in the communities of El Saucito Peyotán, Jesús María, El Colorín and Potrero de las

<sup>&</sup>lt;sup>1</sup> See Ramos Bierge (2017) for a more detailed description on the different mechanisms Huichol uses to increase and decrease the valency of the clauses.

<sup>&</sup>lt;sup>2</sup> This corpus was collected with the help of the *Center of Study of Indigenous languages* of the *West* from the University of Colorado-Boulder, The National Council for Science and Technology (CONACyT), and the University of Nayarit (Mexico).

Palmitas, all of them located in state of Nayarit (Mexico).<sup>3</sup> The data come from different dialects mainly from Jalisco and Nayarit, but also to a lesser extent from Zacatecas. However, the dialects are mutually intelligible and there are no major morphosyntactic differences.<sup>4</sup>

This chapter is organized as follows. Section 2 describes the grammatical aspects of Huichol. Sections 3, 4, 5, and 6 explore the different valence-increasing suffixes found in the language. Section 7 summarizes the findings of this study.

## 2. Grammatical aspects of Huichol

Huichol, a Corachol language from the Uto-Aztecan language family, has a tendency to exhibit polysynthesis (Iturrioz 1987; Gómez 1999; Iturrioz & Gómez 2006) and agglutination (Palafox 1978; Gómez 1999; cf. Iturrioz 1987). In average, four to six morphemes are attached to the verb, although it is not rare to find seven or eight morphemes, as example (1) illustrates (cf. Iturrioz & Gómez 2006). In simple clauses, prefixes indicate information about the arguments, location, and assertion, while suffixes indicate information about tense and/or aspect or derivational processes.

<sup>&</sup>lt;sup>3</sup> Huichol is mainly spoken in the States of Jalisco, Nayarit, Durango and Zacatecas (México), with the largest concentration of speakers in Jalisco and Nayarit. The language has approximately 52,000 speakers (INEGI 2010).

<sup>&</sup>lt;sup>4</sup> There is no in-depth assessment of the number of dialects of the language. However, INALI (2015) estimates that the language has four dialects.

(1) 'itsari te food F.S.<sup>5</sup>

*te-m-te-wa-ye-hapa-xɨa-ni* 1PL.SBJ-AS2-DISTR.PL-3PL.NSBJ-inside-take.out.small.PRS-ITR-NR '...we take out food for them...'6

Huichol is mostly a verb-final language (Grimes 1964; Gómez 1999; Iturrioz & Gómez 2006). In transitive clauses with an explicit object noun, the tendency is to present OV order, as illustrated in (2). However, topicalization may change the order of the elements.

(2) O<sub>1</sub> V<sub>1</sub> O<sub>2</sub>

'iku me-pu-ka-'etsa mume

corn 3PL.SBJ-AS1-down-grow.PRS beans

V<sub>2</sub>

me-pu-ka-'etsa

3PL.SBJ-AS1-down-grow.PRS

'...they grow corn, they grow beans...'

Huichol marks core arguments on the verb, and non-core arguments with postposition case marking (e.g., *-tsie* 'on'), or independent postpositions (e.g., *'aurie* 'around') (Iturrioz & Gómez 2006: 110). The language has two types of pronouns, independent and dependent. The independent pronouns

<sup>&</sup>lt;sup>5</sup> 1=First person; 2=Second person; 3=Third person; ALL=Allative; ANIM=Animate; APPL= Applicative; AS=Primary assertion; AS2= Secondary assertion; CAUS=Causative; COM=Comitative; COMPL=Completive; COP=Copula; DEM=Demonstrative; DER=Derivative; DIM=Diminutive; DISTR=Distributive; DS=Different subject; EVI=Evidential; EXT=Extension; F.S.=False start; FIG=Figure; FOC=Focus; HAB=Habitual; ICOMPL=Incompletive; IND=Indirect; INDF=Indefinite; INSTR=Instrumental; IPFV=Imperfective; ITR=Iterative; LOC=Locative; MID=Middle voice; NR= Narrative; NEG=Negative; NMLZ=Nominalizer; NSBJ=Non-subject; NV= Non-visual; OS=Out of sight; OBJ=Object; PASS=Passive; PFV= Perfective; PL=Plural; POSS=Possesive; POT=Potential; PR=Property; PRO=Prominent; PRS=Present; PST=Past; RDP=Reduplication; REFL=Reflexive; RES=Resultative; SBJ=Subject; SG=Singular; SP=Several places; SS=Same subject; ST=Stative; VIS=Visible, speaker's place.

<sup>&</sup>lt;sup>6</sup> The translation of some of the examples has three dots (...) at the beginning and at the end of the sentence. These dots represent sentences taken from natural data. Examples without three dots mean that they come from elicitation.

can be omitted in the clause, while the dependent pronouns are obligatory on the verb, making it a verb-agreement language (Grimes 1964; Comrie 1982; Gómez 1999; Iturrioz & Gómez 2006). Dependent pronouns code animate arguments (Grimes 1964; Iturrioz & Gómez 2006), except for *i-* 3SG object, which marks both animate and inanimate. Independent pronouns are neutral regarding grammatical relations, while dependent pronouns distinguish two, subject and non-subject (cf., Grimes 1964, Gómez 1999, and Iturrioz & Gómez 2006), as Table 1 shows.

	Independent pronouns	Dependent subject pronouns	Dependent non-subject pronouns <sup>7</sup>	Possessive pronouns	Object of postposition
1sg	nee	ne-	netsi-	ne-	ne-
2sg	'ek <del>i</del>	pe-	matsi-	'a-	'a-
3sg	mɨkɨ/ 'iya	Ø	(i)-,[e]-	-ya 'DS' yu-'SS'	Ø
1 <sub>PL</sub>	tame	te-	tatsi-	ta-	ta-
2PL	xeme	xe-	$xe^{-8}$	xe-	xe-
3PL	iki/mimi <sup>9</sup>	me-	wa-	wa-	wa-

Table 1. Huichol pronominal system

Huichol has a nominative-accusative case system mostly manifested through the two sets of dependent pronouns. The subject of an intransitive clause and the agent of a transitive clause are encoded by dependent subject pronouns, like *ne-* '1SG.SBJ' in (3a) and (3b). The patient of a transitive clause is encoded by non-subject pronouns, like *netsi-* '1SG.NSBJ' in (3b).

## (3) a. **ne**-pɨ-mara akame 1SG.SBJ-AS1-shaman

"...I am a shaman..."

<sup>&</sup>lt;sup>7</sup> The pronominal affixes can be reduced to *nes-*, *mas-*, *tas-*; o *ne-*, *ma-*, *ta-*.

<sup>&</sup>lt;sup>8</sup> According to Iturrioz & Gómez (2006: 198), the 2PL non-subject pronoun has the form *xetsi*-. However, I did not find any instance of this form in the corpus.

<sup>&</sup>lt;sup>9</sup> *Miki* is a deictic pronoun that functions as 3sG and 3PL pronouns. Occasionally, the deictic pronoun '*iya* is used to encode a 3sG pronoun.

b. nee ne-kie ne-u-ka-re-ka ne-papa 1SG 1SG-house 1SG.SBJ-VIS-NEG-INDF-sit 1SG-father netsi-he-ku-waya 1SG.NSBJ-NV-SP-hit '...I, I don't live in my house, my father hits me...'

The language has a primary object system (Comrie 1982: 101) or secundative alignment, since it marks both the patient in transitive clauses and the recipient/beneficiary in ditransitive clauses through non-subject pronouns on the verb, as in (4a) and (4b).

- (4) a. pe-wa-ti-waya-kaku 2SG.SBJ-3PL.NSBJ-PL-hit-DS '...you hit them...'
  - b. *miki* yu-nai-me te-m-wa-mi-ni-xia

    DEM ANIM-all-NSBJ 1PL.SBJ-AS2-3PL.NSBJ-give.gift-NR-ITR

    '...we give everything [the corn] to them as a gift...'

In addition to the non-subject pronouns, Huichol has case marking only in certain syntactic contexts. The suffix -ti indicates that the noun is a subject, but -me signals that the noun is a non-subject or an oblique oblique (Iturrioz 1987; Gómez 1999). The suffixes only attach to noun phrases with numerals (Comrie 1982), as illustrated in (5) and (6), particles such as nai 'all', as in (4b), or attributes that describe nouns, as in (7).<sup>10</sup>

(5) wa-papa tsiere pu-yeika-kai waniu yu-huta-ti
3PL-father also AS1-wander.SG-IPFV EVI.IND ANIM-two-SBJ

tiiri
children
'...their father was wandering also there, two children [were wandering]...'

<sup>&</sup>lt;sup>10</sup> Huichol's attributive roots largely behave as verbs (Iturrioz & Gómez 2006). However, there are a few cases where attributives seem to behave like prototypical adjectives, as example (6) illustrates. This means that attributive roots are not a clear-cut subcategory of verbs (Ramos Bierge 2017).

- (6) ne- wa-ri-xeiya yu-haika-me xei-me=ta
  1SG.SBJ-3PL.NSBJ-PL-have.PRS ANIM-three-NSBJ one-NSBJ=FOC

  ne-u-re-ka-'iya
  1SG.SBJ-VIS-INDF-NR-wife
  '...I have three [children] and a wife...'
- (7) rosario 'iki ka-ni-hiki-ti-ni kaniyi rosary DEM NR-NR-COP-DER-NR F.S. viviwi-me-ki

RDP.PL.be.black-NSBJ-INSTR '...this is a rosary, with black...'

Huichol is predominantly a head-marking language (Nichols 1992), since the syntactic relations are marked in the head (possessed noun and arguments on the verb) in most of the constructions. However, some instances of dependent-marking can be found, like the instrument suffix -ki in nouns, subject/non-subject case markers in numerals, and some postpositions marked in dependent clauses, like with -ki 'for, to' or -tsie 'when' (Iturrioz 1987; Iturrioz & Gómez 2006: 111-112).

#### 3. The suffix -tia

### 3.1 The causative use of -tia

Huichol encodes causative events by using the suffix *-tia* (Grimes 1964, 1981; Gómez 1999; Iturrioz & Gómez 2006), a causative reconstructed in Proto-Uto-Aztecan as \*-*tu-(y)a* (Langacker 1977: 144),<sup>11</sup> in a wide range of different semantic classes of verbs. A causative situation is defined as a semantic relation that is associated with two different events, one linked to the notion of cause, which commonly corresponds to the way the event is initiated, and the other to the notion of effect, the resultant state or the performed action (Comrie 1981; Podlesskaya 1993; Dixon & Aikhenvald 2000; Shibatani & Pardeshi 2002). This relation is associated with the presence of two

<sup>&</sup>lt;sup>11</sup> Langacker (1977: 144) also reconstructs the causative suffix as \*-kV. However, he states that a more definite reconstruction for the causative is \*-na with the plural, repetitive or distributive variant \*-ca.

participants, one prototypical volitional agent and responsible for the change of state, and the other, a patient who is affected by that change (Givón 2001). Morphological causatives are considered properly to increase the number of core arguments in a clause because they always imply one more participant than the non-causative equivalent (Comrie 1981; Dixon & Aikhenvald 2000). In Huichol, the participant that is required is the *causer* of the action, as in example (8b).

- (8) a. matsika-ya 'u-ta-tsua-ti older.brother-3SG.POSS OS-SG-cry-SS '... his older brother [was] crying...'
  - b. *netsi-'u-ta-tsua-ri-s-tia* 1SG.NSBJ-OS-SG-cry-RES.COMPL-x-CAUS 'S/he made me cry.'

The suffix -tia can only be used with intransitive or transitive clauses of different verbal classes; in the former case a second argument is introduced, while in the latter a third argument is introduced. Introducing more than three arguments gives an ungrammatical clause. Examples of non-causative/causative pairs in intransitive and transitive clauses are illustrated in (9) and (10) with the verb naanai 'to laugh' and pi 'to cut'. In Huichol, the causer is expressed by means of the subject pronoun prefixes, while the causee is associated with the non-subject pronouns.

- (9) a. tame te-te-naanai-ma-ka
  1PL 1PL.SBJ-DISTR-laugh-COM-DS
  '...we, with laughter (Lit. 'We laugh with')...'
  - b. *ne-metsi-'u-ta-naanai-tia* 1SG.SBJ-2SG.NSBJ-OS-SG-laugh-CAUS 'I made you laugh.'
- (10) a. tuutu ne-p-an-pi flower 1SG.SBJ-AS1-side-cut.PFV 'I cut (PST) the flowers.'

b. 'eki pe-neste-'an-pi-s-tia tuutu 2SG 2SG.SBJ-1SG.NSBJ-side-cut-x-CAUS flower 'You made me cut flowers.'

The suffix -tia encodes both direct and indirect causation. Direct causation generally occurs with inanimate participants, as in (11) and (12). The actor in both examples has complete control in carrying out the action, in this case, 'making the sacred fire visible' and 'finishing the ceremony', respectively. The actors perform a physical action on the objects in order to bring about the change of state.

- (11) tatewari xia te-m-a-ti-nieri-tia-ni sacred.fire truth 1PL.SBJ-AS2-PRO-PL-see-CAUS-NR '...we set the sacred fire (Lit. 'We make the sacred fire visible)...'
- (12) *miki te-u-ti-pari-tia*DEM 1PL.SBJ-VIS-PL-finish-CAUS

  '...there we end it [the ceremony]

  (Lit. 'We make it get finished')...'

The suffix -tia also expresses indirect causation (Iturrioz 1987: 306-08) with animate actors and undergoers where there is no direct physical contact in the action. This means that the causer has less control in carrying out the change of state. Occasionally, the completive resultative suffix -ri can be observed in some of the constructions, which means that the actor has no direct influence on the undergoer's performance of the action. An example of indirect causation with the suffix can be observed in (13) with the verb hare/hari 'to drink/beber'. This example denotes an event in which people during a ceremony give something to drink to the participants, but they are not physically forced to carry out the action.

(13) a. te-mi-ti-hare-ni
1PL.SBJ-AS2-PL-drink-NR
'...we drink water...'

b. 'anake xia te-mi-ti-hari-tia-rie-ni that.moment truth 1PL.SBJ-AS2-PL-drink-CAUS-PASS-NR '...in that moment, we are given water (Lit. 'We are forced to drink water')...'

The suffix *-tia* can also introduce two co-participants, which is a phenomenon known as *sociative causation*. Shibatani (2002: 96-7) describes sociative causation as a situation in which two actors occur in a single event. He recognizes at least three different sociative events: (i) joint-action, (ii) assistive, and (iii) supervision. The construction in Huichol expresses joint actions of two co-participants, one encoded by a subject pronoun and the other by a non-subject pronoun. The only type of verb that illustrates this pattern is *nei* 'to dance', as in (14b). Semantically speaking, example (14a) expresses the action of 'dancing' as a group activity (also expressed by the plural subject distributive prefix *te-*), while (14b) expresses an invitation to dance. Although the two participants appear to encode the same degree of agency, structurally, the degree of volition of the two participants differs, that is, the participant marked with a non-subject pronoun has less agency than the other, as the literal translation reflects: 'I made you dance with me'.

- (14) a. *te-mi-te-ti-nei-ni*1PL.SBJ-AS2-DISTR-PL-dance-NR
  '...we dance [in the ceremony]...'
  - b. *ne-mats-u-ti-nei-tia*1SG.SBJ-2SG.NSBJ-OS-PL-dance-CAUS
    'I danced with you.' (Lit. 'I made you dance with me')

The suffix *-tia* derives different results with other types of roots. When the suffix *-tia* attaches to roots that describe attributes, a causer is introduced and a change of state in the undergoer is encoded, like prototypical causative/transitive constructions illustrated in (15).

(15) a. *ki pi-tusa* house AS1-white.PRS 'The house is white.'

b. *p-i-ti-tusa-ri-tia*AS1-3SG.OBJ-PL-white-RES.COMPL-CAUS
'Some one made it white [the house].'

When the suffix attaches to nominal roots, either a *beneficiary* or an *actor* is introduced. Example (16b) illustrates the beneficiary marked with a nonsubject pronoun, showing an overlap with the applicative domain. The difference from the applicative is that in this construction, the suffix not only introduces the beneficiary but also denotes the actor's action of 'making' or 'creating' an object for someone else. Example (16a) shows the transitivizer *-ta* when the intended meaning is to denote the activity of making houses, while in (16b) the suffix *-ta* is replaced by *-tia* when a second argument is introduced. Example (16c) illustrates the ungrammaticality of the clause when the suffix *-ta* and a non-subject pronoun encoding the beneficiary of the action are used together.

- (16) a. ne-pi-ki-ta 1SG.SBJ-AS1-house-DER 'I make houses.'
  - b. *ne-pi-matsi-ki-tia* 1SG.SBJ-AS1-2SG.NSBJ-house-APPL/CAUS 'I made you a house.'
  - c. \*ne-pi-matsi-ki-ta 1SG.SBJ-AS1-2SG.NSBJ-house-CAUS ('I made you a house.')

Example (17b) shows an instance where an argument is introduced with the nominal root 'iyari 'heart'. In this case, the suffix -tia introduces the argument tawewiekame 'creator', and the undergoer of the action is encoded with the non-subject pronoun ta- '1PL.NSBJ'. The new argument is an actor that does not cause a complete change of state in the patient as prototypical causatives, but is the responsible of the action of 'guiding'. Example (17a) shows an instance of the nominal root without the causative suffix. Cases with nominal roots and the suffix -tia are not very frequent.

(17) a. wixarika pi-n-ti-u-ka-'iyari xeniu
huichol AS1-NR-DISTR-OS-NR-heart.PRS EVI.IND
'...that's the way the Huichol goes (Lit. 'That is how the hearts of the Huichols are)...'

b. *ta-wewie-kame miki ya-'ane-me ta-ti-u-pitia*1PL-do-NMLZ DEM aleady-be-DS 1PL.NSBJ-PL-OS-allow
'...our creator allows us [to do something],'

*ye-m-ta-ti-u-'iyari-tia* straight-AS2-1PL.NSBJ-DISTR-OS-heart-CAUS 'he guided us...'

Iturrioz (1987: 310) describes two cases whereby the suffix -tia that appears attached to nouns denote the relation of inalienable and alienable possession of objects, as he illustrates in (18) and (19), respectively. However, after verifying the meaning with the speakers, the examples simply denote the creation of an object with an intended beneficiary. Example (18) codes the action of 'making arms' for the inanimate object mexa 'table', and example (19) the 'making of guitars' for himself. It is likely that the semantic confusion is due particularly to conceptualizing the legs as an inherent part of the table. However, the verb only denotes the action of 'making something', as in example (16) above with kitia 'making houses'. Similarly, in (19), the action refers to the 'making' of a musical instrument, but the reflexive marker ne '1SG.REFL' denotes the beneficiary of the action and not a possessive relation. Therefore, better translations of the sentences would be 'Wiyeme made legs for the table' and 'I made a guitar for myself'.

- (18) Wiyeme mexa p-a-'ika-tia
  Wiyeme table AS1-LOC-arm-APPL<sup>12</sup>
  'Wiyeme gave feet to the table.' [Iturrioz 1987: 310]
- (19) *ne ne-pu-ne-ta-kanari-tia*1SG 1SG.SBJ-AS1-1SG.REFL-SG-guitar-APPL
  'I made the guitar mine/I chose it/I kept it.' [Iturrioz 1987: 310]

<sup>&</sup>lt;sup>12</sup> The glosses of these examples were changed from the original, but the translations were kept to compare Iturrioz's original translation with my interpretation.

## 3.2. The applicative use of -tia

Huichol uses the suffix *-tia* as an applicative that introduces a core argument in certain contexts. This behavior occurs with verbs that denote the physical transfer of an object (e.g., give, send), like *hapa* 'to take out something small', *kwei* 'to take out something large', and *huri(e)* 'to bring', as illustrated in (20), (21), and (22) respectively. The participant introduced is a recipient marked with non-subject pronouns, which shows that the function of the suffix overlaps with the applicative suffix *-ri(e)*. This phenomenon is known as *causative/applicative syncretism* (Shibatani & Pardeshi 2002: 116) because it refers to the split of functions of one single morpheme based generally on the semantics of the verbs. Pragmatically, the constructions with the suffix denote the action of 'offering' or 'giving'. According to Iturrioz (1987: 306-308), the suffix *-tia* in this type of verbs encodes a direct action of the agent upon the direct object, as in a causative construction. However, the examples below show that the use of the suffix is to introduce a recipient argument and not to encode a causative meaning.

- (20) a. 'itsari te-m-te-wa-ye-hapa-xia-ni food 1PL.SBJ-AS2-DISTR-cavity-inside-take.out.small-PL-NR '...we take out food...'
  - b. *nawa te-wa-ta-hapa-tia-ni* tejuino 1PL.SBJ-3PL.NSBJ-SG-take.out.small-APPL-NR '...we offer them tejuino...'<sup>13</sup>
- (21) a. *ne-p-i-wa-ye-kwei katira* 1SG.SBJ-AS1-3SG.OBJ-cavity-inside-take.out.large.PFV candle 'I took it out, the candle.'
  - b. *miki 'itsi ti-kwei-tia-ni*DEM walking.stick DISTR-take.out.large-APPL-NR
    '...that walking stick is given [to nature]...'

<sup>&</sup>lt;sup>13</sup> *Tejuino* is a cold beverage made from fermented corn. It is commonly consumed in Wixárika communities during the ceremonies.

(22) a. *ta-muleto te-mu-hurie-tsie* 1PL-notebook 1PL.SBJ-AS2-bring-when '...when we bring the notebook...'

b. *xapa te-ta-huri-tia-ri-wa* notebook 1PL.SBJ-SG-bring-APPL-PASS-HAB '...we are given notebooks...'

#### 4. The suffix -ta

#### 4.1 The derivative use of *-ta*: Non-verbal roots

The suffix -ta is a derivational suffix reconstructed in Proto-Uto-Aztecan as \*-tu 'become' or \*-ta 'make' (Langacker 1977: 45). This suffix is usually attached to nouns to create verbs in some Southern Uto-Aztecan languages, like Papago -t, Tepecano† -ta, Cora -ta, and Classical Nahuatl -ti (Langacker 1977: 45).

The suffix -ta attaches to nouns to create verbs in Huichol. The construction is a factitive (Iturrioz 1987; Iturrioz & Gómez 2006), since it encodes an action that produces a result (Fillmore 1968; Lyons 1977; Crystal 2008: 184). In other words, the resultant verb stem denotes the action of creating an object, but the object is not explicitly coded in the clause, since the verb stem itself refers to the object. The actions refer to daily or more common activities in the community, like 'itsarita' 'to make food' ('itsari 'food'), teu-karita<sup>14</sup> 'to baptize, name' (teukari 'grandparents'), winuta 'make wine' (winu 'wine'), kita 'make houses' (ki 'house'), and paapata 'make tortilla' (papa 'tortilla'). The suffix cannot attach to all nouns; for instance, it is not grammatical to say \*tekurinata' 'to make baskets' or \*mumeta' 'to cook beans' because those activities are less frequent in the community. Examples (23) and (24) illustrate the use of the derivational morpheme with 'itsari 'food' and teukari 'grandparents'.

<sup>&</sup>lt;sup>14</sup> Traditionally, the *teukari* or grandparents assign names to children in the community in a special ceremony. These names are Wixaritari and denote sacred objects, animals or elements from nature. For a more detailed description of this practice, see Santos & Carrillo (2012: 149).

- (23) nee ne-pu-'itsari-ta-xi 1SG 1SG.SBJ-AS1-food-DER-PFV 'I made food.'
- (24) *me-m-i-ta-teukari-ta-xi*3PL.SBJ-AS2-3SG.OBJ-SG-grandparent-DER-PFV
  '...they baptized him [they gave him a name]...'

The derivational suffix cannot introduce a second argument with a patient or beneficiary role, proving its derivative function, as in (25).

(25) \*ne-pu-matsi-'itsari-ta-xi 1SG.SBJ-AS1-2SG.NSBJ-food-DER-PFV ('I made you food.')

Iturrioz (1987: 302-303) describes other semantic results of the suffix *-ta* attached to nouns, like *'ikuta* 'to harvest' (> *'iku* 'corn') or *maxata* 'to recreate, imitate deer' (> *maxa* 'deer'). However, the examples were marked ungrammatical in my corpus.

### 4.2 The causative function of -ta: Verbal roots

The suffix -ta in Huichol also has a causative function (Grimes 1964) when attached to verbal roots. According to Grimes (1964: 96), the morpheme denotes the idea of 'causing something to be done', while the suffix -tia denotes the action of 'causing someone to do something'. Following Grimes, the data show that the difference between the suffix -tia and -ta is that the latter encodes an indirect causation while the former shows direct causation. Indirect causation is generally defined as a causative event where the effect is brought about indirectly by means of an indirect physical contact by the causer's action. This definition also implies a more independent and controlling patient and more temporal distance between the causing and caused event (Givón 2001; Song 2001; Shibatani 2002).

The suffix -ta introduces a causer and the original actor turns into an undergoer who has more control of the action, in the case of animate participants, or undergoes no change of state, in the case of inanimate participants. For instance, when the suffix -ta is attached to the verb hekia 'to be visible',

as in (26), a causer, responsible for the action, is introduced by subject pronouns, and the construction adopts the meaning 'to show or make visible/reveal'. The action of 'showing' or 'making visible/revealing' does not entail direct, physical affectedness of the properties of the objects.

(26) a. *tipina* tsi-ka-mi-pe-ni miki hummingbird DIM-NR-AS2-size-NR DEM

kwa-yu-**hekia** 

NEG-MID-visible.PRS

- "...the hummingbird is small and cannot be seen..."
- b. wa-wewie-kame ta-hekia-re-ke-kai

  3PL-do-NMLZ SG-visible-RES.ICOMPL-POT-IPFV

  '...the creator was going to become visible...'
- c. *wanapai me-m-i-hekia-ta-xi* outside 3PL.SBJ-AS2-3SG.OBJ-visible-CAUS -PFV '...they showed it outside (Lit. They made it visible)...'

Similar cases can be observed with *niere* 'to see', and *we* 'to fall down' in (27) and (28) respectively. Examples with the suffix *-ta* encode instances of the causee's own will of doing the action, like in (27b) expressing the action of 'making themselves visible on purpose/revealing themselves', or as in (28b), expressing the action of 'dropping itself on purpose'.

(27) a. *ne-na-ye-tu-ni yu-kwaxi-ki waniu* inferior-ALL-inside-take-NR 3SG.POSS-tail-INSTR EVI.IND

*pe=tsi yepauka* but=so fast

"...he took it [the flame] with its tail, but very fast

*me-ka-ne-niere-kaku*3PL.SBJ-NEG-inferior-see-DS
'when they were not looking...'

- b. *me-m-a-niere-ta*3PL.SBJ-AS2-PRO-see-CAUS Michoacán-PR tarasco

  '...the Tarascos, they make themselves visible [can be found] in Michoacán...'
- (28) a. *mɨkɨ mana pu-ka-we waniu papa-ya*DEM there AS1-down-fall.PFV EVI.IND father-3SG.POSS

  ' his father fell down '
  - b. *m-e-we-ta xeikia miki yeuxu*AS2-down-fall-CAUS only DEM armadillo
    '...the armadillo just threw itself [to the floor]...'

The difference between the suffix -tia and -ta can be observed with the verb niere 'to see' in (29) and (27b). When the suffix -tia is attached to niere, as in (29), it denotes a change of state of the patient, in this case, tatewari 'sacred fire' goes from being invisible to being visible. Fire cannot occur spontaneously, but it may be produced by any animate or inanimate entity. When -ta is used with the same verbal root, there is not a complete change of state, as in example (25b) above.

(29) *tatewari xia te-m-a-ti-nieri-tia-ni* sacred.fire truth 1PL.SBJ-AS2-FIG-PL-see-CAUS-NR '...we set the sacred fire (Lit. 'We make the sacred fire visible)...'

The suffix -ta is not as frequent as the suffix -tia. The former only attaches to a limited type of semantic class of verbs, and their combinations can denote an indirect causative meaning.

### 5. The suffix -ya

Huichol uses the suffix -ya to introduce arguments in intransitive clauses. The origin of the suffix may be traced back in the second component of the causative \*-tu-(y)a (Langacker 1977: 145) or applicative \*li-ya (Langacker

<sup>&</sup>lt;sup>15</sup> The *Tarascos*, also known as *Purepechas*, are an indigenous group located in Michoacán, Mexico.

1977: 146) reconstructions in Proto-Uto-Aztecan. Grimes (1981: 126) reports the construction as a 'causative of state' because it changes the original state of the patient, while Gómez (1999) and Iturrioz & Gómez (2006) describe the suffix as a transitivizer. Similar to the former description, the data show that the construction with the suffix -va is used in an inchoative/causative relation (cf., Grimes 1981; Gómez 1999; Iturrioz & Gómez 2006). The pair of constructions express the same basic situation (i.e., a change of state), but they only differ in the expression of the causer participant (Haspelmath 1993: 90). The inchoative construction excludes a causing actor and presents the situation as occurring spontaneously, while the transitive construction includes the actor participant. The suffix attaches to verbs that denote attributes (e.g., size, color, taste, etc.), to numbers, and to nouns that denote attributes. The resultant clause is a transitive construction with a causer that performs the action. For instance, in the intransitive construction in (30a), the subject tsitsi 'milk' is the undergoer of the action tsina 'sour, to get sour'. In (30b), tsitsi 'milk' is affected by the action, but the causer xiri 'heat, hot' is added to the clause. As a result, the argument tsitsi 'milk' maintains its undergoer role in both types of constructions.

- (30) a. *tsitsi pu-tsina-ri-xi* milk AS1-sour-RES.COMPL-PFV 'The milk got sour.'
  - b. *xiri tsitsi mu-tsina-ri-ya-xi*heat milk AS2-sour-RES.COMPL-CAUS-PFV
    'The hot weather caused the milk to sour.'

These constructions generally occur with the completive resultative -ri<sup>16</sup>, which means that the initiator of the action does not have total control of the resulting effect in the patient, but causes the change of state indirectly by starting a process. For this reason, the construction with the suffix -ya can also be called a *factitive* because it denotes an action in which a cause produces a result (Fillmore 1968; Lyons 1977; Crystal 2008: 184). Examples (31c) and (32c) illustrate the causative constructions with the suffix -ya in

<sup>&</sup>lt;sup>16</sup> Grimes (1981: 91) names this suffix as 'completive of change' (*completivo de un proceso de cambio*), while Iturrioz and Gómez (2006) name it 'ingressive' (*ingresivo*).

attributes. In all of them, the animate causer initiates the action, but an intermediate force (not always expressed in the clause) causes the change of state in the undergoer. The intermediate force can be the 'fire' that heats water in (31c) and the 'smoke' produced by a causer that makes the pot black in (32c). Other similar examples with the same morphosyntactic behavior are *xawa* 'hole', *tini* 'get dirty', and *kixauna* 'get thick'.

- (31) a. *miki tai hiki-ti-kai xi-ka-kai waniu*DEM fire/flame COP-DER-IPFV hot-ST-IPFV EVI.IND

  '...the flame was hot...'
  - b. 'echiwa=ri me-'u-ti-xi-re-ku=ri little=already 3PL.SBJ-OS-PL-hot-RES.ICOMPL-DS=already waniu EVI.IND '...they got warm a little...'
  - c. nee haa ne-pu-xi-ri-ya-xi
    1SG water 1SG.SBJ-AS1-hot-RES.COMPL-CAUS-PFV
    'I heated water.'
- (32) a. *pi-yiyiwi*

AS1-RDP.PL.dark.PRS '...they are dark/black...'

- b. *mu-ta-yi-ri-xi* waniu mi hai AS2-SG-dark-RES.COMPL-PFV EVI.IND DEM cloud '...the cloud got black...'
- c. *kitsi xari pi-ta-yixa-ri-ya-xi* smoke pot AS1-SG-black-RES.COMPL-CAUS-PFV 'The smoke made the pot black.'

Numerals can occur with the suffix -ya to introduce a causer, as illustrated with xewi 'one' in (33). The suffix -ya also occurs in constructions without the completive resultative -ri as in (34) and (35). The lack of the resultative in the construction denotes less prominence on the result.

(33) a. *pi-xewi* 

AS1-one.PRS

'It's one.'

b. *ne-'i-ta-xewi-ri-ya-ti* 

 $1 \hbox{SG.SBJ-3} \hbox{SG.OBJ-SG-one-RES.COMPL-CAUS-SS}$ 

"...I take one path (Lit. 'I make it one')...'

(34) a. *papá pu-ti-tai(-ri)* 

tortilla AS1-PL-fire.PFV(-RES.COMPL)

'The tortillas were burned.'

b. me-m-i-ti-tai(-ri)-ya-kai

3PL.SBJ-AS2-3SG.OBJ-PL-fire(-RES.COMPL)-CAUS -IPFV

"...they were burning it [firewood]..."

(35) ta-wewie-kame xeniu tatsi-xeiya tatsi-kixi-ya 1PL-make-NMLZ EVI.IND 1PL.NSBJ-see.PRS 1PL.NSBJ-light-CAUS '...our creator see us, light us...'

The suffix -ya does not attach to the verb if the action was accidental, proving that the suffix is used to introduce a causer. Compare (36a) where the actor causes the action purposely and (36b) where the action occurs accidentally.

- (36) a. *kamixa-te* **ne**-mu-ti-tai-ya-xi shirt-PL 1SG.SBJ-AS2-PL-fire-CAUS-PFV 'I burned the shirts.'
  - b. *ne-mama-tsie ne-mu-tai*1SG-hand-LOC 1SG.SBJ-AS2-fire.PFV
    'I burned my hand [accidentally].'

## 6. The suffix -ri(e)

# 6.1 The applicative function of -ri(e)

Huichol, like other Uto-Aztecan languages, has an applicative suffix *-ri(e)* (Grimes 1964, 1981; Iturrioz 1987; Gómez 1999), reconstructed as \**-li-ya* 

in Proto-Southern Uto-Aztecan (Langacker 1977: 146). An applicative is typically described as a construction signaled by overt verbal morphology, which allows the coding of a semantically peripherial argument or adjunct as a core argument (Mithun 2002; Polinsky 2005; Peterson 2007). The applicative suffix -ri(e) in Huichol is used to introduce a third argument, encoded by non-subject pronouns, generally in verbs of physical transfer (Malchukov et al. 2010). These verbs express a scene in which an agent participant causes an object to pass into the possession of an animate receiver (=recipient), like tui 'to give', ni'a 'to send', etc. The applicative is also used with speech verbs, like xatsi 'to talk', which denote the transfer of some sort of knowledge or information. Example (37a) shows the clause with the verb stem wewie 'to make' which has two arguments, namely artesanía 'handcraft' and ne- '1SG.SBJ'. When the applicative suffix -ri(e) is used, the beneficiary 3PL non-subject pronoun wa-, is attached to the verb stem. It is important to mention that the language has very few inherent ditransitive verbs, like 'iwawiya 'to ask someone' (cf., 'iwau 'to ask') and xatia 'to talk to someone' (cf., xata 'to talk about something') or mi 'to give a gift', but mostly derived ones.

- (37) a. artesanía=ta ne-ti-wewie ne-ti-tua handcraft=FOC 1SG.SBJ-DISTR-make.PRS 1SG.SBJ-DISTR-sell.PRS '...I make handcrafts, I sell...'
  - b. 'ikwai ne-ti- wa-wewi-rie-ti food 1SG.SBJ-DISTR-3PL.NSBJ-make-APPL.COMPL-SS '...I make them food...'

One of the most common types of arguments introduced by the applicative suffix is either a recipient or a beneficiary participant (Grimes 1964; Iturrioz 1987), as illustrated in (38) and (39). The recipient/benefactive participant in (38b) is encoded with the non-subject pronoun *matsi-mes-* '2SG.NSBJ'. When the third participant is not introduced but the prefix *i*- is used, like in (38a), it refers to the theme/object to be transferred. Example (39) illustrates the applicative with the verb *xatsi* 'to talk' where the recipient is encoded with *wa-* '3PL.NSBJ'.

- (38) a. *me-u-ka-'i-tua yu-'etsi-ya hiki* 3PL.SBJ-OS-NEG-3SG.OBJ-give.PRS 3SG.POSS-harvest-NMLZ now '...they do not sell their harvest nowadays...'<sup>17</sup>
  - b. 'iki ne-mes-ta-tui-rie 'iri DEM 1SG.SBJ-2SG.NSBJ-SG-give-APPL.ICOMPL arrow '...I give you this, the arrow...'
- (39) *ne-wa-ka-xatsi-ri* 'echiwa ye-tewi-me 1SG.SBJ-3PL.NSBJ-NR-talk-APPL.COMPL little straight-small-NSBJ '...I talked to you a little [about a story]...'

The applicative suffix also introduces malefactive arguments, participants who are harmed by the action (Grimes 1964; Iturrioz 1987). These arguments are also encoded by non-subject pronouns, as in (40) with *ta-* '1PL.NSBJ', the reduced form of *tatsi-*.

(40) haa ta-ti-kweri-rie-ka ta-kie
water 1PL.NSBJ-PL-take.out-APPL.ICOMPL-DS 1PL-house
ti-mieme
DISTR-from
'...he takes water away from our house...'

Grimes (1964: 96) states that there are three applicative suffixes in the language, namely -rie, -ri and -ya, which are all allomorphs depending on the verb stem. The data shows that there are only two applicatives that differ in aspectual meanings. The form -ri denotes completive aspect, while -rie expresses non-completive aspect. The suffix -ya does not function as an applicative but as a causative, as discussed in §5. Iturrioz (1987: 254) in turn states that the suffix -ri, which he terms 'indirect object', is not an applicative that promotes an argument, since there is no alternative clause that occurs with a noun in the indirect object function and without the suffix. The data, however, show that the suffix is an applicative, since it promotes oblique

<sup>&</sup>lt;sup>17</sup> In the Uto-Aztecan tradition, this phenomenon is considered vowel harmony, which is a common phonological process in the Uto-Aztecan language family (Heath 1977; Press 1980; Beckman 1997; Dakin 2004; Caballero 2008).

arguments to core ones. As with many other languages, Huichol has an alternative oblique realization of the peripherial participant by means of the post-position *-(he)tsie(meme)* 'for', as in (41) and (42).<sup>18</sup>

- (41) a. xeme nawaxa xe-mu-nanai ne-hetsie-mieme

  2PL knife 2PL.SBJ-AS2-buy.PFV 1SG-on/with-from
  'You (PL) bought the knife for me.'
  - b. xeme nawara xe-mu-nats-u-nanai-ri

    2PL knife 2SG.SBJ-AS2-1SG.NSBJ-VIS-buy-APPL.COMPL
    'You bought me the knife.'
- (42) ne-kawaya ne-pu-tua miki 'uki hetsie 1SG-horse 1SG.SBJ-AS1-sell.PFV DEM man on/with 'I sold my horse to the man.'

### 6.2 The causative function of -ri(e)

The applicative suffix -ri(e) adopts a causative function when it introduces a causer instead of promoting an oblique argument into a core one. The verbs that undergo vowel alternation to indicate an inchoative-causative relation (e.g., tari 'to break.INTR' vs. tara 'to break.TR') take the applicative suffix to encode a causative meaning. This phenomenon is another example of what is known as causative/applicative syncretism (Shibatani & Pardeshi 2002: 116) because it refers to the split of functions of one single morpheme based generally on the semantics of the verbs. The applicative suffix is attached to the verbal complex in the inchoative form of the verb in order to introduce the causer. The original actor is encoded as an undergoer with non-subject pronouns, as in (43) and (44).

(43) a. *xari pu-tari-xi* pot AS1-break-PFV 'The pot is broken.'

<sup>&</sup>lt;sup>18</sup> As the reader may have noticed, the language has a resultative suffix *-ri*. Whether this suffix is historically related to the applicative one or not is still unknown.

- b. 'ukiratsi xari pu-tara-xi man pot AS1-break-PFV 'The man broke the pot.'
- c. *mɨkɨ xari mats-u-tari-ri*DEM pot 2SG.NSBJ-VIS-break-APPL.COMPL 'He made you break the pot.' 19
- (44) a. *kustari pu-ta-tsani-xi* sack AS1-SG-tear-PFV 'The sack is torn.'
  - b. xeme xe-p-i-e-ta-tsana-xi kustari 2PL 2PL.SBJ-AS1-3SG.OBJ-EXT-SG-tear-PFV sack 'You (PL) tore the sack.'
  - c. *xeme xe-nes-ta-tsani-ri kustari* 2PL 2PL.SBJ-1SG.NSBJ-SG-tear-APPL.COMPL sack 'You (PL) made me tear the sack.'

The causative function of the applicative suffix is also found in attributives that take the suffix -ya to introduce an actor. This is replaced by -ri(e) when a third argument (i.e., the causer) is introduced into the clause, as in (45).

- (45) a. *nee haa ne-p-i-hauti-ri-ya-xi*1SG water 1SG.SBJ-AS1-3SG.NSBJ-cold-RES.COMPL-CAUS-PFV
  'I cooled the water.'
  - b. 'eki haa 2SG water

pe-nets-u-haiti-ri-ri-xi
2SG.SBJ-1SG.NSBJ-VIS-cold-RES.COMPL-APPL.COMPL-PFV
'You made me cool water.'

<sup>&</sup>lt;sup>19</sup> The form of the verb may be due to vowel harmony. However, the examples suggest that it is the inchoative form because the causee is not doing the action intentionally.

#### 7. Conclusion

In this chapter, I presented Huischol's different valency-increasing suffixes. I identified three causative (-tia, -ta, -ya) and one applicative (-ri(e)) suffixes. Each strategy has different functions that occur in specific conditions, as summarized in Figure 1.

The suffix -tia mainly functions as a causative morpheme that introduces an actor participant in intransitive and transitive constructions, resulting in two or three arguments, respectively. The causative morpheme attaches to verbal roots and roots that describe attributes to encode either direct or indirect causation. The suffix -tia also functions as an applicative morpheme because it introduces beneficiary/recipient arguments instead of actor/causer participants in some contexts. This function is more restricted since it only occurs with verbal roots that denote physical transfer of an object, and nominal roots. The suffix -ta also behaves as a causative morpheme in any verbal root to encode indirect causation. This suffix also creates denominal verbs without a causative function with a restricted set of nouns: nouns that encode daily common activities in the community.

The suffix -ya is a causative that introduces an actor in attributive and nominal roots, which encode an inchoative/causative relation. The causative relation denotes a change of state in an inanimate argument, but performed indirectly by an intermediate force not always expressed in the clause.

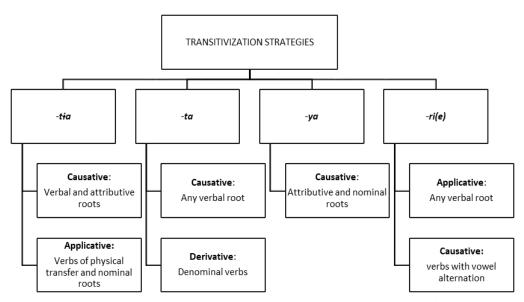


Figure 1. Coded transitivization strategies in Huichol.

The suffix -ri(e) is mainly an applicative morpheme because it introduces a beneficiary/recipient argument in transitive clauses with any verbal root. However, the suffix functions as a *causative* when it attaches to verbs that undergo vowel alternation to encode an inchoative/causative relation. In this construction, the suffix introduces an actor that performs an action to cause a change of state in the undergoer.

As observed, Huichol presents a large number of morphemes to transitivize constructions, particularly in the causative domain. Contrary to typological theories on causative constructions (Haiman 1985; Comrie 1989; Givón 2001), the language presents morphological strategies to encode different degrees of causer's directness of the action and causee's control in the event. In addition, there is functional overlap between the suffixes *-tia* and *-ri* (e) because both suffixes adopt applicative and causative functions, respectively, in restricted contexts.

It is likely that the primary functions of the causative and applicative suffixes -tia and -ri(e), respectively, were first developed from the Proto-Uto-Aztecan suffixes \*-tu-(y)a and \*li-ya (Langacker 1977: 144-46). The secondary functions of the suffixes and the suffixes -ta and -ya may have been developed in a later stage, as the restricted contexts signal. In fact, the suffix -ya is reconstructed as a transitivizing morpheme (Langacker 1977: 144),

which explains its behavior in the synchronic stage. In the current stage of the language, the suffix -ya only attaches to attributive and nominal roots. Finally, the suffix -ta is reconstructed as the derivational morpheme \*-tu 'become' or \*-ta 'make' (Langacker 1977: 45). The formal similarity of the suffix -ta to the suffix -tia, and the need to express different semantic nuances in the causative event may have triggered the development of a semantic extension to the causative domain.

In general, it is likely that the language developed this number of morphemes, particularly in the causative function, due to its polysynthetic nature. Huichol rarely uses syntactic patterns to express any domain or semantic nuances, as all the information is encoded in the verbal complex. Both, the language's need of expressing different semantic nuances and its polysynthetic characteristics led to the development of different morphological strategies for two different domains, the causative and the applicative, which overlap in some functions in restricted contexts.

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