

# 'Chop, shred, snap apart': Verbs of cutting and breaking in Lowland Chontal\*

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## Abstract

*Typological descriptions of understudied languages reveal intriguing cross-linguistic variation in descriptions of events of object separation and destruction. In Lowland Chontal of Oaxaca, verbs of cutting and breaking lexicalize event perspectives that range from the common to the quite unusual, from the tearing of cloth to the snapping apart on the cross-grain of yarn. This paper describes the semantic and syntactic criteria that characterize three verb classes in this semantic domain, examines patterns of event construal, and takes a look at likely changes in these event descriptions from the perspective of endangered language recovery.*

*Keywords:* cut and break; separation events; state change; verb semantics; typology; endangered language; Lowland Chontal; Meso-america.

## 1. Introduction

This study examines cutting and breaking (C&B, hereafter) predicates in Lowland Chontal, an unclassified language of southern Mexico. The semantic domain of object separation and destruction has been much discussed in the linguistic literature, with most studies characterizing two primary classes of predicates according to certain shared semantic and syntactic properties. Cut verbs specify the type of action that causes separation (the causing sub-event) and cannot occur in intransitive alternations, e.g., \**The bread cut*. Break verbs specify the type of change in the object (the state change sub-event) and can be predicated of the semantic theme, e.g., *The vase broke*. Various theoretical approaches have identified “cut” and “break” verbs (Guerssel et al. 1985), “hit” and “break” verbs (Fillmore 1970), and “manner” and “result” verbs (Rappaport

Hovav and Levin 1998). Other crosslinguistic work and studies of languages other than English, such as Pye (1996), DeLancey (1998), Ross et al. (1998), and the present study, have explored specific event perspective and the fine-grained semantic distinctions of verbs in this semantic domain.

The paper begins with an introduction to the speakers and to relevant features of the language in Section 2. Section 3 identifies C&B predicates and defines verb classes, looks at major event types, and characterizes particular event construals. The paper ends with a few predictions on semantic and syntactic changes in Chontal C&B descriptions from the perspective of language endangerment and recovery.

The data for this study were collected using non-verbal video stimuli (Bohnemeyer et al. 2001, see Majid et al., this issue, for a description of the videoclips). Four individual Chontal speakers were asked to describe a series of videoclips depicting events of object separation and destruction. A group session was also conducted with an additional six speakers.

## **2. The language and speakers**

Lowland Chontal (Chontal, hereafter) is a language spoken fluently by perhaps 200 elderly people along the coastal plain of the southern Mexico state of Oaxaca. The Chontal economy depends primarily on subsistence farming of corn, beans, tomatoes, and other produce; river and shore-line fishing, and the selling and re-selling of goods. Socioculturally, the Chontal community is internally cooperative, private, and self-sufficient, historically famous for having held out against Aztecs and missionaries alike.

Chontal is a verb-initial head-marking language with variable word order, no case markers, and a complex aspectual system but no tense markers. The major person-marking paradigm is an agentive system motivated by the perceived volition or intention of the participant. Morphemes in the agentive (hereafter, *AGT*) series can occur as free pronouns but frequently occur as clitics. Third persons have no *AGT* markers but can be expressed lexically or as polyclitic pronouns. The patientive (hereafter, *PAT*) series of person markers are verbal affixes that reference non-agentive participants. Third person singular has no *PAT* marker, and therefore the agentive vs. non-agentive distinction is neutralized for this person. See O'Connor (2004) for a full description.

The lexical resources that form C&B predicates come in a variety of syntactic packages. Some roots can or must be derived with a causative suffix *-ee* or *-k'e*; some can or must combine with a directional element

-*ñi* ‘across’ which here depicts a realization state ‘apart’; and some can take an intransitivizer suffix *-uu* or *-ku*. This intransitivizing suffix is considered here a ‘middle’ of the “anaphoric passive” type described in Bohnemeyer (this issue). That is, a middle construction is used in C&B descriptions to describe a result state achieved by a causing event retrievable from the discourse context.

For example, in one scene, a man chops a branch with a knife; in another, he cuts a cloth with a knife. Both clips were described by most speakers with *tek'e-* ‘cut/break, separate’, a stem formed of the monovalent root *te-* ‘fall’ plus a causative.<sup>1</sup>

- (1) *tye-k'e-duy la'wa-'ej.*<sup>2</sup>  
 fall-CAUS-DUR.SG DIM-tree  
 ‘He is cutting the branch.’ [APM C/B.3]
- (2) *tye-k'e-pa lich'ale con coraje.*  
 fall-CAUS-PFV.SG cloth with anger  
 ‘He cut the cloth angrily.’ [APM C/B.4]

However, there is no intransitive equivalent to (1) or (2) using the verb root *te-* ‘fall’. To describe the result state of the branch or the cloth, speakers used intransitive derivations of *tyof'ñi-* ‘break, snap apart’ or *jas-* ‘tear, split’, as in the following.

- (3) *tye-k'e-duy lakwe' joypa tyof'-ñu-pa.*  
 fall-CAUS-DUR.SG man now break-apart:ITVR-PFV.SG  
 ‘The man is cutting it; now it broke/has broken apart.’  
 [AER C/B.3]
- (4) *wejl-pa lich'ale jas-uu-pa.*  
 rot-PFV.SG cloth tear-ITVR-PFV.SG  
 ‘The cloth was rotten; it tore/got torn.’ [AER C/B.4]

In both examples, a causing event is understood, whether an agent with an instrument, in (3), or a presumed effect of sunshine or wear, in (4).

Another relevant construction for this paper involves use of the applicative (*-ko*, *-go*, *-o*) to express an instrument as a core argument. In (5), formed with the labile root *ñay-* ‘cut, chop’, the applicative is fused with a causative suffix *-k'e*, and the human wielding the instrument is understood.

- (5) *xantya. ñay-k'o-pa machete.*  
 watermelon cut-CAUS:APPL-PFV.SG bladed.instrument  
 ‘It’s a watermelon. The machete cut it/he cut it with a machete.’  
 [APM C/B.51]

Although a rare occurrence in natural discourse, all three participants can be expressed, as in the prompted example in (6).

- (6) *lakw-atolo' pa-ño-pa machete el xantya.*  
 man-left leave?-apart:APPL-PFV.SG machete DET watermelon  
 'The left-handed man split the watermelon with a machete.'  
 [APM C/B.51]

The lexicalized verb stem in (6) is *pañi-* 'break food', perhaps based on the labile root *pa-* 'leave', and the applicative morpheme is fused with the suffix *-ñi* 'apart'.

### 3. The C&B predicate corpus

The list of Chontal C&B verbs is presented in Table 1.<sup>3</sup>

Building on the analysis in DeLancey (1998; who in turn bases his analysis on Fillmore 1970), the C&B predicates in Chontal are grouped into one of three classes: a cut-like class called "delivery of force", a break-like class called "change of state", and a class formed exclusively of compound stem predicates that depict the result state as "apart". Class membership depends upon certain syntactic and semantic criteria. All predicates in the delivery of force class (i) do not occur in intransitive descriptions of separation or result state (i.e., the theme cannot be the subject), and (ii) focus semantically on the manner of action on the part of the agent and/or instrument. All predicates in the change of state class (i) can be used in intransitive descriptions of separation or result state (i.e., the theme can be the subject) and (ii) focus semantically on the manner of change in the theme. Predicates in the separate apart class are compound stem predicates in which the initial element has varied semantics and the second element *-ñi* encodes the result state as 'apart' (much like the result verb *kai*<sup>1</sup> in Mandarin, described in Chen, this issue). Like the change of state class verbs, all of these participate in intransitive constructions.

Table 1. *Chontal predicates used to describe C&B stimulus events*

Delivery of force	Change of state	Separate apart
<i>tek'e-</i> 'cut/break'; 'separate'	<i>pay'ee-</i> 'break', 'smash'	<i>tyof'ñi-</i> 'break', 'snap apart'
<i>ñayk'e-</i> 'cut', 'chop'	<i>jas-</i> 'tear'	<i>jasñi-</i> 'tear apart'
<i>ñanjts'e-</i> 'perforate'	<i>ts'ajl-</i> 'shred'	<i>skiñi-</i> 'divide apart'
<i>pinj-</i> 'pound'	<i>tyelay-</i> 'dice', 'pulverize'	<i>k'wañi-</i> 'pry apart (inserting)'
<i>lyos-</i> 'poke'	<i>ts'ik'e-</i> 'bend'	<i>pañi-</i> 'break food apart'
<i>kegay'</i> 'cut hair'		

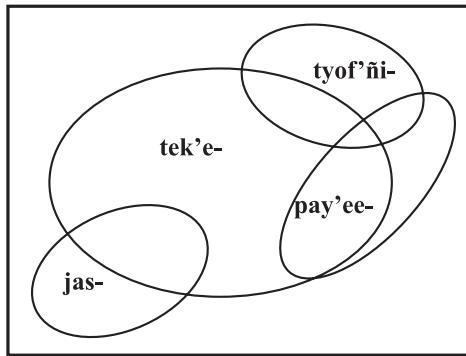


Figure 1. Major event type C&B predicates

### 3.1. Major event types

No scene in the stimulus set was described exclusively by a particular C&B predicate. Stated conversely, every scene was described by at least two and up to seven different C&B predicates or periphrastic descriptions. Some of this variation is attributable to the lexical attrition and overextension expected in a little used and poorly remembered language. However, nearly all stimulus clips could be described by one of four predicates in Table 1, suggesting that Chontal speakers perceived four major object separation event types. The four predicates are *tek'e-* 'cut, break, separate'; *jas-* 'tear, split'; *tyof'ñi-* 'break, snap apart'; and *pay'ee-* 'break, smash'. Coverage of the semantic domain is represented in Figure 1.

Figure 1 illustrates overlaps in predicate distribution. Chontal showed mixed results with respect to the crosslinguistic similarity structures described in the introductory chapter (Majid et al., this issue), and the three dimensions that emerged from that study provide a useful frame for clarifying the features that differentiate major event types in Chontal.

Chontal correlates strongly along Dimension 1 of the crosslinguistic study (degree of predictability of the locus of separation), reflecting the distinction between *tek'e-* (relatively predictable) and the verbs *tyof'ñi-* 'break, snap apart' and *pay'ee-* 'break, smash' (relatively unpredictable). The verb *tek'e-* 'cut, break, separate' has the most general scope in the semantic domain of object separation, often a first choice predicate for events with diverse instruments and objects. Literally 'cause to fall', is also used to describe picking fruit from a tree.

Dimension 2 of the crosslinguistic study isolates 'tear' from other separation types, and here Chontal also shows a high correlation with the general solution. Note though, that the boundary of the Chontal *jas-* is

different from that in many other languages. *Jas-* ‘tear, split’ is the verb par excellence to depict separation of cloth or paper, and indeed some speakers extended its use to any scene of cloth separation with any instrument. However, *jas-* also depicts lengthwise splitting of carrots and, outside the stimulus set, splitting firewood and cutting paper. In each event, the result state is a single, clean split along the longest axis or along a natural break-boundary,<sup>4</sup> also called separation ‘with the grain’ (see Levinson, this issue, for a similar finding in Yéfi Dnye). This root can also combine with *-ñi* ‘apart’ to emphasize that the object was torn or split apart.

Dimension 3 of the crosslinguistic study distinguishes snapping events from smashing events, and here Chontal shows no correlation to the crosslinguistic similarity structure. As Figure 1 shows, *tyof’ñi-* ‘break, snap apart’ and *pay’ee-* ‘break, smash’ overlap with the general separation verb *tek’e-* and with each other in stimulus scene descriptions.

The verb stem *tyof’ñi-* ‘break, snap apart’ depicts the breaking off of pieces (as in branches from a tree) and especially the separation of one-dimensional objects with the hands. The lexicalized predicate appears to be composed of *tyof’-* ‘fire, shoot’ (perhaps appealing to the sound of the shot?) and the directional element *-ñi* ‘apart’. The key to the usage pattern is the single small locus of separation—against the grain—of any one-dimensional object, by any means. Meanwhile, *pay’ee-* ‘break, smash’ is a stem derived from a monovalent root *pay-* ‘break’ plus the causative suffix *-’ee* that depicts clean separation into multiple pieces, especially of brittle objects such as pots, plates, or glass. This predicate also functions as a general break verb, often the second or third choice of skilled speakers and a frequent choice of less skilled speakers for many stimulus clips.

In summary, only the more general main event types in Chontal are sensitive to the degree of control of the locus of separation, with *pay’ee-* as a preferred first response for events that could happen by themselves and *tek’e-* for events in which an object must be acted upon. The other main event types describe ruptures with and against the grain or natural separation boundary in the object.

### 3.2. *Specific event construal*

Particular event perspectives lexicalized by Chontal C&B predicates are presented below as three patterns of particular semantic focus: on the *action* that causes the separation; on the *type of change* in the object; and on the *result state* as ‘apart’.

3.2.1. *Delivery of force: Focus on the manner of action.* Occurrences of the verb *tek’e-* have been illustrated previously in this paper. Other predicates in this class include *ñayk’e-* ‘cut, chop’; *ñanjts’e-* ‘perforate’, *pinj-*

‘pound’, and *lyos-* ‘poke’. Much as Mithun (1999: 119) found for the so-called instrumental affixes in North American languages, these Chontal verbs seem to encode a manner of action that, by extension, is customarily but not necessarily performed with a specific instrument. Thus, *pinj-* ‘pound’ also describes tapping a pencil or your fingers, as in (7).

- (7) *pinj-duy=ya’*                      *lay-ñe’wa-mane jaape el mesa.*  
 pound-DUR.SG=1S.AGT my-DIM-hand where DET table  
 ‘I’m tapping my finger on the table.’ [EER]

‘Hammer’ is not part of the lexical meaning of the root *pinj-*. Example (7) also illustrates that this verb entails no change of state but instead a literal delivery of force to a location on the table. To depict the state-change in the object, another verb is recruited, as in (8).

- (8) a. *con un fierro pimj-pa.*<sup>5</sup>  
 with DET iron pound-PFV.SG  
 ‘With a metal instrument he pounded it.’  
 b. *pimj-pa*              *tyof’-ñu-pa*                      *la’wa’ej.*  
 pound-PFV.SG break-apart:ITVR-PFV.SG DIM-tree  
 ‘He pounded it and the twig broke apart.’ [RS C/B.53]

The final verb in this class is the suppletive verb *kegay’*, which describes the cutting of hair. Narasimhan (this issue) also notes a preferred verb for ‘cutting hair’ in Hindi. The root here is *kej-*, which apparently means ‘cut, chop’, as there is a related predicate *kef’-* for chopping down trees. This root cannot occur in an intransitive stem.

3.2.2. *Change of state: Focus on the manner of change.* The predicates in this subsection describe the manner of the state change in the semantic theme. *Pay’ee-* ‘break, smash’ and *jas-* ‘tear, split’ were discussed in Section 3.1. When a cloth is torn or shredded but not necessarily torn apart, *ts’ajl-* ‘shred’ is used. Speakers used *telay-* and sometimes *skelay-* to describe chopping and dicing, and one speaker used *telay-* for any event in which the object was separated into many pieces. And finally, *ts’ik’e-* ‘bend, fold’ was used to describe a scene in which an agent bends a stick to the point of breaking but not breaking apart. All of these predicates have intransitive counterparts to describe spontaneous separation and result state.

3.2.3. *Separate apart: Focus on the result state.* Complex predicates *tyof’ñi-* ‘break, snap apart’ and *jas’ñi-* ‘tear apart, split apart’ have been presented earlier. Events described with *skiñi-* ‘divide apart’ usually end with an object split cleanly in two, but at least one speaker used this

predicate as a way to describe splitting a twig or a carrot with a hammer, as in (9).

- (9) *joypa 'ee-p-ola' polvo lakwe, xki-ñi-pa.*  
 now do-PFV-3P.PAT powder man divide-apart-PFV.SG  
 'The man just smashed it to smithereens, he broke it apart.'  
 [AER C/B.21]

The predicate *skiñi-* seems to have quite general semantics, as it can be used to describe the splitting of watermelons, fish, the earth, and a crowd of people.

The compound stem *pañi-* describes the breaking apart of food, whether with a bladed instrument, a hammer, or the hands. And finally, the complex predicate *k'wañi-* 'split by inserting something' is formed of a labile root *k'wa-* which depicts a configuration of 'insertion' and the result state 'apart'. The state-change itself is implied.

#### 4. The perspective from language endangerment and recovery

Chontal is a highly endangered language with only around 200 fluent first-language speakers. There are no monolinguals, and Spanish is everyone's language of everyday interaction. The consultants who took part in this study include two very fluent speakers, two passive speakers or "rememberers" (Grinevald 2003), and one group composed of three elders (first-language speakers) and three younger people (second-language speakers). The younger people in the last group are actively involved in language recovery; their responses to the stimulus task highlight some of the challenges of revitalization and suggest the types of semantic and syntactic changes that we may see in C&B predications of tomorrow.

For example, the semantic categories described in Section 3 are not the categories of Spanish. The language recovery team is faced with a series of verbs with often poorly understood nuances of meaning, and they may opt to simplify the semantic domains of specific predicates. During our stimulus work, the younger speakers cited above decided by fiat to use *ñayk'e-* for all events involving a bladed instrument, as in (10), giving other verbs as second or third preference.

- (10) a. *ñay-k'e-duy con tijera.*  
 cut-CAUS-DUR.SG with scissors  
 'She's cutting it with scissors.'  
 b. *jas-pa ch'ajl-pa con la mano.*  
 tear-PFV.SG shred-PFV.SG with the hand  
 '(it would be) she tore it, she shredded it, with the hands.'  
 [RS C/B.4]



The clarifications in (10) were given in Spanish, here given in bold, and show that the blade was indeed the deal-breaker. Varying sensitivity to blade-like instruments was noted in several languages in the C&B study; see Brown, Enfield, and Gaby (this issue) for representative descriptions. In comparison, older Chontal speakers also used verbs such as *tek'e-* (general separation), *skiñi-* (general splitting), and *pañi-* (separation of food) to describe events involving a bladed instrument.

Likely syntactic changes in Chontal represent radical changes in the realization of argument structure. These include the replacement of an intransitive construction with a reflexive construction and a shift to a more Spanish-like expression of an instrument participant.

First, the younger speakers in the mixed group used the reflexive construction to describe the spontaneous separation of cloth and were corrected by the older speakers' use of middle constructions, in (11).

- (11) *jas-ñi-p-osi* . . .                      *jas-ñu-pa*                      *ch'ajl-yu-pa*.  
 tear-apart-PFV-RFLX.SG . . . tear-apart:ITVR-PFV.SG shred-ITVR-PFV.SG  
 'It tore itself . . . (corrections) it tore, it shredded.' [RS C/B.8]

In an intransitive description of an event of object separation or destruction, the semantic theme is expressed as a non-agentive participant. The situation is not clearly illustrated in data from the C&B corpus because the referents of C&B stimulus scene participants (agent, theme, instrument) are singular, and the agentive vs. non-agentive distinction is neutralized for third person singular (which has no marker). Therefore, an invented example will serve to make this point.

Had the theme referents in (11) been plural, the results would be the following.

- (12) a. *jas-ñi-p-ojlchi* . . .  
 tear-apart-PFV-RFLX.PL . . .  
 'They tore themselves . . .'  
 b. *jas-ñu-p-ola'*                      *ch'ajl-yu-p-ola'*.  
 tear-apart:ITVR-PFV-3P.PAT shred-ITVR-PFV-3P.PAT  
 '(corrections) they tore, they shredded.' [invented]

In (12a) the "cloths" are referenced with the reflexive suffix, and in (12b) they are referenced with non-agentive markers for third person plural. The agentive system of Chontal is quite different from the accusative system of Spanish and is already difficult for L2 learners. The shift from an intransitive construction to a reflexive construction means the loss of a functional slot for this type of participant marking, weakening the conceptual link to the non-agentive grammatical category.

A second type of argument realization likely to undergo reanalysis is the expression of instrument participants. The Chontal construction for

encoding an instrument, with an applicative derivational suffix, is demonstrated again in (13).

- (13) *tye-k'o-pa*                      *serrucho*.  
 fall-CAUS:APPL-PFV.SG saw.  
 'The saw cut it/he cut it with a saw.' [APM C/B.15]

The Spanish-like incorporation of an instrument, in a 'with' phrase and without applicative derivation on the verb, was seen in (8) and (10), by L2 Chontal speakers, and is shown in (14), from an L1 Chontal "rememberer".

- (14) *ñay-k'e-pa*            *con li'acha*.  
 cut-CAUS-PFV.SG with his-axe.  
 'He cut it with his axe.' [JHS C/B.37]

The semantics and syntax of descriptions of events of object separation and destruction may change radically in the coming years. While discussions among members of the language recovery team have tended to focus on organizing the C&B lexicon according to semantic theme, factors such as manner of action vs. manner of state change and the expression of theme and instrument participants present important considerations.

## 5. Conclusions

Chontal, a highly endangered indigenous language of Mexico, has rich verbal resources for the construal of events of object separation, and there are preferred construction types that encode an instrument participant as an applied object and a spontaneous change as a result state achieved by an understood causing event. This paper identified three classes of Chontal C&B predicates, presented typologically unusual main event predicates, and described semantic generalizations and syntactic shifts to patterns in the dominant national language that highlight the types of decisions being made by the Chontal community involved in language recovery and revitalization.

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## Notes

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1. In a regular morphophonemic process, verb-initial alveolar consonants are palatalized when the verb occurs with a third person subject.

2. Glossing and orthographic conventions: 1s—first person singular; 3P—third person singular; AGT—agentive; APPL—applicative; CAUS—causative; DET—determinant; DIM—diminutive; DUR—durative; ITVR—intransitivizer; PAT—non-agentive; PFV—perfective; PL—plural; RFLX—reflexive; SG—singular. At morpheme boundary, a hyphen marks derivation or inflection, and an equal sign marks a clitic. Special graphemes are {j} for the glottal fricative /h/ and the velar fricative /x/; {x} for the alveopalatal fricative /ʃ/; and the apostrophe {'} for the glottal stop and for glottalization as secondary articulation.
3. Speakers also described C&B clips with periphrastic expressions, not discussed here.
4. The “natural break-boundary” of cloth or paper here refers to the boundary intended by the person tearing or cutting the object. A tear or cut that goes off course is characterized as *wañipa*, literally ‘moved/walked across’, a predicate used to depict selecting a path at a Y-intersection or making a turn at a crossroads.
5. The nasal coda of *pinj-* assimilates homorganically to the initial consonant of the suffix.

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