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# Grammaticalization of the linking devices with ka in Purepecha

Claudine Chamoreau CNRS (SEDYL/CELIA – CEMCA)

This paper describes, in synchrony, the use, form, and position of the linking devices with ka in coordinating phrases and clauses and in subordinate clauses. This study also explores the relation between the different occurrences of ka and investigates a diachronic common source. Taking into account such parameters as weight, cohesion, and variability (Lehmann 2002), I advance the hypothesis that there have been two routes of grammaticalization. These two routes include the free coordinator ka which has given rise to a dependent marker -ka that forms subordinators, and the subjunctive mood -ka which seems to be the grammaticalization of the assertive mood marker -ka used for speech-act participants.

Keywords: Grammaticalization, Purepecha, coordination, subordination, linker, coordinator

#### 1. Introduction

Coordination and subordination represent two types of relation that are encoded by complex constructions (Bril & Rebuschi 2006). For Haspelmath (2007: 1), "The term *coordination* refers to syntactic constructions in which two or more units of the same type are combined into a larger unit and still have the same semantic relations with other surrounding elements." Coordination applies to a combine of words, as in (1a) to the coordination of nouns and verbs phrases, in (1b) for the noun phrase, and in (1c) to the coordination of clauses. The members may be connected by means of a linking device<sup>1</sup> called a coordinator, by a coordinating conjunction, or by coordinating connectives, such as 'and', 'but', 'or'.

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<sup>&</sup>lt;sup>1</sup> I am grateful to two anonymous reviewers who helped me improve this paper, in particular for making the terminology more precise. The term "linking device" is used with a general meaning when I refer to the general function of *ka*, whatever the context it appears in. When I refer to the marker in coordinating phrases or clauses, I call it the "coordinator" (Haspelmath 2007: 50). In subordinating clauses, the situation is more complex. The marker *-ka* suffixed on the verb is always called the "subjunctive" in accordance with the tradition in Purepecha descriptions (see below in Section 4 the explanation for this choice). When the marker *-ka* forms a complex marker that appears at the

- (1) a. Peter **and** Maria sleep **and** snore.
  - b. My wife **and** my three young girls went to the restaurant.
  - c. He woke up early **but** he did not get up.

In contrast, subordination is a type of asymmetrical relation, restricted to clauses, in which the subordinate clause is dependent and subordinate to the main clause. The subordinate clause may be linked to the main one by means of a subordinator, also known as a subordinating conjunction, that may be called a relative subordinator or relative marker for the relative clause, as in (2a), a complementizer for the complement clause, as in (2b), or a subordinator for the adverbial clause, as in (2c). The form of the subordinator depends on the type of subordinate clause (Cristofaro 2003, Thompson et al. 2007), in particular when they are grammatical morphemes with lexical content (e.g., English *before*, *when*, *if*).

- (2) a. The girl [**who** was crying] was hungry.
  - b. She suggested [that he leave].
  - c. He gets up [when the sun rises].

As illustrated above, coordination and subordination are generally expressed by means of two distinct types of linking device. (These relations may also be showed by juxtaposition with no overt markers: see Cristofaro 2003, Haspelmath 2007, Longrace 2007, and Thompson et al. 2007.) However, in certain languages, the links have a similar appearance, in the sense they have a common formal component even if they are not identical.

Purepecha, an isolate language spoken in Mexico, is an example of this: linking devices with ka implies a relation between at least two units. Coordination is expressed by ka, a coordinator that on its own establishes a conjunctive relation between two units, as in (3a) for the noun phrase and in (3b) for clauses. In coordination, ka constitutes a conjunction in the traditional sense, as it is a free and invariable morpheme (Giacalone Ramat & Mauri 2011: 654). Its position is always before the second unit. Moreover, ka may receive adverbial enclitics (Chamoreau 2014) to create other coordinators, such as ka=ru in (3c) for adversative coordination.

(3) a. pawani t'iri-a-ka=ni juchi jinkonikwa-o ka mimi-o tomorrow eat-IRR-ASS1/2S=S1SG POSS1SG sister-RES and brother-RES 'Tomorrow, I will eat at my sister's and brother's house.'

<sup>-</sup>

beginning of the clause, it is generally called the "subordinator" because regardless of the type of subordinate clause the function of this marker is the same: it introduces the subordinate clause and indicates the left boundary of the clause. However, in contexts in which it is relevant to distinguish the different types of subordinator, it may be called the "relative subordinator" for relative clauses, the "complementizer" for complement clauses, and the "subordinator" for adverbial clauses.

- b. *jwata tsakapu kw'ani-ku-xa-p-ti ka tsakapu* hill stone throw-APPL3O-PROG-PST-ASS3S and stone *ma kwhiripu anta-s-p-ti* one people reach-AOR-PST-ASS3S 'The hill was throwing stones **and** one stone reached people.'
- c. ni-ra-s-ti ka=ru kinse diya=ksï, pastori-icha and=other fifteen day=3PL shepherd-PL go-FT-AOR-ASS3S arhi-ra-sïn-ti yamintu ireta say-CAUS-HAB-ASS3S all village 'He went out but for fifteen days the shepherds make noise in the entire village.'

In contrast, clausal subordination is expressed by two markers -ka: one beginning the subordinate clause and another at the end of the verb that is generally positioned at the end of the clause. In this type of clause, -ka is no longer a conjunction, as in the case of coordination, because it always depends on another element. Thus, the marker -ka presents a dependent form, a suffix, to indicate embedding and subordinate clauses. At the start of the subordinate clause, -ka forms different subordinators in combination with another element: after the demonstrative pronoun inte 'this' (elided as in) to form the relative subordinator inka with the relative clause, as illustrated in (4a); after the adverb of manner isi 'thus' to build the complementizer iska for the complement clause, as in (4b); and after the instrumental postposition jimpo to form the subordinator jimpoka for a reason clause, as in (4c) (see below Section 4, where Table 3 presents a list of the various subordinators). At the end of the clause, the marker -ka suffixed on the verb is referred to as the "subjunctive" mood in the Purepechan tradition because it appears on the verb in the position occupied by the morphemes of this category (Capistrán 2002, Friedrich 1984, Monzón 2004, Wares 1984). The presence of -ka on the verb is a morphological constraint for all subordinate finite clauses; it is impossible to use another mood in this clause (Chamoreau 2009: 103-105). In this paper, I continue to use the label "subjunctive" even if it does not correspond to the traditional notion of the subjunctive as opposed to the assertive mood. The constraint of -ka on the verb and that the tense and the aspect display distinctive and reduced forms (compare the forms for the agrist aspect and past tense in (3b) and (4c)) indicate that subordinate finite clauses in Purepecha are less finite than main finite clauses (Chamoreau 2016).

tsimanhi-e-x-ti=ksï=nha (4) a. inte werantupinti-cha [inka=ksi=nha two-PRED-AOR-ASS3S=3PL=EV orphan-PL SUB=3PL=EV DEM táte-empa-ni ka ama-mpa-ni no ka-nko-rhe-nka-\phi-ka] father-KPOSS3-OBJ and mother-KPOSS3-OBJ NEG have-INTS-body-IT-AOR-SBJV 'They said that there were two orphans who did not have a father and mother.'

- b. arhi-x-ka [iska=ri y'ontani jo-nkwa-pirin-ka] say-AOR-ASS1/2S SUB=S2SG late come-CENTRIP-COND-SBJV 'I said **that** you should come back late.'
- c. *jwata tsakapu kw'ani-ku-xa-p-ti* [*jimpoka jinche-p-ka*] hill stone throw-APPL3O-PROG-PST-ASS3S SUB earthquake-AOR.PST-SBJV 'The hill was throwing stones **because** the earth trembled.'

The first aim of this paper is to describe, in synchrony, the use, form, and position of the linking devices with ka in coordinating phrases and clauses and in subordinate clauses. The second aim is to explore the relation between the different occurrences of ka and to investigate a diachronic common source. Taking into account such parameters as weight, cohesion, and variability (Lehmann 2002), I advance the hypothesis that there have been two routes of grammaticalization: (1) the free coordinator ka has given rise to a dependent marker -ka that forms subordinators; (2) the subjunctive mood -ka seems to be the grammaticalization of the assertive mood marker -ka used for speech-act participants (henceforth SAP).

The structure of this paper is as follows. Section 2 gives basic grammatical information about Purepecha. The coordinator ka is described in Section 3. In Section 4, I explore the different context in which ka occurs in a subordinate clause. The paper closes by proposing a hypothesis about two possible scenarios of grammaticalization.

#### 2. Basic typological characteristics of Purepecha

Purepecha (formerly known as Tarascan) is classified as a language isolate and is spoken in the state of Michoacan in western Mexico by approximately 110,000 people (Chamoreau 2009, 2012). Classifying Purepecha within the Mesoamerican linguistic area is still debated, but generally it is not classified as a Mesoamerican language, as it possesses few of the characteristics shared by these languages (Smith-Stark 1994).

Purepecha is an agglutinative and synthetic language, and is almost exclusively suffixing. Although bare stems exist, there is a very productive derivational system in which a basic stem can take voice, causative, locative, positional, directional, and adverbial derivative suffixes. Inflectional suffixes follow the stem to mark aspect, tense, irrealis, mood, and person (Chamoreau 2009, 2017).

Purepecha has nominative-accusative alignment and is a case-marking language in which the nominal subject has no overt marker. The object is generally marked by the objective case marker -ni. This morpheme encodes the object of a transitive verb, such as *misitu-ni* 'the cat' in (5), and both objects of a ditransitive verb, such as *inte-ni* wantantskwa-ni and Puki-ni, in (6). The presence or absence of the objective case marker depends on different hierarchies: (i) the inherent semantic properties of the referent (human, animate); (ii) properties related to grammatical features (definite, count noun vs. mass noun, generic vs. specific, etc.); and (iii) pragmatic strategies (topic,

focus) (Chamoreau 2009). Typically, the objective case marker -ni indicates that the noun phrase is characterized as individuated.

- (5) jo celia ata-x-ti ima-eri **misitu-ni** yes Celia beat-AOR-ASS 3SDEM-GEN cat-OBJ 'Yes, Celia beat her cat.'
- (6) celia arhi-x-ti inte-ni wantantskwa-ni Puki-ni
  Celia tell-AOR-ASS3S DEM-OBJ story-OBJ Puki-OBJ
  'Celia told Puki this story.'

Purepecha is an SV and SVO constituent order language as illustrated by examples (5) and (6). This is the basic order in the region of Lake Patzcuaro (Capistrán 2002, Chamoreau 2009:55-58). Other orders indicate specific pragmatic properties. Studies of constituent order in the other regions do not as yet exist. However, Purepecha exhibits traits of a SOV language: (i) tense, aspect, irrealis, and modal markers following the verb; (ii) postpositions; (iii) only suffixes; (iv) only enclitics; (v) case markers; (vi) main verbs preceding inflected auxiliaries; and (vii) positional variation of the head noun in the noun phrase that reveals that final head nouns precede non-final head nouns (compare examples (6) and (7)). SVO and SOV constituent orders were attested in the sixteenth century, and the former has increased since then. The change is most likely due to areal contact. Prior to the Conquest there were speakers of other languages in this territory, Nahuatl (Uto-Aztecan family) and Otomi (Otopamean family), two languages with verb-initial structure. The change probably began under the influence of these languages; Spanish, an SVO language, continued the process, for example by introducing prepositions (Chamoreau 2007).

Purepecha displays the predominance of dependent-marking, for example with the pronominal enclitic, as in (7), and the genitive case, as in (8). Subject and object pronouns are expressed by pronominal enclitics. Table 1 presents the two paradigms of pronominal enclitics, the subject and object enclitics.

- (7)  $no=\mathbf{r}\mathbf{i}$   $x\ddot{\imath}pa-ku-a-xa-p-ka$ NEG=S2SG steal-APPL3O-O3PL-PROG-PST-ASS1/2S

  'You were not stealing them.'
- (8) nanaka-echa-eri jawiri sési ja-rha-a-ti girl-PL-GEN hair well be.there-FT-IRR-ASS3S 'The girls' hair is beautiful.'

**Table 1**. Pronominal enclitics in Purepecha

	Subject	Object
1	$\phi / = ni$	=reni (=rini) / =ts 'ini
2	=re (=ri)	=kini / =kxïni
3	ø	Ø
1PL	$=ch'e(=ch'i)/=kxi^2$	=ts'ini <sup>3</sup>
2 <sub>PL</sub>	$=ts$ ' $\ddot{i}$	=kxini
3PL	=kxï	=kxïni

Independent and main clauses are the most finite types of clause: participants are expressed by a noun, as in (9), by an independent pronoun, as in (10), or by a pronominal enclitic, as in (7) for subject and (9) for object. The predicate, a verb as in (9) or a noun as in (10), must be marked by a mood. It may also be modified by an aspect and a tense, such as the progressive aspect and past tense in (7), or by an irrealis marker, as in (8).

- (9) *juchi tata=rini kwane-xïn-ti jiwatsï k'éri-ni* POSS1SG father=O1SG lend-HAB-ASS3S coyote old-OBJ 'My father lends me to the old coyote ....'
- (10) **jucha** isi=si mi-te-s-p-ka ima ts'irakwa jimpo S1PL.IND thus=FOC open-SUP-AOR-PST-ASS1/2S ART.DEF cold INS 'We, thus, knew it for the cold.'

Purepecha distinguishes four different paradigms: aspect, tense, irrealis, and mood (henceforth ATIM). These suffixes have various dialectal allomorphs; I present in Table 2 the forms attested in the village of Jaracuaro (for the different allomorphs see Chamoreau 2009 and Friedrich 1984). There are four aspect markers (aorist – the narrative non-marked aspect – habitual, progressive, and continuative), one tense marker (past), two irrealis markers (irrealis-future, conditional), and five mood markers (assertive, interrogative, imperative, exclamative, and subjunctive). Table 2 presents the morphemes as they occur in independent or main clauses.

<sup>&</sup>lt;sup>2</sup> For the first person plural, the difference between =ch'e and =kxi' (or =ksi') today exhibits a dialect variation (Chamoreau 2009:64) that reveals a diachronic change: in the sixteenth century only =kuch'e (the marker that has been grammaticalized in ch'e) was used.

<sup>&</sup>lt;sup>3</sup> The first person object enclitic =ts'ini and the second person object =kxini are always used when the subject is plural.

Table 2. ATIM markers in independent or main clauses

Aspect	Tense	Irrealis	Mood
$AOR - x^4$	PAST -p/-an	IRR -a	ASS1/2S -ka / ASS3S -ti
HAB <i>-xïn</i>	PRS unmarked	COND -pirin	INT - <i>ki/-i/-</i> ø
PROG -xa			IMP.SG -ø / IMP.PL -e
CONT -xam			EXCL -k'a
			SBJV -ka

These morphemes have a fixed order of occurrence at the end of the predicate: (aspect) + (tense) + (irrealis) + mood (Chamoreau 2009, 2017). Mood is obligatory in a finite verb. Aspect has to occur with tense, and with mood. The irrealis marker occurs directly with mood (aspect and tense are impossible). The assertive mood is -ka for SAP first and second persons, as in (11a, b, d, e), and -ti for third persons, as in (11c, f). Interestingly, in this mood two of them – the first person singular and the third person singular – may have a zero marker when they function as the subject. The third person always has a zero marker. For the first person there is no difference in using the covert marker or the overt =ni. In the sixteenth century the use of  $\phi$  was the most frequent (Chamoreau 2014). We may observe in (11) the paradigm with the verb kara- 'write' and the habitual aspect -xin:

(11) a.	kara-xïn <b>-ka</b> / kara-xïn- <b>ka=ni</b>	'I write'
b.	kara-xïn- <b>ka</b> = <b>ri</b>	'You (sg.) write'
c.	kara-xïn- <b>ti</b>	'He writes'
d.	kara-xïn- <b>ka=ksï</b>	'We write'
e.	kara-xïn <b>-ka=ts ĩ</b>	'You (pl.) write'
f.	kara-xïn- <b>ti=ksï</b>	'They write'

Purepecha distinguishes between an assertive mood and an interrogative mood in independent and main clauses. Compare (12) with (13), which has the interrogative mood  $-\phi$  (this is the allomorph used after the irrealis). This language contrasts these two moods, which occur in independent clauses, with the so-called subjunctive mood -ka, which codifies the verb in a dependent clause. Compare (14a) with (15a) and (14b) with (15b).

(12)	ni- <b>a-ka=ri</b>	(13)	ni- <b>a-ø=ri</b>
	go-IRR-ASS1/2S=S2SG		go-IRR-INT=S2SG
	'You will go.'		'Will you go?'
(14) a.	anchi-kuri-x-ka	(14)b.	anchi-kuri-x-ti
	work-refl-aor-ass1/2s		work-refl-aor-ass3s
	'I worked.'		'He worked.'

<sup>&</sup>lt;sup>4</sup> In a orist and habitual aspect markers, the palatal x is pronounced as an alveolar s (-s for a orist aspect, -sin for habitual aspect). This is a dialectal variation.

- (15) a. arhi-x-ka=ri [exka=ni anchi-kuri-φ-**ka**] say-AOR-ASS1/2S=S2SG SUB=S1SG work-REFL-AOR-SBJV 'You said that I worked.'
  - b. arhi-x-ka=ri [exka anchi-kuri-φ-**ka**] say-AOR-ASS1/2S=S2SG SUB work-REFL-AOR-SBJV 'You said that he worked.'

#### 3. Coordinator ka

This Section is divided into two sub-Sections. In the first (3.1), I introduce the general properties of the coordinator, showing its use in interphrastic contexts. In the second (3.2), I describe the use of the coordinator in interclausal contexts.

#### 3.1 General properties and interphrastic uses

The coordinator ka is a free and independent element that is used to link two noun phrases, as in (16), or two verb phrases, as in (17). As illustrated in (16) and (17), ka on its own establishes the coordination of two units that are functionally equivalent. The coordinator ka expresses the conjunctive coordination that may be translated by 'and' in English.

- (16) a. *t'u* **ka** watsï-ti mak'u=ts'ï ja-rha-x-ka s2sG.IND and son-KPOSS2 similar=s2PL be.there-FT-AOR-ASS1/2s 'You and your son are similar.'
  - b. pawani t'iri-a-ka=ni juchi jinkonikwa-o ka mimi-o tomorrow eat-IRR-ASS1/2S=S1SG POSS1SG sister-RES and brother-RES 'Tomorrow, I will eat at my sister's and brother's house.'
- (17) *kwara-tsi-x-ti* **ka** *kaka-rhu-x-ti* fall-ground-AOR-ASS3S and break-nose-AOR-ASS3S 'He fell to the ground and broke his nose.'

When over two units are coordinated, *ka* always appears before the last element, as with *ka piri-mpa* in (18). The other units are juxtaposed, as with *Alicia*, *Celia*, *Emilio* in (18):

(18) Alicia, Celia, Emilio ka piri-mpa ampuxï juka-tsï-a-x-ti
Alicia Celia Emilio and sister-KPOSS3 louse have-TOP-O3PL-AOR-ASS3S
'Alicia, Celia, Emilio and his sister have lice.'

The coordinator ka is a free and independent element because it may function as host for an adverbial enclitic (Chamoreau 2014) to build other coordinators. In (19), the complex coordinator ka=ru 'and=then' is an adversative that may be translated by 'but' and in (20) ka=teru 'and=other' expresses disjunction that may be translated by 'or'.

- (19) *k'e-xa-ti ka=ru marhua-ta-xa-ti* grow-PROG-ASS3S and=then employ-CAUS-PROG-ASS3S 'He grows but he continues to use them (diapers).'
- (20) *chi kawayu urapiti-x-ki* **ka=teru** *turhipiti-x-ki*POSS2SG horse be.white-AOR-INT and=other be.black-AOR-INT 'Is your horse white or is it black?'

Nowadays these two complex coordinators are forsaken, and are replaced by the Spanish coordinators 'pero' (also pronounced *peru*) for the adversative, as in (21), and 'o' for disjunction, as in (22). These borrowings confirm the implicational hierarchy (but > or > and) proposed by Matras (1998: 301-305, 2007: 54-56; see also Chamoreau 2007: 470-471). Purepecha, like many languages, has borrowed the elements 'but' and 'or', but not 'and'.

- (21) *mis-kurhi-s-ti* **peru** piri-xa-ti be.sad-REFL-AOR-ASS3S but sing-PROG-ASS3S 'He is sad but he is singing.'
- (22) ni-ra-a- $\phi$  ama-mpa-nkuni o imeri tata-nkuni go-FT-IRR-INT mother-KPOSS3-COM or POSS3SG father-COM 'Will she go with her mother or with her father?

Whatever the coordinator (ka, ka=ru, ka=teru, peru, o), its position is always the same: the coordinator is grouped with the following phrase (or the last one, when several elements are coordinated, as in (18)), not with the preceding one. In Purepecha, it is much more natural to make a pause before rather than after a coordinator.

#### 3.2 Interclausal uses

The various coordinators introduced above, and in particular the conjunctive coordinator ka, are attested in interclausal coordination. Two different contexts exist in Purepecha: either the coordinated clauses are finite and functionally equivalent (explored in Section 3.2.1) or the coordinated clauses are not functionally equivalent. In this context, the second clause is non-finite and depends on the first one, the main clause. This interesting process is found in chain-medial clauses (described in Section 3.2.2).

### 3.2.1 Coordinated finite clauses

When two clauses are coordinated, they may have the same reference, as in (25a), or switch reference, as in (23) and (24). The two clauses may have the same tense, aspect, irrealis, or mood markers, as in (24) and (25b), but the opposite is also possible, as in (23) and (25a). The coordinator links two independent and finite clauses. Each clause can be autonomous and independent. The two coordinated clauses are functionally equivalent, having the same semantic function, with possible syntactic autonomy since they contain at least one argument and each clause has a finite verb (Haspelmath 2007). These behaviors are illustrated in examples (23), (24), and (25) with the different coordinators described above (in Section 3.1).

- jwata tsakapu kw'ani-ku-xa-p-ti ka tsakapu hill stone throw-APPL3O-PROG-PST-ASS3S and stone

  ma kw'iripu anta-s-p-ti
  one people reach-AOR-PST-ASS3S

  'The hill was throwing stones and one stone reached people.'
- (24) *chi kawayu urapiti-x-ki* **ka=teru** *ima animalu turhipiti-x-ki*POSS2SG horse be.white-AOR-INT and=other DEM animal be.black-AOR-INT
  'Is your horse white **or** is this animal black?'
- (25) a ni-ra-s-ti ka=ru kinse diya=ksï, pastori-icha go-FT-AOR-ASS3S and=then fifteen day=S3PL shepherd-PL arhi-ra-sïn-ti ireta say-CAUS-HAB-ASS3S village 'He went out but for fifteen days the shepherds make noise in the village.'
  - b. *mi-ti-xïn-ka kara-ni peru*=*ni no u-xïn-ka* open-SUP-HAB-ASS1/2S write-NF but=S1SG NEG may-HAB-ASS1/2S 'I know how to write **but** I cannot [...].'

Using coordinators between two clauses reinforces that these elements are grouped with the following unit and not the preceding one. The coordinator ka (and the other coordinators) may function as the host for pronominal enclitics, as in (26), although today, as in (27), the enclitic often appears after a constituent located after the coordinator.

(26) *ampuxii juka-tsii-a-x-ti=kxii ka=kxii menkhu*Louse have-TOP-O3PL-AOR-ASS3S=S3PL and=S3PL always

\*katsii-tsii-ni ja-rha-siiren-ti
scratch-TOP-NF be.there-FT-HAB.PST-ASS3S

'They had lice and they always scratched their heads.'

(27) **ka** jini=kxï ni-ra-x-ti jurimpitkwa and there=S3PL go-FT-AOR-ASS3S straight.ahead 'and there they have gone straight ahead.'

#### 3.2.2 Coordinated non-finite chain-medial clauses

Within discourse coherence, a clause-chain is characterized as the "smallest unit of coherent multipropositional discourse," one with "the tightest, most continuous cross-clausal coherence links" (Givón 2001:355). Chain-medial clauses "carry the bulk of sequential new information in the chain and display the highest cross-clausal coherence. Their grammatical marking is the most minimal, since most threads of thematic coherence (topical referents, temporality, aspectuality, modality, perspective) remain the same" (Givón 2001:356). Chain-initial and chain-final clauses are the most finite type, while chain-medial clauses are the least finite (the degree of finiteness of chain-grounding clauses is often unpredictable, although usually they are nominalized phrases). The correlation between degree of finiteness and clause-types within the chain in discourse shows that the more referential ones and those with thematic predictability – corresponding to the highest degree of cross-clausal coherence and continuity – display less finiteness.

Non-finite chain-medial clauses in Purepecha are constructions used to facilitate thematic, referential, and aspectual continuities in discourse (Chamoreau 2016). Such strategies correlate with reduced finiteness. When the subject is the same in the discourse, reference tracking is always possible and easy; in a chain-medial clause the referent functions as the subject. In the chain-initial clause, as in (28a), the referent is introduced by the definite noun phrase *acheti-echa* 'the men' and the verb is marked by aspect. In chain-medial clauses, as in (28b) and (28c), the pronominal enclitic *=ksi* is attested and attached to the verb. Referential and tense-aspect-mood continuities are crucial to understanding the use of these constructions. In non-finite chain-medial clauses in Purepecha, ATIM are not expressed but are recoverable. These clauses use a non-finite *-ni* marker. The aspect of the narratives is usually the aorist, as in (28a). Non-finite medial clauses depend on the chain-initial clause, the independent clause, for its ATIM and subject reference. Dependent non-finite clauses are connected to independent finite clauses by means of the coordinator *ka*, as in (28b) and (28c).

- (28) a.  $xas\ddot{\imath}=ks\ddot{\imath}=nha$  kustakwa jinkoni acheti-echa pa-s-ti, next=S3PL=EV music COM man-PL take-AOR-ASS3S 'They said that then the men took her with music,
  - b. **ka** jikwa-ra-ni=ksï=nha ya, and bathe-CAUS-NF=S3PL=EV now **and** they said that they bathed her,

c. **ka** ampa-tsi-ku-ni=ksï=nha ya. and be.clean-LOW-NCS-NF=S3PL=EV now **and** they said that they combed her.'

When ka is used in chain-medial clauses, the construction is ambiguous as between coordination and subordination. The morpheme ka appears with the form for coordinated clauses, that is, as a free and independent element, but the clauses that make up the clause chaining are not functionally equivalent with the first clause, and chain-medial clauses do not possess syntactic autonomy. The chain-medial clause is coordinated with the chain-initial clause and depends on it: the initial clause contains ATIM and argument reference, while coordinated chain-medial clauses have reduced finiteness (Longacre 2007: 375). In Purepecha, these clauses use the non-finite -ni marker. The coordinator ka is repeated at the beginning of each chain-medial clause, as in (28). But in certain chain-medial clauses the clauses are juxtaposed, as in (29b) and (29c). The coordinator ka shows the end of a chain-medial clause, as in (29d). Using ka in a chain-medial clause is relevant because it exhibits a high level of thematic and tense, aspect, irrealis, and mood continuities (Chamoreau 2016).

- (29) a. Teremendo anapu-echa kutsu-sïraam-ti, Teremendo origin-PL tan-HAB.PST-ASS3S 'Those from Teremendo tanned (leather),
  - b. *ima-echa noampe u-ni*,

    DEM-PL NEG do-NF they did not do anything,
  - c. *no=ksï* sesi xama-ra-nte-ni,

    NEG=S3PL well smell-CAUS-nose-NF
    they did not smell good,
  - d. **ka** no=ksï tsipi-ni and NEG=S3PL be.happy-NF **and** they are not happy.'

To sum up: Purepecha has a free and independent coordinator ka that may occur alone between words, phrases, and clauses. Only one occurrence of ka is necessary to coordinate two units. In the case of various words, phrases or clauses are coordinated, ka only occurs once, before the last coordinated unit (except in certain occurrences of chain-medial clauses). The other units are juxtaposed. With words, phrases, and finite clauses, the coordinated units are functionally equivalent and possess possible syntactic autonomy. This is not the case in the contexts of coordination of chain-medial clauses that are coordinated but dependent on the chain-initial clause. In Purepecha, there is a clear distinction between coordination (linkage of two independent clauses,

where both are coordinated), chain-medial clause (linkage of an independent clause with a dependent clause, where the latter depends on the former and both are coordinated) and subordination (linkage of an independent clause with a dependent clause, where the latter is embedded in the former; see Section 4). Literature has also described the second construction as a medial verb or as co-subordination (Foley & Van Valin 1984, Haspelmath 1995).

#### 4. ka used in subordinate finite clauses

Purepecha is one languages in which subordinate clauses are usually finite. The verb has markers of tense, aspect, irrealis, and mood. Pronominal enclitic and switch reference are possible as illustrated in (30). Non-finite subordinate clauses also exist for same reference complement clauses, as in (31), and purpose clauses, as in (32). In non-finite subordinate clauses, the verb is marked by the overt non-finite marker -ni, no tense, aspect, irrealis, or mood, no subordinator, no pronominal enclitic, usually same-subject and same intonation contour (for more details, see Chamoreau 2016).

- (30) arhi-nha-sïren-ti tanako, [jimpoka=kxï kw'iripu-echa say-PAS-HAB.PST-ASS3S Tanaco SUB=S3PL person-PL tanha-li-sïren-ka] join-body-HAB.PST-SBJV 'That place was called Tanaco because people were gathering together.'
- (31) *ero-ta-xa-ka* [*k'ama-ta-ni prontu*] hope-CAUS-PROG-ASS1/2S finish-CAUS-NF soon 'I hope to finish soon.'
- (32) Kumicho incha-parha-ku-x-p-ka [para eskwela arhi-t'a-a-ni]
  Ocumicho enter-LONG.EXT-NCS-AOR-PST-ASS1/2S for school say-IT-O3PL-NF
  'I had entered into Ocumicho to teach them.'

In this Section, our aim is to describe the different elements that occur with the marker -ka in finite subordinate clauses. As introduced in Section 1, subordination in finite clauses is expressed by the presence of -ka in two positions: one that begins the subordinate clause and another at its end, suffixed on the verb that is usually positioned at the end of the clause. In this clause, -ka is no longer a conjunction as with coordination, because it always depends on another element. The dependent markers -ka shows clausal embedding. At the beginning of the subordinate clause, the marker -ka forms a complex subordinator with another different element, delimiting the clause and indicating the type of clause: it may introduce a relative clause, a complement clause, or an adverbial clause. These markers are listed in Table 3 and described in Section 4.1.

**Table 3**. Subordinators<sup>5</sup>

Relative clause		inka / inki / enka / enki / =nka / =nki <sup>6</sup>		
Complemer	nt clause	iska / iski / eska / eski		
	Temporal / Condition	eka / eki		
	Locative / Temporal	inka / inki / enka / enki		
Adverbial	Manner	iska na / iski na / eska na / eski na		
clause	Reason	jimpoka / jimpoki		
	Concessive	nak'iruka / nak'iruki		
	Hypothetical	peeka / peeki		
	Purpose	parake / paraki		

At the end of the clause, the marker -ka on the verb has been referred to as a "subjunctive" mood in the Purepechan tradition because it appears on the verb in the position occupied by the morphemes of this category (Capistrán 2002, Friedrich 1984, Monzón 2004, Wares 1984). However -ka on the verb is a morphological constraint for the subordinate clause regardless of the type of clause; therefore it is impossible to use another mood in this type of clause (Chamoreau 2009: 103-105). In this paper, I keep the label "subjunctive" even if it does not correspond to the traditional notion of the subjunctive as contrasted with the assertive mood. This marker -ka is described in Section 4.2.

# 4.1 -ka at the beginning of the subordinate clause: different kinds of subordinator

The subordinator constitutes the first element of the subordinate finite clause. As listed in Table 3, the subordinators possess various forms depending on the kind of subordinate clause they introduce. The marker -ka always combines with another element to form the subordinator. These two elements form a complex element analyzed in synchrony as a single morpheme. Despite this relational outcome, the source of the element with which -ka forms a subordinator is often transparent.

In relative clauses, the marker may have various forms: inka as in (33), enki, enka, inki, =nka as in (34), and =nki. The latter two forms function as enclitics and may appear after a noun, independent pronoun, deictic pronoun, or demonstrative, as in (34). They elide the first vowel in

<sup>&</sup>lt;sup>5</sup> As explained in note 1, I use the label 'subordinator' to refer to all the markers that occur in the different types of subordinate clause. In Table 3, I present various dialectal forms because they are relevant for diachronic explanations (see Section 4.1).

<sup>&</sup>lt;sup>6</sup> The variation between -*ka* and -*ki* is currently present in Purepecha as a dialectal variation (Chamoreau 2007, 2009: 268-273). The variation between -*ki* and -*ka* has not been explored. In the sixteenth century, -*ki* seems to have been the most frequent form attested for the subordinators (Gilberti 1987 [1558]: 35), while *ka* was used for the coordinator. The problem is that for the sixteenth century, data from only the Eastern area exist: this is the area in which nowadays -*ki* is used with more frequency to build the subordinator. By contrast, in the Western area -*ka* is generally used to build the subordinator and no data from the sixteenth century are known. In this paper, I only use examples with -*ka*. Otherwise, the vowel variation and change between *e* and *i* is well attested in Purepecha (Chamoreau 2009).

comparison with the full forms *inka* or *inki*. The source of the form that may be analyzed as *in-ka* is the form *inte-ki* (sometimes transcribed as *jinte-ki*, with initial velar that has been lost) attested in the sixteenth century (see note 6 for the variation between *-ki* and *-ka*). The element *inte* is a distal demonstrative pronoun (Gilberti 1987 [1558]: 25), as in *inte werantupinti-cha* in (33). In the subordinator *inka*, the demonstrative pronoun has lost the unaccented segment *te* that appears just before *-ki*. The use of the demonstrative pronoun as the source for the relative subordinator is crosslinguistically widespread (Heine & Kuteva 2002: 113-115).

- tsimanhi-e-x-ti=ksï=nha inte werantupinti-cha [inka=ksï=nha two-PRED-AOR-ASS3S=S3PL=EV DEM orphan-PL SUB=S3PL=EV táte-empa-ni ka ama-mpa-ni no ka-nko-rhe-nka-\phi-ka] father-KPOSS3-OBJ and mother-KPOSS3-OBJ NEG have-INTS-body-IT-AOR-SBJV 'They said that there were two orphans who did not have a father and mother.'
- [ima=nka jini ja-\phi-ka] juchiti mimi-i-x-\phi-ti

  DEM=SUB there be.there-AOR-SBJV POSS1SG brother-PRED-AOR-ASS3S

  'That one who is there is my brother.'

In complement clauses, the marker is *iska*, as in (35), or *iski*, *eska*, *eski* (see Table 3 above). The source for *is*- is the adverb of manner, *isi* 'thus'. The current form is a grammaticalization of the marker *isi*-*ki* attested at the beginning of complement clauses in the sixteenth century (Gilberti 1987 [1558]: 135-136). The two variations between *e/i* and *-ki/-ka* are also present in the various forms (see note 6). The evolution from an adverb of manner to a complementizer is another well-known process of grammaticalization (Heine & Kuteva 2002: 258).

(35) wanta-x-ti=kxï [iska no=kxï ukhuri-echa biajari-\phi-ka] tell-AOR-ASS3S=S3PL SUB NEG=S3PL opossum-PL travel-AOR-SBJV 'They told that the opossums have not traveled.'

In adverbial clauses, different subordinators exist depending on the contexts of use. The temporal subordinator is eka, as in (36). This subordinator is also used for condition, as in (37). The use of the same marker for these two contexts has been cross-linguistically described and is due to an absence of distinction of degrees of expectability (Thomason et al. 2007: 257-258). The source for the first part of the marker e seems to be the proximal demonstrative pronoun i 'this', displaying the same variation between e/i as described above in note 6. In the sixteenth century, the form was iki (Gilberti 1987 [1558]: 35, Lagunas 1983 [1574]: 56).

- (36)[eka Rosita-ri ата-тра chem-empa-o nia-nts'a-ni SUB Rosita-GEN mother-KPOSS3 house-KPOSS3-RES return-IT-NF *ja-p-ka*] imeri tapichu no ixe-pa-nts'a-s-p-ti be.there-AOR.PST-SBJV POSS3SG uncle NEG see-CENTRIF-IT-AOR-PST-ASS3S 'When Rosita's mother had returned to her house, her uncle did not see.'
- (37) wanti-ku-a-ka=kxï tsikata-ni [eka=ri ju-pirin-ka] matar-FT-IRR-ASS1/2S=S1PL chicken-OBJ SUB=S2SG come-COND-SBJV 'We will kill the chicken if you would come.'

For the locative adverbial clause, the same form as for the relative marker is used, *inka*: compare the marker *inka* in the relative clause in (33) and the locative adverbial clause in (38). Nevertheless, the source for the locative subordinator is different. For the marker in the relative clause, the source is the demonstrative *inte*. For the locative subordinator, the source is the deictic pronoun *jini*, and the grammaticalization has moved from *jini-ki* attested in the sixteenth century (Medina Plaza 1998 [1575]: 49 [81]), to the marker *inka* (or *inki*), as in (38). In Purepecha, demonstrative pronouns and deictic pronouns are related, as they are built on the basic deictic form *ji* (Chamoreau 2004).

(38) *ima=nha incha-tse-nt'a-x-p-ti* [*inka itsï ja-p-ka*]

DEM=EV enter-SUP-IT-AOR-PST-ASS3S SUB water be.there-AOR.PST-SBJV

'They said that he submerged himself **where** there was water.'

The subordinator for the manner-adverbial clause is built with the juxtaposition of the complementizer *eska* (see above, example 35) and the interrogative pronoun *na* 'how', as in (39):

(39)Rosa-ita. pawani pawani, jarhintku jawa-ra-sin-an-ti Rosa-DIM day get.up-MID-HAB-PST-ASS3S day early urhu-ni, [iska na imari tarha-mpa-iri *arhi-p-ka*] how POSS3SG mother.in.law-KPOSS3-GEN grind-NF SUB tell-AOR.PST-SBJV 'Rosita, all the days, got up early to grind **how** her mother-in-law told her.'

In the adverbial reason clause, the subordinator is *jimpoka*, as in (40): the instrumental postposition *jimpo* and -*ka*.

no=teru=chk'a anta-nku-x-ti [jimpoka=ni yontki=t'u NEG=other=certainly gain-INTS-AOR-ASS3S SUB=1 before=too
 a-rha-ni unta-φ-ka] divide-MID-NF begin-AOR-SBJV
 'This is no longer sufficient because before I also began to drink.'

Another example is the concessive subordinator, nak'iruka, as in (41). This is a complex form built with the morpheme nak'i 'which' and the adverbial enclitic for politeness =aru, that is nak'i=aru 'which=politeness'. The element -ka is attached to this complex form.

(41) kw'iripu xarha-narhi-sïn-ti eka ikia-ni ja-φ-k'a,
People show-PRINC-HAB-ASS3S SUB be.angry-NF be.there-AOR-SBJV

[nak'iruka no wanta-ni ja-a-ka]

SUB NEG tell-NF be.there-IRR-SBJV

'People show when they are angry although they will not tell.'

The subordinator for the hypothetical adverbial clause *peeka*, as illustrated in (42), is borrowed by Purepecha from the Spanish *puede que* 'may be that'. The behavior of this element correlates with the other types of subordinator in Purepecha, as it is built as a complex form with - *ka*.

(42) *arhi-siren-ti=ksi* [*peeka Maria arhi-nha-am-ka*] tell-HAB.PST-ASS3S=S3PL SUB María tell-PAS-HAB.PST-SBJV 'They told **that maybe** she is named María.'

The last subordinator I have found in the data appears in the purpose finite clause with switch reference *paraki*. Compare the example in (43) with the example in (32). In the purpose finite clause, as in (43), the marker is borrowed from Spanish, *para que*, and appears as *paraki* or *parake* in Purepecha (this is a dialectal variation). I have never found the form *paraka*. A possible hypothesis is that this is a recent borrowing and that *ke* (or *ki*) is borrowed from Spanish because the form and the function are similar to the Spanish particle *que* (which may be why *paraka* has not been found). Nevertheless, another possibility is convergence or syncretism between the Spanish *que* and the native Purepecha element *ki* (see note 6 above). Convergence or syncretism between the two elements might have been favored because they presented a similar form and functioned in similar contexts. This topic has not yet been studied. The subordinator *paraki* is well integrated in Purepecha; it may thus be considered a complex form (and not two morphemes, as in Spanish) because it is impossible to introduce another morpheme (suffix or enclitic) between *para* and *ki*. As illustrated in (43), the enclitic pronoun always attaches to the end of the subordinator.

(43) ju-\phi kokwani **paraki**=ri xe-a-ka come-IMP.SG quickly SUB=S2SG see-IRR-SBJV 'Come quickly **so that** you see him.'

In summary, at the beginning of a subordinate finite clause the subordinator is always a complex form built with the form -ka (or -ki) in combination with different kinds of element that enable recognition of the subordinate clause. In this complex form, -ka has a dependent form. In synchrony, the combination of the two elements is analyzed as one morpheme. However, on the diachronic level we may propose the hypothesis that the two elements were distinguishable and functioned as two separated morphemes, but that then the two morphemes were reanalyzed as one element in which each lost its autonomy. This process is transparent in the elements peeka and paraki borrowed from Spanish.

#### 4.2 -ka at the end of the subordinate clause: a compulsory suffix on the verb

In subordinate finite clauses, -ka modifies the predicate. All the predicates in subordinate finite clauses must have this suffix. Although the suffix is described as a "subjunctive" mood (Capistrán 2002, Friedrich 1984, Monzón 2004, Wares 1984), it does not have the characteristics of the morphemes of this category as it is compulsory and cannot be opposed to some other mood. Moreover, cross-linguistically the subjunctive mood can be opposed to an assertive (or indicative) mood at the semantic level, as in French in (44), in which the opposition between (44a) with the indicative and (44b) with the subjunctive expresses the degree of reality of the event. In (44a) the speaker indicates that he knows that this house (with red walls) exists, but in (44b) the use of the subjunctive mood expresses a doubt about the existence of such a house. In Purepecha, this opposition is impossible because the assertive mood always appears in main and independent clauses, and the subjunctive mood is the only one attested in subordinate finite clauses.

- (44) a. cherche Je maison qui une look.for.prs.indc.1sg art.indf.fem.sg S1SG house **REL** des mur-s rouge-s  $\boldsymbol{a}$ have.PRS.INDC.3SG ART.INDF.PL wall-PL red-PL 'I am looking for a house that **has** red walls.'
  - b. Je cherche une maison qui
    s1sG look.for.PRS.INDC.1sG ART.INDF.FEM.SG house REL

    ait des mur-s rouge-s
    have.PRS.SBJV.3sG ART.INDF.PL wall-PL red-PL
    'I am looking for a house that would have red walls.'

The label "subjunctive" may be explained by three factors: 1) in subordinate finite clause, the predicate must be marked by this morpheme. So this marker is associated with subordination, as is cross-linguistically true of the subjunctive; 2) this morpheme only appears in subordinate clauses and is the only mood that can be used; and 3) this morpheme is positioned at the end of the verb, in the slot for the mood.

As Purepecha is traditionally a SOV language (see above, Section 2), the verb usually appears at the end of the clause. Nowadays this is not always the case because Purepecha is changing to SVO. Nevertheless, subordinate finite clauses seem to be more conservative and present more SOV order than independent and main clauses (see examples in Section 4.1). The final position of the verb in the clause is significant, because -ka appears at the end, to close and delimit this subordinate clause. This type of clause always exhibits this schema: [SUB with -ka ... V-ka]. The double -ka marking delimits the clause, underlining its subordinate and embedding status. The role of the morpheme -ka on the verb is to signal the end of the subordinate clause; it has no semantic meaning as with the other moods.

In subordinate finite clauses, tense and aspect markers are present but in a distinctive and reduced form (the irrealis and conditional retain the same form), as presented in Table 4.

	Main and independent clauses		5	Subordinate finite clauses	
aorist	- <i>x</i>			-φ	
aorist – past	-x-p			<i>-p</i>	
habitual		-xïn			
habitual - past	-xïn-an	xïn-an -xïren		-am	
progressive	-xa				
progressive - past	-xa-p			V-NF AUX	
continuative	-xam				
continuative - past	-xam-an				
irrealis			<i>-a</i>		
conditional	-pirin		oirin		

**Table 4.** *ATIM markers in independent and subordinate clauses* 

The agrist aspect is codified -x in an independent or main clause, and  $-\phi$  in a subordinate clause, as illustrated in (40), while the agrist aspect and past tense are -x-p in an independent or main clause, and -p in a subordinate clause, as shown in (36).

The habitual aspect marker is -xin in an independent or main clause, as in (41), and retains the same form in a subordinate clause, as in (45). In independent clauses, habitual aspect and past tense markers appear as -sinan, as in (39), or as -siren, as in (42) (a lot of formal variations exist for these morphemes when they appear together: see Friedrich 1975: 184-185). In the subordinate finite clause two forms have been found: -siren, as illustrated in (30), and a reduced form, -am, as in (42).

(45) ari-xïn-ti [iska cho-narhi-xïn-ka] say-HAB-ASS3S SUB be.afraid-PRINC-HAB-ASS1/2S 'He (always) says that I am afraid.'

The progressive aspect marker is -xa in an independent and main clause, as in (19). In a subordinate clause, this aspect has an analytic form: it is built with the non-finite verb and the ja'be there' auxiliary, as in (46). Note that the auxiliary appears with the aorist aspect. The progressive aspect and past tense present a similar process: the markers for independent and main clauses are xa-p-, as in (23), whereas in dependent clauses an analytic construction is attested, as in (47). In this context the ja- 'be there' auxiliary is marked by the aorist aspect and the past tense, encoded as -p-. In these two contexts, the subjunctive mood presents the form k'a.

- (46) kwhiripu xarha-narhi-sin-ti [eka ikia-ni ja-ø-k'a]
  people show-PRINC-HAB-ASS3S SUB be.angry-NF be.there-AOR-SBJV
  'People show when they are angry.'
- (47) no=kxï nia-ntsha-x-p-ti [jimpoka=kxï **t'iré-ni** ja-p-k'a]

  NEG=S3PL come.back-IT-PST-ASS3S SUB=S3PL eat-NF be.there-AOR.PST-SBJV

  'They didn't come back because they were eating.'

The irrealis and conditional present a similar form in independent and subordinate clauses: the irrealis is -a, as in (37) in an independent clause and (43) in a subordinate clause, and the conditional is *pirin*-, as illustrated in (48) in an independent clause and (37) in a subordinate clause.

(48) Pacanda anapu-echa pa-pirin-ti
Pacanda ORIG-PL take-COND-ASS3S
'Those from Pacanda should carry it.'

To sum up: At the end of a subordinate clause -ka always appears suffixed to the verb, as a morphological constraint. It appears in the same position as the mood, after the aspect, tense, and irrealis markers; this is why this morpheme is traditionally treated as a subjunctive mood. However, in fact its role is to show the end of the subordinate clause and it has no semantic meaning, unlike the other moods. In subordinate clauses, the aspect and tense markers appear in reduced form. These two characteristics, the marker -ka requirement and the reduced aspect and tense markers, show that subordinate clauses have less finiteness than main clauses (Chamoreau 2016).

<sup>&</sup>lt;sup>7</sup> For the continuative aspect and the continuative aspect with the past tense, the process is the same as for the progressive aspect and the progressive aspect with the past tense (see Wares 1974: 96-97 and Friedrich 1984: 73).

#### 5. Conclusion: two hypotheses about the source and grammaticalization of ka

Purepecha distinguishes between coordination (linkage with a free and independent ka of two independent clauses), chain-medial clauses (linkage with a free ka, which may be repeated, of an independent clause with a dependent clause, the latter depending on the former), and subordination (linkage of an independent clause with a dependent clause, the latter being embedded in the former; the dependent markers -ka are attested). As described in this paper, in synchrony three markers with ka are attested in Purepecha: the coordinator, the marker that builds the subordinator, and the subjunctive mood. One question remains: Does a relation among these three morphemes exist?

The main, shared function of the first two morphemes is to link units, although each ka performs a different type of linkage. Thus to postulate a common source for these linking devices might make sense. Nevertheless, although the diachronic relation between the coordinator ka and the subordinator with -ka is likely, as the main function of both is linkage, the diachronic relation between these two and the subjunctive -ka is not so evident. This morpheme has two faces: it appears in the slot of the mood at the end of the verb, but its presence is compulsory in subordinate clauses and it has no semantic meaning (unlike the other moods). Its function is to signal the end of the embedded and subordinate clause. For this morpheme, I suggest a different route of evolution: the source seems to be the assertive mood marker for the SAP -ka. In the route of grammaticalization from assertive to subjunctive, the use of -ka extends to a new compulsory context of use, and has been desemanticized (no choice is possible, no modal meaning is possible). These processes have led it to look more like a linking device than a mood, and thus to adopt the main function of delimiting a clause and to play a role (in combination with the subordinator) in the process of linking a subordinate clause with a main clause.

Taking into account such parameters as weight, cohesion, and variability (Lehmann 2002) and analyzing the correlation between them, I advance the hypothesis that there have been two routes of grammaticalization. First, the free coordinator ka has given rise to the dependent and compulsory marker -ka that appears in the subordinator. The diachronic change illustrates a shift from marking coordination and independence to showing coordination and dependence and ultimately subordination and embedding. This process is depicted by the form of ka, which appears twice. I suggest five stages for this route of grammaticalization. Second, another route of grammaticalization leads from the assertive mood marker for SAP -ka to the subjunctive mood marker -ka (see Table 5).

#### Stage 1. Coordinator of two words or noun phrases

On the syntagmatic level, the syntactic scope of the coordinator ka is to link two functionally equivalent words or phrases. It is a free and independent element. It groups with the second unit it links to, or to the last one when several units are coordinated. Just one occurrence of ka suffices to link two or more units. On the paradigmatic level, ka presents the semantic feature of conjunctive coordinator, which may be distinguished from other types of coordinator (disjunctive or adversative). It thus belongs to a paradigm of coordinators. The coordinator ka may receive

enclitics that change its meaning (to build other coordinators). Thus the possibility of a choice of coordinator exists depending on communicative intention.

#### Stage 2. Coordinator of verb phrases

Using the coordinator to link verb phrases presents the same features as the coordinator of noun phrases (see stage 1, above). However, it makes up the first stage of grammaticalization as verbs constitute another context of use for the coordinator ka. In a coordinated verb phrase, phrases have high thematic reference as well as tense, aspect, irrealis, and mood continuities.

#### Stage 3. Coordinator of finite clauses

The following stage involves the use of ka as a clausal coordinator, which often incorporates thematic reference and tense, aspect, irrealis, and mood continuities. In this stage, the coordinator ka maintains the features presented above for stage 1. However a change occurs at the syntactic level, as it links clauses and not phrases. Following Heine & Kuteva (2002: 83), coordinators used with NP appear to provide one source for clause-connecting markers ('and').

#### Stage 4. Coordinator of chain-medial clauses

This is an intermediate stage: On the paradigmatic level, its features are similar to those described for the coordinator in stage 1, but on the syntagmatic level the changes are more significant. Here ka remains a free and independent coordinator, but the two coordinated units are not functionally equivalent. Chain-medial clauses depend on the independent clauses, that is, chain-initial clauses, for their ATIM reference. A second syntactic feature is that ka is more bound: it often occurs at the head of each coordinated clause (various ka are used, not just one with the last coordinated clause). Therefore, the repetition of ka thus indicates the dependency of the clauses.

#### Stage 5. Marker at the beginning of a subordinate clause

The marker -ka is a bound element that loses its autonomy. It occupies a fixed slot and is always attached to another lexical or grammatical element to build a subordinator. It always appears in the same position, at the beginning of a subordinate clause. It thus links two functionally non-equivalent clauses. The presence of this morpheme is compulsory at the beginning of each subordinate clause. On the paradigmatic level, -ka displays desemanticization, as it constitutes part of a complex morpheme and does not have a semantic feature on its own (it is combined with different types of element). The consequence is a change of paradigm (or decategorization for Heine & Kuteva 2007: 32-53), in which -ka no longer belongs to the paradigm of coordinators but to the paradigm of subordinators. There is no semantic choice: -ka is always suffixed to another element, whatever the communicative intention.

#### The specific route of the subjunctive mood

In a subordinate clause, -ka is always a suffix and appears twice (at the beginning, forming the subordinator, and at the end, on the verb), delimiting the embedded subordinate clause. In the second occurrence, -ka is suffixed to the verb and modifies it. The presence of the suffix -ka is compulsory because of the type of clause; no syntactic or semantic choice is possible, unlike with the other moods. For this morpheme, I suggest a different route of evolution: the source seems to be the assertive mood marker for the SAP -ka, because both appear on the predicate in the slot of the mood after aspect and tense markers. It is seen as a member of the paradigm of mood because of its position at the end of the verb, but it has a specific position in this paradigm as it is not possible to contrast it with another mood. In Purepecha, the assertive mood may be contrasted with the interrogative mood, and the imperative mood may be contrasted with the exclamative mood (see Chamoreau 2009: 100-108). In the route of grammaticalization from assertive to subjunctive, the use of -ka extends to a new compulsory context of use, and it has been desemanticized (no choice is possible, no modal meaning is possible). These processes have led it to look more like a linking device than a mood and thus to adopt those devices' main function of delimiting a clause and to play a role in the process of linkage (in combination with the subordinator) of a subordinate clause with a main clause. The result is that it is more closely associated with the syntactic configuration of embedding – marking the end of this type of clause and indicating that the clause delimited by the two occurrences of -ka is subordinated to a main clause – than with a semantic modal meaning. This is why its position in this paradigm is marginal, as it cannot be contrasted with another mood. Cross-linguistically, according to Bybee et al. (1994: 236), the subjunctive mood marker may have the indicative mood marker as its source. They explain that "subjunctive uses occur near the end of grammaticalization paths; whether they are from indicatives or from modal elements, their restriction to subordinate clauses comes late in their development. A related point is that they are more semantically reduced".

In Table 5, I present the five stages of grammaticalization from the coordinator to the subordinator (built with -ka and another element) in the left-hand column and the stage from the assertive mood marker for the SAP to the subjunctive mood on the right.

**Table 5**. Stages of grammaticalization of ka

Noun phrase coordinator

> Verb phrase coordinator

> Finite clause coordinator

> Chain-medial clause coordinator

> Subordinator (-ka with another element)

> Subjunctive mood marker

The route of grammaticalization from coordination to subordinator has been cross-linguistically demonstrated (see for example Harris and Campbell 1995: 290). This process is not uncommon in several languages. This grammaticalization appears to be part of a more general process whereby markers of phrase coordination change into markers of clause coordination that

then give rise to subordination markers (Heine and Kuteva 2002: 43). In Purepecha, the route includes an intermediate stage, coordination of a dependent clause. Interestingly, the last stage of the first route of grammaticalization and the grammaticalization of the subjunctive mood create two dependent markers -ka that indicate subordination and embedding. The doubling of -ka is a way to encode the high degree of dependence of this type of clause.

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#### **Abbreviations**

**AOR** aorist applicative APPL article ART assertive ASS causative **CAUS CENTRIF** centrifugal centripetal **CENTRIP** comitative COM conditional **COND** definite DEF demonstrative **DEM** 

diminutive DIM evidential EV focus FOC feminine **FEM** formative FTgenitive **GEN** habitual HAB imperative **IMP** independent IND indicative **INDC** indefinite **INDF** INS instrumental interrogative INT

intensive **INTS** irrealis IRR iterative IT

kinship possessive **KPOSS** LONG.EXT long exterior area

lower area LOW middle MID

no coreferential subject NCS

negation NEG non-finite NF object O

objective case OBJ

passive PAS

**PRINC** principal area

**PST** past plural PL**POSS** possessive predicativizer **PRED** progressive **PROG** present PRS reflexive **REFL** subject **SBJV** subjunctive singular SG subordinator SUB superior area **SUP** top area

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