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Historical change in reported speech constructions in the Chapacuran family

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The reported speech construction found in the Chapacuran language family of South America has undergone a number of changes in the individual languages, such that its uses extend beyond that of merely reporting speech. In many languages, it is used to express the inner states of the reported speaker, and in some cases it is used to express imperfectivity and causation. This paper argues that the future construction in Moré is a further development of the reported speech construction, one that has been reanalyzed as a basic main clause type. The morphosyntactic properties of the source construction explains the divergent inflectional forms, the loss of object indexation, and the innovation of an object case marker in the future construction. This paper provides new insights into the diachronic pathways that can lead to innovative future constructions as well as the origins of a tense-based split in case marking in Moré.

Keywords: Amazonian languages, construction grammar, reported speech constructions, Chapacuran family, diachronic morphosyntax

1. Introduction

The Chapacuran languages form a small linguistic family in southwestern Amazonia. They show similar argument structures in their non-future affirmative declarative main clause constructions. This structure is exemplified in (1a) from Moré, where a clause-initial verb is followed first by an inflectional particle that indexes the subject, then optionally by a suffix that indexes the object, and then by the nominal participants. However, the argument structure of the future construction varies across the different languages of the family. The future construction in Moré, as shown in (1b), indexes the subject participant through a bimorphemic inflectional particle *ta ana.* This particle includes the form of the non-future inflectional particle that corresponds to the subject participant (*ana*) followed by the object argument marked with the prefix *pa-*.

(1) Moré
  a. furu   ana-in   uje tanapat
      shoot.arrow 1SG.NFUT-3N big stingray
      'I shot the big stingray'
  b. fota   ta   ana pa-ito-ju
      retrieve FUT.SG 1SG OBL-wife-1SG
      'I will retrieve my wife'

In all the other Chapacuran languages for which grammatical information is available, such as Wanyam in (2b), the inflectional particle of the future construction contains only a single morpheme followed by an optional object suffix. The object nominal is not marked with any additional case morphology, much like the non-future constructions in (1a) and (2a).

(2) Wanyam
  a. hiri   un-on   pain   paro'
      shoot.arrow 1SG.NFUT-3SG.M OBL.3N bow
      'I shot it with my bow'
  b. hi   ata-in   ixe'
      blow 1SG.FUT-3N fire
      'I will light (blow) the fire'   (Ribeiro 1998: 8, 28)

From a historical perspective, the first morpheme *ta* 'future singular' of the Moré inflectional particle in (1b) is cognate with the first person future form *ata* in Wanyam in (2b). Furthermore, the first person non-future *ana* form seen in both of the Moré examples above is cognate with the *un(a)* form in Wanyam in (2a). Additionally, the *pa-* prefix used to mark objects and obliques in the Moré future construction in (2b) is cognate with the oblique preposition *pain* seen in (2a). Given these four examples, it is clear that the Moré future construction diverges from the other constructions in both the indexation and the case marking of clausal participants. Even though much of the morphology used in the future constructions is cognate across all of the languages, it is the argument structure of the constructions themselves that is different.

The question then arises as to how the divergent structure in the Moré future construction emerged. One cannot help but notice the structural parallels between the future construction in Moré and the reported speech construction found in other languages of the Chapacuran family, as shown in (3) for Wari'.

(3) Wari', Oro Mon variety
      in'am ta'   na   ta
      hunt 1SG.FUT 3SG.NFUT EMPH
      'He went hunting' (literally "'I will hunt" he (said)')

Like the Moré future construction in (1b), the Wari' reported speech construction in (3) has two inflectional particles that follow the predicate and a number of additional constraints on argument realization (see Section 3). The hypothesis presented in this article is that the Moré future construction, with its bimorphemic inflectional particle and object marking prefix, derives from a different diachronic source from the basic declarative main clause construction in Proto-Chapacura. Rather, the Moré future construction and its corresponding argument structure arose through the extension and reanalysis of reported speech constructions.

The following section demonstrates that the non-future constructions in Moré and Wanyam seen in (1a) and (2a) are directly descended from the original Proto-Chapacuran non-future declarative main clause construction, both with respect to the argument structure that they present and the forms used in the paradigm of inflectional particles. Additionally, the Wanyam future construction in (2b) is shown to be cognate with the future constructions seen across all of the other languages for which we have reliable data, with the exception of Moré. Section 3 discusses the reconstruction of the reported speech construction (RSC) in Proto-Chapacura. Section 4 discusses the functional extension of the RSC across the language family into domains of usage beyond the citation of actual speech. Section 5 examines the reanalysis of the RSC into main clause future construction in Moré.

Speech reporting practices are commonly found in the language of lowland South America (Beier, Michael & Sherzer 2002), and this analysis describes the different semantic functions that these constructions can extend into beyond the direct citation of observed speech. It further helps to illustrate a possible diachronic pathway between speech reporting practices and the development of innovative grammatical constructions to mark tense.

2.   Reconstructing the basic main clause in Proto-Chapacura

The affirmative declarative main clause construction in Chapacuran languages, referred to here as the "basic main clause," shares a number of properties across all languages for which there is reliable grammatical data. These constructions are all predicate-initial and contain an obligatory inflectional particle that indexes the grammatical subject of the predicate, which is then optionally followed by the expressed nominal arguments, generally with the subject occurring as the last

constituent when realized. The structure of this basic construction is seen in (4) for Torá and (5) for Oro Win, members of separate branches of the family.[1]

(4) Torá
 a. imi' na
     die 3SG.NFUT
     'It died'
 b. pa un-on   imin
     kill 1SG.NFUT-3M tapir
     'I killed the tapir'   (Nimuendajú 1925:154, 156)

(5) Oro Win
 a. maki na   oka'
     come 3.NFUT 3M.PROX.SP
     'This one came'
 b. fri'   n-on   ifam Hoto
     shoot.arrow 3.NFUT-3M fish Hoto
     'Hoto shot a fish'

Except for Moré, all of the other Chapacuran languages use identical grammatical structures in both the future and non-future basic clause. The tense distinction is expressed through the use of different paradigms of subject inflectional particles, with distinct future and non-future (past/present) paradigms.

(6) Torá
     make **ar**-ai   kom
     bring 2SG.FUT-3N water
     'You will bring water'   (Nimuendajú 1925:157)

(7) Oro Win
     tom **t**-an   titot
     burn 1SG.FUT-3N swidden
     'I will burn the swidden garden'

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1. Birchall, Dunn & Greenhill (2016) propose a three-branch classification of the Chapacuran family: the Tapakuric branch contains Tapakura, Kitemoka, and Napeka; the Waric branch contains Wari', Wanyam, Urupá, Jarú, and Oro Win; the Moreic branch contains Moré, Cojubim, and Torá; the poorly-attested Rokorona language is considered unclassified within the family due to a lack of lexical data and observable shared phonological innovations. The data presented in this paper primarily come from the languages of the Waric and Moreic branches, since little grammatical information is available for the Tapakuric languages. Nevertheless, the limited data available support the claims made here on the Chapacuran languages as a whole (Birchall 2013, Weinold 2012). Example data without a reference are drawn from the author's personal field-notes.

Table 1 presents the non-future and future subject inflectional particles for Moré, Torá, Wariʼ, and Oro Win. Bimorphemic forms are underlined.

Table 1. Subject inflectional particles

Person	Moré NFUT	Moré FUT	Torá NFUT	Torá FUT	Wariʼ NFUT	Wariʼ FUT	Oro Win NFUT	Oro Win FUT
1SG	ana	_ta ana_	una	ta	ina	taʼ	ona	ta
2SG	ma	_ta ma_	ma	ara, era	ma	ra	ma	era
3SG	na	_ta na_	na	tra	na	tara	na	tra
1PL.INCL	katiʼ	_ti katiʼ_	kati	ati	iriʼ	xiʼ	iriʼ	tiʼ
1PL.EXCL	katut	_ti katut_	?	?	yryt	xyt	yryt	tiʼ
2PL	fuʼ	_ti fuʼ_	?	?	hwe	je	fy	_ti fy_
3PL	na	_ti na_	?	?	nana	tatara	na	tra

While more work is still needed on the phonological reconstruction of the family before proto-forms of the inflectional particles can be reliably proposed, it is clear that the bimorphemic future forms are an anomaly. Rather than being composed of a single morpheme, as is the case of all the forms in the other languages with the exception of the second person plural future marker in Oro Win (see Section 5), the Moré future forms are composed of two morphemes: the first morpheme, referred to as the future marker, is cognate with the first person singular future inflectional particle used in the other languages in the singular and cognate with the first person plural inclusive future particles in the plural; the second morpheme consists simply of the non-future forms in Moré. Given the forms presented in Table 1, it is clear that the original Proto-Chapacura forms were composed of only a single morpheme in both the non-future and future paradigms and the bimorphemic future forms are innovations.

It is further possible to reconstruct that the Proto-Chapacura main clause also indexed the grammatical object of the predicate through a suffix that attaches to the subject inflectional particle. Object indexation is attested in all branches of the family in both future and non-future basic clauses; it is shown for Wanyam in (2b), for Oro Win in (5b) and (7), and in (4b) and (6) for Torá (see also Weinold 2012 for Napeka and Birchall 2013 for Rokorona). Object indexation tends to be optional with indefinite or non-specific objects but obligatory otherwise. Furthermore, object indexation in ditranstive constructions showed a primary object alignment in Proto-Chapacura, one where the recipient-like argument (R) is indexed by the object suffix on the inflectional particle, while the theme-like argument of the ditransitive (T) is marked with an oblique preposition or prefix, as shown in (8) for Wanyam and in (9) for Torá.

(8)   Wanyam
    min at-on   **pain** ipija-n pana
    give 1SG.FUT-3M OBL.3N fruit-3N tree
    'I will give him the fruit of the tree'   (Ribeiro 1998: 29)

(9)   Torá
    mi' ar-on   **pa**-mapak
    give 2SG.FUT-3M OBL-corn
    'You will give him corn'   (Nimuendajú 1925: 156)

Oblique participants of the clause are expressed through the use of a single prepo-sition that indexes person, number, and gender. This is the same preposition used to mark the theme participant of the Wanyam ditransitive clause in (8).

(10)   Oro Win
    a.   mo na   **pan**   kota-kon
       go 3.NFUT OBL.3N basket-3SG.M
       'He went with his basket'
    b.   an aj fo' pe pi n-an   **pan**
       grab take put sit.SG PFV 3.NFUT-3N OBL.3N
       'He took it and put it in it (the basket)'

In some Chapacuran languages this preposition attaches to nominal participants without further inflection, functioning as an oblique prefix, as in Rokorona in (11). This is the same marker used to mark the theme of the Torá ditransitive clause in (9) and the object in the Moré future construction in (1b).

(11)   Rokorona
    koron kiji   na   **pa**-timaw
    enter   descend 3SG.NFUT OBL-earth
    'He descended into the earth'   (Teza 1868 in Birchall 2013)

Prepositions are also used to introduce subordinate clauses in (at least) Oro Win and Wari'. Note that the subordinate clause occurs in a post-verbal position and takes different inflectional morphology than a main clause (see Everett & Kern 1997: 78–116 for a detailed discussion of subordination strategies in Wari').

(12)   Wari', Oro Nao' variety
    param in-em   pain   ka   maw wa
    desire 1SG.NFUT-2SG OBL.3N NFUT.N go.SG INF
    'I want you to go'   (Everett & Kern 1997: 24)

In all of the Chapacuran languages for which audio recordings or reliable tran-scriptions are available, sentential stress occurs on the final syllable of the

predicating element, before the verbal inflection (Everett & Kern 1997, Leigue Castedo 1957, Nimuendajú 1925, Weinold 2012).[2] When a predicate is composed of multiple verbs forming a serial verb construction, the primary stress occurs on the final syllable of the final verb. In (13) and (14), the syllable that receives primary sentential stress is underlined.

(13) Oro Win
    a.   my<u>ryk</u> n-an   tawi
          stir   3.NFUT-3N honey
          'He stirred the honey'
    b.   jyk   karakat an to<u>ko</u>' n-an
          push break.PL get lie.PL 3.NFUT-3N
          'He broke (the twigs) and laid them down'

A verbal modifier can occur between the predicate and the inflectional particle. These particles can function as aspectual markers (usually perfective or sequential), directional markers, and valency-changing devices. Many of these particles are historically derived from verbs (Birchall 2014). However, unlike a verb, when a verbal modifier occurs between the predicate and the inflectional particle, stress remains on the last element of the predicate with the modifier remaining unstressed, as seen in (14) with the directional modifier *ma*' 'thither' and the benefactive *mi*' in Oro Win.

(14) Oro Win
    a.   awin maw <u>tyt</u>   ma'   na
          find go.SG walk.SG thither 3.NFUT
          'He found it and left'
    b.   <u>fot</u>   mi' na-pa   pokon ifam
          cook BEN 3.NFUT-1SG OBL.3M fish
          'He cooked fish for me'

3.   Reconstructing reported speech constructions

The reported speech constructions have not been well described for most of the Chapacuran languages, except for the Oro Nao' variety of Wari'. For this language, a general description of the "verbalized sentence" construction is given in Everett and Kern (1997), while Everett (2008) gives a formal syntactic account

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2. Multisyllablic words generally receive primary lexical stress on the final syllable, e.g. [poˌro.naˈkon] 'his bow' in Oro Win. See Birchall (to appear) for further discussion on stress and intonation in Chapacuran languages.

of the construction, and Turner (2006) provides a description of its intonational properties.[3] In comparing Oro Win to Wari', Popky (1999:53–54) reports not finding any RSCs in her Oro Win corpus. However, this is likely a result of relying exclusively on elicited data, since the natural speech corpus from which the examples in this paper are drawn contains many of these constructions in both monologue and dialogue.

Before looking at specific intonational and morphosyntactic properties of the RSCs in individual languages, a few basic structural properties and terminological distinctions should first be introduced. Let us begin by examining a reported speech construction used by two Wari' parents as they discussed putting their child to bed.

(15) Wari', Oro Nao' variety
      pi'am ra   m-on
      sleep 2SG.FUT 2SG.NFUT-3SG.M
      'Did you tell him to go to sleep?' (lit. '"You will sleep" (did) you (say) to him?')

While Wari' speakers themselves would rarely offer up such a literal translation, this utterance can be construed as '"You will sleep" (did) you (say) to him?', reporting the speech of an individual from their own deictic perspective (*pi'am ra* 'You will sleep'), followed by an inflection of the clause from the perspective of the actual speaker of the utterance (*mon*).

As seen in (15), RSCs most often begin with an underived verbal predicate (*pi'am* 'sleep'), but they can also begin with a variety of different grammatical elements such as interjections, negators, or question words together with a predicate.[4] This predicate is referred to as the "reported predicate." The first inflection that immediately follows the reported predicate indexes clausal participants from the perspective of a reported speaker, which in (15) is *ra* 'second person singular future'. This is referred to as the "reported index." This particle is often in the future tense and is most commonly inflected for the first or second person (singular or plural). Together, the reported predicate and the reported index form the "reported clause," which in (15) is *pi'am ra* 'You will sleep'.

The second inflectional particle indexes the participants from the perspective of the actual speaker of the utterance, just as in any other non-reported speech construction. In (15), the particle *mon* is used to index a second person singular subject acting on a third person masculine singular object in the non-future tense.

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3. Pontes (2015:127–128) describes the first person reported indexes in the reported speech construction in the Oro Waram variety of Wari' as a type of future marker without recognizing the full range of uses and productivity of the construction.

4. See (18) and (20) for Wari' in the following sections.

This particle is referred to simply as the verbal inflectional particle of the clause; any additional grammatical elements, such as participants or clause-final particles, are referred to by their standard labels. To avoid any confusion, the clause in which the reported clause functions as the predicate is referred to as the "matrix clause." This convention is merely adopted to distinguish the two clauses and is not intended to imply that the reported clause is subordinate to the matrix clause.

The reported clause is not restricted to containing only the reported predicate and the reported index, but can also contain expressed nominal arguments, as seen for Oro Win in (16).

(16)   Oro Win
       pa' ta   ifam na
       kill 1SG.FUT fish 3.NFUT
       'He went to fish' (lit. "'I will kill fish" he (said)')

In this example, the reported clause *pa' ta ifam* 'I will kill fish' includes the nominal participant *ifam* 'fish'. Any noun or prepositional phrase that occurs directly after the reported index is referred to as a "reported argument."

The structure illustrated in the previous examples is shared by all the languages with attested reported speech constructions and can serve as a general sketch of what the reported speech construction reconstructs to in Proto-Chapacura. Let us now turn to more specific properties.

3.1   Intonational properties

Everett (2008: 319–392) shows that for RSCs in the Oro Nao' variety of Wari', the final syllable of the reported clause bears primary sentence stress, just like the predicate in other non-RSC constructions, as already seen in (13) and (14) for Oro Win.[5] This intonational pattern for RSCs is also found in other varieties of Wari' and for Oro Win. In (17a), the final syllable of the predicate (*in'am* 'hunt') receives primary sentence-level stress, as indicated with underlining. In (17b), the predicate is a serial verb composed of three independent verbs, and primary sentence-level stress also falls on the final syllable of the final verb in the series. In (17c), the same clause *in'am ta'* 'I will hunt' from (17a) is the reported clause in a RSC. In this case, it is not the final syllable of the verb that receives primary sentence-level stress, but the last syllable of the reported clause, which is the reported index *ta'*.

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5.   More detailed prosodic analysis of these constructions is available in Turner (2006).

(17) Wari', Oro Mon variety
   a. in'<u>am</u> ta'
       hunt 1SG.FUT
       'I will hunt'
   b. pan'   korom <u>maw</u> na   karawa
       fall.SG enter   go.SG 3SG.NFUT animal
       'The animal fell in (the trap)'
   c. in'am <u>ta'</u>   na   ta
       hunt 1SG.FUT 3SG.NFUT EMPH
       'He went hunting' (lit. '"I will hunt" he (said)')

When there is a nominal participant expressed in the reported clause, primary sentential stress is still on the final syllable of the reported clause, as shown in (18).

(18) Wari', Oro Mon variety
      mayi noro   xi-m   xa<u>ri</u>   akaka   na
      INTJ search 1PL.INCL.FUT-3SG.F sister.1PL.INCL SEQ.3PL.M 3SG.NFUT
      'And then they searched for their sister' (lit. 'And then they "Let's go! We will search for our sister" he (said).')

These intonation patterns suggest that the reported clause has the intonational properties of a single predicate, whether simple (17a) or complex (17b), as indicated through the assignment of primary sentential stress to the final syllable of the clause.

3.2   Morphosyntactic properties

The reported clause of a RSC functions as a derived predicate in the languages under discussion. There are a number of syntactic properties that indicate this: (i) the RSC occurs in the position that would normally be occupied by the verb in the matrix clause, relative to the inflectional particle of the matrix clause; (ii) no other predicating element is found in the matrix clause; (iii) there is no indication that the RSC is subordinated. Everett (2008: 391–392) identifies a number of additional properties of the RSC in Wari' that are more difficult to evaluate for the other languages, namely that they can be compounded with other verbs and that they can receive verbal modifiers.[6] However, it is clear that at least in Oro Win and Wari', it is possible to include a serial verb construction as the reported predicate in an RSC, as seen in (19).

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6. Neither of these properties have been observed in the moderately-sized Oro Win corpus and relatively small Moré corpus used in this study, nor in the available descriptive literature.

(19) Oro Win

korom fym   panim   panim   ti'   na
enter   sit.PL defecate defecate 1PL.FUT 3.NFUT
'They were always defecating inside (the house)' (lit. '"We will enter, sit and defecate" they (said)')

While these properties indicate that the reported clause is embedded within the matrix clause, the nature of this embedding is distinct from that used to embed subordinate clauses. This is seen in (12), where the clause is introduced by the oblique preposition *pain*; this is different both in terms of the morphology used (reported clauses are unmarked) and the position in which the reported clause occurs in the matrix clause. Rather, the embedding of the reported clause is accomplished through zero derivation – or, rather, derived without overt morphological marking – whereby the clause is treated prosodically and syntactically as a single simple predicate and is distinguished from a main clause through the shift in intonation, as argued in Everett (2008).

Everett & Kern (1997: 60–63) describe a number of conditions regarding the indexation and occurrence of clausal participants in the reported and matrix clauses of RSCs for Wari'. No examples have been observed for Oro Win and Moré that contradict the applicability of these conditions for these languages as well.

1. Condition A: If an NP object occurs in the matrix clause, it can be indexed on the verbal inflectional particle in both the reported and matrix clauses.
2. Condition B: If a third person object is verbally indexed in the matrix clause, then it must be indexed in the reported clause.
3. Condition C: If an NP object occurs in the reported clause, then it cannot be indexed in the matrix clause.

These conditions applied to RSCs can be observed in the elicited and hypothetical examples from Oro Win in (20), based off of the example *pa' ta ifam na* 'He went to kill fish' already shown in (16).

(20) Oro Win

    a.   Condition A

        pa' t-on   n-on   ifam

        kill 1SG.FUT-3M 3.NFUT-3M fish

        'He went to kill the fish'

    b.   Condition B

       *pa' ta   n-on   ifam

        kill 1SG.FUT 3.NFUT-3M fish

        'He went to kill the fish'

    c.   Condition C

       *pa' t-on   ifam n-on

        kill 1SG.FUT-3M fish 3.NFUT-3M

        'He went to kill the fish'

    d.   Condition C

       *pa' ta   ifam n-on

        kill 1SG.FUT fish 3.NFUT-3M

        'He went to kill the fish'

    e.   Condition C

        pa' t-on   ifam na

        kill 1SG.FUT-3M fish 3.NFUT-3M

        'He went to kill the fish'

In other words, reported objects cannot be indexed in the matrix clause, as in (20d), but are only to be indexed in the reported clause, as in (20e). Objects indexed in the matrix clause must be also indexed in the reported clause, as in (20a). One strategy that languages have adopted to allow the expression of objects in the matrix clause is to treat them as an oblique indexed by a preposition, as in (21).

(21) Oro Win

    a.   kaw timin   aryt   na   kom **pan**

        eat   accompany 1PL.EXCL.NFUT 3.NFUT also OBL.3N

        'It was that we also ate (meat) accompanied by it (the palm hearts)'

    b.   kaw ti'   na   **pokon** ifam

        eat   1PL.INCL.FUT 3.NFUT OBL.3M fish

        'They were eating the fish'

This strategy of object demotion is especially common with specific and/or definite objects that would otherwise be indexed on the verbal particle. In (21a) the participant indexed on the preposition *pan* is specific and definite – palm hearts that were introduced in the previous section of the discourse – which would have required the participant to be indexed on the verbal inflectional particle as an

object had it not been treated as an oblique. The elicited example in (21b) further highlights the structure by expressing the participant indexed on the preposition.

These conditions on argument indexation and expression in RSCs, and the subsequent strategy of treating definite and/or specific objects as obliques in the matrix clause to help satisfy these conditions, are especially relevant to the development of the object prefix in the Moré future construction, as discussed later in Section 5.

4.   Functional extension of RSCs

The structure of the reported speech constructions – a reported clause inflected from the perspective of a reported speaker, which is then treated as a predicate to be further inflected – already suggests that the original function of the RSCs was, as the label of the construction implies, to quote the speech of an individual. This function is especially apparent in the Wari' example in (22).

(22)   Wari', Oro Nao' variety
       ma'   ko   maw na-in   Guajara na-nam   oro
       that:PROX.HEARER M/F.NFUT go.SG 3SG.NFUT-3N Guajará 3SG.NFUT-3PL.F COLL
       narima' taramaxikon
       woman chief
       '"Who went to Guajará?" the chief (said) to the women'
                                                          (Everett & Kern 1997:59)

The fact that the same participant can be indexed using two different deictic perspectives, once from the perspective of the reported speaker and once from the perspective of the utterer of the clause, even when these denote different person values for the participant, further shows that the original usage of this construction is to directly report speech. This is evident in the different person values of the object indexed in (23).

(23)   Oro Win
       fri'   t-on   ma-pa
       shoot.arrow 1SG.FUT-3M 2SG.NFUT-1SG
       'You will shoot me' (lit. '"I will shoot him with an arrow" you (said of) me')

Everett (2008:387) states that the direct quotation function is the most frequent usage of the RSC by Wari' speakers and that the construction can often be interpreted, at least figuratively, as a direct quote. Apart from the direct citation of speech, as seen in (22), another common usage of the RSC is to comment on the

inner states of the reported speakers without the actual speaker assuming epistemic authority over the content of the citation.

(24)   Wari', Oro Mon variety

maji pa' xi'   ta   ak tykykyn na
INTJ kill 1PL.INCL.FUT EMPH SEQ 3PL.REFL 3SG.NFUT
'And then they went to hunt' (lit. 'And then "Let's go! We will kill" they (said to) themselves')

This reported clause need not actually have been said. Rather, the speaker of the entire utterance uses a RSC to indicate the intentions of the reported speaker(s). In-depth ethnographic study of speech reporting strategies and practices needs to be carried out, investigating the various languages discussed here, to understand the full scope of the metapragmatic usages of the RSCs in each language community. At present, this may only be feasible among Wari' speakers due to the level of endangerment and obsolescence of Moré and Oro Win. However, it is clear that at least for Wari' and Oro Win, the two languages for which considerable natural speech corpora are currently available, the speakers frequently take certain liberties in projecting speech onto the reported speaker – i.e. reporting speech that was not actually uttered – in order to exemplify the attitudes, behaviors or beliefs of the reported speaker (cf. Michael 2001). In this sense, it is fictive in nature, representing a conceptual reality rather than an actual speech event (Pascual 2014).

Reporting the inner states of an individual also allows the speaker to comment on the fact that an event has started without commenting on whether the event has finished (for which they may not have an observational basis to conclude). Reporting fictive speech thus allows the usage of the RSCs to give an imperfective or present progressive interpretation to a clause, aspectual values which the languages generally lack the grammatical resources to express.[7] This same strategy also allows for a speaker to comment on the intended actions of another without assuming epistemic authority over whether that action will indeed occur, resulting in a possible simple future interpretation, i.e. "he said he will go fishing" is analogous to "he will go fishing" except that the speaker does not assume to know the actual intentions of the reported speaker. The different interpretations of the RSCs, such as in (25a), are generally resolved through the context in which they were used.

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7. Note that progressive and habitual aspect can also be expressed through the use of reduplication of verbal elements in the predicate, as seen in (19) for Oro Win. Everett & Kern (1997:324) consider the clause final particle *ira* a marker of past progressive and imperfective aspect. In Oro Win, this marker is frequently used to express the past progressive.

(25) Oro Win
   a. pa' ta   ifam na
       kill 1SG.FUT fish 3.NFUT
       'He went to fish/He is fishing/He said he was going to fish/He will go fish-
       ing'
   b. pa' n-on   ifam
       kill 3.NFUT-3M fish
       'He killed the fish'
   c. pa' pi n-on   ifam
       kill PFV 3.NFUT-3M fish
       'He has killed the fish'

Unlike many Amazonian languages, the Chapacuran languages lack explicit mor-
phology for causativization. Direct causation is frequently expressed by the use of
a RSC where the imperative *era*/*re* 'second person singular future' is used for the
inflection of the reported clause.[8]

(26) Torá
       kaw re   on-on
       eat 2SG.FUT 1SG.NFUT-3SG.M
       'I made him eat' (lit: "You will eat" I (said) to him')   (Nimuendajú 1925:156)

(27) Oro Win
       maw era   n-on
       go.SG 2SG.FUT 3.NFUT-3M
       'He sent him away' (lit. '"You will leave" he (said) to him')

As the use of RSCs expanded into other functional domains of language outside of
speech reporting, such as aspectual marking and causativization, other strategies
were employed in some of the languages to replace the original quotative function
of the construction. In Oro Win, it is possible to cite the speech of actors in the
discourse directly without the use of a RSC. Below is a short except from a nar-
rative about a paca hunt where the narrator directly cites the speech of multiple
participants without a RSC or the use of a speech verb. The direct citations are
indicated with square brackets, separated for different actors in the narrative.

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8. The second person singular future/imperative form also appears as *era* and *ara* throughout
the Torá source without any apparent change in meaning.

(28) Oro Win

Fri'   ak-on   n-on   ma'.   Maki. [Fri'   on-on
shoot.arrow SEQ.3-3M 3.NFUT-3M PROX.HEAR arrive shoot.arrow 1SG.NFUT-3M

mikop okowa.]   [Fri'   ma?]   [Fri'   ona.]   [Narom
paca   PROX.SP.3M shoot.arrow 2SG.NFUT shoot.arrow 1SG.NFUT singe

er-on.]   Kaw ti'   aka   na.   Narom ak-on.
2SG.FUT-3M eat   1PL.INCL.FUT SEQ.3M 3.NFUT singe   SEQ.3-3M

'And then he shot a paca and came back. "I shot this paca." "You shot (it)?" "I
shot (it)." "Singe it!" And then let's eat, they (said). And then he singed it.'

Notice that the unmarked quoted portion of the narrative is then followed by the
RSC *kaw ti' aka na* 'And then let's eat, they (said)', showing that both an unmarked
strategy and an RSC can be used for direct citation. The RSC functions here as
a transition back to the perspective of the actual speaker. However, one possible
alternative analysis of this passage is that the *aka na* in utterance *kaw ti aka na* is
actually embedding the whole dialogue between the reported participants. A sim-
ilar strategy of unmarked direct speech reporting is also used in Wari' narratives,
as seen in (29).

(29) Wari' (Oro Mon variety)

Nok   nok   ma-in   ka   tyt   ak ka. Nok   ma-in   ka
dislike dislike 2SG.NFUT-3N NMLZ walk.sg SEQ 3N dislike 2SG.NFUT-3N NMLZ

tyt   wa ira   xina.   Ka na-pa   ta   ate.   Ak i ma'
walk.sg INF PROG husband 3N 3SG.NFUT-1SG EMPH father seem N PROX.HEAR

na   ka   tomi' nekem.
3SG.NFUT NMLZ say   POSS:3SG.F

'"You don't like to walk. You dislike walking, my husband (said). This is what
he told me, father." Her speech was like this.'

A major difference between the discursive strategies for direct citation shown in
(28) and (29) is that in the Wari' example the narrator explicitly mentions that he
is citing the speech of another individual in the last sentence through the use of a
nominalization construction with a speech verb, *ak i ma' na ka tomi' nekem* 'Her
speech was like this'. These two examples serve to illustrate that as the usage of
the RSCs expanded beyond that of direct citation, other discourse-based strate-
gies were adopted in the languages to carry out this function.

In summary, the use of the reported speech construction in the Chapacuran
languages has expanded considerably beyond that of the direct citation of the
observed speech of an individual. The extended usage of the RSC did not produce
morphosyntactic changes in the construction itself. As is shown in the following
section, the RSC in Moré underwent further extension and reanalysis, resulting in
a dramatic shift in the argument structure of the future main clause construction.

5.   Reanalysis of RSCs as the Moré future construction

As discussed in the previous section, the additional uses of the RSCs across the family build off the direct citation function. As the usage of the construction extended into fictive contexts, the ability to project speech about the inner states of a reported speaker became a resource to be exploited by interlocutors in order to make additional grammatical distinctions in their language, namely for the expression of imperfectivity and direct causation.

Unlike in Wari' and Oro Win, Moré does not use a speech reporting construction for any of the direct citation or aspectual functions already discussed. Now let us consider the future construction in Moré once again, as seen in (30).

(30) Moré
      <u>ta</u>' ti   katut   pa-titot
      cut FUT.PL 1PL.EXCL OBL-swidden
      'We (excl.) will cut our swidden garden'

A number of different properties of the Moré future construction indicate that it was indeed historically derived from the RSC. First is the clear cognacy between the *ta/ti* future markers in Moré and the first person future subject inflectional particles in the other languages, as discussed in Section 2. The second is that the Moré future construction shows all of the same restrictions on the indexation of objects that is also found in the RSCs, as discussed in Section 3.2. Finally, the RSC is the only other main clause construction that shows two adjacent inflectional particles following the predicate.

Beyond the obvious structural similarities between the two constructions, the future construction in Moré has two distinct properties that set it apart from the RSCs in the other languages: no nominal argument can occur between the reflex of the reported index (the future markers *ta/ti*) and the verbal inflectional particle of the clause; and primary sentential stress is on the final syllable of the final predicating element of the reported predicate and not on the final syllable of the reflex of the reported index, as indicated in (30) through underlining. In this sense, the RSC and future construction in Moré are no longer the same construction, with both having their own morphosyntactic and prosodic properties.

The two distinct properties of the Moré future construction mentioned in the previous paragraph show that the double inflection of the RSC has been reanalyzed into a compound particle that indexes the person value originally expressed through the second index in the RSC, the verbal inflectional particle of the matrix

clause.[9] With the original person indexation pattern in the RSC reanalyzed as a compound particle inflecting Moré future constructions, the construction became similar to other basic monoclausal constructions, albeit with different inflectional particles. This status caused the stress assignment to shift back to the unmarked position of all main clauses, which was the last syllable of the last predicating element of the clause. This difference in intonation helped to distinguish the Moré future construction from the RSC (cf. Mithun 2009 on the use of intonation to distinguish morphosyntactically similar constructions).

As the double indexation of the Moré RSC underwent reanalysis as a compound particle that indexes the subject in the future construction, the conditions on argument indexation and realization discussed in Section 3.2 were still maintained with regard to the realization of object arguments in the future construction. Especially important is Condition B, in which third person objects indexed in the matrix clause are obligatorily indexed in the reported clause. The reanalysis of the reported index as part of the matrix inflectional particle thus prohibited the argument from being indexed on the second morpheme of the bimorphemic future inflectional particle. In order to realize the object nominal in the clause, given the restriction on the indexation of object arguments, especially since definite objects tend to be obligatorily indexed in these languages, the object was instead treated as an oblique marked with the prefix *pa-*. This is much like what was shown for Oro Win in (21).[10] Because of the extension of the oblique marker to object arguments, the reanalysis of the RSC as a main clause future construction resulted in the oblique marker being reanalyzed as an object marker in these constructions. Direct objects are now obligatorily marked with the oblique prefix in the future construction. This has resulted in an alignment split between future and non-future clauses in Moré with regard to the case marking of direct objects.

In summary, the structural changes that took place in the Moré future construction can be thought of as occurring in three stages:

1. Stage 1: Moré future construction is identical to the RSC in the other languages, including the restriction on object indexation and realization.
2. Stage 2: The reported index in the Moré RSC is reanalyzed as a future marker. The reported clause no longer functions as a predicate and no participants can be expressed between the two inflectional particles. This results in a

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9. When discussing the Moré future construction, Angenot de Lima (2002:349–351) describes an "imminent imperfective future" paradigm whose forms are composed of two elements, *ta/ti* "imminent future" and the "imperfective" person indexes that are used in the non-future (*ana/ma/na*…).

10. See also Everett & Kern 1997:125–132 on the variable nature of object selection and oblique marking in Wari'.

shift in stress assignment from the last syllable of the reported index/future marker back to the last predicating element, just as in a basic main clause construction.

3. Stage 3: The strategy of marking definite objects in the matrix clause of an RSC is extended to all objects in the Moré future construction.

The crucial first step in this historical pathway is the reanalysis of the reported index in Moré as part of a compound verbal inflectional particle rather than as part of the reported clause. This triggers the resulting shifts in intonation and argument marking. Such a reanalysis has been attested in the second person plural future inflectional particle in Oro Win, as seen in (31). This form is derived from the first person plural future index *ti'* plus the second person plural non-future subject index *fy*. Like the Moré examples in (1b) and (30), the object is expressed as an oblique *paryt* 'first person plural exclusive' after the inflectional particle. Clauses inflected for second person plural future cannot take an object suffix on the inflectional particle.

(31) Oro Win
    to pa' **ti fy**   paryt
    hit kill 2PL.FUT OBL.1PL.EXCL
    'You (pl.) will shoot us'

This form is infrequently used in Oro Win and not widely attested in the current corpus of the language. However, it is likely that this form derives through a similar reanalysis of the RSC indexation pattern as that seen in Moré. A possible motivation for this reanalysis is the loss of the plural forms in the rest of the future paradigm in Oro Win. In this paradigm, the first person plural inclusive and exclusive forms are both marked using the form that is cognate with the inclusive form used in the other languages, while the third person plural future form is conflated with the third person singular future form *tra*, also cognate with the form that is cognate with the third person singular future forms used across the family. This still poorly understood case of paradigm simplification could have resulted in the communicative need to derive a periphrastic expression of the second person plural future, and the RSC proved to be a readily available source.

6. Discussion

The historical development of reported speech constructions in the Chapacuran languages helps to further our understanding of the diachronic. The constructions provide an example of how speech reporting can be functionally extended to

express intention and cognition and how the expression of these inner states can be further extended into the domain of expressing imperfectivity and ultimately future tense. They also provide a case study of the development of distinct case marking patterns across different tense constructions.

The functional development of the RSC in Chapacuran languages can be conceived of as a historical pathway from a primarily discourse phenomenon to a primarily grammatical one: it progressed from speech reporting to expressing aspectual distinctions, then finally to expressing a distinct future construction in Moré. The restrictions on argument indexation and realization inherited from the RSC source construction produced subsequent changes in object case marking in the Moré future construction that ultimately resulted in a typologically rare prefix/preposition locus of case marking (cf. Dryer 2013).

Interestingly, the grammaticalization of a reported speech construction has also occurred in the nearby isolate language Aikanã, also spoken in the Brazilian state of Rondônia, where a first person subject marker (singular or plural) became fixed and reanalyzed as part of the imminent future construction (van der Voort 2013). The person markers are marked in boldface in (32).

(32) a. hari-**ka**-ne-ẽ
          bathe-1SG-PFV-DECL
          'I have bathed'
      b. hari- **ka**-re-**ka**-ẽ
          bathe-1SG-IMM.FUT-1SG-DECL
          'I am going to bathe'
      c. hari-**ka**-re-**me**-i
          bathe-1SG-IMM.FUT-2SG-INT
          'Are you going to bathe?'
      d. hari-**txa**-re-**dukari**-ẽ
          bathe-1PL-IMM.FUT-3PL-DECL
          'They are going to bathe'   (Aikanã; isolate, personal fieldwork 2015)

The person marking pattern seen in the Aikanã imminent future construction has, along with other evidence, led van der Voort (2013) to propose that this construction is a result of "fossilized fictive quotation." This construction shows interesting parallels to the Moré future construction, not only in the diachronic pathway of a speech reporting construction becoming a future tense construction, but also in the fact that the Aikanã construction also requires that the first of the two person inflections always be in the first person and that this form varies between singular and plural subjects, as can be seen by comparing (32b) and (32d).

The quotative construction in Kwaza, an isolate language spoken near Aikanã, shows a similar double inflection pattern to that in Moré and the Chapacuran RSCs in general, as seen in (33).

(33) a.   kukuihɪ̃-**da**-ki
           ill-1SG-DECL
           'I am ill'
      b.   kukuihɪ̃-**xa**-re=**da**-ki
           ill-2SG-INT=1SG-DECL
           'I asked if you are sick' (literally, '"Are you sick?" I said')

<div align="right">Kwaza (isolate, van der Voort 2013: 367)</div>

Thus double person inflection as a strategy for direct citation, as well as the reanalysis of person markers in reported speech constructions as a diachronic source for marking future constructions, are both well attested in this region of southwestern Amazonia beyond the Chapacuran languages. This makes the diachronic pathway proposed from speech reporting to future marking in Moré even less surprising given the regional context in which it occurred.

This study has shown how the extension and reanalysis of the reported speech construction within the Chapacuran family has influenced the tense and aspect system in these languages and produced considerable changes in the treatment of clausal participants. While grammaticalization is generally thought of as a process whereby a lexical item acquires a grammatical function through language-internal changes, the development of the RSCs in the Chapacuran family is of a somewhat different nature. Here, a primarily discourse-based grammatical construction, rather than a lexical item, is the diachronic source for the future construction. Each of the individual components of the construction are grammatical in nature, such as the inflectional particles, the oblique marker, and the conditions on argument indexation. The whole construction acquires innovative uses and undergoes grammatical changes not found in the source construction, what Barð-dal & Gildea (2015) refer to as "constructionalization."

The reanalysis of the construction itself is what has led to the changes in person indexation and case marking in Moré. The description of this process provides new insights into the diachronic sources and pathways that can alter the grammar of languages throughout time and helps us better understand the development of the differences in argument marking systems within the Chapacuran family.

Acknowledgements

Abbreviations

All glosses used in this article conform to the Leipzig Glossing Rules standard. The following additional glosses are used throughout the article:

3M	third person masculine
3F	third person feminine
3N	third person neuter
COLL	collectivizer
EMPH	emphatic
IMM	imminent
INT	interrogative
INTJ	interjection
NFUT	non-future
PROX.HEAR	proximal to hearer
PROX.SP	proximal to speaker
SEQ	sequential

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