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Non-finite chain-medial clauses on the continuum of finiteness in Purepecha

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On the continuum of finiteness that can characterize clauses, Purepecha is one of the languages in which the predicates of both independent and dependent clauses are usually finite. Some non-finite dependent clauses have been observed. The predicate is converted to a non-finite form by means of the non-finite marker *-ni*, without independent specification of tense or aspect. The use of non-finite clauses in clause-chaining, especially chain-medial clauses in narratives, is a phenomenon that appears to be frequent. Its primary function is to maintain event coherence. Reference tracking is almost always possible, but in specific contexts a new reference may be introduced in non-finite chain-medial clauses (participant discontinuity). Temporal continuity is generally attested, although some exceptions have been found with utterance predicates. Non-finite chain-medial clauses seem to display more finiteness features than the other non-finite clauses. In this paper, I describe and discuss in detail the uses of non-finite chain-medial clauses and the position of these non-finite clauses on the continuum of finiteness in Purepecha.

Keywords: chain-medial clauses; continuum of finiteness; referential continuity; non-finite marker; temporal continuity

1. Finiteness and chain-medial clauses: A brief introduction

The aim of this paper is to describe non-finite chain-medial clauses and to show where they are placed on the continuum of finiteness in Purepecha, a language in which independent and dependent clauses are usually finite. Finiteness is a widely debated notion that has been characterized differently depending on the approach taken (Bisang 2001, 2007, this volume; Givón 2001, this volume; Nikolaeva 2007, *inter alia*). In contrast, chain-medial clauses as part of clause-chaining systems have been treated from a factual and functional perspective (Givón 2001; Longacre 2007).

From the functional perspective, finiteness is seen as a property of the clause (not only of the verb) that depends on a cluster of features. Focusing on these involves the

identification of various properties: particular combinations of tense, aspect, irrealis, and mood, agreement, illocutionary force marker, case marking, determiners, possessive marking of arguments, number marking, and so on. Finiteness is also defined as a scalar continuum: a clause can be more or less finite and may be located on a continuum going from most independent or main finite clauses to most nominalized phrases (see Givón 2001:26 and this volume). This perspective, which is the one adopted in this paper, contrasts with the discrete characterization of finiteness (Bisang 2007; Nikolaeva 2007). Finiteness generally correlates with tense, aspect, and mood markers, presence of agreement, and possibility of switch reference. By contrast, non-finiteness correlates with more nominal features, absence of markers of tense, aspect, and mood, preference for referential continuity, and so on.

Another correlation relevant to this paper is that between degree of finiteness and clause types within clause-chaining. Clause corresponds more or less to “individual predication” (Longacre 2007:372) and to a “syntactic unit packed under a single intonation contour” (Givón 2001:355). A clause-chain is typically a cluster of clauses which may constitute sentences or paragraphs. According to Longacre (2007:372), “sentences are tighter bundles than paragraphs. They commonly have more cross-reference between their component parts (clauses) and more ‘closure’ (i.e., it is somewhat easier to tell where one stops and another starts) than is the case with combinations of sentences which we call paragraphs.” Within discourse coherence, a clause-chain is characterized as the “smallest unit of coherent multi-propositional discourse,” one that has “the tightest, most continuous cross-clausal coherence links” (Givón 2001:355). Within the clause-chain, a distinction between four clause types is established by Givón (2001:356–357): chain-grounding clauses, chain-initial clauses, chain-medial clauses, and chain-final clauses. The first type corresponds to the “coherence-bridge” function, typically pre-posed adverbs or existential-presentatives. Chain-initial clauses initiate the new chain and are grammatically the more elaborated clauses (topical referent, marked tense, aspect, mood, etc.). Chain-medial clauses “carry the bulk of sequential new information in the chain, and display the highest degree of 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). Lastly, chain-final clauses conclude the thematic chain. Chain-initial and chain-final clauses are generally the most finite clause type, and chain-medial clauses are the least finite (the degree of finiteness of chain-grounding clauses is often unpredictable, although generally 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.

As will be argued below, non-finite chain-medial clauses in Purepecha are constructions employed to facilitate thematic, referential, and aspectual continuities in discourse. Such strategies thus correlate with reduced finiteness. It will be shown that chain-medial clauses in clause-chains display specific features that make them different from chain-initial and chain-final clauses, whereas on the continuum of finiteness, by contrast, non-finite chain-medial clauses occupy a specific position between dependent finite clauses and subordinate non-finite clauses.

The structure of this paper is as follows: Section 2 gives some basic grammatical information for Purepecha, concerning both independent and main clauses and subordinated finite and non-finite clauses. The analysis of chain-medial clauses has to take into account various features that constitute components of event integration. The first one is referential continuity, discussed in Section 3, where it is presented as a continuum of ease of referential recoverability. In Section 4 I explore tense-aspect mood continuity, and in Section 5 I describe the continuum of thematic continuity and different properties employed to characterize degrees of coherence with previous discourse. The paper concludes with a brief final comment, setting out the continuum of finiteness in Purepecha and discussing the central position of chain-medial clauses on this continuum.

2. Purepecha: Some basic grammatical information

Purepecha (formerly known as Tarascan) is classified as a language isolate and is spoken in the state of Michoacán in western Mexico by approximately 110,000 people (Chamoreau 2009, 2012). Whether Purepecha belongs to the Mesoamerican linguistic area is still debated, but it is not generally classified as a Mesoamerican language, since it possesses very few of the traits common to Mesoamerican languages (Campbell et al. 1986; Smith-Stark 1994).

Purepecha is an agglutinative and synthetic language, and is 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, mood, and person (Chamoreau 2009, in press).

2.1 Independent and main clauses

Purepecha has nominative-accusative alignment; it 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 (1), and both objects of a ditransitive verb, such

as *inte-ni wantantskwa-ni* and *Puki-ni*, in (2). The presence or absence of the object case marker depends on various hierarchies: the inherent semantic properties of the referent (human, animate); properties related to grammatical features (definite, count noun vs. mass noun, generic vs. specific, etc.); and pragmatic strategies (topic, focus) (Chamoreau 2009).

- (1) *jo Selia ata-x-ti imeri misitu-ni*
 yes Celia beat-AOR-ASS3S POSS3 cat-OBJ
 'Yes, Celia beat her cat.' (JR-A25: 94)¹
- (2) *Selia arhi-x-ti inte-ni wantantskwa-ni Puki-ni*
 Celia tell-AOR-ASS3S DEM-OBJ story-OBJ Puki-OBJ
 'Celia told Puki a story.' (JR-A25: 36)

Subject and object pronouns are expressed by second-position enclitics (Chamoreau 2014). Dependent marking is predominant in Purepecha, for example with the pronominal enclitic, as in (3), and the genitive case, as illustrated in (4).

- (3) *witsintikwa=kxi ikya-pa-rini*
 yesterday=S1PL get.angry-CENTRIF-PTCP.PST.AC
wanto-nts-kwarhe-pa-nt'a-ni xa-rha-x-p-ka
 tell-IT-MID-CENTRIF-CENTRIF-NF be.there-FT-AOR-PST-ASS1/2S
 '... yesterday, getting angry, we discussed.' (IH10: 128)
- (4) *jinte-s-ti wampa Maria-eri*
 be-AOR-ASS3S husband Maria-GEN
 'He is Maria's husband.' (JR7: 90)

As independent and main finite clauses are the most finite, participants are clearly expressed by a noun, as in (2), by an independent pronoun, as in (5), or by a pronominal clitic, as in (6) and (7).

- (5) *jucha isi=sii mi-te-s-p-ka ima*
 S1PL.IND thus=FOC know-face-AOR-PST-ASS1/2S ART.DEF
ts'irakwa jimpo
 cold INS
 'We, thus, knew it for the cold.' (TM9: 10–14)
- (6) *no=taru=ksi ima-echa-ni jatsi-a-s-ka*
 NEG=other=S1PL DEM-PL-OBJ have-O3PL-AOR-ASS1/2S
 'We no longer had them (papers).' (AR1: 43)

1. The examples come from my own fieldwork data. The first letters correspond to the pueblo, here JR, followed by the file identifier, here A25, and finally the reference of the recording, here 94.

- (7) *juchi tata=rini kwane-xin-ti xiwatsi k'eri-ni*
 POSS1 father=O1SG lend-HAB-ASS3s coyote old-OBJ
 'My father lends me to the old coyote' (CC11: 92)

Purepecha has three exophoric demonstrative pronouns (*i*, *inte*, *ima* in the singular and *tsi*, *tsimi*, *tsima* (*imaecha/imaksi*), in the plural). The distal invisible demonstrative pronouns *ima* and *tsima* (*imaecha/imaksi*) have been recruited to be used as the anaphoric (endophoric) pronoun.

Purepecha is basically a SV and SVO constituent order language, as illustrated by Examples (1) and (2). This is the basic order in the region of Lake Patzcuaro (Chamoreau 2009: 55–58). Other orders reflect specific pragmatic properties. Studies of constituent order in the other regions do not as yet exist. However, Purepecha exhibits some traits of a SOV language: (1) tense, aspect, irrealis, and modal markers following the verb; (2) postpositions; (3) only suffixes; (4) only enclitics; (5) case markers; (6) main verbs preceding inflected auxiliaries; and (7) variation in the position of the head noun in a noun phrase (henceforth NP). SVO and SOV constituent orders were attested in the sixteenth century, and the former has gradually increased since then. The change is probably due to areal contact. Prior to the Conquest there were speakers of other languages in this territory, mostly 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, a SVO language, continued the process, for example by introducing prepositions (Chamoreau 2007).

Purepecha distinguishes four different paradigms: aspect, tense, irrealis, and mood (henceforth TAIM). These suffixes have various dialectal allomorphs; I present in Table 1 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, continuative), one tense marker (past), two irrealis markers (irrealis-future, conditional), and five mood markers (assertive, interrogative, imperative, exclamative, subjunctive). Table 1 presents the different morphemes as they occur in independent or main clauses.

Table 1. TAIM markers in independent or main clauses

Aspect	Tense	Irrealis	Mood
AOR -x ²	PAST -p/-an	IRR -a	ASS1/2s -ka / ASS3s -ti
HAB -xin	PRS unmarked	COND -pirin	INT -ki/-i/-ø
PROG -xa			IMP.SG -ø / IMP.PL -e
CONT -xam			EXCL -ka
			SBJV -ka

2. In aorist and habitual aspects, the palatal *x* is pronounced as an alveolar *s* (-s for aorist aspect, -sin for habitual aspect). This is a dialectal variation.

These morphemes have a fixed order of occurrence at the end of the predicate: (aspect) + (tense) + (irrealis) + mood (Chamoreau 2009, forthcoming). Mood is obligatory in a finite verb. Aspect has to occur with tense, and also with mood. The irrealis marker occurs directly with mood (aspect and tense are impossible).

2.2 Coordination

The pattern of clause coordination is symmetrical: two finite and independent clauses may be coordinated using different types of coordinator (Chamoreau forthcoming). As illustrated in (8), the coordinator *ka* on its own establishes the coordination of two entities that are functionally equivalent. It expresses the conjunctive coordination that may be translated by ‘and’ in English.

It may also function as the host of an adverbial enclitic (Chamoreau forthcoming) to build other coordinators: the coordinator *ka=ru* ‘and=then’ means adversative and may be translated by ‘but’, while *ka=teru* ‘and=other’ expresses disjunction and may be translated by ‘or’. Today these two coordinators tend to be abandoned and replaced by the Spanish coordinators ‘pero’ (also pronounced *peru*) for adversative 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). The coordinators are free and independent elements used basically to link two noun or verb phrases, or two clauses. When two clauses are coordinated, they may have the same reference or switch reference, as in (8). The two clauses may have the same TAIM markers, but the contrary is also possible, as in (8).

- (8) *ampuxi juka-tsi-a-x-ti ka men'k'u=kxi=nha*
 louse have-SUP-O3PL-AOR-ASS3S and always=S3PL=EV
katsi-tsi-ni ja-rha-siren-ti
 scratch-SUP-NF be.there-FT-HAB.PST-ASS3S
 ‘He had lice **and** they said that they always scratched their heads.’ (TN2-36)

2.3 Subordination

Purepecha shows morphological asymmetry between dependent and independent clauses (Bisang 2001: 1408). The form of the predicate itself and the type of reference (same or different) signal the subordination of the clause. Purepecha is among those languages in which subordinate clauses are generally finite; however, non-finite subordinate clauses also exist, for the same-reference complement clause and the purpose clause.

2.3.1 Finite subordinate clauses

Finite subordinate clauses are recognizable by the presence of two markers of *-ka*: one at the beginning of 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 always

dependent on another unit. It thus displays a dependent form (a suffix) in order to indicate clausal subordination. At the beginning of the subordinate clause, *-ka* forms different subordinators in combination with another element. At the end of the clause, the marker *-ka* suffixed on the verb has generally 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). But the presence of *-ka* on the verb is a morphological constraint for the subordinate finite clause regardless of the type of clause; there is no option to use another mood in this type of clause (Chamoreau 2009: 103–105, forthcoming).

Finite subordinate clauses are introduced by a subordinator built with *-ka*: *jimpoka* in the adverbial-reason clause in (9a), *inka* in the relative clause in (9b), *iska* in the complementive clause in (9c), and *eka* in the adverbial-temporal clause in (9d). The predicate is always modified by the mood *-ka* called “subjunctive.” Tenses, aspects, and irrealis markers are present, but take a distinctive form. In particular, aspects have a reduced form (see Chamoreau forthcoming, for the complete list): for example, the aorist is codified *-x-* (or *-s*) in an independent or main clause, as in (8), and *-ø* in a dependent clause, as in (9b), and the aorist and past appear as *-s-p* in an independent or main clause, as in (5), and *-p* in a dependent clause, as in (9d). Coreference is possible, but generally there is no coreference between main and dependent clauses. Discourse markers such as the evidential are possible in main and dependent clauses, as in (9b). A separate intonation contour is attested in adverbial subordinate clauses, as in (9a) and (9d), but relative and complement clauses display the same intonation contour.

- (9) a. *jima arhi-nha-siren-ti kheri tanako, [jimpoka=kxi jima*
 there say-PAS-HAB.PST-ASS3S big Tanaco SUB=S3PL there
tanha-li-siren-ka kw'iripu-echa]
 join-body-HAB.PST-SBJV person-PL
 ‘That place was called big Tanaco because there, people were gathering together.’ (TN3-2)
- b. *tsimnhi-e-x-ti=ksi=nha inte werantupinti-cha*
 two-PRED-AOR-ASS3S=S3PL=EV DEM orphan-PL
[inka=ksi=nha no ka-nko-rhe-nka-ø-ka táte-empa-ni
 REL=S3PL=EV NEG have-INTS-body-IT-AOR-SBJV father-KPOSS3-OBJ
ka ama-mpa-ni]
 and mother-KPOSS3-OBJ
 ‘They said that there were two orphans who did not have father and mother.’ (TN2-2.3)
- c. *wiri-ø juchiti tapichu-ni arhi-ø [iska ju-a-ka]*
 run-IMP.SG POSS1 uncle-OBJ say-IMP.SG SUB come-IRR-SBJV
 ‘Run and tell my uncle to come ...’ (TR1-216)

- d. [*eka Rosita-ri ama-mpa chem-empa-o nia-nts'a-ni*
 SUB Rosita-GEN mother-KPOSS3 house-KPOSS3-RES return-IT-NF
ja-p-ka], *imeri tapichu no*
 be.there-AOR.PST-SBJV POSS3 uncle NEG
sési ixé-pa-nts'a-s-p-ti
 well see-CENTRIF-IT-AOR-PST-ASS3S
 'When Rosita's mother had returned to her house, her uncle did not
 see well.' (TR1-139)

2.3.2 Non-finite complement and purpose clauses

In certain complement and purpose clauses the verb is marked by the overt non-finite marker *-ni*, with no TAIM, no subordinator, no pronominal enclitic, generally the same subject, as in (10a), and the same intonation contour. In the complement non-finite clause there is coreference between the agent of the main and complement clauses (equi-subject), as in (10a) (92.5% of the occurrences); in the case of manipulative verbs, as in (10b), the manipulee of the main clause (syntactic object) is coreferent with the agent of the complement clause (7.5% of the occurrences). This construction is used in order to indicate successful manipulation. The evidential marker may be used in a non-finite complement clause, as in (10c).

- (10) a. *ero-ta-xa-ka* [*k'ama-ta-ni pruntu*]
 hope-CAUS-PROG-ASS1/2S finish-CAUS-NF quickly
inki=ni tep'e-ni ja-ø-ka
 SUB=S1SG weave-NF be.there-AOR-SBJV
 'I hope to finish soon what I am weaving.' (JR45-267)
- b. *no=chka=ni jwina-x-ka ugo-ni [jupi-ka-ni*
 NEG=then=S1SG allow-AOR-ASS1/2S Hugo-OBJ take-FT-NF
xuchi kawayu-ni]
 POSS1 horse-OBJ
 'I do not allow Hugo to take my horse.' (JR10-2)
- c. *kw'iripu mi-ti-x-p-ti* [*wanta-ni=na imeri tsípi kwa*]
 people know-face-AOR-PST-ASS3S tell-NF=EV POSS3 life
 'People had known how to tell their life story, they said.' (TR1-91)

The purpose non-finite clause is introduced by *para*, with coreference and TAIM continuity, as in (11). This construction is not attested in the sixteenth century and seems to be a grammatical replication of the Spanish construction: *para* + non-finite V:

- (11) *Kumicho incha-parha-ku-x-p-ka* [*para warhiti-cha-ni*
 Ocumicho enter-shoulder-NCS-AOR-PST-ASS1/2S for woman-PL-OBJ
eskwela arhi-t'a-ni]
 school say-IT-NF
 'I had entered into Ocumicho in order to teach these women.' (OC6-47)

These clauses use a non-finite *-ni* marker. It is noteworthy that this marker is in homophony with a nominalizer, the enclitic of the first person singular, and the objective case marker. This situation suggests a remarkable scenario in which a diachronic source for the non-finite marker can be conjectured. It may come from a nominalizer, as in (12), but this is an unproductive nominalizer, generally appearing with (unknown) bases that do not occur in other contexts.

- (12) *afu-* ‘?’ *afu-ni* ‘deer’
awa- ‘?’ *awa-ni* ‘rabbit’
kwi- ‘?’ *kwi-ni* ‘bird’
pawa- ‘?’ *pawa-ni* ‘tomorrow’
fi- ‘?’ *fi-ni* ‘tooth’

But more probably the non-finite marker is related to the objective case: this is a well-known source (see Heine & Kuteva 2002). There is a parallelism of treatment between the complement non-finite clause, as in (13a), and the objective nominal phrase (NP), as in (13b): both are arguments of the verb.

- (13) a. *nahrexama araspi vandani*
nah=re=xama a-rha-s-p-i [wanta-ni]
how= 2SG=probability divide-MID-AOR-PST-INT tell-NF
‘How could you tell (this)?’ [Medina Plaza 1998 [1575]:30 [17–18]]
b. *Selia a-rha-s-ti kurucha-ni*
Celia divide-MID-AOR-ASS3S fish-OBJ
‘Celia ate the fish.’ (JR24-169)

Independent clauses are the most finite type, while non-finite complement and purpose clauses correlate with least finiteness. They constitute respectively the two ends of the continuum along which the subordinated finite clauses are placed (see Table 2).

Table 2. Independent finite clauses and subordinate clauses on the continuum of finiteness in Purepecha

Properties	Independent and main finite clauses	Subordinated finite clause	Non-finite complement and purpose clause
TAIM markers	+	+ reduced or obligatory forms	–
Possibility of a different referent	+	±	–
Separate intonation contour	+	±	–

3. Chain-medial clauses in Purepecha: A continuum of ease of referential recoverability

In Purepecha, referential recoverability exhibits variations along a continuum from referential continuity or easy identification of the referent to referential discontinuity – that is, a new referent introduced in a non-finite chain clause (Givón 1983: 53–63).

3.1 Referential continuity

In a same-subject situation, reference tracking is always possible and easy; in a chain-medial clause the referent generally has the function of the subject. In the chain-initial clause, as in (14a), the new referent is introduced by the NP *Teremendo anapuecha* ‘Those from Teremendo’. In chain-medial clauses, as in (14b), the anaphoric pronoun *imecha* is used, and in (14c) the pronominal enclitic =*ksi* is attested.

- (14) a. *Teremendo anapu-echa kutsu-siraam-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=ksi sesi xama-ra-nte-ni*.
 NEG=S3PL well smell-CAUS-nose-NF
 they did not smell good.’ (TM1-1.2)

In (15a), the referent is expressed in the chain-initial clause by a definite NP *acheti-echa*, ‘the men’, and the verb is marked by aspect, while in the chain-medial clauses in (15b) and (15c), the subject is the pronominal enclitic =*ksi*. We also observe that the evidential enclitic may be attested in this non-finite chain-medial clause.

- (15) a. *xasi=ksi=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=ksi=nha ya*,
 and bathe-CAUS-NF=S3PL=EV now
 and they said that they bathed her,
- c. *ka ampa-tsi-ku-ni=ksi=nha ya*.
 and be.clean-SUP-APPL3O-NF=S3PL=EV now
 and they said that they combed her.’ (TN2-47)

3.2 Referential predictability without ambiguity

Narratives are multi-propositional: two (or more) referents are generally expressed and interact in discourse. The speaker passes from one referent to another, and the

change is generally clearly expressed by the use of a definite NP. Example (16) is the beginning of a story. In the chain-initial clause, in (16a), the first referent, a woman, is introduced by an indefinite NP, and the verb is marked by aorist aspect and past tense. In (16b) the referent is expressed by a definite strategy, the NP with the anaphoric demonstrative *ima*. In (16c) and (16d), no overt subject is attested (pronominal enclitic = \emptyset); the recoverability of the reference is easy (strategy of referential continuity). The second referent is introduced in (16d) as a definite NP *wampa-ni* 'her husband', in the objective case, and appears as a definite subject NP in (16e), showing referential object-subject continuity. In (16f) no overt subject (pronominal enclitic = \emptyset) is marked, indicating referential continuity. In (16g), the first referent, the woman, reappears in an anaphoric NP, as in (16b). In (16h) and (16i) the anaphoric demonstrative is used. It is noteworthy that TAIM are introduced only in (16a) and (16e): (16a) represents the beginning of the story, that is, the chain-initial clause, and in (16e) the activity of the second referent is introduced (by the progressive/past). The clause in (16e) is considered to be inserted in the chain-medial clauses because there is a clear referential continuity (object-subject) between (16d) and (16e), and no (long) pause between the two clauses is attested. When the first referent reappears in (16g) and in the following clauses, non-finite clauses are used. No ambiguity is possible: passing from one referent to another is the consequence of the interaction of the two, and each one has its role. The recoverability of the references is easy. In (16e) and (16g), the introduction of the conjunction *ka* at the beginning of the clause is a clear strategy for indicating the changes that maintain thematic continuity and referential continuity (object-subject).

- (16) a. *ja-rha-x-p-ti=na* *ma* *warhi* *xepiti*,
 be.there-FT-AOR-PST-ASS3S=EV ART.INDF woman lazy
 'There was a lazy woman,
- b. *ima* *warhi* *xepi-ni*,
 DEM woman be.lazy-NF
 this woman was lazy,
- c. *xepi-ni=na*,
 be.lazy-NF=EV
 they said that she was lazy,
- d. *no* *thiri-ra-ni* *wampa-ni*,
 NEG eat-CAUS-NF husband.KPOSS3-OBJ
 she did not give to eat to her husband,
- e. *ka* *ima* *wampa* *anchi-kurhi-xa-p-ti*
 and DEM husband.KPOSS3 work-MID-PROG-PST-ASS3S
 kampu-rhu *yawani*,
 field-LOC far
 and this husband worked in the field far away,

- f. *ni-ra-ni jini*,
go-FT-NF there
he went there,
- g. *ka ima warhi xepi-ni*,
and DEM woman be.lazy-NF
and this woman was lazy,
- h. *ima no thirikwa u-ku-ni*,
DEM NEG lunch do-APPL3O-NF
she did not make the lunch for him,
- i. *ima no thirikwa pa-ku-ni*.
DEM NEG lunch bring-APPL3O-NF
she did not bring the lunch for him.' (JR3-1.6)

Another example of referential predictability without ambiguity has been found in dialogue inserted in discourse, as in (17). In this context, the recoverability of the reference is possible even if no subject is expressed in (17d–f). Two methods are employed to build the reference: in this discourse, the speaker generally uses the first person plural, as in (17a), and the first person singular, as in (17b), in order to contrast the activity of his family in (17a) with his own activity in (17b). In (17c), the question asked by the person who talks with him employs the second person plural, so the answer, in (17d–f), has to use the first person plural. Chain-medial clauses displaying the interaction of various referents without ambiguity for reference tracking are found in this kind of dialogue. When it is worked into discourse, this may be done by non-finite chain-medial clauses, as in the answer in (17d–f).

- (17) a. J. *jucha=t'u kara-sin-ka*,
s1PL.IND=too write-HAB-ASS1/2s
'We also write,
- b. *peru ji no=teru kara-x-ka ya*.
but s1SG.IND NEG=more write-AOR-ASS1/2s now
but I did not write any more now.'
- c. T. *ka patsa-kata=tshi jatsia-x-ka ya*
and keep-PART.PP=S2PL have-AOR-ASS1/2s now
ampku karakata-echa-ni?
so writing-PL-OBJ
'And had you already kept the writings?'
- d. J. *No, isi=k'u kara-ni*,
NEG thus=only write-NF
'No, thus only, we wrote them,
- e. *estudiari-ni*,
study-NF
we studied them,

- f. *ka isì=k'u jura-k'u-a-ni.*
 and thus=only leave-FT-O3PL-NF
 and thus only we left them.' (AR1-27.30)

The reading of the reference is not necessarily linked to the immediately preceding clause; however, it can relate to another speaker's turns (e.g. in question-answer sequences).

3.3 The leitmotif strategy in the narrative

In a variety of narratives a leitmotif (recurring) strategy has been found. The intention is to bring up a thematic refrain several times in the discourse (at the beginning, middle, and end), giving a certain rhythm to the narrative. This referent is always introduced in a cluster of non-finite clauses. In the story in Example (18), the two main referents, a man (who did not believe that souls came back) and the souls are introduced in the first clause of the narrative. The leitmotif clauses express the behavior of the souls in (18a–e), in contrast to the behavior of the soul of the mother of the main referent, the woman, in (18f). This (18f) clause carries a special marker, the conjunction *ka* 'and' indicating the distinction of reference and the end of this cluster of non-finite clauses that close the refrain. In the four occurrences of the leitmotif clauses in the story no new information is expressed, simply a repetition: the participants are introduced first by a NP with a demonstrative pronoun and the noun *tsìma animaicha*, then they are expressed by the pronominal enclitic =*kxì*; the verb presents the same construction with the centrifuge suffixes that express this repetition. The clauses are juxtaposed from (18a) to (18e), and substantial referential continuity lends itself to less coding. There is no obligatory link with the tense-aspect of the context in which they appear. The transparency and repetition of these clauses means that they can appear in any tense-aspect context.

- (18) a. *ka anima-icha nya-nt'a-ni=na,*
 and soul-PL arrive-CENTRIF-NF=EV
 '... and they said that the souls came back,
 b. *tsìma anima-icha wanta-pa-nt'a-ni,*
 DEM.PL soul-PL tell-CENTRIF-CENTRIF-NF
 these souls were telling,
 c. *tsìpi-pa-nt'a-ni=kxì,*
 be.happy-CENTRIF-CENTRIF-NF=S3PL
 they were happy,
 d. *tere-kurhi-pa-nt'a-ni=kxì,*
 laugh-MID-CENTRIF-CENTRIF-NF=S3PL
 they were laughing,
 e. *pìri-pa-nt'a-ni=kxì,*
 sing-CENTRIF-CENTRIF-NF=S3PL
 they were singing,

- f. *ka ma warhiti we-pa-nt'a-ni.*
 and ART.INDF woman cry-CENTRIF-CENTRIF-NF
 and a woman was crying.' (JR2-4.10)

3.4 New referent

A new referent is generally introduced in a finite chain-initial clause, as in (16a), but in order to produce a greater degree of surprise it may be introduced in a non-finite chain-initial clause. We analyze how this happens in (19). The clause in (19a) represents a chain-initial clause, while (19b) is the chain-final clause of a previous cluster of clauses. The clause in (19b) constitutes the end of the first part of the story: the speaker has previously introduced the two relevant referents, the man and the woman – referred to in (19b) as the couple – and the general theme of this story, that the woman disobeys her husband and joins him far from their house. This clause is significant, since in the NP *temunkurhiri* the couple is right-dislocated. This clause is also important for the information contained: the couple slept at the top of the tree, which contrasts with the activity of the thieves in (19d). Finally, (19b) serves as a conclusion to the first theme and as a link (and background information) to the new theme introduced in (19c).

In (19c), a new referent is introduced with an indefinite NP, *maru xipapiriecha*, which is right-dislocated. This clause is introduced by an adverbial phrase that indicates thematic discontinuity, a contrast with the information previously given. The presence of this new referent forces the end of one chain and the beginning of another: a period is introduced at the end of (19b), making (19c) a chain-initial clause. Interestingly, this chain-initial clause displays two contradictory features for finiteness, that is, a fully-marked NP subject reference is attested and the non-finite marker *-ni* is on the verb, whereas chain-initial clauses generally correlate with an increased degree of finiteness – see for example (16a) and (17a). In the chain-medial clauses the referent is expressed by the pronominal enclitic in (19d) and by the anaphoric pronoun in (19e), in order to express the contrasting fact that the thieves are at the bottom of the tree and the couple is at the top of the tree. In order to close this part of the introduction of this new referent, in (19f), the speaker used a definite NP (contrastive information: the thieves played whereas the couple slept). The use of the NP favors the absence of use of *ka*, as in (19f). The clause in (19g) marks a thematic break: this is a chain-initial clause, where the adverb *yaxi* introduces the clause (and contrasts with the anterior one) and the speaker reintroduces the first referent, the man, using a definite NP.

Clause-chain 1

- (19) a. *anatapu-rhu ma jatsi-x-ti pwerta* Chain-initial clause
 tree-LOC ART.INDF have-AOR-ASS3s door
 'In a tree, there is the door ...
 ...

- b. *kw'i-ni ya karhakwa*
 sleep-NF now top
anatapu-rhu temunkurhiri. Chain-final clause
 tree-LOC couple
 ... the couple slept now at the top of the tree.'

Clause-chain 2

- c. *terok'ani chirukwa nia-nt'a-ni*
 middle night arrive-CENTRIF-NF
maru xipapiri-icha, Chain-initial clause
 some thief-PL
 'In the middle of the night arrived some thieves,
- d. *ch'ana-ni=ksĩ,* Chain-medial clause
 play-NF=S3PL
 they played,
- e. *tsima ketsikwa ja-rha-ni,* Chain-medial clause
 DEM.PL bottom be.there-FT-NF
 they were at the bottom (of the tree),
- f. *xipapiri-icha ch'ana-ni jimani.* Chain-final clause
 thief-PL play-NF thus
 the thieves played thus.'

Clause-chain 3

- g. *yaxi ima tata k'eri era-n-te-ni ya,* Chain-initial clause
 now DEM man old look.at-PERIPH-NF now
 'Now, the old man woke up now ...' (TD1-42.49)

In this example three different clause-chains occur: (19a/-b), (19c-f), (19g/-). The referential discontinuity and thematic modification do not result in the introduction of tense and aspect markers: tense-aspect-mood continuity subsumes the referential and thematic discontinuities. This strategy reinforces the coherence of the discourse, that is, the succession and interaction between the different themes.

4. Tense-aspect-irrealis-mood continuity

Tense-aspect-irrealis-mood continuity is crucial for studying the position of these clauses on the finiteness continuum. In non-finite chain-medial clauses in Purepecha TAIM are not expressed but are easily recoverable (as in Amele, see Roberts 1987:275, and in Supyire, see Carlson 1994).

In Purepecha, the aspect of the narratives is generally the aorist, as in (19a), or the past-aorist, as in (16a), in chain-initial clauses. The habitual (past-habitual), as

in (14a), or progressive (past-progressive) may be used to emphasize how the action unfolds. In (20) we see an example attested in dialogue inserted in a narrative, showing mood continuity for the imperative. Non-finite clauses can also be attested in dialogues inserted in narratives that exhibit mood continuity for the imperative, as in (20b–c). Outside this context, a non-finite clause is not used for expressing commands (Chamoreau 2009: 105–107).

- (20) a. *warhiti, ju-ø ya,*
 woman come-IMP.SG now
 ‘Woman, come now,
 b. *ju-ni ixu,*
 come-NF here
 come here,
 c. *ka jwa-ni ima ichuskuta*
 and bring-NF DEM corn cake
 and bring this corn cake.’ (JR3-10.12)

This indicates that in non-finite clauses the verb is dependent on its immediate verbal context for the reading of its tense, aspect, and mood. The degree of dependence (binding) on previous clauses is very high, allowing a high level of narrative coherence.

One special feature is the strategy used for the verbs of utterance, such as *ari* ‘say’ in (21a) and *yoarhi* ‘tell’ in (21c), which introduce direct quotation. In Purepecha, whatever the TAIM context, the verb that introduces the direct quotation is generally non-finite (or may appear with the aorist aspect). These clauses are generally interpreted as aorist (that is, with the narrative non-marked aspect).

- (21) a. *xasi=nha ari-ni,*
 after=EV say-NF
 ‘They said that after he said,
 b. *“nani ja-ra-x-ki Emilio Bravo?”*
 where be.there-FT-AOR-INT Emilio Bravo
 “Where is Emilio Bravo?”
 c. *ima=ksi yoarhi-ni,*
 DEM=S3PL tell-NF
 They answered,
 d. *jini chene-mpa-o para ampe=ri we-ka-sin-i*
 there POSS2-KPOSS3-RES for what=s2SG want-FT-HAB-INT
 t’u ima-ni
 s2SG.IND DEM-OBJ
 “‘There, in his house, for what do you want him?’” (TN1-16.17)

The type that these clauses exemplify has not been yet defined. They do not constitute chain-clauses, but may be defined as “bridge-clauses”: the interpretation is not found in the preceding context, and there is no obligatory link with the tense-aspect of the narrative in which they appear (this is also true for the leitmotif strategy, see (18)). The interpretation has to be made using linguistic knowledge shared by the speakers (here, the fact that in Purepecha the aorist is the non-marked narrative aspect).

5. Thematic continuity and a high degree of coherence

In Purepecha, the highest level of thematic continuity correlates generally with reduced finiteness. The communicative intention of chain-medial clauses is to highlight events that possess thematic continuity and a high degree of coherence with the preceding discourse.

Chain-medial clauses express a specific type of event – a sequence of actions, as in (15), repeated here as (22), or of movements, as in (19c), repeated here as (23). The latter example is very interesting, because although this is a chain-initial clause it exhibits reduced finiteness, something that does not commonly occur. Reduced finiteness is possible because of the fact that movements keep recurring in the stories in general. The verb *nia-nt'a-* ‘arrive’ expresses a movement, but it also represents a way to introduce a new referent: ‘X arrived’.

- (22) a. *xasì=ksì=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=ksì=nha ya,*
 and bathe-CAUS-NF=S3PL=EV now
 and they said that **they** bathed her,
- c. *ka ampa-tsi-ku-ni=ksì=nha ya.*
 and be.clean-SUP-APPL3O-NF=S3PL=EV now
 and they said that **they** combed her.’ (TN2-47)
- (23) *terokàni chirukwa nia-nt'a-ni maru xīpapiri-icha,*
 middle night arrive-CENTRIF-NF some thief-PL
 ‘In the middle of the night arrived some thieves’

Reduced finiteness thus generally correlates with a chronological succession of actions or movements, and may also correlate with chronologically overlapping events and feelings, as in (18).

It is noteworthy that Purepecha has a marker *ka* with a particular role to play in thematic continuity (Chamoreau forthcoming). This marker may function alone

as coordinator (see above, Section 2.2) or with another element as subordinator (see above, Section 2.3). Its function is to link independent coordinated clauses in the former context and dependent subordinate clauses in the latter. When it is used in chain-medial clauses the construction is ambiguous as between coordination and subordination. Moreover, the morpheme *ka* appears with the form for coordinated clauses, but the clauses that constitute the clause chaining are not symmetrical with the initial clause and are generally dependent on it: the initial clause generally contains finite properties, while coordinated chain-medial clauses generally have reduced finiteness (Longacre 2007: 375).

In chain-medial clauses, the absence of *ka* always indicates referential and thematic continuities, as in (14), repeated here as (24).

- (24) a. *Teremendo anapu-echa kutsu-siraam-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=ksi sesi xama-ra-nte-ni*.
 NEG=S3PL well smell-CAUS-nose-NF
 they did not smell good.' (TM1-1.2)

The absence of *ka*, that is, the juxtaposition of the non-finite clauses, highlights the succession of events, as in (20), repeated here as (25). The presence of the conjunction *ka* generally indicates the end of a chain-medial clause, as in (17f) and (25c).

- (25) a. *warhiti, ju-ø ya*,
 woman come-IMP.SG now
 'Woman, come now,
 b. *ju-ni ixu*,
 come-NF here
 come here,
 c. *ka jwa-ni ima ichuskuta*
 and bring-NF DEM corn cake
 and bring this corn cake.' (JR3-10.12)

Another strategy that correlates with increased non-finiteness is the presence of both the conjunction *ka* and the terminative marker *ya*. They surround the verb that expresses the event and thus give a rhythm to the sequence of events, as in (15), repeated above as (22).

Finally, the intonation contour reflects the status of each clause in the chain-medial clauses as a separate statement. Generally, each chain-medial clause begins with a pitch reset, then descends to a final fall at the end. The next clause begins after a pause, indicated by a comma in the transcription.

6. Concluding comments: Chain-medial clauses on the continuum of finiteness

In Purepecha, the more referential, tense-aspect-irrealis-mood, and thematic predictabilities correlate with the highest degree of cross-clausal coherence and continuity, and with reduced finiteness. Chain-medial clauses are a strategy employed to facilitate the thematic, referential, and aspectual coherence of discourse. Purepecha possesses chain-initial and chain-final clauses that generally correlate with finiteness (but see (19c)) and chain-medial clauses that are generally non-finite (Givón 2001: 356–357). In chain-medial clauses, the finiteness increases in the context of switch reference, as in (16e). Non-finite clauses also correspond to a leitmotif strategy or refrain clauses, as in (18), in which the repetition of the clauses in the discourse is sufficient by itself to establish thematic and reference continuity.

Purepecha makes a clear distinction 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).

Finiteness is a clearly multilayered feature that involves the characterization of various properties, in particular combinations of tense, aspect, and mood reference continuity as well as intonation contour. Non-finite chain-medial clauses occupy an intermediate position on the finiteness continuum between two extremes: on the one hand, independent finite clauses (TAIM markers, possibility of a different referent, separate intonation contours) and on the other, non-finite complement and purpose clauses (no TAIM markers, same reference, one intonation contour). On this continuum two intermediate stages exist, the subordinated finite clause and chain-medial non-finite clause. The former has reduced TAIM markers and obligatory subjunctive mood, and may display switch reference, while the latter has no TAIM markers (but a non-finite *-ni* marker), generally the same referent, and separate intonation contours. This last feature distinguishes chain-medial non-finite clauses from non-finite complement and purpose clauses, which always display the same intonation contour (Table 3).

Table 3. Continuum of finiteness

Properties	Independent and main finite clauses	Subordinated finite clause	chain-medial non-finite	Non-finite complement and purpose clause
TAIM markers	+	+ reduced or obligatory forms	–	–
Possibility of a different referent	+	±	– (+ very uncommon)	–
Separate intonation contour	+	±	+	–

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Abbreviations

AC	active	IND	independent
AOR	aorist	INDF	indefinite
APPL	applicative	INS	instrumental
ART	article	INT	interrogative
ASS	assertive	INTS	intensive
CAUS	causative	IRR	irrealis
CENTRIF	centrifuge	IT	iterative
DEF	definite	KPOSS	kinship possessive
DEM	demonstrative	LOC	locative
EV	evidential	MID	middle
FOC	focus	NCS	no coreferential subject
FT	formative	NEG	negation
GEN	genitive	NF	non-finite
HAB	habitual	O	object
IMP	imperative	OBJ	objective case

PAS	passive	PROG	progressive
PST	past	PTCP	participle
PERIPH	peripheric area	REF	reflexive
PL	plural	RES	residential
POSS	possessive	SUB	subordinator
PP	patientive	SBJV	subjunctive
PRED	predicativizer	SUP	superior area

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