# From Discourse to Thought: An Ethnopoetic Analysis of a Chol Mayan Folktale

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#### ABSTRACT

Classic Whorfian work has explored the relationship between grammatical features and cognition, but how languages can also influence thought through discursive patterns remains a largely unexplored topic in the neo-Whorfian agenda. In this article, I conduct an ethnopoetic analysis of a Chol traditional story to investigate the relationships between Chol "fashions of speaking," in the Whorfian sense of the term, and cognitive patterns. I revisit a classic Whorfian topic—how speakers of different languages conceptualize time— but through close examination of how temporal relationships between events are deployed in narrative contexts. I argue that Chol narratives possess a nonlinear plot structure, which exemplifies the kind of non-iconic, nonlinear presentation of sequential events that is characteristic of Chol discourse and thought.

ime is one of the basic structural domains of human experience, and for this reason the question of how we conceptualize and experience time has appealed to scholars from virtually all fields of knowledge and disciplines. The view that abstract conceptual domains, like time, may be conceived in terms of more tangible domains, like space, has been particularly strong in cer-

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tain research paradigms, such as conceptual metaphor theory (Lakoff and Johnson 1980). A central claim often made in this literature is that we think and talk about time in terms of space, and that evidence of such conceptual mapping can be found in explicit lexical metaphors. Hence, according to conceptual metaphor scholars, in languages where it is possible to say something like "we are moving the meeting forward," speakers think about time as if it were a linear matrix. Furthermore, particular events are conceived as physical ob ects that are located along that line and that can be moved forward or backward.

The metaphorical mapping of time onto space via "time lines" along which the concepts of past/present/future and earlier/later sequential relationships are mapped has been widely attested cross-linguistically (Clark 1973; Hill 1978; Shinohara 1999; Boroditsky 2001, 2011; Evans 2003; Moore 2006; Radden 2006; Sweetser and Núñez 2006; Boroditsky and Casasanto 2008; Shinohara and Pardeshi 2011). This fact has led some conceptual metaphor scholars to formulate the conceptual metaphor "time is a line" (Shinohara 1999), which is sometimes assumed to be a cognitive universal. Furthermore, the psychological reality of this linear representation of time has been argued to be validated not only by linguistic and behavioral experiments, but also by neuroscientific research (see Bonato et al. [2012] for a comprehensive review of this literature).

For decades, anthropological theory has questioned the assumption that a linear notion of time may be a cognitive universal. Through a diverse array of studies that have focused on symbolic thought in ritual (Leach 1961; Geertz 1973; Gell 1975; Gupta 1992), sociocultural factors (Evans-Pritchard 1940; Lee 1950; Barnes 1974; Bloch 1977; Miracle and Yapita Moya 1981; Dahl 1995), and the linguistic expression of time-related notions (Whorf 1956; Hill 1978; Danziger et al. 2001; Le Guen and Pool Balam 2012), anthropologists have pointed out that the linear view of time is but one of many possible ways of thinking about and experiencing the abstract domain of time. The question of whether specific linguistic patterns may influence or "shape" how people think about time was perhaps most notoriously addressed by Whorf (1956). As is widely known, in "the relation of habitual thought to behavior and language," he argued that languages that have fundamentally different means for talking about time and temporal relationships between events differ substantially in how their specieve and experience time.

Despite the fact that the original data proposed by Whorf in support of this hypothesis have been dismissed by many, decades after the publication of this provocative essay, the question of whether temporal thought can be mediated by linguistic convention continues to be a hot topic among neo-Whorfian re-

searchers, conceptual metaphor scholars, and cognitive linguists alike. Yet the methods developed in the last two decades to investigate the validity of the Whorfian hypothesis of linguistic relativity have changed substantially from those employed in earlier studies. Nowadays, many researchers have concentrated their efforts on examining how speakers of different languages perform cognitive tasks in experimental situations; their claims are mostly based on differences in mean reaction times between speakers of different languages when performing language-related tasks. For instance, in a famous study designed to test whether Mandarin and English speakers' different metaphors for time affect how speakers of these languages think about time, the researcher found that "when answering questions phrased in purely temporal earlier/later terms, Mandarin speakers were faster after vertical primes than after horizontal primes. This pattern was predicted by the fact that in Mandarin vertical metaphors are often used to talk about time" (Boroditsky 2001, 10). Based on these kinds of results, researchers may claim that speakers of one particular language are "faster" than speakers of another language in performing a language-related task, after having meticulously measured differences in mean reaction times, usually in milliseconds, to some kind of stimulus. This is interpreted as evidence that speakers of different languages perceive the world differently, "think" differently, or have different worldviews.

This line of work has been groundbreaking and influential in neo-Whorfian studies that have sought to tackle—with purportedly more empirical rigor than Whorf did—one of the original Whorfian questions: Is thought somehow mediated by linguistic conventions? Yet for all its worth, it has opened the door to some recent criticisms (Pinker 2007; McWhorter 2014), which have raised a legitimate question: Have cognitive scientists and academic psycholinguists placed too much weight on the milliseconds that separate, say, Mandarin speakers' perceptions of time from English speakers' perceptions of time and, ultimately, Mandarin from English worldviews? What is the real significance of these claims beyond the world of academic psychology? Have not these methodologies taken neo-Whorfian researchers perhaps too far afield from the original Whorfian question?

These questions are relevant, especially considering that the question of how languages can also influence thought through discursive patterns, first raised by Whorf himself, remains a largely unexplored topic in the neo-Whorfian agenda. Certainly, Whorf talked about the influence of grammatical patterns in worldview and thought. However, he also spoke emphatically—and this is a point often bypassed by many of his critics—about the multiple ways in which language shapes thought. One particularly clear example is his analysis of the relationship between language habits and behavior in accidents involving fire and explosions: language habits cause people to behave more carelessly when they are around empty gasoline drums than when they are around full gasoline drums. "Empty" gasoline drums, Whorf explains, are not truly empty as they contain explosive vapor. By linguistic habit, however, the word "empty" implies or "inevitably suggests absence of hazard" (Whorf 1956, 135). Hence, even though "empty" gasoline drums are, in fact, more dangerous than "gasoline drums," people will indulge in careless behavior—for example, tossing cigarette butts or smoking—when they are around "empty" drums.

In that famous example, Whorf argued that there is a relationship between linguistic meaning, socially created meaning, and behavior. Later on, he proposed that certain "fashions of speaking" can be integrated with behavioral, cultural, and cognitive patterns: "There are cases where the 'fashions of speaking' are closely integrated with the whole general culture, whether or not this be universally true, and there are connections within these behavioral reactions and also the shapes taken by various cultural developments" (Whorf 1956, 159). In what follows, I conduct an ethnopoetic analysis (Hymes 1981) of a Chol traditional story to investigate the relationships between Chol "fashions of speaking," in the Whorfian sense of the term, and cognitive patterns. I revisit a classic Whorfian topic-how speakers of different languages conceptualize time-but through close examination of how temporal relationships between events are deployed in narrative contexts. I begin by outlining some background information about the Chol language and its speakers, and about how people reckon time and talk about sequential relationships between events in Chol. I then analyze a traditional folktale that I collected during my fieldwork in the Chol-speaking town of Tila in southeastern Mexico.

Chol traditional folktales have been analyzed before (Attinasi 1979; Alejos García 1988; Hopkins and Josserand 2016), but not through the lens of ethnopoetic Hymesian analysis. In what follows, I argue that Chol narratives possess a nonlinear plot structure, which exemplifies the kind of non-iconic, nonlinear presentation of sequential events that is characteristic of Chol discourse and thought. In so doing, I hope to reconsider the Whorfian question of how—or *if*—language indeed shapes thought by examining Chol "fashions of speaking" and wider modes of discursive representation as performatively created in the act of storytelling.

## The Chol Language and Its Speakers

The Chol are a population of approximately two hundred thousand slash-andburn agriculturalists who speak a western Mayan language and live mostly in

the Mexican state of Chiapas, in the municipios 'counties' of Sabanilla, Tila, Salto de Agua, Tumbalá, and Palenque. The modern Chol communities have their origins in the colonial reducciones 'Indian Reductions' founded by Fray Lorenzo de la Nada in the second half of the sixteenth century. For centuries, these communities were organized around a system of communal land property, which was abolished with the Agrarian Reform initiated by Benito Juárez in the nineteenth century. The Chol and many other indigenous populations throughout Mexico were thus deprived of their lands, which were sold to European and American companies. The Chol became mozos 'wage laborers' in great plantations owned primarily by German and English coffee companies (Alejos García 1999). They kept working in these plantations until 1936, when Lázaro Cárdenas, in an attempt to bring back at least some portion of the lands to their original owners, expropriated the foreign-owned coffee haciendas and transformed them into ejidos, communal lands designated for agricultural use that cannot be sold or bought. In the Chol communities, where descent is patrilineal, each community member is entitled to using a plot of land, and ejidal authorities manage, distribute, and watch over the communal lands.

Chol society continues to be predominantly agricultural, and nowadays most Chol Mayans cultivate maize, beans, and squash in their land parcels, which are called *milpas* 'cornfields'; coffee is also grown as a cash crop. Although most Chol families live off their *milpas*, some Chol who live in the *cabecerasmunicipales* 'county seats, market towns' own small shops where they sell groceries or a variety of products. Others own or rent stalls in permanent or semipermanent flea markets where they sell all kinds of religious objects, such as images of saints, candles, incense, and herbs.

The Chol language is in an early stage of language shift. Most adult men are bilingual in Chol and Spanish, or trilingual in Chol, Spanish, and another neighboring Mayan language, like Tzeltal or Tzotzil. Women over 60 are typically monolingual speakers of Chol. In the intermediate generations, most men and women are bilingual in Chol and Spanish, although in some isolated communities, middleaged and young women are Chol monolinguals. In the county seats, most children are being raised bilingually in Spanish and Chol or monolingually in Spanish. In more isolated communities, children are mostly raised bilingually in Chol and Spanish and very occasionally monolingually in Chol.

As for literacy levels, few men over 60 have some degree of literacy in Spanish, and most women in this generation are nonliterate. Most men and women between the ages of 20 and 60 have some degree of literacy in Spanish, and there are a few individuals—mostly instructors at bilingual elementary schools—who are literate in Chol. The current generation of children, especially those who live in the county seats and in the surrounding communities, are being schooled mostly in Spanish, and thus the majority of these children are literate in Spanish. There are a few children who attend classes offered by the regional Casas de la Cultura 'Houses of Culture' to learn to read and write in Chol. These are, however, a minority, and even in bilingual schools Chol is considered as a transitional language that is tolerated during the first years of formal education, but it is expected that students will be weaned from it afterward.

# Time-Reckoning and Temporal Sequences in Chol Culture and Thought

As is the case with many agricultural societies, some of the cultural elements that have contributed to the measurement, linearization, and standardization of time in the Western world have been, until recently, absent in the territories occupied by the Chol, especially in Tila, which has remained a relatively conservative region. Clocks and watches have only been introduced recently. Church bells worked as early clocks prior to the introduction of modern clocks in the area; although in most Chol county seats the building that hosts the county government office has a clock in its frontispiece—which rarely works—these are completely absent in the smaller communities and hamlets. Watches are highly appreciated, but not everybody can afford one. Prior to the introduction of electricity in the area, women used to wake up *iktyo* 'when it was still dark' in order to make tor-tillas for the men, who leave for the *milpa* early in the morning to avoid working during the hottest hours of the day. The presence or absence of sunlight was, and continues to be in some isolated communities, a major instrument for structuring the temporal divisions of the day.

Despite the fact that the modern Chol are descendants of the Classic Maya, their knowledge of ancient calendrics vanished in colonial times, and none of the time-reckoning systems known by the Classic Maya are used nowadays by the Chol. The Gregorian calendar is used for time reckoning and administrative purposes, and it coexists with two other systems that shape the rhythm of Chol life throughout the year: the ceremonial and agricultural calendars. The ceremonial calendar comprises an important set of syncretic rituals and religious celebrations (Hopkins and Josserand 2001), whereas the agricultural calendar, known as *ñoj cholel*—which literally means "important, abundant cornfield"—comprises a set of agricultural activities, from the preparation of the fields for seeding to the collection and storing of maize and other staples. In Tila, the agricultural and ceremonial calendars are perfectly attuned to the seasonal changes in the region, with preparations for the most important festivities carried on during the rainy season,

and several important celebrations taking place during the dry season. Although two religious celebrations—Holy Cross and Corpus Christi—take place during the first months of the rainy season, no festivities or special agricultural activities are scheduled during June or July, months of abundant rain.

I have argued elsewhere that Bourdieu's (1963) description of a temporal system made of activities that are experienced as "islands of time" is closer to the Chol notion of time than the linear spatial metaphor proposed by conceptual metaphor scholars: "time is a line" (Rodríguez 2014; Rodríguez and López, forthcoming). Chol speakers often talk about the relative order of events in both the Chol ceremonial and agricultural calendars by means of completed or punctual activities that act as benchmarks for other (not yet completed) activities: for instance, the bending of the corn plant needs to be finished before the harvest can begin, while the celebration of the Virgin of Guadalupe needs to be complete before the subsequent festival, the Lord of Tila, can take place. The Chol thus conceive of "bending-harvesting" and "Virgin of Guadalupe-Lord of Tila" as sequences of events that convey a sense of temporal progression. But what characterizes these sequences is, first, that they tend to be structured in dyadic frameworks, and second, the events that make up these sui generis sequences often present qualitative differences: the first event is conceived as a punctual, finished activity that acts as a reference point—a benchmark—for the next, usually nonpunctual, unfinished activity. This way of conceiving relations of sequentiality between events also applies to short-term temporal processes: one cannot start patting tortillas unless the action of preparing the *nixtamal* mixture has been completed,<sup>1</sup> so in describing the process of tortilla-making, Chol speakers often say something like "nixtamal mixture being completed, I start to pat tortillas." A similar narrative style has also been documented in other Native American languages. In Chinook narratives, sequences of events may be presented in the form of "premise + narrative action," such as "Having become tired, then he sat down" (Hymes 1981, 102). This "fashion of speaking" hence emphasizes reference events that act as benchmarks for other events. Such "sequences" follow an internal logical order based on dyadic relationships between events that does not conform to an abstract linear system.

## The Expression of Time in Chol Mayan

Tense, defined by Comrie as "the grammaticalization of location in time" (1985, 1), is a deictic category (Lyons 1968; Jakobson 1971; Traugott 1978) that locates

<sup>1.</sup> Nixtamal is a gruel made of corn soaked and boiled in slaked lime, which is used for making tortillas and other basic staples.

the time of the narrated event with respect to some other time of reference, usually the moment of speech. Aspect, by contrast, is a nondeictic category that focuses on the internal make-up of an action, situation, or event. A key difference between these two temporal operators is that *tense*, by definition, is a grammatical category concerned with the "location" of events, and thus it provides the basic ingredients for the metaphorical mapping of time onto space. Given that tense "takes the time of the speech event as the fixed point of comparison in referring to another time" (Silverstein 1976, 24), it necessarily implies a minimum of two different temporal points in time: the moment of speech, which is, in Silverstein's terms, the "fixed point of comparison" based on which the time of the narrated event is calculated, and the narrated event. I have argued elsewhere that it is precisely this need to "locate" the moment of the narrated event with respect to the moment of speech that makes speakers of tensed languages represent sequences of events in thought as "time lines" (Rodríguez 2014).

Aspect, on the other hand, focuses on the quality of the event being described and thus it may not convey the type of spatial representations that tense does. Chol is a tenseless language, and temporal information in Chol is mostly encoded in predicates inflected for grammatical aspect. Chol has a perfective (completive) aspect and several nonperfective (noncompletive) aspects, the most important of which are imperfective and progressive. The perfective is a morphological operator that presents situations as "punctual," "bounded," or "liminal," because it "imposes boundaries on situations at the contextual occasion" (Timberlake 2007, 292). It emphasizes the completeness of the situation described by the predicate. Sentence (1) is an example of a typical perfective predicate in Chol:

Tyi ik'uxu kalo'bil jiñi ts'i'
 That dog bit my son.

The imperfective in Chol conveys habitual meaning, and it is also used to make generic statements or to describe "general knowledge" facts that are clearly atemporal. When the imperfective is used to convey habitual meaning, it can receive past, present, and future interpretations, depending on the context, as illustrated in sentence (2). The progressive in Chol emphasizes the ongoingness or continuousness of the situation described. As with the imperfective, progressive predicates can receive past, present, or future interpretations in the absence of any deictic anchors. Sentences (2) and (3) illustrate typical imperfective and progressive predicates in Chol:

(2) Jiñ mi imelob Ajal
They used to do / (habitually) do / will do Ajal.<sup>2</sup>
(3) Choñkol iletselob tyi tye<sup>2</sup>
They were / are / will be climbing up the tree.

In sentences like (2) and (3), the location of the narrated event with respect to some other time of reference or to the moment of speech is unspecified. But a Chol speaker may, if she so wishes, express tense-like relationships—the location of any particular event with respect to the moment of speech—by means of deictic temporal adverbs. The following sentence (4) illustrates the same imperfective predicate anchored to two different moments in time: the contrast between past and present is achieved by means of the deictic temporal adverbs *wajali* 'back then' and *wa'li* 'nowadays, now':

(4) Sik'ä'b mi k-päk'loñ je'el wajali,
Back then, we used to plant sugarcane as well, peru wa'li ma'ix kpäk'lojoñ
but now we don't plant it anymore.

Earlier/later relationships between events—which have also been called "sequencing" in the literature on temporal language (Traugott 1978)—are expressed in Chol by means of the syntactic mechanism of sequential predication (Rodríguez 2014). Sequential predicates are syntactic-prosodic units composed of a minimum of two predicates sequentially connected to each other by means of a temporal or logical relationship, or by a causal, conditional, or teleological relationship. Each sequential predicate consists of a minimum of two verb clauses, which can be connected by parataxis or by means of a preposition, a temporal noun, or occasionally borrowings from Spanish. Sequential predicates in Chol are akin to narrative sequences that present the "premise + narrative action" structure described by Hymes (1981) for other Native American languages.

As illustrated in sentence (5), sequential predicates can also be identified by prosodic features: they are characterized by rising intonation at the end of the first clause, followed by a small pause, and then falling intonation at the end of the second clause. In the following glossed example, the rising intonation of the first clause is transcribed as (/) and the falling intonation of the second clause is trans-

<sup>2.</sup> *Ajal* 'The Evil Woman' is a form of witchcraft in which an evil spirit, disguised as a person of the opposite sex of its victim, tries to lure its victim into sexual intercourse. If the sexual union is consummated with the *Ajal*, the victim dies.

scribed as (#). This intonation contour is key to distinguishing single sentences containing sequential predicates from multiple sentences each containing one predicate. Syntactic information alone cannot always make this distinction.

(5) Ujtyi pechom / Tortilla-making being finished, mux kaj tyi misujel, pejtyel, jiñi #
I start to sweep, (and) all (the other stuff).

To summarize, in Chol, a language that lacks grammatical tense, the location of any given event with respect to the moment of speech or to some other reference time may be left unspecified, which makes it fundamentally different from languages that have mandatory grammatical tense. As we have seen, Chol speakers have at their disposal optional means for determining the location of the narrated event with respect to the moment of speech (tense-like relationships), or with respect to any other reference time (earlier/later sequential relationships). However, if we are to propose a Whorfian argument, it is crucial to keep in mind that these resources, which are mandatory in tensed languages, are optional in Chol.

# The Nonlinear Narrative Structure of The Two Comadres

Having discussed how temporal relationships between events are conceived of and expressed in Chol, I will now examine how these are deployed in narrative contexts. Do Chol folktales possess the same nonlinear quality that, as I have argued, characterizes Chol ways of thinking and speaking about temporal relationships between events? In answering this question, I tackle the classic topic of the relationship between language and thought, but by examining aesthetic canons of discursive representation in traditional Chol narratives.

The following story was narrated by a monolingual speaker of Chol known as Doña María la Partera (Doña María the midwife). She was born in Tila but had spent most of her adult life in the *municipio* of Tumbalá. The interview took place at her home in Buena Vista, a small Chol community in the foothills of the Tumbalá mountains. I asked Doña María to tell me a story that her parents or grandparents had told her when she was young. The story narrated by Doña María is known in the oral traditions of other Mayan languages, like Mopan,<sup>3</sup> and it belongs to a subgenre of Chol folktales that narrates encounters among

<sup>3.</sup> Eve Danziger, personal communication, 2013.

## Table 1. Clause-by-Clause Translation of The Two Comadres

And it is said there was that one	l añ abi jiñi
the one that goes to grab snails at the river,	mukbä imajlel ichuk abi ipuy tyi jajpa'
they say	mi yäl
Then, it is said	Entonse ta' bi
that she hit her on her head,	ta'bi ityeñbe ijol
There at the river,	Jiñi ya' tyi ja'
her companion, it seems	jiñi yu'bi aj jiñi piä'li.
She went to fetch her at her home,	Ta'bi ñumi ipäy tyi otyoty
her companion	aj jiñi piä'li.
"Let's go to grab snails," she says	"Komla tyi chuk puy komare" che'bi
"Let's go to grab snails," she says	"Komla tyi chuk puy komare" che'bi
But since she was not,	Pero komo ma'añik ta'
it is said that she was not her (true) comadre	mach abi komarejich,
she had already started (to become) a witch.	i ke xi'bajix yubil aj jiñi.
Mmm, it is said like this	Che' abi mi yäl ah bajche
she went to grab snails.	ta'bi majli ah tyi chuk puyi.
Then it is said	Entonse jiñ abi
perhaps her comadre went to fetch her	jiñi ikomare yubil ta' ñumi ipäy majleli
It is said she was face down there at the river,	Ya' abi ñukiña ya' tyi ja'i
it is said she was grabbing snails,	wo' abi ichuktyak aj puy mi imeli
But it is said under a stone she puts her head	Pero tyi iye'bal abi jiñi tyuñ mi ichok oche ijol,
Under her stone it is said she gave her head	Yebalbi ixajlel mi iyäk ah ijoli
Then she came	Entonse ta' tyäli yub aj jiñi
Indeed, it is said she hit her head.	Ta'meku abi ityembe ijol.
It is said that she turned around to run,	Ta'bi sujtyi tyi ajñel
The woman	Jiñi x-ixik.
That's what my dad, my mom told me like this	Che' ta' mi yäl aha, kpapa, kmama bajche' jiñ.
Mm, that's how it is.	Mhm, che' añ bajche'jiñi.
So they said like this. Aha.	Che' mi yäl ah bajche' jiñi. Aha.
That's what my dad used to tell me back then, like this.	Jiñ ah mukbä yäl kpapa wajali bajche' jiñi.

humans and human-like characters (Josserand 2003). The folktales in this subgenre are known as the "*comadre* stories,"<sup>4</sup> in which "women go to the river to grind corn and gather snails, and one is revealed to be a jaguar transformer. The human flees and is chased" (Josserand 2003, 8). The transformation of the *comadre* witch into a jaguar is not a part of the following version of the story; Doña María simply points out that one of the *comadres* was in fact a *xi'baj*—an evil spirit. In a longer version of this story collected by Josserand

<sup>4.</sup> *Comadre* literally means "co-mother"; it is a term applied in Chiapas and all over Latin America to women who have become kin via the *compadrazgo* system.

#### Table 2. Nonchronological Order of Events in The Two Comadres

- 1. A woman is grabbing snails at a river.
- 2. The woman is hit on the head by a friend.
- 3. The friend of the woman who has been hit in the head goes to pick her up at her home.
- 4. The friend of the woman (who is also her *comadre*) invites the woman to grab snails.
- 5. The *comadre* friend turns into a witch.
- 6. The woman is grabbing snails.
- 7. The *comadre* friend fetches the woman at her home.
- 8. The woman is grabbing snails at a river.
- 9. The fake *comadre* hits her on the head.
- 10. The woman who has been hit on the head runs away.

and Hopkins, the evil *comadre* becomes a jaguar, but she is given away by her inhuman features and behavior—a jaguar tail shows underneath her clothes, and she does not know how to catch snails, so she grabs stones instead (Josserand 2003; see table 1).

A first reading of this Chol story reveals that its narrative structure does not follow "the default case of sequentially ordered events, referring forward to each new event in time" (Berman and Slobin 1994, 389). There are two characters in this story: a woman and her *comadre*, who pretends to be her friend but is in fact a witch in disguise. In the text, the fake *comadre* sometimes is referred to as "her friend" (that is, the friend of the woman, *ipi'äli*), sometimes as "witch" or "evil spirit" (*xi'baj*), and in another passage as "the one who is not a *comadre*" (*ma'añik comarejich*). The events that make up the story's plot are narrated in a nonchronological order in table 2.

With the exception of what seems to be the culmination of the story (the running away of the woman who has been attacked by her *comadre* witch), which is mentioned approximately at the end of the story, a sequential connection between these events cannot be inferred from the Chol text alone. The two characters, the woman and her *comadre* witch, move freely between different events that are not arranged chronologically. This nonlinear, nonsequential narrative structure seems to be characteristic of Chol and of other Mayan languages, such as Tzeltal (Pitarch 1996, 2010), and in general of Mesoamerican

## Table 3. Sequential Reordering of the Main Events in The Two Comadres

- 1. A woman is visited by her comadre (who is a witch).
- 2. The comadre witch invites the woman to grab snails at a river.
- 3. The two comadres go to the river and one of them starts to grab snails.
- 4. While the woman is grabbing snails, the *comadre* witch hits her on the head.
- 5. The woman who has been hit on the head runs away.

# Table 4. Minimal Narratives in The Two Comadres

- (a) A woman is grabbing snails at a river.
- (a') The woman is hit on the head by a friend.
- (b) The fake *comadre* of the woman who has been hit in the head goes to pick her up at her home.
- (b') The fake *comadre* invites the woman to grab snails.
- (c) The woman is grabbing snails at a river.
- (c') The fake  $\ensuremath{\textit{comadre}}$  hits her on the head.
- (d) The woman is hit on the head.
- (d') The woman runs away.

narratives, where "a plot can be considered to be composed of a series of events that are related to each other temporally even though they may not be presented in sequential order" (Josserand 1991, 13). A sequential reordering of the Chol text—which is *not*, I must underscore, in the text itself—would yield a narrative in which the main events, or "peak events" (Josserand 1991), would be ordered as given in table 3.

Despite its lack of linearity in the presentation of events, the story nonetheless contains several junctures-at least four-that conform to the Labovian definition of minimal narrative: "a sequence of two clauses which are temporally ordered. . . . In alternative terminology, there is a temporal juncture between the two clauses, and a minimal narrative is defined as one containing a single temporal juncture" (Labov 1972, 360-61). The four minimal narratives also possess the "first this, then that" structure characteristic of Native American traditional narratives (Hymes 1981, 2003), which is "built upon a base of pairing, or better perhaps, binary relationships" (Hymes 1981, 106). This discursive mode of representation based on binary relationships is in line with Chol fashions of speaking. As has been argued in the preceding sections, temporal relations between events in Chol discourse are based on dyadic frameworks and follow an internal logic that does not conform to a linear system. These binary relationships, which are quite remarkable in Chol descriptions of temporal processes, also seem to be one of the structuring principles of Chol narratives. Table 4 illustrates the four minimal narratives, or the "first this, then that" binary relations, which form the plot structure of The Two Comadres.

Each of these four minimal narratives represents a self-contained episode, and in the story they appear interspersed with other events, like the transformation of the fake *comadre* into an evil spirit, or with references to background information and events that have already been mentioned. Yet the fact that the set of episodes composing the story is not presented following the earlier–later sequential order that yields canonical linear narratives<sup>5</sup> does not mean that the Chol text lacks an internal organizational structure. In the following section, I conduct an ethnopoetic analysis of this text, which reveals that it is structured in four parts: an introduction, a first scene, a second scene, and a formal closure.

# An Ethnopoetic Analysis of The Two Comadres

In this ethnopoetic analysis, I follow Hymes's (1981) model for the analysis of oral narratives, according to which texts are divided into scenes, scenes into stanzas, stanzas into verses, and verses into lines. Verses, which can be composed of one or more lines, are identified "not by counting parts, but by recognizing repetition within a frame, the relation of putative units to each other within a whole" (Hymes 1981, 318).

The Chol text possesses a nesting architecture, wherein each of its four parts (introduction, first scene, second scene, and closure) consists of one or two stanzas, each stanza is composed of four verses (indicated in the text with the following lowercase letters: a, b, c, d), and each verse may be composed of one or several lines (indicated in the text with ordinal numbers at the leftmost column). Although Hymes originally indicated lines with numbers and indented lines that belonged to the same verse, I follow Dobrin (2012), who incorporates lowercase letters to indicate verse distinctions, which makes it easier to see the four-verse structure of each stanza. However, I have also sought to adapt this scheme to the particularities of Mayan and Mesoamerican poetry, where it is conventional to present parallel verses directly underneath one another. Hence, in table 5, regular verses that belong to the same line are placed underneath one another.

Like in many of the Native American texts analyzed by Dell and Virginia Hymes, significant information in this Chol story comes packaged in groups of twos and fours (Hymes 1981, 2003): the text consists of four parts, each stanza has four verses, and some of these four-verse stanzas can also be analyzed as "two plus two"—or, as will be seen in the last part of the story, "two within two."

The introduction consists of a stanza (four verses), which presents, in a nutshell, the argument of the story: a woman went to grab snails in the river *and* was hit in her head by her friend. These two clauses contain the first minimal narrative (one temporal juncture), in lines 2–7, and introduce the main characters

<sup>5.</sup> By "canonical linear narrative," I mean a narrative in which events are iconically presented in chronological sequence, or where "the default case of sequentially ordered events, referring forward to each new event in time" (Berman and Slobin 1994, 389).

Line	Verse		
Introduction First stanza:			
1	а	And it is said there was that one	l añ abi jiñi
2	b	the one that goes to grab snails at the river,	mukbä imajlel ichuk abi ipuy tyi jajpa'
3		they say	mi yäl
4	С	Then, it is said	Entonse ta' bi
5		that she hit her on her head,	ta'bi ityeñbe ijol
6	d	There at the river,	Jiñi ya' tyi ja'
7		her companion	jiñi yu'bi aj jiñi piä'li.
First scene			
First stanza:			
8	а	She went to fetch her at her home,	Ta'bi ñumi ipäy tyi otyoty
9		her companion	aj jiñi piä'li.
10	b	"Let's go to grab snails," she says	"Komla tyi chuk puy komare" che'bi
11		"Let's go to grab snails," she says	"Komla tyi chuk puy komare" che'bi
12	С	But since she was not,	Pero komo ma'añik ta'
13		it is said that she was not her (true) comadre,	mach abi komarejich,
14		she had already started (to become) a witch.	i ke xi'bajix yubil aj jiñi.
15 16	d	Mmm, it is said like this she went to grab snails.	Che' abi mi yäl ah bajche ta'bi majli ah tyi chuk puyi.
Second scene		she went to grab shalts.	ta bi majti an tyr chuk puyi.
First stanza:			
17	а	Then it is said	Entonse jiñ abi
18	a	perhaps her <i>comadre</i> went to fetch	jiñi ikomare yubil ta' ñumi ipäy majleli
19	b	It is said she was face down there at the river,	Ya' abi ñukiña ya' tyi ja'i
20		it is said she was grabbing snails,	wo' abi ichuktyak aj puy mi imeli
21	С	But it is said under a stone she puts her head	Pero tyi iye'bal abi jiñi tyuñ mi ichok oche ijol,
22	d	Under her stone it is said she gave her head	Yebalbi ixajlel mi iyäk ah ijoli
Second stanza:			
23	а	Then she came	Entonse ta'tyäli yub aj jiñi
24	b	Indeed, it is said she hit her head	Ta'meku abi ityembe ijol.
25	С	It is said that she turned around to run,	
26	d	The woman	Jiñi x-ixik.
Closure			
First stanza:			
27	а	That's what my dad, my mom told me like this	Che' ta' mi yäl aha, kpapa, kmama bajche' jiñ.
28	b	Mm, that's how it is.	Mhm, che' añ bajche'jiñi.
29	С	So they said like this. Aha.	Che' mi yäl ah bajche' jiñi. Aha.
30	d	That's what my dad used to tell me back then, like this.	Jiñ ah mukbä yäl kpapa wajali bajche' jiñi.

 Table 5. The Quadripartite Structure of The Two Comadres

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of the story, a woman and her comadre witch. This formal introduction presented by Doña María to her audience as a preview of the story has also been referred to as "setting the scene" (Josserand 1991) or a "capsule statement" (Attinassi 1979). It contains what Hopkins and Josserand have identified as a key element of Chol folktales, the "evidentiality statement" (Hopkins and Josserand 2016), a sentence or sentences that fulfill the metapragmatic function of establishing that the story that is about to be told belongs to the genre of folklore or hearsay. The four verses that make up the first stanza contain up to three quotative particles (a'bi and -bi, "it is said") and a verb of speaking that has the same function as the quotative particles (mi yäl, "s/he/they say"). The quotative particle in Chol-as in other Mayan languages, for example in Yucatec-"provides a means for framing a report of one communication within another-especially speech within speech" (Lucy 1993, 118). By presenting the story as reported speech, the speaker adds a certain narrative distance between the content of the speech and herself as the originator of that speech. In Chol, and in other Maya languages like Mopan, the use of the quotative particle to frame speech as hearsay is crucial especially when reporting "under doubtful empirical conditions" (Danziger 2010, 211). Adding narrative distance in this linguistic and cultural context thus becomes a necessity, especially given cultural attitudes toward the uttering of falsehood.6

After this brief scene-setting introduction, the narrator moves quickly into the first scene, which contains the second minimal narrative (lines 8–11): a woman visits her *comadre* and invites her to grab snails in the river. We learn that the *comadre* is actually a witch, but the woman does not know it, so she accepts the invitation and they head for the river. The first predicate in line 8 (*ta'bi ñumi ipäy* 'she went to fetch her') is inflected for perfective aspect. Josserand and Hopkins have argued that this kind of aspectual inflection marks an event as belonging to the "event line," which is "a storyline that relates the series of occurrences that constitute the story" (Hopkins and Josserand 2016, 23). In this analysis, I prefer to use the term "nonlinear plot structure" to refer to what Hopkins and Josserand call story line, or event line, in an attempt to use a term that does not imply linearity of mental representation—which I argue is not in the Chol text. However, I agree with Hopkins and Josserand in that the perfective separates peak events from background information, which usually comes in the form of a clause with a predicate inflected for imperfective aspect.

<sup>6.</sup> For a deep analysis of cultural and linguistic attitudes toward truth and falsehood in Mopan Maya discourse, see Danziger (2006, 2010).

The first scene is composed of a stanza that contains two sets of couplets in verse b (lines 10, 11) and verse c (12, 13). These are beautiful examples of parallelism, a stylistic resource widely documented in Mesoamerican oral traditions (e.g., Edmonson and Bricker 1985; León-Portilla 1985), which consists of the repetition of groups of lines or verses in parallel structures and are sometimes called "couplets," "triplets," or "lists," depending on the number of repeated verses. In the Mayan family of languages, two main types of parallelism have been reported. Semantic parallelism consists of the repetition of the same concept or idea in two consecutive lines, whereas syntactic parallelism is based on the repetition of "(1) a frame, part of which appears in both lines of the verse, and (2) one or more slots which are filled by pairs of variable elements that complement each other" (Bricker 1989, 371). The variable element(s) introduced in the repeated frame may be synonyms, near-synonyms, words that belong to the same lexical class, or antonyms. The story of *The Two Comadres* possesses examples of both types of parallelism.

Although parallel verse serves a variety of functions, in Chol narrative contexts it is used as a foregrounding device (Josserand 1991, 2003; Hopkins and Josserand 2016); that is, it marks the surrounding text as important, new, or key information for the development of the nonlinear plot structure. It should also be noted that the two couplets in this first stanza (lines 10–11 and 12–13) are composed as two sets of twos (two plus two), which reinforces the overarching dyadic structure of the text.

Syntactic parallelism:		
19	It is said she is grabbing there at the river	ya' abi ñukiña ya' tyi ja'i
20	It is said she is doing grabbing snails	wo' abi ichuktyak aj puy mi imeli
Semantic parallelism:		
12	But since it was not	Pero komo ma'añik ta'
13	it is said she was not her comadre	mach abi komarejich
21	But it is said under a stone she puts her head	Pero tyi iye'bal abi jiñi tyuñ mi ichok oche ijol
22	Under her stone it is said she gave her head	yebalbi ixajlel mi iyäk ah ijoli
Syntactic and semantic parallelism:		
10	"Let's go to grab snails, comadre" she says	"Komla tyi chuk puy komare" che'bi
11	"Let's go to grab snails, comadre" she says	"Komla tyi chuk puy komare" che'bi

Table 6. Syntactic and Semantic Parallel Couplets in Scenes 1 and 2

The last verse of the first stanza in the first scene ("it is said like this, she went to grab snails") contains a predicate inflected for perfective aspect (*ta'bi majli*), which represents another peak event in the story: not suspecting that her *comadre* is an evil spirit in disguise, the woman accepts the invitation to grab snails, and the two *comadres* head for the river. The action of heading for the river is presented as completed, and thus this perfective predicate serves as a natural reference point for the events that are about to unfold in the following scene.

The second scene transpires in the river and is composed of two stanzas, each of which contains one temporal juncture: in the third minimal narrative (lines 20 and 21), the victim is grabbing snails and the fake comadre, who is a witch, hits her in the head; in the fourth minimal narrative (lines 24 and 25), the comadre witch hits the woman in the head and the woman runs away. But before these two temporal junctures are introduced, the first verse of the first stanza (lines 17 and 18), "then, it is said, perhaps her comadre went to fetch her," seems to go back in time with respect to the last verse of the previous stanza, where the two women had completed the action of heading for the river. This verse marks a boundary between the first and second scenes. The use of a "backstep in time" to mark episode boundaries is prominent in hieroglyphic texts (Hopkins and Josserand 2016), and this is a clear example where the same principle applies in a Chol Mayan oral text. Although Hopkins and Josserand argue that the use of the back-step device is more common in hieroglyphic texts than in modern texts, I have found that it is pervasively used in natural conversation, and especially in narrations or descriptions of short-, middle-, and long-term temporal processes. Following the back-step device in line 18, the peak event of the episode is introduced: the fake *comadre* hits the woman with a rock. This peak event is elegantly foregrounded by two sets of couplets (two plus two) in lines 19-20 and 21-22.

The second stanza of the second scene contains the last temporal juncture and the final episode of the story, where the woman, who is hit in the head

27	That's what my dad, my mom told me like this	Che' ta' mi yäl aha, kpapa, kmama bajche' jiñ.
28 29 30	Mm, that's how it is. So they said like this. Aha. That's what my dad used to tell me back then, like this.	Mm, che' añ bajche'jiñi. che' mi yäl ah bajche' jiñi. Aha. Jiñ ah mukbä yäl kpapa wajali bajche' jiñi.

Table 7. Nested Couplets in the Closure of The Two Comadres

by the *comadre* witch, runs away. The boundary between episode 1 and episode 2 is marked again by a verse (line 23, "and then, she came"), which seems to go back in time with respect to the previous verse, where the woman has already been hit in the head (lines 21, 22). In both stanzas in the second scene, the verses that serve as boundaries between episodes (lines 17–18 and 23, respectively) are introduced by the Spanish loanword *entonces* ("and then . . ."), another common rhetorical device that marks the beginning of a new episode (Hopkins and Josserand 2016). Line 25 repeats known information that has been presented in the previous stanza ("Indeed, it is said she hit her head"), but which acts as a reference event for the subsequent event that concludes the story, the woman running away in line 26.

The fourth part of the text is a formal closure that serves as metapragmatic commentary on the whole text: the speaker abandons her narratorial voice and points out that her parents told the story to her. The phrase *che' añ bajche' jiñ* 'that's how it is/was' is a formal closure characteristic of Chol narratives (Hop-kins and Josserand 2016). This final stanza, which is composed, like all others in the text, of four verses, comes in the shape of two "nested couplets," which is "a structure that places one couplet inside another to form a chiasmic structure, for example, two couplets AA BB rearranged as ABBA" (Hopkins and Josserand 2016, 28). Lines 27–30 and 28–29 are semantically and syntactically parallel.

This set of "two within two" couplets serves, once again, to reinforce the overall dyadic structure of the text. It should by now have become clear that our narrator has not laid out a linear plot where earlier events precede later events. Rather, the story has gracefully been created out of a succession of discontinuities. In this folktale, the dyadic nature of temporal relationships between events comes across rhetorically through culturally specific canons of aesthetic representation: the text is divided in four parts, two of which serve to frame the story (introduction and closure), while the peak events are condensed in two central scenes (first and second scene). Dyadic relationships are also contained in the minimal narratives—two events united by one temporal juncture—that make up the story's plot. Finally, dyads are also present in parallel verses, which come in the shape of "two" (see table 6 for examples) or "two within two" (see table 7 for the nested couplets in the closure of the story).

# Conclusion

The preceding analysis of the story *The Two Comadres* illustrates the necessity of coining new terms to describe the plot of Chol traditional folktales that do not

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imply a linear order of the episodes comprising these stories. Furthermore, it makes us question our own assumptions about what constitutes a "default" narrative: we are too accustomed to conceiving of "storylines" that lay out events chronologically as the default (or unmarked) narrative case (Berman and Slobin 1994). Narratives that are based on different organizational structures are described as special tropes, such as flashback tropes, flashforward tropes, or in media res narratives. The default organization of Chol narratives, however, is nonchronological and nonlinear. An ethnopoetic analysis of The Two Comadres showed a distinctive nonlinear organizational structure: rather than presenting episode after episode in a temporal order that is assumed to present the events in the same order in which they occurred-that is, earlier events followed by later events-the Chol text is divided into four parts. Each of these parts is a self-contained unit of discourse: an introduction, a first scene, a second scene, and a formal closure. This quadripartite structure shows a different organizational principle where relationships between events are not necessarily projected in an abstract "time line" that contains the plot of the story. Instead of laying out events chronologically, Chol storytelling is a speech act that requires the active participation of the narrator's audience: in order to understand the narrative development of any story, the audience needs to identify and connect the sets of "minimal narratives" that make up that story. These minimal narratives, which are composed of two events that are sequentially connected to each other by means of a temporal juncture (Labov 1972), are reminiscent of the structure of sequential predicates, in that they are composed minimally of two events, and one event acts as a benchmark for the other. Just as in describing temporal processes in natural conversation many Chol use dyadic patterns-for example, "tortilla-making being finished, I sweep the floor"-when telling stories, they use similarly dyadic forms, which can be elucidated in the overall structure of the text and in the use of minimal narratives and couplets.

Although this article has focused on how temporal relationships between events are deployed in narrative contexts, the preceding discussion offers a fresh perspective on the debate about the empirical validity of the hypothesis of linguistic relativity. Decades after the Whorfian hypothesis of linguistic relativity was formulated, embodied views of cognition are gaining ground among researchers interested in the relationship between language and thought. Some of these views hold that cognitive processes are universally based on perceptual and sensorimotor experience, rather than on cultural and linguistic factors. For instance, Kranjec and McDonough (2011, 747) have argued that abstract concepts such as the notion of time "find structure in the body and the environ-

ment, and not merely in the semantic relations among particular lexical items." The ethnopoetic analysis of the folktale The Two Comadres, however, shows that abstract concepts such as "time" or, to be more precise, temporal relationships between events can be mediated by linguistic and cultural conventions and by wider modes of discursive representation or "fashions of speaking," like Whorf proposed (1956). A Hymesian analysis of the Chol text revealed that narrative action in Chol storytelling is packaged in groups of "twos" and "fours," or "two plus two." Such emphasis on dyadic frameworks is a poetic affordance that is in line with the logic of sequential predication, and it can be considered as a stylistic device equivalent to the "before/after" of languages that have these prepositions, which allows the non-iconic presentation of events in descriptions of temporal sequences. It also reflects Chol wider discursive patterns or "fashions of speaking," where temporal progression is conceived of and expressed as "sequences" that follow an internal logical order based on dyadic relationships between events, using reference events that act as benchmarks for other events. This narrative style does not require iconic-chronological presentation of events but nevertheless makes the text perfectly understandable. Chol ways of thinking and speaking about time are thus not grounded in what Leach (1961) called "innocent geometrical metaphors," be they linear or cyclical. They are not based on spatial categories (lines, axes, or time lines) but rather on self-contained, dyadic relationships between events.

# References

- Alejos García, José. 1988. Wajalix ba t'an: Narrativa tradicional ch'ol de Tumbalá, Chiapas.
   Ed. Centro de Estudios Mayas Instituto de Investigaciones Filológicas, Cuaderno 20. Mexico City: Universidad Nacional Autónoma de México.
  - ——. 1999. Ch'ol / Kaxla'n: Identidades étnicas y conflicto agrario en el norte de Chiapas, 1914–1940. 1st ed. Mexico City: Instituto de Investigaciones Filológicas, Centro de Estudios Mayas, Universidad Nacional Autónoma de México.
- Attinasi, John. 1979. "Chol Performance: Do Not Talk to Dogs, They Might Talk Back to You." *International Journal of American Linguistics* (Native American Texts Series; Mayan Texts II, ed. Louanna Furbee-Losee): 3–17.
- Barnes, Robert H. 1974. Kédang: A Study of the Collective Thought of an Eastern Indonesian People. Oxford: Clarendon.
- Berman, Ruth Aronson, and Dan Isaac Slobin. 1994. *Relating Events in Narrative: A Crosslinguistic Developmental Study*. Hillsdale, NJ: Erlbaum.
- Bloch, Maurice. 1977. "The Past and the Present in the Present." Man 12 (2): 278-92.
- Bonato, Mario, Marco Zorzi, and Carlo Umiltà. 2012. "When Time Is Space: Evidence for a Mental Time Line." *Neuroscience and Biobehavioral Reviews* 36 (10): 2257–73. doi:10 .1016/j.neubiorev.2012.08.007.

- Boroditsky, Lera. 2001. "Does Language Shape Thought? Mandarin and English Speakers' Conceptions of Time." Cognitive Psychology 43 (1): 1–22. doi:10.1006/cogp.2001.0748.
  - ——. 2011. "How Languages Construct Time." In Space, Time and Number in the Brain: Searching for the Foundations of Mathematical Thought, ed. Stanislas Dehaene and Elizabeth Brannon. London: Academic Press.
- Boroditsky, Lera, and Daniel Casasanto. 2008. "Time in the Mind: Using Space to Think about Time." Cognition 106:579–93.
- Bourdieu, Pierre. 1963. "The Attitude of the Algerian Peasant towards Time." In Mediterranean Countrymen, ed. Julian Pitt-Rivers. Paris: Recherches Méditerranéennes.
- Bricker, Victoria R. 1989. "The Ethnographic Context of Some Traditional Mayan Speech Genres." In *Explorations in the Ethnography of Speaking*, ed. Richard Bauman and Joel Sherzer, 368–88. Cambridge: Cambridge University Press.
- Clark, Herbert H. 1973. "Space, Time, Semantics, and the Child." In *Cognitive Development and the Acquisition of Language*, ed. Timothy E. Moore, 27–63. New York: Academic Press.
- Comrie, Bernard. 1985. Tense. Cambridge: Cambridge University Press.
- Dahl, Øyvind. 1995. "When the Future Comes from Behind: Malagasy and Other Time Concepts and Some Consequences for Communication." *International Journal of Intercultural Relations* 19 (2): 197–209. doi:10.1016/0147-1767(95)00004-U.
- Danziger, Eve. 2006. "The Thought That Counts: Understanding Variation in Cultural Theories of Interaction." In *The Roots of Human Sociality: Culture, Cognition and Human Interaction*, ed. Stephen Levinson and Nicholas Enfield. New York: Berg.
  - 2010. "On Trying and Lying: Cultural Configurations of the Gricean Maxim of Quality." *Intercultural Pragmatics* 7 (2): 199–219.
- Danziger, Eve, Sotaro Kita, and Christel Stolz. 2001. "Cultural Specificity of Spatial Schemas, as Manifested in Spontaneous Gestures." In *Spatial Schemas and Abstract Thought*, ed. M. Gattis. Cambridge, MA: MIT Press.
- Dobrin, Lise. 2012. "Ethnopoetic Analysis as a Resource for Endangered-Language Linguistics: The Social Production of an Arapesh Text." Anthropological Linguistics 54 (1): 1–32.
- Edmonson, Munro S., and Victoria R. Bricker. 1985. "Yucatecan Mayan Literature." In *Supplement to the Handbook of Middle American Indians*, ed. Victoria R. Bricker, 44–63. Austin: University of Texas Press.
- Evans, Vyvyan. 2003. The Structure of Time: Language, Meaning, and Temporal Cognition. Amsterdam: John Benjamins.
- Evans-Pritchard, E. E. 1940. The Nuer: A Description of the Modes of Livelihood and Political Institutions of a Nilotic People. Oxford: Clarendon.
- Geertz, Clifford. 1973. "Person, Time, and Conduct in Bali." In *The Interpretation of Cultures: Selected Essays*, ed. Clifford Geertz. New York: Basic.
- Gell, Alfred. 1975. *Metamorphosis of the Cassowaries: Umeda Society, Language and Ritual.* London: Athlone.
- Gupta, Akhil. 1992. "The Reincarnation of Souls and the Rebirth of Commodities: Representations of Time in 'East' and 'West.'" *Cultural Critique* 22:187–211.
- Hill, Clifford A. 1978. "Linguistic Representation of Spatial and Temporal Orientation." Paper presented at the Proceedings of the 4th Annual Meeting of the Berkeley Linguistics Society, Berkeley, CA.

- Hopkins, Nicholas, and Kathryn Josserand. 2001. Chol Ritual Language. Los Angeles: Famsi.
- ———. 2016. Chol (Mayan) Folktales: A Collection of Stories from the Modern Maya of Southern Mexico. Boulder: University Press of Colorado.
- Hymes, Dell H. 1981. "In Vain I Tried to Tell You": Essays in Native American Ethnopoetics. Philadelphia: University of Pennsylvania Press.
- ———. 2003. Now I Know Only So Far: Essays in Ethnopoetics. Lincoln: University of Nebraska Press.
- Jakobson, Roman. 1971. "Shifters, Verbal Categories, and the Russian Verb." In Roman Jakobson: Selected Writings, 130–47. The Hague: Mouton.
- Josserand, Kathryn. 1991. "The Narrative Structure of Hieroglyphic Texts at Palenque." In *Sixth Palenque Round Table*, ed. Merle Greene Robertson and Virginia Fields. Norman: University of Oklahoma Press.
  - ——. 2003. Story Cycles in Chol (Mayan) Mythology: Contextualizing Classic Iconography. Los Angeles: FAMSI.
- Kranjec, Alexander, and Laraine McDonough. 2011. "The Implicit and Explicit Embodiment of Time." Journal of Pragmatics 43:735–48.
- Labov, William. 1972. "The Transformation of Experience in Narrative Syntax." In *Language in the Inner City: Studies in the Black English Vernacular*, 354–95. Philadelphia: University of Pennsylvania Press.
- Lakoff, George, and Mark Johnson. 1980. *Metaphors We Live By*. Chicago: University of Chicago Press.
- Leach, Edmund Ronald. 1961. "Two Essays concerning the Symbolic Representation of Time." In *Rethinking Anthropology*, 124–36. London: University of London/Athlone Press.
- Lee, Dorothy. 1950. "Lineal and Nonlineal Codifications of Reality." Psychosomatic Medicine 12:89–97.
- Le Guen, Olivier, and Lorena I. Pool Balam. 2012. "No Metaphorical Timeline in Gesture and Cognition among Yucatec Mayas." *Frontiers in Psychology* 3 (August), doi:10.3389/fpsyg .2012.00271.
- León-Portilla, Miguel. 1985. "Nahuatl Literature." In *Supplement to the Handbook of Middle American Indians*, ed. Victoria R. Bricker, 7–43. Austin: University of Texas Press.
- Lucy, John Arthur. 1993. "Metapragmatic Presentationals: Reporting Speech with Quotatives in Yucatec Maya." In *Reflexive Language: Reported Speech and Metapragmatics*, ed. John Arthur Lucy, 91–125. New York: Cambridge University Press.
- Lyons, John. 1968. Introduction to Theoretical Linguistics. New York: Cambridge University Press.
- McWhorter, John H. 2014. *The Language Hoax: Why the World Looks the Same in Any Language.* New York: Oxford University Press.
- Miracle, Andrew, and Juan de Dios Yapita Moya. 1981. "Time and Space in Aymara." In *The Aymara Language and Its Social and Cultural Context*, ed. M. Hardman, 33–56. Gainsville: University of Florida Press.
- Moore, Kevin Ezra. 2006. "Space to Time Mappings and Temporal Concepts." *Cognitive Linguistics* 17 (2): 199–244.
- Pinker, Steven. 2007. The Stuff of Thought: Language as a Window into Human Nature. New York: Viking.

- Pitarch, Pedro 1996. *Ch'ulel: Una etnografía de las almas tzeltales*. Mexico City: Fondo de Cultura Económica.
- ———. 2010. The Jaguar and the Priest: An Ethnography of Tzeltal Souls. Austin: University of Texas Press.
- Radden, Günter. 2006. "Where Time Meets Space." In The Metaphors of Sixty: Papers Presented on the Occasion of the 60th Birthday of Zoltán Kövecses, ed. R. Benczes and S. Csábi, 210–26. Budapest: Eötvös Loránd University.
- Rodríguez, Lydia. 2014. "Thinking Gesture: The Dialectics of Language, Gesture and Thought in Chol Maya." Doctoral dissertation, Department of Anthropology, University of Virginia, Charlottesville.
- Rodríguez, Lydia, and Sergio López. Forthcoming. "The Crossroads of Time." In *The Invention of the Americas*, ed. Pedro Pitarch, Kelly Pitarch, Jose Antonio, and Sean Kingston.
- Shinohara, Kazuko. 1999. *Epistemology of Space and Time*. Kwansei: Kwansei Gakuin University Press.
- Shinohara, Kazuko, and Prashant Pardeshi. 2011. "The More in Front, the Later: The Role of Positional Terms in Time Metaphors." *Journal of Pragmatics* 43 (3): 749–58. doi:10.1016/j .pragma.2010.07.001.
- Silverstein, Michael. 1976. "Shifters, Linguistic Categories, and Cultural Description." In *Meaning and Anthropology*, ed. Keith H. Basso and Henry A. Selby, 11–55. Albuquerque: University of New Mexico Press.
- Sweetser, Eve, and Rafael E. Núñez. 2006. "With the Future behind Them: Convergent Evidence from Aymara Language and Gesture in the Crosslinguistic Comparison of Spatial Construals of Time." Cognitive Science 30 (3): 401–50. doi:10.1207/s15516709cog0000\_62.
- Timberlake, Alan. 2007. "Aspect, Tense, Mood." In *Language Typology and Syntactic Description*, vol. 3, ed. Timothy Shopen. Cambridge: Cambridge University Press.
- Traugott, Elizabeth C. 1978. "On the Expression of Spatio-Temporal Relations in Language." In *Universals of Human Language*, ed. J. H. Greenberg. Stanford, CA: Stanford University Press.
- Whorf, Benjamin Lee, and John Bissell Carroll. 1956. *Language, Thought, and Reality: Selected Writings, Technology Press Books in the Social Sciences*. Cambridge, MA: Technology Press of Massachusetts Institute of Technology.