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## The rise of cause/reason adverbial markers in Yaqui (Uto-Aztecan)

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This paper deals with three different connectives (*betchi'ibo*, *bwe'ituk*, *po(r)ke*) in Yaqui, which are used to introduce a clause that provides the cause/reason for which the situation denoted in the associated clause is carried out. The goal of this paper is to describe the morphosyntactic diversity present in Yaqui cause/reason adverbial clauses and to explain this diversity considering the evolutionary paths that have originated the three different cause/reason markers in Yaqui. These three markers are associated with three different sources: *betchi'ibo* originates from a postpositional marker that extended its use from noun phrases to clausal constituents; *bwe'ituk* comes from discourse via the recruitment of a discourse marker of discontinuity (the discourse marker *bwe*); and *po(r)ke* arises from language contact with Spanish.

**Keywords:** cause/reason adverbial clauses, discourse marker, postposition, switch-reference system, syntactic calque

### 1. Introduction

This study is concerned with three different forms (*betchi'ibo*, *bwe'ituk*, *po(r)ke*) in Yaqui (Uto-Aztecan), which are used to introduce a clause that provides the cause/reason<sup>1</sup> for which the situation denoted in the associated clause is carried out. Interestingly, the three causal adverbial clauses marked by these three different markers exhibit different internal structures, in particular regarding the coding of

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1. A difference is often made between cause and reason, according to whether the situation denoted in the main clause is carried out intentionally (the situation denoted in the adverbial clause is thus a reason to act) or not intentionally (the situation denoted in the adverbial clause is thus a cause) (Vester 1983: 45; Luraghi 1989: 295; Givón 2001: 335). However, since Yaqui does not make a morphosyntactic distinction between cause and reason, I have conflated both under the label cause/reason.

the subject of the adverbial clause and the position of the causal marker. The goal of this paper is thus to describe the morphosyntactic diversity present in Yaqui cause/reason adverbial clauses and to explain this diversity considering the evolutionary paths that have given rise to the three different cause/reason markers in Yaqui. It will be proposed that these three markers are associated with three different sources: (i) The marker *betchi'ibo* is originated from a postpositional marker that extended its use from noun phrases to clausal constituents. (ii) The marker *bwe'ituk* is originated from discourse, via the recruitment of a discourse marker (the particle *bwe*). (iii) The marker *po(r)ke* is originated from language contact with Spanish. The paper is thus interested in the genesis of syntactic complexity and the development of clausal integration in the domain of cause/reason adverbial clauses in Yaqui, illustrating three different ways for creating an interclausal connective of cause/reason, and trying to show how the internal structures identified in synchrony are fashioned by the origins of the new adverbial markers and by the diachronic processes derived from these sources. Although this paper is focused on the morphosyntax of causal adverbial clauses in Yaqui, and clearly does not pretend to offer a detailed and plausible semantic/pragmatic account of communicating interclausal causality in Yaqui, it will also be shown that the origin of each causal marker determines in some way the semantic/pragmatic differences between the three markers.

This paper is organized as follows. In Section 2, I provide general information about Yaqui and the data used in this study. Section 3 presents the different cause/reason adverbial clauses that can be used in present-day Yaqui, whereas Section 4 shows the old cause/reason adverbial clauses documented in colonial times. The comparison of these past and present-day constructions reveals that important changes have been introduced in the expression of interclausal causality, in particular the switch-reference system associated with past strategies has been lost and new constructions have been developed with the use of new and more explicit cause/reason adverbial markers. In Section 5, I explore the origin of these new markers as well as the evolutionary paths that have originated the present-day cause/reason adverbial clauses, trying to show how the diachrony of cause/reason adverbial clauses can explain the differences in the internal structures identified in synchrony, specially regarding the coding of the dependent clause subject and the position of the new cause/reason adverbial markers. Lastly, the final remarks insist on the main aspects of the evolution presented in this study.

## 2. Yaqui language

Yaqui is spoken in northwestern Mexico in the state of Sonora by almost 17,000 speakers and in the bordering state of Arizona (USA) by approximately 500.<sup>2</sup> This language belongs to the Taracahitan branch of the Sonoran group within the Southern Uto-Aztecan languages. Table 1 presents the different languages belonging to this sub-part of the Uto-Aztecan family.

**Table 1.** The Southern Uto-Aztecan languages (adapted from Miller 1984)

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Sonoran	
a. Tepiman:	
– Upper Piman:	Tohono O’odham, Akimel O’odham, Nevome
– Lower Piman:	Pima Bajo, Northern Tepehuan, Southern Tepehuan, Tepecano
b. Taracahitan	
– Tarahumaran:	Rarámuri (Tarahumara), Guarijío
– Opatan:	Opata, Eudeve, (Jova?)
– Cahita:	Yaqui, Mayo, Tehueco
c. Tubar:	Tubar
Corachol-Aztecan	
a. Corachol:	Cora, Huichol
b. Aztecan:	
– Pochutec	
– General Aztec (or Nahuatl):	Pipil, Aztec (many varieties)

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As shown in Table 1, Yaqui is part of a sub-group named Cahita<sup>3</sup> that also includes Mayo and Tehueco (nowadays, extinct). Although it is not uncommon to use the term “languages” when referring to Yaqui, Mayo and Tehueco, they are structurally very similar, so it is possible to consider them as three varieties of the same language: the Cahita language, as named in the *Arte de la lengua cahita*, first available description of this linguistic group elaborated around 1630 (Álvarez 2018, see Section 4).

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2. At the beginning of the twentieth century, this community settled in the USA from its original homeland in the south of the neighboring state of Sonora in Mexico, fleeing persecution by the Mexican dictator, Porfirio Díaz.

3. This exonymic glossonym comes from the word *kaita* meaning ‘nothing’.

Yaqui<sup>4</sup> is an agglutinative language with a predominant use of suffixes and postpositions. Its alignment system is nominative-accusative as can be seen from the pronoun system illustrated in Table 2.

Table 2. Pronominal system in Yaqui

	Nominative	Accusative	Possessive
1SG	<i>inepo</i> , = <i>ne</i>	<i>nee</i>	<i>in</i> , <i>nim</i>
2SG	<i>empo</i> , = <i>'e</i>	<i>enchi</i>	<i>em</i>
3SG	<i>aapo</i>	<i>aapo'ik</i> , <i>a=</i>	<i>aapo'ik</i> , <i>a=</i>
1PL	<i>itepo</i> , = <i>te</i>	<i>itom</i>	<i>itom</i>
2PL	<i>eme'e</i> , = <i>'em</i>	<i>enchim</i>	<i>em</i> , <i>enchim</i>
3PL	<i>bempo</i> , = <i>mme</i>	<i>aapo'im</i> , <i>am</i>	<i>bem</i> , <i>bempo'im</i>

Examples (1) and (2) show that the basic order in the transitive construction is SOV. They also show that in noun phrases, the nominative case is unmarked, whereas the accusative case is marked by the suffix *-ta* as in (1), with the exception of plural objects (2), due to the differential object marking existing in Yaqui. Determiners are optional, especially in object position.

- (1) *U yoeme-Ø uka kari-ta jinu-k*  
 DET man-NOM DET.ACC house-ACC buy-PFV  
 'The man bought the house.'
- (2) *U yoeme-Ø u-me kari-m jinu-k*  
 DET man-NOM DET-PL house-PL buy-PFV  
 'The man bought the houses.'

The data for this study are from several sources. Historical data come from the *Arte de la lengua cahita*, a colonial grammar written in the first half of the 17th century by an anonymous Jesuit (probably the priest missionary Tommaso Basilio, Álvarez 2018: 222–224) and edited by Eustaquio Buelna in 1890, and from the letters written by the Yaqui leader Juan Banderas between 1830 and 1832, and published by Dedrick (1985). Synchronic data of Yaqui come from texts included in Silva et al. (1998), Estrada et al. (2004), Buitimea (2007).

4. Johnson (1962), Lindenfeld (1973), and Dedrick and Casad (1999) have proposed general descriptions of Yaqui grammar.

### 3. Cause/reason adverbial clauses in Modern Yaqui

#### 3.1 *betchi'ibo*

One possibility to express a cause/reason adverbial clause in Yaqui is using the form *betchi'ibo*, both for same-subject situations as in (3) and for different-subject situations as in (4).

- (3) *Wikosa-ta ne baajta-k [in ousi jibwa-ka betchi'ibo]*<sup>5</sup>  
 belt-ACC 1SG.NOM loosen-PFV 1SG.POSS a\_lot eat-PFV BECAUSE  
 'I loosened my belt because I ate a lot.'
- (4) *In maala bwaana [in sim-bae betchi'ibo]*  
 1SG.POSS mother cry 1SG.POSS go.SG-DES BECAUSE  
 'My mother is crying because I am going to leave.'

In these examples, we see that the adverbial connective *betchi'ibo* is located in the adverbial clause-final position, on the right side of the adverbial clause. Considering the coding of the arguments in the dependent clause, there is no switch-reference system associated with the use of *betchi'ibo*, in the sense that its presence is not conditioned by the fact that the subject of the adverbial clause is identical or distinct to the subject of the main clause. In both cases, the connective *betchi'ibo* is present. The subject of the adverbial clause is in a possessive form, implying that the clause introduced by *betchi'ibo* is deranked (Stassen 1985), that is, the structure is different to the structure of the main clause, since the subject is not in the nominative form. As for the verb of the adverbial clause, it is finite (marked as perfective in (3) and as desiderative/near future in (4)).

#### 3.2 *bwe'ituk*

Another possibility for expressing cause/reason adverbial clauses in Yaqui implies the use of *bwe'ituk* as exemplified in (5) and (6).

- (5) *Baanu'u-ta te tapunia-bae [bwe'ituk te*  
 water\_bottle-ACC 1PL.NOM fill-DES BECAUSE 1PL.NOM  
*ke'u-bae]*  
 go\_to\_the\_wood-DES  
 'We are going to fill the water bottle because we are going to the wood.'

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5. In the different examples provided in this paper, cause/reason adverbial clauses will be put in brackets.

- (6) *Inepo in yo'owam baisae [bwe'ituk bempo kaba'i-ta*  
 1SG.NOM 1SG.POSS parents thank BECAUSE 3PL.NOM horse-ACC  
*nee miika-k]*  
 1SG.ACC give-PFV  
 'I thank my parents because they gave me a horse.'

Comparing with cause/reason adverbial clauses marked by *betchi'ibo*, we can see that the adverbial connective *bwe'ituk* is located in the adverbial clause-initial position, on the left side of the adverbial clause. As in the case of *betchi'ibo*, there is no switch-reference system associated with the use of *bwe'ituk*, but in this case, the adverbial clause introduced by *bwe'ituk* is balanced (Stassen 1985), that is, the structure is alike to the structure of the main clause: the subject is in the nominative case, the object in the accusative, and the verb is finite and can receive the same Tense-Aspect-Mood marking than with *betchi'ibo* (desiderative/near future in (5), perfective in (6)).

### 3.3 *po(r)ke*

The third possibility for introducing a cause/reason adverbial clause in Yaqui corresponds to the use of *po(r)ke*, as illustrated in (7) and (8).

- (7) *Ne kaita nooka [porke ne lotti-la]*  
 1SG.NOM nothing speak BECAUSE 1SG.NOM get\_tired-RES  
 'I don't say anything because I am tired.'
- (8) *Aapo sii-ka [poke empo a'abo noite-k]*  
 3SG.NOM go.SG-PFV BECAUSE 2SG.NOM here come-PFV  
 'He left because you came.'

We can observe that there is no morphosyntactic differences between cause/reason adverbial clauses introduced by *bwe'ituk* and those introduced by *po(r)ke*. In both cases, the causal connective is in the adverbial clause-initial position, the adverbial clause is balanced, the verb in the dependent clause is a finite verb, and no switch-reference system is present.

## 4. Cause/reason adverbial clauses in Old Cahita

As mentioned above, the earliest known description of the Cahita language is given in the *Arte de la lengua Cahita escrita por un Padre de la Compañía de Jesús*, from the early 17th century. This version was later edited and published in 1890 by Eustaquio Buelna, who acknowledged in his introduction (Buelna 1890: X) that the Cahita

language is represented by three dialect variants: Yaqui, Mayo and Tehueco. The same assumption is made by the own author of the *Arte* in the information provided to the reader (Buelna 1890: 5), where it is said that, in spite of their differences, Yaqui, Mayo and Tehueco can be considered as the same language. I shall refer to it here as Old Cahita.<sup>6</sup>

#### 4.1 Cause/reason adverbial clauses in Old Cahita

Almost all adverbial clauses in Old Cahita exhibited a switch-reference system. From (9) to (14), the constructions provided in Buelna (1890: 72) for illustrating the cause/reason adverbial clauses from Old Cahita are presented.

Same Subject

- (9) *Emchi ne noctehoa, [emchi eria teca]*  
 2SG.ACC 1SG.NOM teach 2SG.ACC love SUB  
 ‘Porque te amo, te enseño’<sup>7</sup>  
 ‘I teach you because I love you’
- (10) *Emchi ne vuiu-c, [emchi eria-c tuca]*  
 2SG.ACC 1SG.NOM quarrel-PFV 2SG.ACC love-PFV SUB  
 ‘Porque te amé, te reñí’  
 ‘I quarreled you because I loved you.’
- (11) *Emchi ne veb-naque, [emchi eria-naque teca]*  
 2SG.ACC 1SG.NOM whip-FUT 2SG.ACC love-FUT SUB  
 ‘Porque te amaré, te azotaré’  
 ‘I shall whip you because I shall love you.’

6. The linguistic forms documented in the *Arte* come from Tehueco but the original author was very careful to point out, all along the *Arte*, the existing differences between Tehueco and the other two Cahita variants. In that respect, Buelna (1890: XI) admits that these differences are very few in number, thus, it is possible to use the linguistic information provided in the *Arte* as comparative data in order to identify the evolution undergone by cause/reason adverbial clauses in Yaqui.

7. In the examples taken from the *Arte*, I have left the original translation into Spanish proposed by the own author of the *Arte*, whereas the morphological segmentation, the gloss and the English translation are mine. The same has been made for the different discursive examples presented below in this paper and that mainly come from narrative texts included in Silva et al. (1998), Estrada et al. (2004) or Buitimea (2007).



## Different subject

- (12) *Tuurisi ne ane, [emchi netz eria ituca]*  
 well 1SG.NOM behave 2SG.ACC 1SG.ACC love SUB  
 ‘Porque me amas, procedo bien’  
 ‘I behave well because you love me.’
- (13) *Buite-ca ne [emchi netz eria-c tuco /tuca]*  
 run away-PFV 1SG.NOM 2SG.ACC 1SG.ACC love-PFV SUB SUB  
 ‘Porque me amaste, me huí’  
 ‘I run away because you loved me.’
- (14) *Tuurisi e a-naque [netz emchi eria-naque ituca]*  
 well 2SG.NOM behave-FUT 1SG.ACC 2SG.ACC love-FUT SUB  
 ‘Porque te he de amar, has de vivir bien’  
 ‘You will behave well because I shall love you’

In all these examples, the cause/reason clause is marked by a particle located in the final position within the adverbial clause and conveying distinctions associated with temporal-aspectual meanings and switch reference:

- *teca* was used when the subject of the main clause and the subject of the adverbial clause co-referred in present (Example 9) and future situations (Example 11)
- *ituca* was also used in present (Example 12) and future situations (Example 14) but in the cases of no co-reference between the subjects of the main clause and of the adverbial clause.
- *tuco* was used when the subject of the adverbial clause was different from the subject of the main clause but only in past situations (Example 13)
- *tuca* was used in co-referential and past situations (Example 10) but it could also be used instead of *tuco*, for no co-referential and past situations (Example 13).

If we compare the cause/reason adverbial clauses illustrated in (9)–(14) from Old Cahita with the cause/reason adverbial clauses of Modern Yaqui exemplified from (3) to (8), we can observe several interesting differences:

- In Old Cahita, there was a system of switch-reference, which does not exist anymore. The marking of the old cause/reason adverbial clauses was different depending on whether the subjects of the adjacent clauses co-referred. As seen above, this distinction is no longer relevant nowadays, since *betchi’ibo*, *bwe’ituk* and *po(r)ke* are used for both same-subject (SS) and different-subjects (DS) situations.
- This old switch-reference system was accompanied by temporal-aspectual distinctions. Different markers were used depending on the tense-aspect situation: for present and future, *teca* (SS) and *ituca* (DS); for past, *tuca* (SS/DS) and *tuco*

(DS). Nowadays, this differential marking of the cause/reason adverbial clause no longer exists as the connectives *betchi'ibo*, *bwe'ituk* and *por(r)ke* can be used for all temporal-aspectual situations. In that respect, it can be observed that the neutralization of the switch reference system was apparently incipient in Old Cahita, since *tuca* could be used in past situations for both SS and DS.<sup>8</sup>

- The old cause/reason adverbial clause exhibited a higher degree of syntactic integration in relation to the main clause. The old cause/reason adverbial clauses were deranked (Stassen 1985), like present-day cause/reason adverbial clauses introduced by *betchi'ibo*, however the coding of the arguments of the adverbial clause was different. Contrary to *betchi'ibo* cause/reason adverbial clauses in which the subject is expressed as possessive in cases of subject coreferentiality (3) and subject non-coreferentiality (4), the old cause/reason adverbial clauses used zero anaphora for same subjects, and accusative marking for different subjects. As for cause/reason adverbial clauses introduced by *bwe'ituk* and *po(r)ke*, the subject of the adverbial clause is in the nominative case (Examples (5), (6), and (7), (8), respectively) for both, same subjects and different subjects.
- The old adverbial connectives (*teca*, *tuca*, *tuco*, *ituca*) were in the adverbial clause-final position, like in the case of present-day cause/reason adverbial clauses introduced by *betchi'ibo* and unlike the adverbial connectives *bwe'ituk* and *po(r)ke*, which are in the adverbial clause-initial position.

#### 4.2 The multifunctionality of *teca* in Old Cahita

The final particle *teca* was not only used to mark cause/reason clauses in Old Cahita. According to the information provided in the *Arte* (Buelna 1890: 66–68), this element was also used to introduce other adverbial clauses, like conditional clauses in (15) and (16), purpose clauses in (17) and (18), and temporal posteriority clauses ('before' clause) in (19), always in same-subject situations.

Conditional clause in Old Cahita (Buelna 1890: 66–68)

- (15) *Emchi-ne hiocori eiai, [emchi eria teca]*  
 2SG.ACC-1SG.NOM help try 2SG.ACC love SUB  
 'Te socorriera, si te amara ó te hubiera amado.'  
 'I would help you, if I loved you'

8. As shown in Álvarez (2009), the neutralization of this switch-reference system corresponds to a generalized process in Yaqui adverbial clauses. Indeed, almost all adverbial clauses in Old Cahita exhibited a switch-reference system, which has been completely neutralized in Modern Yaqui, except for temporal adverbial clauses, in which the switch reference is still observable (*-ka(i)* 'when, same subject', *-(k)o* 'when, different subject'), even though not always in a systematic way (Álvarez 2009; Guerrero 2019).

- (16) [*Ca-ne emchi eria-tec*], *ca emchi mica-na*  
 NEG-1SG.NOM 2SG.ACC love-SUB NEG 2SG.ACC give-OPT  
 ‘Si yo no te amara, no te lo diera’  
 ‘If I didn’t love you, I wouldn’t give it to you’

Purpose clause in Old Cahita (Buelna 1890: 82)

- (17) *uaquim ne iepsa-c [misa-ta bit-naque teca]*  
 here 1SG.NOM arrive-PFV mass-ACC look-FUT SUB  
 ‘He llegado aquí á oír misa’  
 ‘I have arrived here to hear the mass’
- (18) *Teopa-u ne quivaque [Dios-ta eria-naque teca]*  
 church-DIR 1SG.NOM enter God-ACC love-FUT SUB  
 ‘Entro en la Iglesia á amar a Dios’  
 ‘I enter into the church to love God’
- (19) *emchi ne hiocore-c, [quehe emchi eria teca]*  
 2SG.ACC 1SG.NOM help- PFV not\_yet 2SG.ACC love SUB  
 ‘Te socorrí antes de que te amara’  
 ‘I helped you before I loved you’

These adverbial clauses show that *teca* was not an explicit marker of interclausal causality, but a general adverbial clause connective that required contextual information to be activated in order to infer the specific semantic adverbial relation between the two clauses. This marker seems to have been used, in fact, more generally for backgrounding the situation denoted in the dependent clause to the situation expressed in the main clause, and for linking both clause situations in terms of sequentiality. If the adverbial clause marked by *teca* was not expressing a future situation, the dependent clause situation was then anterior to the main clause situation (before,<sup>9</sup> cause/reason and conditional interpretations). If this adverbial clause was marked by the future marker *-naque*, the dependent clause situation was posterior to the main clause situation (purpose interpretation) in the absence of temporal co-referentiality between both clause situations (that is, there is no future marking in the main clause, as in (17) and (18)) or anterior to the main clause situation (cause/reason interpretation) in the case of temporal co-referentiality between both clause situations, (both the main clause and the adverbial clause exhibit the future suffix as in (11) and (14)).

9. In the case of ‘before’ adverbial clauses, the dependent clause situation is posterior to the main clause situation but this temporal interpretation of posteriority is explicitly expressed by the temporal adverbial marker *quehe* ‘not yet’ located in the initial position within the adverbial clause in (19). The presence of this temporal adverb indicates that the use of *teca* by itself implies the anteriority of the dependent clause situation, which is, in this case, canceled and changed to posteriority by means of *quehe*.

This sequentiality may be then literally interpreted as temporal but also metonymically as causal, conditional or purposive, based on the idea that causes/reasons and conditions are usually anterior to their consequences, and that purposes are prospective consequences, posterior to the main event (Croft 1991). As pointed out by Heine and Kuteva (2002: 291), the grammaticalization from TEMPORAL to CAUSAL and from TEMPORAL to CONDITIONAL are instances of a “widespread process whereby spatial and temporal markers are grammaticalized in specific contexts to markers of “logical” grammatical relations such as adversative, causal, concern, concessive, and conditional relations.” Kortmann (2001) has also shown that temporal relations represent the most common source domain for cause, condition and purpose adverbial connectives. Moreover, the syncretism between temporal, causal, conditional and purposive meanings is also explained because conditions may be conceptualized as hypothetical causes/reasons that would chronologically precede the main event, whereas purposes may be conceptualized as prospective causes/reasons that would chronologically follow the main event.

The multifunctionality of the connective *teca* shows a semantic under-specification and concomitant context-driven interpretations, that is, the activation of pragmatic inferences in order to correctly interpret the corresponding meaning of the adverbial clause from the context. This need for pragmatic enrichment from context illustrates a kind of hidden complexity, that is, a complexity created by economy and represented by a language structure that (i) does not force the speaker to overtly express grammatical categories that are part of its grammatical inventory (lack of obligatory categories) and (ii) has multifunctional markers whose concrete meaning must be inferred from context (Bisang 2009, 2014).

Another fact that is interesting to note is the possibility illustrated in (16) to have the adverbial clause before the main clause, something very common cross-linguistically for conditional clauses (Ford & Thompson 1986; Diessel 1996; Diessel 2001) and that is iconically motivated since conditions are anterior to their consequences. In this case, we can observe that the adverbial marker *teca* seems to be more integrated with the dependent verb (if we consider the transcription used in the *Arte*)<sup>10</sup> and, more importantly, its final vowel *a* is elided, something that is very pervasive in Old and Modern Cahita where the final vowels of bi-syllabic morphemes are lost if not in final position of the sentence.

Additionally, all these adverbial clauses marked by *teca* confirm two features that have been mentioned above in the description of the cause/reason adverbial

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10. Nowadays in Yaqui, the suffix *-tek(o)* is used to mark conditional adverbial clauses and it is clearly a bound morpheme attached to the dependent verb. The same can be said for another temporal adverbial clause marker of Modern Yaqui, the perfect participial suffix *-taka(i)* (or ‘anterior converb’ marker, following the terminology proposed by Haspelmath 1995).

clauses in Old Cahita: (i) *teca* was apparently only used as a same-subject adverbial connective since the subject of the adverbial clause is always the same subject than the subject of the main clause, (ii) *teca* was apparently incompatible with past adverbial clauses, since all *teca* examples shows present and future adverbial clauses (recall that in past cause/reason adverbial clauses as in (10) and (13) the particle changes to *tuca*).

Based on these features and on the fact that the last relics of the old switch-reference system are found nowadays in the temporal adverbial marking (*-ka(i)* ‘when, same subject’ vs *-(k)o* ‘when, different subject’ (see footnote 8), in Álvarez (2009) I have proposed that the markers of cause/reason adverbial clauses in Old Yaqui are probably resulting from a bimorphemic combination in which, originally, suffixes *-te* and *-tu* were associated with the temporal marking present in the two clauses being connected (*-te* ‘non-past’ vs. *-tu* ‘past’), and suffixes *-ko* and *-ka* were temporal markers of switch reference (*-ko* ‘when, different subject’ vs. *-ka* ‘when, same subject’), that is, dependent clause markers used for indicating referential coherence between the situation denoted by the main clause, and the dependent clause situation, which is temporally related to the main situation. This marking system of clausal dependency would thus combine a marker of temporal (co)-referentiality between the situations denoted by the clauses being connected (*-te*, *-tu*) and a marker of participant (co)-referentiality between the subjects of these clauses (*-ko*, *-ka*). As we can see above from the examples of old cause/reason adverbial clauses (from (9) to (14)), these distinctions between *-te* and *-tu* on one hand, and between *-ko* and *-ka* on the other hand, were already becoming blurred in the cause/reason adverbial clause of Old Cahita, even though the switch-reference system was still in place.

The combination of those markers was thus used for backgrounding the dependent clause situation to the main clause situation, and for linking both clause situations in terms of consecutiveness, sequentiality. The activation of pragmatic inferences from context was needed for the interpretation of the specific meaning relation (temporality, causality, conditionality, purpose) between the two situations.

In sum, the comparison between the past strategies used in Cahita for cause/reason adverbial clauses and the present-day strategies identified in Yaqui reveals that the switch-reference system has been lost and that new markers have been originated for the more explicit expression of interclausal causality. The internal structures of the old and present-day adverbial clauses are not the same, and, as it will be seen in the next sections, the differences are clearly related to the origins of these constructions.

## 5. The origin of cause/reason adverbial markers in Yaqui

### 5.1 The origin of *po(r)ke*

In her study of Yaqui syntax, Lindenfeld (1973: 84) only identifies for introducing causal adverbial clauses the uses of *bwe'ituk* and of *po(r)ke*. She reports that *po(r)ke* is borrowed from Spanish, in which the form *porke* (written as *porque*) is used as causal adverbial clause marker, as illustrated in (20) for same subject and (21) for different subject.

- (20) *Estoy contento [porque estoy de vacaciones]*  
 I.am happy because I.am PREP holidays  
 'I am happy because I am on vacation.'
- (21) *Estoy contento [porque ya no estás enfermo]*  
 I.am happy because already NEG you.are sick  
 'I am happy because you are no longer sick.'

Lindenfeld (1973: 84) also pointed out that this Spanish-borrowed syntactic connective is clearly the strategy most commonly used for rendering a causal subordination, contrary to the native Yaqui adverbial marker *bwe'ituk*, which is rarely used according to her. However, it should be highlighted that in fact nowadays the presence of *bwe'ituk* in oral and written narratives seems to be frequent (Buitimea 2007), and *po(r)ke* is virtually non-present in those cases. In conversations and more informal speaking situations, however, the use of *po(r)ke* is real, although *bwe'ituk* is also very frequent in these cases.

This situation is clearly explained by the fact that the influence of language contact is more present in conversations than in narratives. Several studies have suggested that, in intense language contact situations, conversations are a frequent locus for code switching (Pfaff 1982; Brody 1987, 1995; Myers-Scotton 1993), which may serve as a trigger for borrowing (Myers-Scotton 1993; Torres 2002).

As for the morphosyntactic features of the Yaqui cause/reason adverbial clauses introduced by *po(r)ke*, the same features present in the Spanish cause/reason adverbial clauses in (20) and (21) are found: *po(r)ke* is used in the adverbial clause-initial position, the adverbial clause is balanced, the verb in the dependent clause is a finite verb, and no switch-reference system is present. This seems to exemplify a case of syntactic copy, in which the syntactic element that is borrowed, is accompanied by the morphosyntactic features of the source construction, including the position of the adverbial connector, the coding of the arguments of the adverbial clause, and the finiteness of the dependent verb.

## 5.2 The origin and evolution of *betchi'ibo* in Yaqui

The story of *betchi'ibo* is much longer than that of *po(r)ke*, and shows an interesting syncretism (Álvarez 2015). Indeed, besides its use as a cause/reason adverbial marker, other uses of *betchi'ibo* are present nowadays in Yaqui. It can also be used: (i) as a postposition associated with different semantic roles (cause, purpose and beneficiary/maleficiary) and (ii) as a purposive adverbial marker.

### 5.2.1 Other uses of *betchi'ibo* in Yaqui

#### 5.2.1.1 Benefactive/malefactive postposition

The most common postpositional use of *betchi'ibo* corresponds to the benefactive/malefactive, in which the oblique complement introduced by the postposition is marked as accusative (suffix *-ta* in (22)), except if this postpositional object is plural (23) since the accusative suffix does not appear with plural nouns, as mentioned in Section 2.

- (22) *Jiak jitoa-ta te Potam-po jinu-bae [Peo-ta betchi'ibo]*  
 Yaqui medication-ACC 1PL.NOM Potam-LOC buy-DES Pedro-ACC POSP  
 'We are going to buy Yaqui medication in Potam for Pedro'
- (23) *María posoim [yoeme-m betchi'ibo] ya'a-bae*  
 María pozole man-PL POSP do-DES  
 'María is going to do *pozole*<sup>11</sup> for the men.'

With pronominal objects, the forms do not correspond to accusative, since Yaqui has a special pronominal paradigm for postpositional phrases, as illustrated in (24).<sup>12</sup>

- (24) *¿Jitása empo [ae betchi'ibo] yeu pu'a-la?*  
 What 2SG.NOM 3SG.OBL POSP for\_outward collect-RES  
 ¿What have you chosen for him?

The animate noun functioning as the postpositional object can have a malefactive meaning, if the main predicate implies a negative effect, as in (25).

- (25) *[Chikul-im betchi'ibo] ne jogo-ta jinu-k*  
 rat-PL POSP 1SG.NOM poison-ACC buy-PFV  
 'I bought poison for the rats'

11. Pozole is a traditional Mexican soup.

12. The present-day paradigm for pronominal objects of postpositions is as follows: *ne/nee* '1SG', *ee* '2SG', *aa/ae* '3SG', *ito* '1PL', *emo* '2PL', *ame* '3PL'.

As seen in these examples, the benefactive/malefactive meaning of *betchi'ibo* is associated with active main predicates and animate postpositional objects.

### 5.2.1.2 Causal postposition

The element *betchi'ibo* can also be used to introduce a causal complement. In this case, the noun phrase that is object of the postposition, denotes the cause/reason why the situation denoted by the predicate is carried out. The coding of the causal postpositional objects is the same marking (accusative suffix *-ta* only with singular noun postpositional objects) than with the benefactive/malefactive postpositional objects, as can be observed in (26) and (27).

- (26) [Em kujteer-im *betchi'ibo*] e kòðkoi weche-k  
 2PL.POSS anger-PL POSP 2SG.NOM sick fall-*PFV*  
 'You got ill because of your angers.'
- (27) *Maria sioka* [ili yoem-ta *betchi'ibo*]  
 María be\_sad little man-ACC POSP  
 'María is sad because of a young man.'

As seen in these examples, the causal meaning of *betchi'ibo* is obvious with inactive predicates, since the lack of agentivity blocks the benefactive/malefactive interpretation.

### 5.2.1.3 Purposive postposition

Besides its postpositional uses as benefactive/malefactive and cause, *betchi'ibo* are also found nowadays for introducing an oblique complement of purpose. Again, the coding of the postpositional object remains the same, as can be seen in (28) with a singular object (suffix *-ta*) and in (29) with a plural object (no accusative suffix).

- (28) *Manto saawa koba meje-ku* oðre-wa [taiwechia-ta *betchi'ibo*]  
 manto<sup>13</sup> leaf head forehead-LOC put-PASS fever-ACC POSP  
 'The *manto* leaf is applied to the forehead for fever.'
- (29) *Chikul aaki-ta nuuse* [naka wantiam *betchi'ibo*]  
 mouse pitaya-ACC take.IMP ear pain.PL POSP  
 'Take the *pitaya*<sup>14</sup> for earache!'

As seen in these examples, the purposive meaning is associated with intentional active predicates and inanimate postpositional objects.

13. The scientific name of *manto* is *ipomoea carnea* subsp. *fistulosa*, which corresponds to a species of morning glory.

14. The scientific name of this *pitaya* is *mammillaria microcarpa*, which is a very common fish-hook cactus in Sonora (Mexico).



#### 5.2.1.4 Purposive adverbial marker

Besides its use as causal subordinator illustrated in (3) and (4), the element *betchi'ibo* can also be used as an adverbial subordinator associated with the notion of purpose. In (30) and (31), the dependent clause is a purposive adverbial clause, which denotes a situation that is presented as the aim for which the action denoted in the main clause takes place. In (30), the subject of the main clause is the same as the subject of the adverbial clause and this case of co-referentiality between both clauses implies zero anaphora (the subject of the dependent clause is not expressed), whereas the subjects are different in (31), and in this case, the subject of the dependent clause is coded as accusative.

(30) *Tomi-ta ne bu'uria [wakas-im jinu betchi'ibo]*  
 money-ACC 1SG.NOM accumulate cow-PL buy SUB  
 'I am saving money in order to buy cows'

(31) *Maria in bwa'am-po joyo-ta ya'a-k [nee koðkoi  
 María 1SG.POSS food-LOC poison-ACC do-PFV 1SG.ACC sick  
 wet-ne betchi'ibo]*  
 fall-FUT SUB  
 'María poisoned my meal for me to get ill.'

Regarding the finiteness of the dependent verb, the only verbal marker that it seems possible to attach to it, is the suffix *-ne* 'future', although it is optional and it tends to appear more often in cases of different-subject situations, as can be seen if (30) and (31) are compared.

In Álvarez (2015), I have analyzed the wide syncretism of *betchi'ibo* from both a synchronic and a diachronic point of view. I have proposed that in synchrony, *betchi'ibo* is used to introduce the motive why the situation denoted by the main predicate happens. This motive can be a cause, a reason, a beneficiary, a maleficiary, a purpose, depending on the type of main predicate and the type of postpositional object.<sup>15</sup> In diachrony, I have defended the idea that the case syncretism in Yaqui is better explained by the evolutionary path CAUSE > BENEFICIARY > PURPOSE,<sup>16</sup> and that the adverbial functions are the result of the extension of the postposition from nominal to clausal complements. In the following sections, I focus on the origin of *betchi'ibo* and on the rise of the cause/reason adverbial meaning.

15. Additionally, *betchi'ibo* has also developed a temporal goal meaning when the object of the postposition is a temporal adverb. This use corresponds to a new extension from the purposive use (Álvarez 2015).

16. Luraghi (2001, 2005a, 2005b) has proposed two different paths for explaining the case syncretism between cause, beneficiary and purpose: CAUSE > BENEFICIARY > PURPOSE, and BENEFICIARY > PURPOSE > CAUSE. I refer the reader to Álvarez (2015) for a presentation of all the arguments considered in support of the CAUSE > BENEFICIARY > PURPOSE path for Yaqui.

### 5.2.2 *Postpositional and spatial origins of betchi'ibo*

Yaqui presents two types of postpositions: free and bound. As Dedrick and Casad (1999: 173, 193) have pointed out, many Yaqui free postpositions are complex and exhibit as first element a form *be-*, such as in (32).

- (32) *bepa* 'over, above'  
*betuk(u)* 'under, beneath'  
*betana* 'from, at one side of'  
*bewichi* 'alongside of, at the same time'  
*bená* 'like'

This form *be-* comes from a third person singular pronoun reconstructed in Proto-Uto-Aztecan as *\*pi*, which is part of a pronoun copy construction (Langacker 1977). This syntactic type illustrated in (33) has been reconstructed for the syntax of postpositions in PUA.

- (33) COMPLEMENT-ABS 3.PRON-POSP

Some of the *be-*postpositions in Yaqui are no longer segmentable synchronically, even though they are clearly complex. In the case of *betchi'ibo*, it is still possible to identify the elements involved in its formation. Besides the *be-* form, two bound postpositions are involved: the locative postposition *-(e)tchi* 'on, in', and the ablative postposition *-bo* 'from'. Both bound postpositions are exemplified in (34) and (35), respectively.

- (34) *Baawe mayoa-tchi*<sup>17</sup> *kooyo-m si bu'u*  
 sea side-LOC shell-PL a\_lot too\_much  
 'At the seaside, there are many shells.'
- (35) *Jaku'u-bo=sa empo wee*  
 where-from-INTERR 2SG.NOM come  
 'Where do you come from?'

The origin of *betchi'ibo* is thus associated with spatial meanings in which the movement from a source/origin (the form *-bo*) is combined with a static location (the form *-(e)tchi*), resulting in a complex postposition associating directionality and stativity.

17. Nowadays, the reduced form *-(e)t* is more frequently used in order to express this locative meaning, especially if any linguistic element is following the postposition, something that was already frequent in the 17th century (Buelna 1890: 100)

### 5.2.3 *The uses of betchi'ibo in Old Cahita*

The only uses documented for *betchi'ibo* in the *Arte* (Buelna 1890) are the causal and benefactive postpositional uses, as illustrated in (36) and (37), respectively.

- (36) [*emo* / *emo-t*                    *vetzivo*] *ne*                    *vebi-ua-c*  
 2SG.OBL/2SG.OBL-LOC POSP    1SG.NOM whip-PASS-PFV  
 'Por ti, me azotaron.'  
 'For you, I was whipped.'  
 Buelna (1890: 107)

- (37) *Dios i-ca*    *aniua-ta*    [*ito-t*                    *vetzivo*] *a-ieua-c*  
 God this-ACC world-ACC 2PL.OBL-LOC POSP    3SG.ACC-create-PFV  
 'Dios crió todo este mundo por nosotros ó para nosotros'  
 'God created this world for us.'  
 Buelna (1890: 107)

According to the information provided in Buelna (1890: 107), this postposition was used to introduce a causal or a benefactive complement, expressed in the Spanish translation by *por* (cause) and *para* (benefactive) and the equivalent form in Latin was *propter*.<sup>18</sup> Interestingly, the object of this postposition was differentially marked when taking a pronominal form. In this case, the postposition could be combined directly to the oblique pronoun, or attached to the locative *-t(zi)*,<sup>19</sup> as can be observed in (36). This differential marking was probably present at the origin of the distinction between cause and benefactive meanings. The cause interpretation could have been triggered by the oblique pronoun, and the benefactive by the oblique pronoun suffixed by the locative *-t(zi)*, if we consider that the locative marker 'on, in' can be interpreted as benefactive via a metaphor based on the idea that the beneficiary is the locus of the action, and the benefit can be identified *on/in* him/her. Additionally, the ablative form *-bo* 'from' in *betchi'ibo* can easily be associated with the causal meaning via another metaphor, which is widely attested in world's languages: "causes are origins" (Lakoff & Johnson 1980). A cause can thus be conceptualized as the source of an event or situation.

The presence of both a locative and an ablative marker in the etymology of *betchi'ibo* could be implying that both cause and benefactive interpretations were

18. The author of the *Arte* states about *vetzivo*: "significa lo mismo que por ó para" ('it means the same than *por* or *para*, "corresponde al *propter*" ('it corresponds to *propter*) (Buelna 1890: 107). It is worth noting that according to Luraghi (2005b), the preposition *propter* in Latin had a locative source ('next to') and evolved first as a causal preposition and, as for Vulgar Latin, developed into a benefactive and purposive preposition. A similar evolution is proposed for *betchi'ibo* in Álvarez (2015).

19. The author of the *Arte* states: "se junta á los ablativos de los pronombres, unas veces inmediatamente, otras mediante el *tzi*, con nombres rige acusativo" (Buelna 1890: 107). The ablative forms mentioned in the *Arte* correspond to oblique pronouns, which were in the period of the *Arte* *ino* '1SG', *emo* '2SG', *aie* '3SG', *ito* '1PL', *emo* '2PL', *ame* '3PL'.

simultaneously active at the very origin. However, some arguments can also be proposed in favor of the CAUSE > BENEFICIARY path.

- The notion of benefit implies the notion of cause, in the sense that when one acts for someone's benefit, the beneficiary becomes the reason why one acts. The beneficiary can thus be viewed as a reason to act. On the contrary, not all-human causes can be considered as a beneficiary. The notion of cause is thus more basic than the notion of beneficiary, and it would be expected that the latter derives from the former.
- Causes can be animate and inanimate, whereas beneficiaries are prototypically animate, most often human. Examples of *betchi'ibo* in the *Arte* always show a human postpositional object. When the main predicate is active like in (37), both causal and benefactive interpretations are possible (this possibility is indicated by the uses of *por* and *para*<sup>20</sup> in the Spanish translation), and when the predicate is inactive like the passivized predicate in (36), only the causal interpretation is possible. This shows that the general meaning of *betchi'ibo* was causal, and that the benefactive meaning is restricted to a certain type of predicate.
- The purposive meaning is commonly derived from the benefactive meaning via an extension of use from animate to inanimate objects (Luraghi 2005a). Recall that the purposive uses of *betchi'ibo* are not mentioned in the *Arte*, in which only human postpositional objects are exemplified. In that regard, the Catechism accompanying the *Arte* in Buelna (1890) contains an interesting use of *betchi'ibo*. Combined with the inanimate indefinite pronoun *jita* 'something', it is used as a causal interrogative pronoun (38), suggesting that the causal meaning is prior to the purposive meaning, and probably also prior to the benefactive.

- (38) *Hita vechivo tua iorem-tu-c itom iautzia Jesu-Cristo?*  
 Something POSP truly man-VBZ-PFV 1PL.POSS father Jesus Christ  
 ¿Por qué se hizo hombre el Hijo de Dios? (Buelna 1890: 242)  
 'Why did our Father Jesus Christ become man?'

Interestingly, nowadays, *jita betchi'ibo* is used as a purpose interrogative marker 'for what?', and the most common cause interrogative marker is *jaisaakai* 'why?'.  
 \_\_\_\_\_

20. According to Corominas (1954), the difference between *por* denoting the cause and *para* denoting the beneficiary and the purpose took place in Modern Spanish, since in Medieval Spanish the preposition *por* could express the three semantic roles. The preposition *para* came out in Spanish after the Middle Age, created out of *por a*. The benefactive/purpose preposition in Spanish is thus the result of the combination of cause and goal, since the form *a* can be associated in Spanish with the spatial domain (directional).

Independently of the simultaneity or directionality at the origin of the cause/beneficiary syncretism, what we know, based on the information contained in the *Arte*, is that *betchi'ibo* was only a postposition, that is, a syntactic element that combines with (pro)nominal, not with clauses.

#### 5.2.4 *The rise to causal adverbial marker*

The evolution from causal postposition to causal adverbial marker is may be a recent development, since the use of *betchi'ibo* as causal adverbial marker is documented neither in Johnson (1962), nor in Lindenfeld (1973). Another option is that this use existed but was not identified because it is not frequent since it seems to be restricted to introducing a negative cause/reason, that is, the motive explaining the affectedness expressed in the main clause. See (3), (4), and (39), (40).

- (39) [In        *techoe*            *tenku-ka*    *betchi'ibo*] *bea ne*  
 1SG.POSS badly\_presage dream-PFV BECAUSE then 1SG.NOM  
*kaá-bae-ka juni ne omot tekia-po kibake-k*  
 NEG-DES-PFV although 1SG.NOM apart\_from position-LOC enter-PFV  
 ‘Por el sueño de mal agüero que tuve, no me quedó más que tomar otro cargo.’  
 ‘Because of the ominous dream I had, the only thing left for me was to take another job’

- (40) *Ian e ne-mak wee-ne kajtikaroa-ri-po benasia [em*  
 now 2SG.NOM 1SG.ACC-COM go-FUT punish-RES-LOC like 2SG.POSS  
*neé baitatta'a betchi'ibo]*  
 1SG.ACC cheat BECAUSE  
 ‘Ahora te irás conmigo como castigo por estarme engañando.’  
 ‘Now you will come with me because you are cheating me.’

If we compare these examples with (26) and (27), it is clear that the same interpretation of negative cause/reason is present in the use of *betchi'ibo* as causal postposition, indicating that the adverbial use comes from the postpositional use via the extension of contexts of use from nominal to clausal complements. This extension results in a hybrid construction exhibiting nominal and clausal features. As a nominal complement, the subject of the adverbial clause is coded as a possessor, which is a clear signal of nominalization (Givón 2001: 25). As a clause, the verb of the adverbial clause is finite and the object is in accusative. The nominalization involved in this construction is a clear indication of its postpositional origin. Indeed, it can be proposed that the causal postposition has been recruited in order to introduce a causal clause, thus imposing the possessive marker to the dependent subjects as an inheritance of the postpositional use in which the object is a noun phrase. As Lehmann (1986) has pointed out, the degrees of clausal interconnectivity correspond to a continuum of desententialization going from the clause prototype to the

noun prototype. The possessive marking thus shows that the new causal interconnectivity marking is accompanied by a process in which the clause adjusts to the noun in some way (Lehmann 1986). Additionally, we can see that the possessive marking, the clause-final position of the adverbial marker, and the semantic preference for a negative cause/reason usage of *betchi'ibo* as causal adverbial marker, are thus all features of its original use as causal postposition.

### 5.3 The origin of *bwe'ituk* in Yaqui

In Álvarez (2019), I have proposed that the causal adverbial marker *bwe'ituk* 'because' is the result of a recent formation process that combines a conversational marker *bwe* and a linguistic element associated with the strategy used in the past for marking cause/reason clauses (*ituca*, see (12) and (14)).<sup>21</sup> This formation is functionally motivated by the fact that *bwe* is mainly used as a discourse connective that introduces a new topic. Based on this connecting function, the element *bwe* has been recruited from discourse to syntax, in order to participate in the creation of a new interclausal connective that also correspond to a thematic reorientation device: the cause/reason adverbial marker *bwe'ituk*.

#### 5.3.1 *The bwe'ituk formation*

In the light of the past strategies used for cause/reason clauses in Old Cahita illustrated from (9) to (14), it can be proposed that *bwe'ituk* corresponds to the combination of a monosyllabic element *bwe-* and a form that can be easily related to the old strategies. This formation hypothesis is then as follows:

- (41) Formation hypothesis for the current cause/reason adverbial connective:

$$bwe'ituk < bwe + ituc(a)$$

The proposal in (41) implies two main syntactic rearrangements in the expression of the new cause/reason adverbial clause: (i) the change of the adverbial marker position from dependent clause final position (*ituca*) to dependent clause initial position (*bwe'ituk*), (ii) the change in the subject marking of the dependent clause from zero (SS) or accusative (DS) marking to nominative marking, with the concomitant loss of the old switch-reference system. This formation also implies the apocope of the vowel *a* from the old final particle *ituca*. This vowel elision, which has already been illustrated in Old Cahita with the Example (16), is still a very

21. In Álvarez (2019) I have shown that, besides the creation of the causal connective *bwe'ituk* 'because', the discourse marker *bwe* has also been recruited in Yaqui for the creation of another interclausal connective of discontinuity: the adversative connective *bweta* 'but'.

frequent phenomenon in Yaqui when suffixed words are in positions others than the final position.

### 5.3.2 *The discourse marker bwe*

No information about old uses of discourse markers or interjections in Old Cahita is given in the *Arte*. As for today, the bilingual Yaqui-Spanish dictionary published by Estrada et al. (2004) registers several discourse markers. One of them is the particle *bwe*, whose lexical entry is given in (42a). From this information, it appears that *bwe* presents several discourse functions (if we consider the different equivalents given in Spanish), and coexists with a longer form, *abwe*.<sup>22</sup> According to the information provided in the lexical entry corresponding to *abwe* in (42b), it is a conversational marker used in initial position.

- (42) a. **bwe part.** ¡ah!, ¡a poco!, ¡bueno!, ¡este!, ¡pues! Cf. **abwe**.  
**bwe part.** ah!, oh really!, well!, er! um! Cf. **abwe**. Estrada et al. (2004: 73)
- b. **abwe part.** Partícula que se utiliza al inicio de una conversación. Equivale en español a: ‘a poco’, ‘bueno’, ‘este’, ‘pues’. Cf. **bwe**.

Estrada et al. (2004: 49)

#### 5.3.2.1 *The origin of bwe*

Regarding the origin of *bwe*, it seems to be plausible and tempting to consider that the discourse marker *bwe* comes from Spanish *pues* (this Spanish discourse marker is often proposed as an equivalent in the translations into Spanish) and *abwe* could be a loan from *ah pues*. Indeed, as mentioned above for the case of *po(r)ke*, several studies suggest that, in intense language contact situations, the borrowing of discourse markers is quite common because discourse markers are a frequent locus for code switching (Pfaff 1982; Brody 1987; Myers-Scotton 1993), which may serve as a trigger for borrowing (Myers-Scotton 1993, Torres 2002). However, in his brief study *Los elementos de la lengua cahita*, Lionnet (1977: 50) proposes that *bwe* corresponds to an old imperative form of the verb ‘look’ (the long form *abwe* could be then the result of the *a*- “3SG.ACC” pronominal prefixation, rendering the meaning ‘look at it/him/her’). This possibility is interesting since, if true, this verbal origin would imply that the evolution presented here is not only from discourse to syntax but also from syntax to discourse in a first stage: IMPERATIVE VERB > DISCOURSE MARKER > INTERCLAUSAL MARKER. Unfortunately, there is no trace of a contemporary verb form *bwe* meaning ‘look’ or ‘see’ (the two current visual perception verbs in Yaqui are *bicha* ‘see’ and *bichu* ‘look at’), no attestation of this

22. Both forms of this discourse marker seem to be equivalent. My Yaqui informants consider them perfectly interchangeable, although the short form *bwe* is much more frequent in discourse.

verb in the *Arte*, and no evidence of this old imperative use. Unfortunately again, Lionnet (1977) does not provide any evidence or argument when proposing this verbal origin. Despite this, although the Spanish origin of *bwe/abwe* is very possible and this external source is tempting, an internal source cannot be totally excluded for now.<sup>23</sup>

### 5.3.2.2 *The discursive functions of the particle bwe*

The importance of discourse contexts for explaining the evolutionary paths implied in many grammaticalization processes has been largely pointed out, not only in a general way (see, for instance, the discourse-based model of grammaticalization proposed by Waltereit and Detges (2007)) but also more specifically like for example in the domain of interclausal connectivity. In that respect, Givón (2009) insists on the fact that the genesis of clausal conjunctions is constrained by the discourse context that frames its emergence. Therefore, it is important to examine the different discourse contexts in which the element *bwe* may appear in Yaqui discourse, in order to understand the motivations and the constraints implied in the diachronic rise of the interclausal marker *bwe'ituk*.

In Yaqui texts, the particle *bwe* only appears in reported direct speech, that is, in conversations between characters. This situation clearly confirms that *bwe* is a conversational marker, as pointed out in Estrada et al. (2004) for *abwe*. Its most frequent use is as the initial element of a reply, as in (43).

- (43) - ¿Jaisa into bea yee ko'oko-si jooa?  
 - how and then someone pain-ADVZ do  
 ¿Y cómo es que hace daño?  
 And how is it that it hurts?  
 - *Bwe*, yee ko'oko-si jooa yet-et tajte-ko  
 - PART someone pain-ADVZ do someone-on touch-TEMP\_SUB  
 - 'Pues, hace daño cuando alcanza a pegarle a alguien.'  
 - 'Well, it hurts when it reaches to hit someone.'

*Mi abuelo y yo* (Buitimea 2007: 65)

This initial position can also imply a kind of surprise for the speaker who has to answer the question, as in (44).

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23. Consider also that there are phonologically similar loanwords from Spanish that are kept in Yaqui the initial voiceless bilabial, like *pueta* 'door' from Spanish *puerta*.



- (44) *-¿Jita ket nee betana nattemae-k, jaboí?*  
 something too 1SG.ACC from ask-PFV grandfather  
 ¿Y qué más te preguntaron de mí, abuelo?  
 And what else did they ask you about me, grandfather?  
*Bwe jachim-po juni'i kaa nee enchi empolai-k su'utoji-sae*  
 PART how-LOC though NEG 1SG.ACC 2SG.NOM alone-ACC leave-order  
 - Ah pues, que no merecías que yo te dejara solo.  
 - Oh well, that you didn't deserve that I leave you alone.  
*Mi abuelo y yo* (Buitimea 2007: 59)

The surprise associated with the use of *bwe* is also clear in (45).

- (45) *¡Bwe jiba yepsa-k!*  
 PART always arrive-PFV  
 '¡A poco siempre llegó!  
 'Oh really, s/he arrived at last!'

*Bwe* functions as a reactive particle that can indicate not only surprise but also some problems on the content level of the question. In (46), *bwe* is used in a case in which the respondent know that he is not giving directly the information the questioner asked for, that there is some sort of insufficiency in his reply.<sup>24</sup> In this case, the use of *bwe* indicates that the answer is not optimally coherent with the preceding question because the respondent is not really supplying the requested information.

- (46) - *¿Jabetasa empo maala-k intoko? -ti neu jiia-k*  
 - Who 2SG.NOM mother-POSS and like this 1SG.OBL say-PFV  
 - ¿Y quién es tu mamá? -me preguntó  
 - And who is your mother? -s/he asked me  
 - *¡Bwe mala-ta!*  
 - PART mother-ACC  
 - *¡Pues mamá!*  
 - *¡Well mom!* *La viejita viuda* (Buitimea 2007: 95)

Other uses involve exclamative utterances and the *bwe* particle functions then more like an interjection, that is, as an exclamation operator that allows carrying out an expressive speech act, as in (47).

24. This use of *bwe* seems to represent a discursive use as a qualifier, according to the terminology used for the discourse marker *well* (Svartvik 1980; Carlson 1984: ch. 5) when, in a context of questions and answers, it is used in the initial position of a reply, signaling a problem between the speaker and the addressee, and thus prefacing a reply that is probably insufficient for the questioner. This discursive use has been much discussed in the literature on *well* (see for instance Lakoff 1973: 458–463; Schiffrin 1987: 102–127).

- (47) - *¿Jaisa ayu-ka kom a wike-k?*  
 - how do-SUB down 3SG.ACC get down-PFV  
 - ¿Cómo le hizo para bajarlo?  
 - How did you do to get it down?  
 - *¿Bwe bu'u tekil-ta! Tua aapo'ik ta'a-'u jiba*  
 - PART too much work-ACC truly 3SG.NOM know-REL always  
 - ¡**Todo un ritual!** Que solo él entendía. (Lit. **Pues mucho trabajo!**...)  
 - **A whole ritual!** That only he understood. (Lit. **Well, a lot of work!**...)  
*Mi abuelo y yo* (Buitimea 2007: 66)

*Bwe* can also be used as a phatic operator indicating hesitation, as in (48) in which the repetition of *bwe* reinforces the speaker's hesitation. In this case, it is used as a pause filler to bridge interactional silence. It marks the speaker's claim to the floor, being a strategy for keeping the floor while looking for something to say or for the right words in which to say it. The pragmatic function of filling a pause is thus made by an element (*bwe*) that is semantically more or less vacuous.

- (48) - *¿Jaisaka empo kaa a'abo siika tuuka?*  
 - why 2SG.NOM NEG here come.PFV yesterday  
 - ¿Por qué no viniste ayer?  
 - Why didn't you come yesterday?  
 - *¿Bwe... bwe ousi ne tekil-ek-an*  
 - PART... PART a lot 1SG.NOM work-POSS-IMPFV  
 - ¡**Pues... pues** tenía mucho trabajo.  
 - **Well... well** I had a lot of work. *La viejita viuda* (Buitimea 2007: 107)

All the discursive uses exemplified so far present the particle *bwe* as the initial element of a reply, working at the interpersonal level.<sup>25</sup> However, *bwe* can also work at the textual level,

Example (49) represents a case in which *bwe* seems to function as a consecutive connective. It allows then introducing a part of discourse as a consequence of the prior discourse. This example is interesting because *bwe* is not strictly associated with a turn at talk in this case as it is in the previous examples, functioning here more appropriately as an interclausal connective linking two independent clauses.<sup>26</sup> Another interesting point is the fact that the particle *bwe* is not located in (49)

25. Brinton (1995: 380) identifies two broad functions for pragmatic markers: an interpersonal function and a textual function. In the interpersonal level, the speaker expresses subjective attitudes and evaluations as well as acknowledges and maintains a social exchange with the hearer. In the textual level, the speaker structures utterances as text.

26. Indeed, although the Spanish and English translations of the first clause in (48) refer to a temporal adverbial clause, it is in fact a non-promotional passive construction (Lit. it was put on me the headpiece).

in a turn-initial position. On the contrary, it is located in a turn-medial position (Clayman 2012) but it is still in the initial position in relation to the new comment.

- (49) - *Ta juka chomo-ta ne-t yecha'a-wa-k*  
 - but DET.ACC penacho-ACC 1SG-on put-PASS-PFV  
 - 'Pero cuando me pusieron el penacho  
 - 'But when they put me the headpiece  
 - *Bwe je'e! ti ne kaa into jiu-bae*  
 - PART no\_EMPH like\_this 1SG.NOM NEG and say-DES  
 - 'Pues ya no quise decir que no.'  
 - 'Well I didn't want to say no anymore.' *Los coyotitos* (Buitimea 2007: 147)

In sum *bwe* appears to be a conversational marker, which exhibits the prototypical features of discourse markers that have been pointed out, among others, by Schiffrin (1987), Fraser (1990), or Onodera (2011): (i) *bwe* is used in the initial position of an utterance, which is usually associated with an intense focal character. Its most frequent use is as an introducer of a reply, (ii) *bwe* signals the speaker's view/attitude/judgment with respect to the relationship between the chunks of discourse that precede and follow it, introducing in most cases a new reactive comment. In a general way, the element *bwe* can be considered as a discourse-connecting conjunction ("contextual coordinates" in Schiffrin's (1987) terms) whose main function is to introduce a new comment relevant to the discourse. In this sense, *bwe* functions as a discourse organizer that structures the information and that introduces a new comment distinct from the prior discourse. It always appears in an initial position, being the first part of a reactive intervention and thus prefacing a new propositional content. Its most frequent function is interpersonal, but it can also function in the textual level.

### 5.3.3 *The functional motivations of the bwe recruitment*

Based on these discourse features associated with *bwe*, it is possible to propose that the element *bwe* has been recruited for introducing cause/reason adverbial clauses in Yaqui because *bwe* is a discourse-connecting marker, serving as a thematic reorientation device with a cataphoric orientation. Indeed, the presence of *bwe* in the discourse creates the expectation of a new utterance coming next, since *bwe* is oriented forward. The same cataphoric thematic reorientation is strongly associated with cause/reason adverbial connectives, since causal clauses typically follow the main clause (Diessel 2001: 445–446). Causal connectives are thus introducing causal situations, that is, new relevant information explaining why the main clause has been expressed. So, the presence of the interclausal connective *bwe'ituk* to the left side of the causal clause creates the expectation of a new clause expressing the cause/reason for the main clause situation, thus linking the following information

to information that is already in the hearer's knowledge store and that is expressed in the first main clause.

Based on this connecting function, I have proposed in Álvarez (2019) that the element *bwe* could move from discourse to syntax, in order to participate in the creation of the cause/reason adverbial marker in Yaqui. In this grammaticalization, the textual use of *bwe* exemplified in (49) might represent the bridging context for the recruitment of *bwe* as part of the causal connective *bwe'ituk*, since in this use *bwe* is already functioning at the interclausal level.

#### 5.3.4 Discursive uses of *bwe'ituk* in Yaqui

The first evidence of the *bwe'ituk* formation comes from the Juan Banderas's letters (Dedrick 1985: 146) written at the beginning of the nineteenth century. Interestingly, in this first use exemplified in (50), the element *bwe'ituk* appears in the initial position and its connecting function is not yet interclausal, but still discursive. Although we do not have strictly speaking a conversation in (50), this example also illustrates a communicative interaction since it comes from a written communication between several Yaqui participants (Captain Ignacio Buitime'a and Juan Domingo Husakame'a, who sign the letter and Juan Banderas who is the addressee).

- (50) *'emchi-te           tebotua lioh-ta   bahi team-po*  
 2SG.ACC-1PL.NOM greet   God-ACC three name-LOC  
 'We greet you in the three names of God'  
*'itepo   'inim pueplo-po hoome-m koòkorim-po*  
 1PL.NOM here town-LOC native-PL Cocorim-LOC  
 'we, the natives of this town of Cocorim,'  
*bat-naata-ka   'itepo   toopa-m,*  
 first-begin-SUB 1PL.NOM troop-PL  
 'beginning with the troops'  
*'ae-t           cha'a-ka   'itepo   komunim chiktia.*  
 3SG.INST-LOC lay-SUB 1PL.NOM community all  
 'including all the community with this.'  
*Bwe'ituk-te       'emchi temae 'inim-wakini*  
 because-1PL.NOM 2SG.ACC ask here-neighborhood  
 '(We write to you) because we ask you here'  
*huka'a   lutu'uria-ta hu'unak'eeria-bae-kai*  
 DET.ACC truth-ACC know-DES-SUB  
 'wanting to know the truth.'

In this case, the element *bwe'ituk* is used in the initial position of a new utterance without the presence of the supposed main clause written in parentheses in the Dedrick's English translation. It introduces the cause/reason for writing the letter, and comes after the initial greetings. The element *bwe'ituk* is used then to introduce

a new topic, which is associated with a strong focus function, something that fully corresponds to the use of the discursive particle *bwe*. This discursive function here might be better rendered by a translation like: ‘Well, we ask you here...’. In this example, *bwe’ituk* is thus used more as a discourse marker, than as a syntactic marker. It does not connect two different clauses in order to create a complex clause, its connecting function is between two chunks of discourse. In fact, it functions as a frame marker, indicating a change of topic. It thus works at the textual level as a text-structuring device, very much like the textual use of *bwe* in (49).<sup>27</sup> Indeed, both uses of *bwe* and *bwe’ituk* correspond to a connecting device that introduces a new topic, both are fixed between the two discourse parts that are connected, and the orientation is, in both cases, cataphoric, that is, the connectives are at the left margin of the new discourse topic, functioning then as a clause-initial reorientation device. However, an important difference is that the presence of the old *ituca* in the form *bwe’ituk* indicates that the new information introduced by *bwe’ituk* corresponds to the cause/reason of the situation expressed in the prior discourse. As the element *ituca* is originally an interclausal marker of causality, it thus conveys to the new form *bwe’ituk*, the causal dependency between the two parts of discourse being connected, while the discourse marker *bwe* provides the focal function and the cataphoric reorientation.

In evolutionary terms, the discursive use of *bwe’ituk* illustrated in (50) is probably representing an intermediate stage in the development of the cause/reason adverbial connective out of the discursive particle *bwe*.<sup>28</sup> In this use, *bwe’ituk* exhibits the discourse function of *bwe* and the causal meaning of *ituca*, it appears in the initial/focal position as *bwe* does, and it is used to introduce a clause interpreted as the cause/reason of the prior discourse, as *ituca* did.

Example (50) also shows that the creation of *bwe’ituk* as a causal adverbial marker seems to involve not just a change from discourse to syntax (where *bwe* is concerned), but also a change from syntax to discourse (where the *ituca* particle is concerned). Indeed, in this evolution, *ituca* dissociates from final position of the subordinate clause, being attracted to the initial position by the discourse marker *bwe*, and this change of position not only implies for *ituca* a change from anaphoric to cataphoric orientation, but also a change from syntax to discourse, since *bwe’ituk* in (50) is not an adverbial marker, but a discourse marker. The evolution from this discursive use in (50) to the sentential use as an adverbial marker naturally occurs

27. This function as a frame marker has also been identified for the discourse marker *well* in English (see, for instance, Svartvik 1980; Jucker 1997).

28. It is worth noting that it seems that in Mayo, the other Cahita language, this element has not yet been recruited for clausal integration, since Almada (1999: 31) registers *buë(y)tuk* saying that it only functions as an hesitation marker (‘muletilla’): “este ...” ‘umm...’.

when the chunks of discourse connected by *bwe'ituk* are clauses. Once this inter-clausal usage becomes fully conventionalized *bwe'ituk* turns into a causal adverbial marker, which is only used to introduce the cause/reason for the situation expressed in the previous clause.<sup>29</sup>

Another important information provided by the Example (50) is that the first causal meaning of *bwe'ituk* had to be action-based,<sup>30</sup> since the causal meaning in (50) appears when the writer of the letter presents the motive for writing the letter. Interestingly, concerning the use of the cause/reason connective, Dedrick and Casad (1999: 397) point out that “Because clauses are commonly marked by the introducer *bwe'ituk* and often occur as the initial clause in a complex sentence... preceding the main clause of the sentence.” This comment is interesting because in our corpus, the position of the adverbial clause introduced by *bwe'ituk* is usually after the main clause, contrary to what Dedrick and Casad (1999) mentioned. This pre-posed location is cross-linguistically unusual since causal clauses typically follow the main clause (Diessel 2001: 445–6). This initial position could thus be a reminiscence of the discursive use of *bwe'ituk* illustrated in (50). If we look at some examples proposed by these scholars, the causal meaning of *bwe'ituk* is clearly action-based. For instance, (51) is used after the speaker asks the hearer to go somewhere, and *bwe'ituk* thus introduces the justification for what has been said before.

- (51) *Bwe'ituk ne kaa enchim saja-ko bwana-ka matchu-nee*  
 because 1SG.NOM NEG 2PL.ACC go.PL-SUB\_COND cry-SUB wake up-FUT  
 ‘Because if you don’t go, I’ll wake up crying tomorrow.’

Dedrick & Casad (1999: 393)

29. As Traugott (1988, 1995) has proposed, pragmatic strengthening usually occurs in the early stages of grammaticalization, in which meanings tend to shift toward greater subjectivity, that is, they become increasingly associated with speaker attitude, especially metatextual attitude toward discourse flow. The early stages of the *bwe'ituk* evolution seem to show this increase of pragmatic significance and subjective expressiveness.

30. Three types of causal meaning associated with causal adverbial markers are usually distinguished (Schiffrin 1987; Sweetser 1990). The first causal relation between two clauses is fact-based, as in (i), whereby a ‘cause and result’ relation holds between two idea units (the content or socio-physical domain of usage). The second type is knowledge-based, as in (ii), in which case the causal relation holds when a speaker uses some piece of information as a warrant for an inference (the epistemic domain of usage). The third one is action-based, as in (iii), and in this case, the causal relation holds when a speaker presents a motive for an action being performed through talk (the speech-act domain of usage).

- i. John is home because he is sick.
- ii. John is home because the lights are burning.
- iii. Is John home? Because the lights are burning.

[Schiffrin 1987: 202]

This use is clearly linked to the use of the discourse marker *bwe* mentioned above, since *bwe'ituk* is used here in a conversation (note the two pronominal forms referring to the speech act participants in (51)), and it is also very similar to the use of *bwe'ituk* in (50), since it is used in the initial position of an utterance, with an intense focal character, introducing an event that is interpreted as the cause/reason of the previous speech-act. The two examples of *bwe'ituk* in (52) also taken from Dedrick & Casad (1999), show the same speech-act sense. In both cases, *bwe'ituk* appears after the performance of a speech act (an advice), and it introduces a clause that expresses the reason for performing this speech act (the reason why the advice has to be followed).

- (52) - *a'a beeba-k juni'i tua a'a me'e-nee,*  
 it hit-PFV even truly it kill-FUT  
 'If you do it, make sure that you kill it,  
 - *bwe'ituk juna'a baakot kaa muku-k-o enchi na'ateho-nee*  
 because that snake not die-PFV-if you.ACC accuse-FUT  
 'because if the snake does not die it will accuse you  
 ... - *weye-m-ta kat beba*  
 go-NMLZ-ACC not.IMP hit  
 'Don't kill a moving snake'  
 - *bwe'ituk waa'a weye-me ji'i-bwa-bae-ka weye*  
 because DEM go-NMLZ thing-eat-DES-SUB go  
 'because the one that is on the move is looking for something to eat  
 Dedrick & Casad (1999: 406)

In these examples, the use of *bwe'ituk* is clearly not factual, that is, the causal clause does not express the cause/reason that explains an effect like for example in *the floor is wet because it rained*, but rather it expresses the justification for an action performed through talk. Thus, the cause is here metadiscursive.<sup>31</sup> Another example of this action-based causality is given in (53), in which *bwe'ituk* introduces the reason why the previous question has been asked.

- (53) - *Jaisa eme inim kaa mekka jo'a-k?*  
 how 2PL.NOM here NEG away live-PFV  
 - '¿A poco viven por aquí cerca?  
 - 'Are you really living nearby?  
 - *Bwe'ituk ne jakko juni kee enchim bicha-n*  
 because 1SG.NOM when also yet\_no 3PL.ACC see-IMPV  
 - 'Porque yo nunca las había visto  
 - 'Because I had never seen them' *Mi abuelo y yo* (Buitimea 2007: 55)

31. Thompson and Longacre (1985: 203) named this type of adverbial clauses that provide the motivation for uttering the main clause, as speech act adverbial clauses or speech act qualifiers.

The original causal meaning of *bwe'ituk* as a causal adverbial marker thus seems to have been action-based, and this is clearly due to the discursive origin of *bwe*.

## 6. Final remarks

This paper has been focused on the rise of cause/reason adverbial markers in Yaqui. It has been shown that three new explicit markers of interclausal causality have been created from three different sources:

- from a causal postposition, since *betchi'ibo* becomes a causal adverbial marker via a syntactic expansion from the postpositional phrase, the object of *betchi'ibo* changing from noun phrases to clauses.
- from discourse, since *bwe'ituk* becomes a causal adverbial marker via the recruitment of a conversational marker from discourse to syntax.<sup>32</sup>
- from language contact, since *po(r)ke* becomes a causal adverbial marker in Yaqui via a morphosyntactic borrowing and a syntactic calque from Spanish.

These new cause/reason adverbial clauses imply that the meaning of the clause-combining device has become totally explicit. If we consider the polyfunctionality of the final particle *teca* in Old Cahita, the evolution in the domain of cause/reason adverbial clauses was from a polyfunctional structure (temporal, conditional, purpose and causal interpretations) to monofunctional structures (only causal interpretation),<sup>33</sup> from economy (hidden complexity) to explicitness (overt complexity). This change illustrates thus an evolutionary process of explicitness-driven maturation (Dahl 2004; Bisang 2013), resulting in a language structure that forces the speaker to overtly express certain grammatical categories (obligatoriness) and that provides a rich inventory of fine-grained grammatical categories. In this process, the past strategies used for expressing cause/reason adverbial clauses have been lost, along with the switch-reference system associated with them. The loss of the switch-reference system can also be explained by the origin of the new cause/reason adverbial markers, since the domains in which they were born (postposition, discourse marker, Spanish-*po(r)ke* clause) are not subject to switch reference.

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32. It also implies the loss of the intersubjective/pragmatic meaning associated with the discursive uses of *bwe*, which has reduced its scope from discourse to sentence, although some residual uses of *bwe'ituk* as a discourse marker are still found.

33. This evolution is in accordance with the general tendency that has been observed in the semantic development of adverbial conjunctions, that is, the tendency away from polysemy to monosemy (Kortmann 2001: 849).



The genesis of the new cause/reason adverbial markers seems to be relatively recent (the first appearance of *bwe'ituk* is from 1830, *betchi'ibo* has not been documented as cause/reason adverbial marker in Johnson (1962) and Lindenfeld (1973), and *po(r)ke* is a recent loanword from Spanish). Two aspects could have been facilitating this explicitness-driven maturation. The first one is the influence of the contact with a language having an explicit cause/reason adverbial marker, i.e. Spanish. The explicitness existing in Spanish *po(r)ke* clauses could have created the need for explicit cause/reason adverbial markers in Yaqui. The other facilitating factor might be associated with writing, since, as Mithun (1988: 357) and Kortmann (1997: 46, 2001: 850) have pointed out, explicit linking devices are especially frequent in written language (recall that the first appearance of *bwe'ituk* comes from a letter). The contrary is usually true in spoken discourse. As Ramat & Mauri (2011: 657) correctly state, “in spoken discourse, the situational context (intonation, extra-linguistic cues, etc.) helps in defining the nuances that language may miss, but in written texts language is the only tool available to establish and infer interclausal relations” (cf. also Meillet 1958 [1921]). The planned language associated with the written use has probably influenced the creation and the consolidation of new explicit markers of interclausal causality in Yaqui.<sup>34</sup> As written language is also less prone to language contact (code switching) than oral language, this could also have participated in the creation of the explicit cause/reason adverbial markers using Yaqui native resources. Interestingly, in spoken discourse, the Spanish-borrowed connective *po(r)ke* is sometimes used, whereas it never appears in the Yaqui written texts that have been consulted for this study.

Yaqui is thus a language that affords several markers for the realization of interclausal causal connection. At first sight, they may appear as synonymous or intersubstitutable. It is clear that a detailed pragmatic account of communicating interclausal causality in Yaqui would be needed for the identification of nuances and distinct contextual features attached to each causal marker, trying to uncover meaning distinctions, which can be very subtle. However, the origin of each marker provides interesting clues to the dissimilar distribution of causal markers in Yaqui.

According to its origin in language contact, *po(r)ke* is only found in informal oral language, since language contact is more present in informal oral language than in formal oral language or written language. According to its postpositional use in which the cause meaning is associated with the affectedness expressed in the main clause, *betchi'ibo* seems to be restricted to mark adverbial clauses expressing a negative cause/reason, within the socio-physical domain of causality (content sense, see

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34. In the consolidation process, the influence of literacy is fundamental. As Miller (2006) argues, complex constructions are acquired after the age of seven and much later, through the strong influence of literacy.

footnote 30). As for *bwe'ituk*, it is the most frequent cause/reason adverbial clause marker in Yaqui narratives, and it has been shown that its original causal meaning as adverbial marker is associated with action-based causality, something due to the discursive origin of the *bwe*-part of *bwe'ituk*. However, as can be observed in (5) and (6), repeated here for convenience, *bwe'ituk* can also express a cause-and-effect relationship between propositions, that is, *bwe'ituk* can be fact-based.

- (5) *Baanu'u-ta te tapunia-bae [bwe'ituk te*  
 water\_bottle-ACC 1PL.NOM fill-DES BECAUSE 1PL.NOM  
*ke'u-bae]*  
 go\_to\_the\_wood-DES  
 We are going to fill the water bottle because we are going to the wood.'
- (6) *Inepo in yo'owam baisae [bwe'ituk bempo kaba'i-ta*  
 1SG.NOM 1SG.POSS parents thank BECAUSE 3PL.NOM horse-ACC  
*nee miika-k]*  
 1SG.ACC give-PFV  
 'I thank my parents because they gave me a horse.'

This possibility seems to indicate that from its original speech act sense, *bwe'ituk* has developed other causal meanings, as the content sense illustrated in (5) and (6). This directionality is opposite to what has been proposed by Sweetser (1990) who has argued that, from their original content meanings, causal connectives have diachronically developed new meanings in the more subjective epistemic and speech-act domains. The meaning of *because* is thus described originally as transcending the content or socio-physical domain of usage to the epistemic domain, and, finally reaching its speech act sense.<sup>35</sup> The case of *bwe'ituk* proves that the speech act sense can also be the original causal meaning, if the interclausal marker of causality comes from the discourse level, and shows that new causal meanings can be developed from this original speech-act sense, thus illustrating a case of desubjectification.

Regarding the formal aspects of the cause/reason adverbial clauses presented here, since the constructions are always the results of diachronic processes, the synchronic differences in the internal structures are explained by the diachrony of these constructions. The origin of the adverbial markers thus explains their positions within the dependent clause as well as the differential coding of the dependent clause subject.

35. Examples of such developments in the realm of connectives have been presented by König and Traugott (1988), Traugott (1995) and Traugott and Dasher (2005). They illustrate cases of subjectification, in which "meanings become increasingly based in the speaker's subjective belief state/attitude toward the proposition" (Traugott 1995: 31). As Traugott (1995) has shown, subjectification plays a significant role in the grammaticalization processes on the sentence level.

- In the case of *betchi'ibo*, the postpositional origin leaves traces of the nominal category in the adverbial clause (subject marked as possessor) and explains why the adverbial marker occupies in this case the clause-final position, that is, the most postposed place in the clause.
- The clause-initial position associated with *bwe'ituk* is obviously caused by the recruitment of *bwe* that, in accordance with its function as an introducer of a new discourse topic, always occupies the chain-initial position. The first uses of *bwe'ituk* were probably in this chain-initial position,<sup>36</sup> where topic shifting usually occurs (Givón 2009). Nowadays, the most frequent uses of *bwe'ituk* are in chain-medial position, that is, after the main clause, in the adverbial clause-initial position, before the new cause/reason topic. This adverbial clause-initial position goes, however, against the general tendency that states that OV languages tend to employ adverbial conjunctions in clause-final position (Kortmann 1997: 71, 2001: 852). As seen above, this apparently inconsistent initial position is due to the grammaticalization path that has created *bwe'ituk* out of the discourse marker *bwe*. This conversational marker *bwe* not only implies the clause-initial position but also explains why the adverbial clause marked by *bwe'ituk* is balanced, (that is, identical to a main clause, with a subject in nominative), since the clauses introduced by *bwe* are always main clauses.
- In the case of *po(r)ke*, the borrowing of the Spanish adverbial marker is accompanied by the morphosyntactic features of the source construction, and the adverbial clause is thus balanced, just like Spanish-*po(r)ke* clauses.
- In the case of old cause/reason adverbial clauses, the markers *teca*, *tuca/tuco*, *ituca* indicate the dependent status of the clause. So, the dependent clause subject cannot receive the same treatment than the main clause subject, thus being dropped (zero) if same subject and marked as accusative if different subject.

At the end, each construction is what it is, according to where it comes from, and the synchrony of dependent clauses is fashioned by the origins of dependent clause markers and by the diachronic processes derived from these sources.

Finally, the different cause/reason adverbial clauses that have been presented in this paper show different degrees of syntactic integration between the main and the dependent clauses, in particular if we consider the coding of the dependent clause subject. The most integrated adverbial clauses are the ones used in Old Cahita, since the coding of the dependent clause subject implied a switch-reference system in which same subjects were zero-marked and different subjects were

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36. Recall the comment made by Dedrick and Casad (§ 5.3.4.) about the initial position of the *bwe'ituk* adverbial clause.



EMPH	emphatic	RES	resultative
IMP	imperative	SG	singular
IMPFV	imperfective	SUB	subordinator
INST	instrumental	TEMP	temporal
INTERR	interrogative	TERM	terminative
LOC	locative	VBZ	verbalizer.

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