

Grammatical periphery of Chontal Maya verb*

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Abstract: This paper examines the formal structure of the grammatical tense/aspect/mood system in Chontal, a Mayan language from Mexico. The verbal grammar is analyzed as a continuum of semantically and morphosyntactically interrelated phenomena of different sorts, from fully grammaticalized (grammatical core) to those lexical items that may possibly be grammaticalized in the future (grammatical periphery). The distinction between grammatical core and periphery is not only important in order to represent in an appropriate way the internal architecture of a grammatical system, but can also help to better understand semantic properties of its structural components. The core elements are usually ambiguous and express very general meanings; the peripheral elements may optionally make them more precise, thereby disambiguating the utterance.

Keywords: Chontal, Mayan languages, grammar, verbal complex, tense/aspect/mood systems

1 Introduction

This paper has emerged from an obvious descriptive problem of mixing up language phenomena that have similar semantics, but that are completely different from the morphosyntactic point of view. This problem becomes particularly evident with tense/aspect/mood systems that typically represent a very heterogeneous functional domain. For instance, traditional grammars usually state that there are so many tenses or so many aspects in a particular language. However, such an analysis is not always accurate, because those tenses and aspects occupy different places within the verbal grammar and are not necessarily easily comparable with each other. Instead, the internal architecture of the grammatical system should be analyzed in order to find the interconnections between tense/aspect/mood markers and categories. I will illustrate this descriptive problem and its possible solution using the example of the verbal system of the Chontal language.

Chontal (sometimes also called Chontal of Tabasco or “*yokot’an*”) is an endangered Mayan language spoken in the state of Tabasco, Mexico, by approximately 37,000 people (INEGI 2011). It belongs to the Cholan subgroup, together with two other languages, Chol and Ch’orti’. In the post-colonial period (16–18th centuries), there were other Cholan languages, such as Cholti’, Chol Manché, and Chontal de Acalán, among others (see Becquey 2012; 2014), but they are now extinct. From the geographical point of view, Chontal is spoken in the Mayan Lowland area (Kroeber 1939; Law 2014), together with the other languages of the Cholan subgroup and the Yucatecan Mayan subgroup. The Chontal-speaking area is not dialectally homogeneous. Schumann (1978) distinguishes three main dialects: that of Nacajuca and Tapotzingo, that of Tamulté de las Sabanas and that of San Carlos; see also Knowles (1984) for some more specific considerations.

The study is primarily based on the three most exhaustive language descriptions of Chontal produced to date, by Knowles (1984), Osorio May (2005), and Schumann (2012), respectively. I

* I am grateful to the Program of Postdoctoral Fellowships at the National Autonomous University of Mexico.

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also analyze some published texts in Chontal (Keller & Luciano 2001; DGCPi 2002; Pérez González 2006) and my own fieldwork data obtained in July 2015.¹ These data relate to the dialect of Nacajuca.

The article consists of four main chapters and the conclusion. First, in Section 2, I describe the theoretical background for the present study, defining the concepts of the “grammatical core” and “grammatical periphery”. Then, I introduce the core tense/aspect/mood paradigm in Chontal (Section 3). Section 4 is devoted to two different structural types of peripheral element: prepositive auxiliary particles and periphrastic constructions. I argue that the core and the peripheral grammatical phenomena are interconnected morphosyntactically and semantically, and should not be mixed up in a descriptive grammar. Finally, in Section 5, I describe some other morphemes with temporal and aspectual semantics that I consider as a part of the lexicon. Unlike the phenomena of the grammatical periphery, they have no direct relation with the grammatical core.

2 Theoretical background

The theoretical background for this work is the idea that grammar is a continuum of semantically and morphosyntactically interrelated phenomena of different sorts, from fully grammaticalized to those lexical items that may possibly be grammaticalized in the future. I make use of the notions “grammatical core” and “grammatical periphery”. This distinction was initially introduced within the generative framework by Chomsky (1981), who used it in another sense.² In descriptive and functional traditions, the distinction between the core and the periphery was subjected to criticism, mainly because of the lack of clear definitions and heterogeneity of the periphery; see Bertinetto (2003). Nevertheless, in this paper, I try to show that the distinction between grammatical core and grammatical periphery can be useful in analyzing the formal structure and semantics of grammatical systems.

I begin from the idea that the grammar has an internal structure that is reflected by the set of language-specific grammatical categories and language-specific relations between them. A category is a paradigm of mutually exclusive markers. To be grammatical, or “inflectional” in terms of Mel’čuk (2006), a category should be obligatory for a certain class of words; that is to say, every time that a word form is used in speech, the speaker should make a choice between two or more grammatical morphemes that constitute the paradigm. The grammar forces the speaker to make this choice; see Jakobson (1959) with reference to the works of Franz Boas, and also Mel’čuk (2006:21–22) and Plungian (2011:6–26). Thus, the set of grammatical categories for a particular language is determined by two basic principles: an obligatory expression and a paradigmatic structure of elements. The grammatical categories of a certain word class make up the grammatical system. It also includes a range of morphosyntactic relations between categories and their members in respect to compatibility, neutralization, interdependency, etc. This is what I label the “grammatical core”.

The grammatical system is logically opposed to the lexical system, which is represented by a potentially non-finite set of optional items that normally do not constitute clear paradigms. Obviously, the delimitation between grammar and lexicon is not straightforward, because there are various linguistic phenomena that, without additional stipulations, cannot be attributed to the grammar or to the lexicon. I label this heterogeneous set of elements the “grammatical periphery”.

¹ I sincerely acknowledge the collaboration of Esmeralda López and Eli Hernández, native speakers of Chontal. My gratitude also goes to Amanda Delgado for her help in organizing the fieldwork.

² He classified grammatical phenomena according to regularity: “The core of the grammar of any individual language is to be given [...] in the form of a list of principles”, while the periphery consists of “various kinds of rules of a non-universal sort” (Baker 1991:388). Chomsky (1981:8) attributes to the grammatical periphery “borrowings, historical residues, inventions, and so on”.

It includes all those language phenomena that are placed in between the grammatical core and the lexicon on the grammatical continuum.

3 Grammatical core: tense/aspect/mood suffixes

Watatani (1995:47) notes that Chontal is one of only two Mayan languages, together with Huastec, that mark grammatical tense/aspect/mood meanings exclusively by means of suffixes. The core of the tense/aspect/mood system in Chontal consists of one single paradigm that includes two or three members, depending on the transitivity of the verb. These members are: completive, incompletive, and subjunctive. The latter is relevant only for the intransitive verbs, as illustrated in Table 1. These three grammatical morphemes form a grammatical category that has a strict paradigmatic structure. This category is obligatory in the sense that a finite verb form cannot lack it; one of its members should necessarily be expressed in a finite verb form.

Table 1: The core tense/aspect/mood paradigm in Chontal

Verb class	Example	Completive	Incompletive	Subjunctive
Transitives, class I	<i>chon</i> ‘to sell’	<i>chon-i</i>	<i>chon-e’</i>	—
Transitives, class II	<i>tz’ib</i> ‘to write’	<i>tz’ib-i</i>	<i>tz’ib-än</i>	—
Intransitives, class I	<i>jul</i> ‘to come’	<i>jul-i</i>	<i>jul-e</i>	<i>jul-ik</i>
Intransitives, class II	<i>t’äb</i> ‘to go up’	<i>t’äb-i</i>	<i>t’äb-o</i>	<i>t’äb-ik</i>
Derived intrans., class I	<i>pok’m</i> ‘to grow fat’	<i>pok’m-i</i>	<i>pok’m-an</i>	<i>pok’m-ak</i>
Derived intrans., class II	<i>täskint</i> ‘to be brought’	<i>täskint-ik</i>	<i>täskint-e</i>	<i>täskint-ik</i>
Positionals	<i>chum</i> ‘to sit down’	<i>chum-wäni</i>	<i>chum-tü</i>	<i>chum-lek</i>

The examples in Table 1 illustrate significant allomorphic variations of the markers. The allomorphs are distributed according to the morphosyntactic verb class and to the subsequent morpheme. The former case is contrasted in Table 1.³ Generally, two main groups of transitive verbs and five groups of intransitive ones can be picked out; see Keller & Luciano (1997:448, 458–459). Among the transitive verbs, there is a class of verbs that take the suffix *-e’* in the incompletive, and there is a class of verbs that take the suffix *-Vn* in the incompletive. The first class comprises only non-derived verbs, while the second class is more heterogeneous; it comprises both derived and non-derived verbs. The vowel of the suffix sometimes depends on the type of derivation: for example, the causative verbs formed by the suffix *-es* take the incompletive suffix *-an*, while the applicative verbs with the suffix *-b* bear the suffix *-en* in the incompletive forms. Among the intransitive verbs, there is a class of regular intransitive verbs that Osorio May (2005) calls “non-agentives”, and there is a class of verbs that indicate position, the so-called “positional verbs”. The first class breaks down into two subclasses according to the incompletive suffix: the majority of the verbs take the suffix *-e*, while there is a relatively small group of verbs that exhibit the suffix *-o* in the incompletive.

The latter case can be exemplified by the completive markers *-i* and *-ik* that disappear when followed by the personal clitics of set B (=on for the first person and =et for the second). When the verb marks the completive with the suffix *-wäni*, it changes to *-wän*; see Table 2.

³ There are also some small groups of derived intransitives taking other suffixes that I do not mention here. Osorio May (2005:Appendix 2) presents an extensive list of verbal stems, sorted according to their morphosemantic properties.

Table 2: The completive allomorphs in Chontal

Verb class	Example	1 st person	2 nd person	3 rd person (final position)
Transitives, class I	<i>k'ux</i> 'to eat'	<i>k'ux=on</i>	<i>k'ux=et</i>	<i>k'ux-i</i>
Transitives, class II	<i>chän</i> 'to see'	<i>chän=on</i>	<i>chän=et</i>	<i>chän-i</i>
Intransitives	<i>yäl</i> 'to fall'	<i>yäl=on</i>	<i>yäl=et</i>	<i>yäl-i</i>
Derived intransitives	<i>täskint</i> 'to be brought'	<i>täskint=on</i>	<i>täskint=et</i>	<i>täskint-ik</i>
Positionals	<i>wa'</i> 'to stand up'	<i>wa'-wän=on</i>	<i>wa'-wän=et</i>	<i>wa'-wäni</i>

The so-called positional verbs constitute the only class that has overt completive marking (the suffix *-wän*) in all personal forms, including the third person, as shown in Table 2. The form *wa'-wän-i* can theoretically be considered as double marked by the completive: first, with the suffix *-wän* for positional verbs, and second, with the completive suffix *-i* that occurs in the third person when no overt personal enclitic follows; see Osorio May (2005:§4.1.1).

The suffix *-i* is sometimes omitted also in forms of the third person; this happens due to phonological reasons. For example, this occurs when the verb form is immediately followed by the reflexive relational noun *ba* with the possessive proclitic *u=* of the third person. The vowel of the completive suffix merges with the vowel of the possessive prefix. As result, the verb may formally appear not marked by tense/aspect/mood (1).

- (1) aj-mokoch u=muk-[i] u=ba yaba ni p'os
 AGN-cockroach 3A=hide[3B]-[COM] 3A=RN:REFL under DEF litter
 'The cockroach hid itself under the litter.'
 (Pérez González 2006:49, #11)

The incomplete markers in Chontal are, in fact, distributed into two paradigms depending on the polarity. Unlike other Cholan languages, Chontal developed a specific set of incomplete markers that is used in negative contexts and that is different from the set used in affirmative contexts. The negative incomplete forms are used only after the negative particle *mach* and when no personal clitic of set B follows the TAM marker. In positive contexts, and before the set B clitics, the standard incomplete marker is used instead (2).

- (2) a. mach kä=k'ux-**u**
 NEG 1A=eat[3B]-INC(NEG)
 'I do not eat it.'
 (Knowles 1984:319)
- b. k=ir-an=la si ka'jini mach u=k'ux-**e'**=on=la baläm
 1A=see[3B]-INC=PL if this.way NEG 3A=eat-INC=1B=PL.INCL jaguar
 'We will see if the jaguar will not eat us in this way.'
 (Keller & Luciano 2001:69, #129)
- c. kä=x-e kä=b-en=et kwa' a=k'ux-**e'**
 1A=go-INC 1A=give-INC=2B something 2A=eat-INC
 'I will give you something to eat.'
 (Pérez González 2006:51, #19)

I prefer not to postulate a separate "negative incomplete" member of the tense/aspect/mood category because this set of suffixes does not convey any additional semantics. The negation should be necessarily expressed by the prepositive negative particle and, therefore, the negative incomplete marker, in fact, does not mark negation, but only indicates concordance according to polarity. I analyze this set of suffixes as a contextual invariant of the incomplete, rather than as

an independent member of the paradigm. I gloss these suffixes INC(NEG), considering negation as their inherent characteristic, but not as an additional semantic component.⁴

A brief remark on the subjunctive should be offered. Only intransitive verbs have these grammatical markers, as Table 1 shows, so a question about transitive verbs naturally arises. The transitive verbs normally take the incomplete suffix in contexts in which the intransitive verbs are marked by the subjunctive (3).

(3) a. *kä=x-e* *kä=pek-än* *ni* *ajts'ak k'a* *se'* *jul-ik*
 1A=go-INC 1A=call[3B]-INC DEF doctor CONJ soon come[3B]-SBJV
 'I will call the doctor, so that he will come soon.'⁵

b. *kä=x-e* *kä=pek-än* *ni* *ajts'ak tuba* *u=chän-en=et*
 1A=go-INC 1A=call[3B]-INC DEF doctor CONJ 3A=see-INC=2B
 'I will call the doctor, so that he will examine you.'

The verb *jul* 'to come' bears the suffix of the subjunctive in (3a), but in (3b), the verb *chän* 'to see' takes the suffix of the incomplete, virtually in the same purposive context.

Finally, some terminological observations should be made. Knowles (1984) and Osorio May (2005) make use of the term "status suffix" for the tense/aspect/mood morphemes in Chontal. This notion is commonly used in Terrence Kaufman's tradition of Mayan linguistic descriptions — see, for instance, Kaufman & Norman (1984) and Kaufman (1990) — for a paradigm of suffixal markers with very vague semantics, principally represented in Western Mayan languages. It is also useful for distinguishing between suffixal and prepositional tense/aspect/mood paradigms in Yucatecan languages (see Bohnemeyer 2002; Hofling 2006), but in Chontal, I see no need to postulate the category of "status".

Note also that Knowles-Berry (1987) and Osorio May (2005) provide another morphological analysis for some Chontal verbal forms. They make use of the terms "transitivizing vowels" and "thematic vowels", respectively. Osorio May (2005:§3.7) defines thematic vowels as suffixes that accompany verb forms and indicate their valency, aspect, mood, and root type, and that are in a complementary distribution with some of the status suffixes. For example, according to this analysis, the form *tz'ib-än* (see Table 1) has two suffixes: *-ä* 'thematic vowel' and *-n* 'incomplete'. Consequently, the negative incomplete form *tz'ib-ä* bears only a thematic vowel and is not overtly marked by the incomplete. In my opinion, such an analysis is an admissible but somewhat complicated way to describe Chontal verbal morphology. Postulating thematic vowels (as well as status suffixes) is, in fact, a theoretical invention of additional morphemes with a vague and opaque meaning that erases clear limits between morphemes, paradigms, and categories.

There are also special suffixes for the imperative in Chontal. They also exhibit allomorphic variations according to the verb class, and some of the imperative allomorphs coincide with those of the negative incomplete. I do not consider the imperative suffixes to be part of the core tense/aspect/mood paradigm because of their specific morphosyntactic relations with personal markers. The imperative forms always presuppose the second person of the transitive subject or of the unique intransitive argument. However, they never combine with overt second-person markers,

⁴ There is also the particle (or proclitic) *u* 'negative incomplete' in Chontal. According to Osorio May (2005:§4.1.5), it optionally accompanies intransitive non-agentive verbs and triggers the change of the alignment pattern from the nominative-accusative that normally characterizes the incomplete clauses to the ergative-absolutive one.

⁵ Here and below, all uncited examples are from the author's fieldwork data.

which clearly distinguishes them from the markers of the completive, incompletive and subjunctive examined above.

4 Grammatical periphery

Besides the grammatical core described in Section 3, there are some other elements in Chontal that express temporal, aspectual, and modal meanings, but form part of the grammatical periphery or the lexicon. Their main feature is that none of these elements is obligatory: their absence does not make a verb form ungrammatical. In Chontal, there are two main structural types of peripheral grammatical element: prepositive tense/aspect modifiers (Subsection 4.1) and periphrastic constructions (Subsection 4.2). Some lexical items conveying semantics of tense, aspect, or mood are discussed in Section 5.

4.1 Prepositive tense/aspect modifiers

The class of prepositive tense/aspect modifiers is characterized by two distinctive features. First, they occupy the specific place in a verb phrase. They always begin the verbal complex or, if one prefers not to consider them part of verbal complex due to their optionality, they are placed immediately before the verbal complex. Second, they are morphosyntactically bound in the sense that they trigger a strictly predetermined marker of the core tense/aspect/mood category. In Chontal, there are at least four such modifiers; see Table 3.

Table 3: Prepositive tense/aspect modifiers in Chontal

Modifier	Meaning	Triggered tense/aspect/mood suffix
<i>mu'</i> / <i>mo'</i> / <i>muk'</i>	'progressive aspect'	Incompletive
<i>san/jan</i>	'perfect'	Completive
<i>dal</i>	'proximate future'	Incompletive
<i>dalchiba</i>	'avertive'	Incompletive

The particle *mu'* (*mo'* or *muk'* in some dialects) can be added to an incompletive verb form to convey the meaning of an ongoing, continuous action (4).

- (4) **mu'** a=k'ux-e' ja'as
PROG 2A=eat[3B]-INC banana
 'You are eating a banana.'

This particle is optional and is normally used for emphasizing the continuity of an action. Without an emphasis, the ordinary incompletive form conveys this meaning as well (5).

- (5) ka a=ch-en ya'i k=amigu
 what 2A=do[3B]-INC there 1A=friend
 'What are you doing there, my friend?' (Pérez González 2006:57, #2)

The combination of the progressive particle with completive forms is ungrammatical. On the contrary, the particle *san* 'perfect' is compatible only with the completive (6). This particle has the dialectal variant *jan* (Knowles 1984:229).

- (6) pues **san** chich u=tsäm-s-i
 well **PERF** always 3A=kill[3B]-CAUS-COM
 ‘Well, s/he has [just] killed it.’ (DGCPI 2002:44)

The particle *san* is the result of the truncation of the adverb *sami* ‘today’ (Osorio May 2005:§4.1.3). Knowles (1984:229) labels this particle as the “immediate past”; the same temporal interpretation is shared by Osorio May (2005:§4.1.3). Here, I reinterpret the semantics of this particle as aspectual and not temporal.

It is sometimes difficult to delimit the temporal meaning of the recent past (a combination of absolute or relative past tense and proximate temporal distance) and the aspectual meaning of the perfect. Comrie (1985:25) notes that “it is more likely that recent events will have current relevance than more remote events, whence the tendency, out of context, to interpret the perfect as referring to a more recent event than the simple past”. Thus, the recent past denotes an event, while the perfect denotes a state that ensued from this event and that is necessarily relevant at the present moment. This difference is subtle, and many contexts obscure it. However, it seems very probable that the particle *san/jan* does not indicate merely a short temporal distance, but the relevancy of the result of the action to the present state of affairs (7).⁶

- (7) a. **jan** ut-i kwa’ tä k’ux-k-an la’=ix tä
PERF be.ready[3B]-COM REL PREP eat-PASS-NMLZ come.IMP=already PREP
 k’ux-n-an
 eat-AP-NMLZ
 ‘The meal is ready, come to eat.’
- b. **jan** wäy-i ch’ok mach a=ch-en awät
PERF sleep[3B]-COM baby NEG 2A=do[3B]-INC shout
 ‘The baby has slept; do not shout.’

The main argument for the aspectual interpretation of this particle is that it also expresses the experiential meaning that Comrie (1976:58) defines as indication “that a given situation has held at least once during some time in the past leading up to the present” (8); see also the relevant theoretical discussion in Dahl (1985:139–144). This use has nothing to do with immediacy, but rather with the resulting state of having experience in doing something.

- (8) **jan** kä=k’ux-i we’e de tsimim
PERF 1A=eat[3B]-COM meat PREP horse
 ‘I have eaten horseflesh.’

Osorio May (2005:§4.1.7) describes another auxiliary particle — *dal* or *dali* that indicates the proximate future tense — that obviously also came from an adverb; in this case, *dali* ‘now’. It is compatible only with the incomplete forms (9), like the progressive *mu’*.

- (9) **dal** kä=kij-e
FUT.PROX 1A=remain-INC
 ‘I will remain.’ (Osorio May 2005:96)

⁶ Comrie (1976:56) labels this kind of meaning as the “perfect of result”.

There is no certainty regarding the exact meaning of the particle *dal*. Like the particle *san* discussed above, it probably does not indicate temporal distance, but has some other meaning, possibly from the modal semantic domain; see, for instance, Jendraschek (2014).

The particle *dal* also forms part of the auxiliary element *dalchiba* ‘avertive’, together with two enclitics: *chich* and *ba*. Knowles (1984:220) and Keller & Luciano (1997:90) propose the translation ‘yes’ for the former; Osorio May (2005:§4.3.7) labels the latter as the “clitic of asseveration”. This complex of morphemes indicates that the action was not realized, although there was an intention or initial conditions for its realization (10). For such a meaning, Kuteva (1998) has proposed the term “avertive” that I use here.

- (10) **dalchiba** u=yäl-o tan te’ ni ixch’ok jini
 AVER 3A=fall-INC PREP tree DEF girl DEM
 ‘This girl was going to fall from the tree.’

All auxiliary particles examined in this subsection are optional, and here is the important difference between Chontal and other Mayan Lowland languages such as Chol and the Yucatecan subgroup: the prepositive tense/aspect/mood markers in Chol and the Yucatecan languages constitute an obligatory paradigm; see, for instance, Vázquez Álvarez (2011), Bohnemeyer (2002), Hofling (2006). Therefore, the prepositive paradigm should be considered part of the grammatical core in those languages, together with the suffixal one (see Vinogradov 2015). In Chontal, the only function of the prepositive markers is in disambiguating the broad semantics of the tense/aspect/mood suffixes they trigger.

4.2 Periphrastic constructions

Unlike the morphosyntactically bound particles examined in the previous section, the periphrastic constructions require a significant change in the syntactic structure of the clause. Generally, a complex predication emerges. There are two basic syntactic types of peripheral analytic constructions in Chontal. The added element normally functions as the main predicate, but it can be finite or non-finite depending on its morphological properties. In both cases, the full verb turns into a complement of a complex construction.

Table 4 presents four periphrastic constructions in Chontal that are discussed below.

Table 4: Periphrastic constructions in Chontal

Auxiliary element	Meaning	Syntactic status
<i>ya’an</i> ‘EXIST’	‘progressive aspect’	Non-finite
<i>ajn</i> ‘to be’ (+ COM)	‘progressive aspect in the past’	Finite
<i>x-</i> ‘to go’ (+ INC)	‘relative future’	Finite
<i>ch-</i> ‘to do’ (+ INC)	‘proximate (undesirable) future’	Finite

Chontal has two analytic constructions for expressing the progressive meaning: one involves the non-finite existential predicate *ya’an*, which receives the personal clitic of set B, and the other involves the finite predicate *ajn* ‘to be’, which combines with the completive forms. In both cases, the full verb appears in the nominalized form that formally coincides with the incompletive (11).

- (11) a. **ya’an**=on kä=chän-en un=p’e pelikula
 EXIST=1B 1A=see-NMLZ one=CLF film
 ‘I am watching a film.’

- b. *kä=na' ya' ajn-i u=juts'-e' nok'*
 1A=mother there **EXIST(COM)[3B]-COM** 3A=wash-NMLZ cloth
 'My mother was washing clothes there.' (DGCPI 2002:64)

The usage of the predicate *ya'an* is restricted to a non-past time reference. As every non-finite predicate, it cannot take tense/aspect/mood inflection.⁷ With reference to the past, the predicate *ajn* is used.

Another type of construction can be illustrated with the auxiliary verbs *x-* 'to go' and *ch-* 'to do'. These verbs should bear the incomplete tense/aspect/mood suffix and the personal proclitic of set A (12–13).

- (12) *kä=x-e kä=jul-b-en=et otro*
 1A=**go-INC** 1A=throw-APPL-NMLZ=2B other
 'I will throw you another [fruit].' (Pérez González 2006:61, #25)

- (13) *a=bon tul-es-i ni a=chim u=ch-en u=ch'äktuk'-än*
 2A=very fill[3B]-CAUS-COM DEF 2A=net 3A=**do**[3B]-INC 3A=burst-NMLZ
u=ba
 3A=RN:REFL
 'You filled your net too much; it is just about to burst.'

There is a problem with the syntactic analysis of the full verb forms in (12) and (13). The suffix of nominalization is the same as the suffix of the incomplete, and the full verbs may be analyzed not only as nominalized complements of their respective main auxiliary finite predicates, but also as parts of a serial verb construction, if one interprets the suffixes *-en* and *-än* as the incomplete markers; cf. the definition of serial construction by Aikhenvald (2006:1): "a sequence of verbs which act together as a single predicate, without any overt marker of coordination, subordination, or syntactic dependency of any other sort". However, when the full verb is intransitive and non-agentive, according to Osorio May (2005:§4.2.2), it takes an overt marker of subordination *tä* (14).

- (14) a. *a=x-e tä muk-e*
 2A=go-INC **SUB** bathe-NMLZ
 'You will bathe.' (Osorio May 2005:102)

- b. *jäks-äb-en u=k'ak'=ba u=ch-en tä yäl-o ni kwa'*
 reduce-APPL-IMP 3A=fire=ENCL 3A=do[3B]-INC **SUB** fall-NMLZ DEF REL
tä k'ux-k-an
 SUB eat-PASS-NMLZ
 'Reduce the fire; the meal is just about to boil over.'

This is the reason for not considering such constructions as serial, at least with this particular verb class. Note that the construction with the auxiliary verb *x-* 'to go' illustrated in (12) can be further grammaticalized. The auxiliary verb can lose the personal clitic, and therefore the form *xe*, when it appears uninflected, can formally be considered as a morphosyntactically bound and invariable item, as well as various adverbs and particles discussed in Subsection 4.1. The marker

⁷ The periphrastic construction with an auxiliary non-finite main predicate for expressing the progressive meaning is reconstructed for both the proto-Mayan and the proto-Cholan languages by Law et al. (2006:440, 445).

xe always precedes the full verb, necessarily triggers the incomplete suffix, and normally does not combine with other bound prepositive tense/aspect modifiers (15).

- (15) *xe* *kä=käch-e'* *aw=ok*
 FUT 1A=tie[3B]-INC 2A=foot
 'I will tie your feet.' (DGCPI 2002:68)

In (15), the analysis of the incomplete suffix as a nominalizer, as in (14), is hardly possible, because the full verb functions syntactically as a finite main predicate here.

Regarding the semantics of these two auxiliary verbs, both seem to convey some kind of futurity. The verb *x-* 'to go' is generally more frequent and has a broader meaning. Osorio May (2005:§4.2.2) considers this verb as a marker of the prospective aspect, but it is used in a wide range of "neutral" future contexts, not necessarily related to the present state of affairs. I refer to this auxiliary verb as "relative future", because it is also used for a situation in the past that follows some other past situation (16).

- (16) *mach* *y=uwi* *kwa'* *u=x-e* *u=ch-en*
 NEG 3A=know what 3A=**go**-INC 3A=do-NMLZ
 'S/he did not know what s/he was going to do.' (Keller & Luciano 2001:83, #310)

The use of the verb *ch-* 'to do' is rarer and it seems to be restricted to proximate and undesirable events, so I label it as "proximate (undesirable) future".

5 Lexical tense/aspect/mood elements

There are some other elements in Chontal that express meanings from the temporal, aspectual, and modal functional domains and that could be confused with the grammatical periphery. I identify three types of such element: "incorporated" adverbs (Subsection 5.1), the prepositive particle *a* (Subsection 5.2), and the particle/adverb *ajni* that conveys the meaning of counterfactuality (Subsection 5.3). Unlike "ordinary" temporal and aspectual adverbs, such as "yesterday" or "customarily", the elements mentioned above have some morphosyntactic properties that reveal their potential to be grammaticalized in the future; however, synchronically, they should be considered as parts of the lexical rather than the grammatical system.

5.1 "Incorporated" adverbs

There are some adverbs in Chontal that are syntactically bound: they occupy a specific syntactic position in a phrase. They break the verbal complex and are placed immediately before the verb stem and after the prepositive personal marker of set A (17).

- (17) *u=pete* *u=laj* *jul-e*
 3A=all 3A=**completely** come-INC
 'All [things] fall down (lit. "come completely").'

Such adverbs are usually labeled "dependent", "compound" or "incorporated" in the literature. They are not mobile within the sentence. Unlike these dependent adverbs, the "regular" ones cannot be "inserted" into the verbal complex; compare (18) and (17).

- (18) **oni** a kē=ch-i patan
earlier PROX 1A=do[3B]-COM work
 ‘I have done the work earlier.’

The syntactically dependent adverbs express a wide range of meanings, from temporal to manner or modal. The list of such adverbs is relatively long, but this word class is very probably closed. Knowles (1984:225), for instance, enumerates 21 “dependent adverbial particles” in Chontal, and her list seems close to being exhaustive. It includes, for example, the following items with temporal and aspectual semantics: *totaj* ‘just’, *wirin* ‘already’, and *p’elaj* ‘sometimes’.

5.2 Prepositive marker *a* ‘proximative’

The prepositive particle *a* (sometimes referred to as the proclitic in the literature) is used with both complete and incomplete forms (19). Thereby, it differs from the prepositive modifiers discussed in Subsection 4.1 that trigger only one strictly predetermined member of the tense/aspect/mood category.

- (19) a. ni chimay **a** num-i äk’bi
 DEF deer **PROX** pass.by[3B]-COM yesterday
 ‘The deer passed by yesterday.’ (DGCPI 2002:16)
- b. **a** kä=k’ux-e’
PROX 1A=eat[3B]-INC
 ‘I am going to eat it.’ (Keller & Luciano 1997:451)

When the action has a future temporal reference, as in (19b), it is more common that the particle *a* co-occurs with the analytic future construction described in Subsection 4.2.

There is no uniformity in the literature concerning the meaning of this morpheme. Osorio May (2005:§2.4.2.3, §4.1.3) claims that it indicates a “perfective action”, apparently confusing the terms “perfective” and “perfect”. Keller & Luciano (1997:450) adhere to the priority of the semantic component of temporal distance and argue that it expresses an “immediate or proximate action”. The same particle is documented in Chontal de Acalán (Smailus 1975). Law et al. (2006: 425) consider *a* as “a temporal deictic which brings the completed action into the temporal here-and-now of the present, resulting in the present perfect”. Sanz González (2003: 129) argues that this particle was virtually the equivalent of the Spanish adverb *ya* ‘already’. This interpretation is especially plausible for modern Chontal as well, because it explains the possibility of its occurring with both complete and incomplete verb forms. Here, I gloss the particle *a* as the ‘proximative’, referring not only to the temporal proximity, but also to the discursive relevancy of events.

This particle can co-occur with other peripheral prepositive particles (20). This is clear evidence that it does not occupy the same slot in the structure of the verbal complex.

- (20) **sam** **a** kä=tsäm-s-i=t’oko’
PERF **PROX** 1A=die[3B]-CAUS-COM=EXCL
 ‘We have already killed it.’ (DGCPI 2002:48)

Another argument against considering this particle as part of the verbal grammar is its obligatory omission before the second and third person markers of set A, due exclusively to phonological reasons. These markers are represented by one single vowel, *a* and *u*, respectively, and the particle *a* becomes impossible in order to avoid hiatus.

5.3 Marker *ajni* ‘counterfactual’

The word form *ajni* ‘counterfactual’ is the consolidated combination of the existential verb *an* that exhibits the specific stem form *ajn* in the completive and the completive suffix *-i*.⁸ This form was grammaticalized and, now, it is not a finite verb, syntactically; rather, it is an invariable particle or an adverb. It indicates that, at the moment of speech, it is clear for the speaker (and possibly also for the addressee) that the action has not happened. The word form *ajni* has no fixed prepositive position in the clause (21), unlike the prepositive tense/aspect modifiers and the particle *a* examined above.

(21) a. a=täs-en **ajni** un=ts’it ts’omba
 2A=bring[3B]-INC CF one=CLF gun
 ‘You would have brought a gun!’

b. a=chän-i=ka a=pap si t-ik=et **ajni** äk’bi=ba
 2A=see[3B]-COM=CF 2A=father if come-SBJV=2B CF yesterday=ENCL
 ‘You would have seen your father if you had come yesterday.’

This word form appears in both incomplete and subjunctive clauses according to the verb transitivity, since the transitive verbs in Chontal do not have the subjunctive; see Section 3. In (21a), *ajni* is used with the transitive verb ‘to bring’ in the incomplete, while in (21b), it is used with the intransitive verb ‘to come’ that bears the subjunctive suffix.

6 Conclusions

The obligatoriness of expression seems to be the crucial factor for determining the grammatical or lexical status of a linguistic phenomenon. In Chontal, there is only one obligatory paradigm of tense/aspect/mood markers; therefore, there is a single grammatical tense/aspect/mood category. In Chol, a genetically related and areally neighboring language, the verbal system is different because it comprises two different grammatical paradigms of markers at the same time; see Vinogradov (2015) for more detail.

The complex verbal system of Chol was recently reanalyzed from the syntactic point of view. Coon (2009; 2010a; 2010b) argues that the suffixal paradigm of tense/aspect markers in Chol performs a syntactic function of marking nominalization or finiteness, rather than a semantic one. Such an analysis is not possible for the verbal system in Chontal, since the prepositive tense/aspect markers do not belong to the core grammar in this language. All three members of the suffixal tense/aspect/mood category — completive, incomplete and subjunctive — are also syntactic markers of a finite status of the predicate, although the incomplete suffixes are also used as nominalizers in some contexts of syntactic dependency.

As a result of belonging to different levels of grammar, the core and peripheral elements are not opposed to each other semantically. On the contrary, their meanings may well intersect and, to a certain degree, interact. The core markers normally express very general semantics and in fact are ambiguous. The peripheral markers may optionally make these meanings more precise when the speaker considers it necessary, thereby disambiguating the utterance. For example, the progressive particle *mu*’ that is used together with the incomplete form of the verb makes its habitual reading

⁸ The same stem is used in the past progressive periphrastic construction; see Subsection 4.2.

impossible, enabling the progressive one only. The particle *san* ‘perfect’ disambiguates the perfective/perfect homonymy conveyed by the completive suffix in favor of the perfect reading.⁹ The point here is that the semantic study of grammatical categories and morphemes is almost always complicated by a very broad range of possible meanings and interpretations that they may convey in a particular language, and special attention to the “semi-grammatical” elements with which they combine may help considerably in resolving that challenge.

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⁹ Interestingly, the Yucatec language has a similar device — the particle *káa* — but this particle excludes the perfect reading; see Bohnemeyer (2002:248–249).

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