

THE ROLE OF *MAS* (< SP. *MÁS*) IN Q'EQCHI': COMPARISON AND DEGREE IN A MAYAN LANGUAGE¹

PAUL KOCKELMAN

YALE UNIVERSITY

This essay analyzes the history and usage of degree modifiers and comparative constructions in Q'eqchi' (Maya). It focuses on the role of *mas* (< Sp. *más*) and the function of the modern comparative construction (long thought to be a calque of its Spanish equivalent). In contrast to previous analyses, it shows that Q'eqchi' *mas* does not function as a comparative (unlike Spanish *más*), but rather as a degree modifier, indefinite quantity, and differential operator (like Spanish *muy* and *mucho*). It shows that the comparative construction doesn't require *mas*, but only the positive form of a gradable predicate, along with the adposition *chiru* (before, in the face of) to mark the standard. It shows that *mas* came into Q'eqchi' during the late 1800s and seems to have functioned this way from the beginning. And it offers reasons for this shift in meaning, and its frequent misanalysis by linguists.

[KEYWORDS: Q'eqchi', grading, historical linguistics, comparatives, loan words]

1. Introduction. Q'eqchi' (ISO code: kek) is a language in the Kichean branch of the Mayan family, spoken by around 1,000,000 people, predominantly in Guatemala and Belize. In Q'eqchi', *mas* is a loan word from Spanish (< *más* 'more'), where it has long played a key role in comparative and superlative constructions (similar to English *-er/more* and *most*). As is the case in many indigenous languages of the Americas, the Q'eqchi' comparative construction seems to have been calqued from Spanish, as might be inferred from the alignment of words in the following sentence.²

¹ Many thanks to Roger Schwarzschild and Michael Silverstein for very helpful feedback on early drafts of this article. I am extremely grateful to David Beck and an anonymous reviewer, who both offered comprehensive suggestions for improving the manuscript. It has greatly benefited from their input.

² Throughout this article the following notational conventions are used: A = absolutive case; AF = afinite; ADJ = adjective; ADPOS = adposition; CF = counterfactual; COMP = complementizer; DEIC = deictic; DER = derivational suffix; DM = determiner; EMP = emphatic; E = ergative case; FUT = future tense; IMP = imperative; INF = inferential; INTERJ = interjection; IP = inalienable possession suffix; IRR = irrealis; LOC = locative; NEG = negation; NOM = nominalizer; NS = non-specific; OPT = optative; P = plural number; PART = particle; PERF = perfect aspect; PLR = plural; PREP = preposition; PRES = present tense; PRO = pronoun; PRT = participle; PSV = passive; QUES = question particle; RDPL = reduplication; RN = relational noun; S = singular number or "nonplural"; SD = status designator; SF = stem formative; SG = speaker's gloss; 1 = first person; 2 = second person; 3 = third person; (. . .) = optional material; / separates alternative forms that may occur in the

[*JLAL*, vol. 85, no. 3, July 2019, pp. 365–99]
© 2019 by The University of Chicago. All rights reserved.
0020–7071/2019/8503–0003\$10.00 DOI 10.1086/703240

(1) Superficial analysis and gloss of comparative construction

mas terto li ch'iich' chiru li maal
 MAS expensive DM machete ADPOS DM axe

'El machete es más caro que el hacha.'

'The machete is more expensive than the axe.'

According to this analysis, which I will argue is incorrect, the Q'eqchi' adposition *chiru* seems to be doing the work of the Spanish complementizer *que* (or English *than*) and the Q'eqchi' particle *mas* seems to be doing the work of the Spanish adverb *más* (or English *more*).

Such a superficial formal resemblance actually covers up some deeper semantic differences, as intimated by the following grammatically acceptable sentences, along with their translations into Spanish by bilingual speakers of Q'eqchi' and Spanish.

(2) Closer analysis of related constructions showing alternative function

a. terto li ch'iich'
 expensive DM machete

'El machete es caro.' (Speaker's gloss of Q'eqchi' expression)

'The machete is expensive.' (English translation of Spanish expression)

b. mas terto li ch'iich'
 MAS expensive DM machete

'El machete es muy caro.'

'The machete is very expensive.'

c. terto li ch'iich' chi-r_i-u [li maal]_i
 expensive DM machete PREP-E3S-RN DM axe

'El machete es más caro que el hacha.'

'The machete is more expensive than the axe.'

d. mas terto li ch'iich' chi-r_i-u [li maal]_i
 MAS expensive DM machete PREP-E3S-RN DM axe

'El machete es mucho más caro que el hacha.'

'The machete is much more expensive than the axe.'

e. mas nek-e'-pleetik
 MAS PRES-A3P-fight

'Pelean mucho.'

'They fight a lot.'

same syntactic position. Vowel length (signaled by doubling letters) is phonemic in Q'eqchi'. /k/ and /q/ are velar and uvular plosives, respectively. /x/ and /j/ are palato-alveolar and velar fricatives, respectively.

- f. mas li kape' na-Ø-x-ket
 MAS DM coffee PRES-Ø-E3S-consume
 'Bebe mucho café.'
 'He drinks a lot of coffee.'

Although such Spanish translations do not provide proof of an alternative semantics (Matthewson 2004), they invite the hypothesis that the meaning of Q'eqchi' *mas*, and the comparative adposition *chiru*, are quite different from their Spanish counterparts. More specifically, *mas* seems to be functioning not as a comparative (like Spanish *más*), but rather as a degree modifier, similar to Spanish *muy* 'very', when it occurs alone (2b), and as an indefinite quantity or differential operator, similar to Spanish *mucho* 'much', when it occurs with a comparative construction (2d). In line with this function as a differential operator (Rett 2018; Schwarzschild 2008), when *mas* occurs with activity predicates (2e) and NPs (2f), it functions as an indefinite quantity. Finally, as intimated by the glosses in (2b), (2e), and (2f), without any comparative adposition (that would otherwise make explicit a comparative ground, or standard), *mas* does not seem to presuppose a comparative ground (from prior discourse or in the immediate context). Contrast English *more*, which, like Spanish *más*, usually presupposes such a ground to be felicitous. That is, to assert that something is "more expensive" (or "not more expensive") is to take for granted the relative expensiveness of something else.

As may also be seen by these examples, without *mas*, the adposition *chiru* not only seems to mark the standard, or ground of comparison (like Spanish *que*), it also seems to make explicit the comparative relation itself (2c), at least when it occurs with the positive form of a gradable predicate such as *terto* 'expensive'. As may be seen in the interlinear translation, this adposition is composed of the preposition *chi* (itself often analyzed as a separate word) in conjunction with the relational noun *-u*. This relational noun is itself the root of the inalienable possession *u-hej* (face-IP). A literal gloss of this adposition might thereby be 'in the face of'. It is usually used to mark spatial relations (before, in front of, on) and temporal relations (before, during), but it also has ablative and instrumental uses (Freeze 1976). In short, comparative constructions involving the adposition *chiru* seem to function like implicit comparative constructions (e.g., 'John is tall relative to Sally'), rather than explicit comparative constructions (e.g., 'John is taller than Sally'). Such implicitly comparative constructions do not involve a comparative morpheme like Spanish *más* or English *more* but rather recruit the inherently comparative nature of gradable predicates. Loosely speaking, to say "the man is tall" is to say the man is taller than the typical member of the class of men (in the speaker's experience).

In what follows I will test these hypotheses regarding the meaning of *mas* and *chiru*. In particular, 2 shows that Q'eqchi' *mas* does not function as a comparative (like Spanish *más*), but rather as a degree modifier, indefinite

quantity, and differential operator (like Spanish *muy* and *mucho*). **3** argues that the comparative construction does not require *mas*, or any other comparative marker, but only the positive form of a gradable predicate, along with the adposition *chiru* (before, in the face of) to mark the standard. **4** traces the history of *mas*, and the comparative construction. It shows that *mas* came into Q'eqchi' from Spanish during the late 1800s and seems to have functioned in similar ways from the very beginning. The conclusion offers some reasons for the shift in meaning that occurred during this borrowing, as well as reasons for its frequent misanalysis.

Most of the data for this article come from ethnographic and linguistic fieldwork, undertaken from 1998 to 2008 (Kockelman 2010, 2016a), in a Q'eqchi'-speaking village of around 600 speakers, in the Department of Alta Verapaz, Guatemala. In particular, after listening to and participating in quotidian communicative practices (from weeding milpa to playing soccer), and transcribing conversations (by villagers, usually at meals) as well as ethnographic interviews (on topics ranging from subsistence practices and illness cures to ecotourism and poultry husbandry), I tabulated and analyzed all utterances involving tokens of *mas*, and related constructions. Having analyzed the data, I spent five recent field seasons in Guatemala doing grammatical elicitation and semantic analysis on such forms with bilingual speakers from San Juan Chamelco and Cobán (where the so-called prestige dialect of Q'eqchi' is spoken). I also use some example sentences from standard dictionaries and grammars of Q'eqchi', as well as tokens from published historical sources; these are cited where they occur.

2. The role of *mas* (and *chik*) in Q'eqchi'. This section shows the wide range of functions currently served by Q'eqchi' *mas*. I argue that, rather than functioning as a comparative, Q'eqchi' *mas* functions as a degree marker, an indefinite quantity, or a differential operator. I show that, in this role, *mas* can function as an operator on most kinds of constituents—not just adjectives, but also nouns, verbs, adverbs, and quantifiers. Finally, I demonstrate that the nearest equivalent to Spanish *más* is Q'eqchi' *chik* (rather than Q'eqchi' *mas*), which evinces most of the key functions of Spanish *más* except its comparative function.

2.1. The role of *mas* in adjectival constructions. Speakers' judgments as to the grammaticality and felicity of various utterances involving adjectival predicates show that Q'eqchi' *mas* functions as a degree modifier (similar to Spanish *muy*) and differential operator (similar to Spanish *mucho*) rather than a comparative (similar to Spanish *más*) and thus carries no presupposition (as to the existence of a comparative ground). For some of the tests, I also show the judgments that bilingual speakers of Q'eqchi' and Spanish made regarding the analogous Spanish constructions. In these respects, their judgments accord with the grammar of standard Spanish and show that it is *not* the case that,

for them, Q'eqchi' *mas* and Spanish *más* are the same, and that their use of Spanish *más* just happens to be different from standard Spanish.

If Q'eqchi' *mas* carries a comparative presupposition, it should be relatively infelicitous in out-of-the-blue contexts when no comparative ground is easily identifiable. As can be seen in the following examples, speakers say that Q'eqchi' *mas* is felicitous in such contexts, which indicates that *mas* does not carry such a presupposition.

(3) Felicity of Q'eqchi' *mas* in out-of-the-blue contexts

- a. *terto* *l-in* *maal*
 expensive DM-E1S axe
 'My axe is expensive.'
- b. *mas* *terto* *l-in* *maal*
 MAS expensive DM-E1S axe
 'My axe is very expensive.'

In contrast, examples (4 and 5) show that, in the Spanish of bilingual Q'eqchi' speakers, Spanish *más* is judged infelicitous in such contexts, while Spanish *muy* is judged felicitous.

(4) Infelicity of Spanish *más* in out-of-the-blue contexts

#*mi hacha es más cara*

'My axe is more expensive.' (Speakers ask, 'In comparison to what?')

(5) Felicity of Spanish *muy* in out-of-the-blue contexts

mi hacha es muy cara

'My axe is very expensive.'

In this respect, Q'eqchi' *mas* behaves like Spanish *muy*, which is a degree modifier, rather than Spanish *más*, which is a comparative.

If Q'eqchi' *mas* is a comparative like Spanish *más*, it should be infelicitous when it contradicts an utterance involving a comparative adposition whose figure and ground of comparison, or topic and standard, have been swapped. However, as may be seen in the next three examples (6a-c), which turn on contradiction and denial data, utterances involving such a swap are judged felicitous in Q'eqchi'.

(6) Lack of contradiction in comparative context

- a. *mas* *terto* *aa-punit*, *ab'an* *terto* *in-punit*
 MAS expensive E2S-hat but expensive E1S-hat
 chi-r-u *aaw-e*
 PREP-E3S-RN E2S-DAT

'Your hat is very expensive, but my hat is expensive in comparison to yours.'

(Context: your hat cost \$100 and mine cost \$110.)

- b. *nim x-teram aj Pedro chi-r-u li ixq, ab'an*
big E3S-stature SD PN PREP-E3S-RN DM woman but
moko mas nim ta x-teram aj Pedro
NEG MAS big IRR E3S-stature SD PN
 'Pedro is tall in comparison to the woman, but he is not very tall.'
 (Context: Pedro is 5'2" and the woman is 5'.)
- c. *terto l-in maal chi-r-u l-aa maal, ab'an*
expensive DM-E1S axe PREP-E3S-RN DM-A2S axe but
moko mas tertto ta chi-r-u l-aa maal
NEG MAS expensive IRR PREP-E3S-RN DM-E2S axe
 'My axe is expensive in comparison to your axe, but it not very expensive in comparison to your axe.'
 (Context: My axe cost 50 quetzales; yours cost 49 quetzales.)

From example (6a), it looks as if Q'eqchi' *mas* means something like 'very' as opposed to 'more' and hence functions as a degree modifier rather than a comparative. In particular, if *mas* meant something like English *more*, it would be relatively infelicitous to say "Your hat is more expensive, but my hat is more expensive than yours," whereas it is relatively felicitous to say "Your hat is very expensive, but my hat is more expensive than yours." (6b) and (6c) show variations of this test (that manipulate the polarity and order of the clauses) with similar results.

Although an utterance such as "My machete is sharper [than your machete], but it is not sharp" is felicitous with a positive adjective, an utterance such as "My machete is very sharp, but it is not sharp" is completely unacceptable insofar as its first clause has an entailment (that my machete is sharp) which is incompatible with its second clause. As shown in (7), this is what we find in Q'eqchi' when we look at entailment patterns, again indicating that *mas* functions like a degree modifier rather than a comparative.

(7) Entailment patterns

- a. #*mas nim x-teram aj Pedro, ab'an moko nim*
MAS big E3S-stature SD PN but NEG big
x-teram ta
E3S-stature IRR
 'Pedro's stature is very big, but it is not big.'
- b. #*mas tertto in-ch'iich', ab'an moko tertto ta*
MAS expensive E1S-machete but NEG expensive IRR
 'My machete is very expensive but it is not expensive.'

If predicating *mas adjective* ('very adjective') of a topic entails that *adjective* is true of the topic, then the unacceptability of the sentences in (7) makes

sense given that such an entailment is incompatible with the second clause in those sentences. Again, then, Q'eqchi' *mas* seems to be functioning as a degree modifier rather than a comparative.

The next two examples show that Q'eqchi' *mas* constructions are judged felicitous in response to degree questions, whereas Spanish *más* constructions are judged infelicitous in such contexts. (A1–3 denote possible answers.)

(8) Felicity of responses to degree questions in Q'eqchi'

Q: jo' ki'-aal x-nim-al li k'iche'
how many-NOM E3S-big-NOM DM forest

'How great is the size of the forest?' or 'How large is the forest?'

A1: nim

big

'Big.'

A2: mas nim

very big

'Very big.'

(9) Felicity of responses to degree questions in Spanish

Q: qué (tal) grande es el bosque

'How big is the forest?'

A1: grande

'Big.'

A2: muy grande

'Very big.'

A3: #más grande

'Bigger.' (Speakers ask, 'In comparison to what?')

As can be seen in the contrast between (8) and (9), bilingual speakers of Q'eqchi' find it appropriate to use *mas* in response to degree questions in Q'eqchi' as well as *muy* in response to degree questions in Spanish. In contrast, they find it inappropriate to use *más* in response to degree questions in Spanish insofar as such a comparative form presupposes a ground of comparison, or standard, that is not specified in such questions. This provides further evidence that Q'eqchi' *mas* functions like Spanish *muy* rather than Spanish *más*.

In short, the behavior of *mas* under a wide variety of tests is consistent with the claim that it does not function as a comparative, but rather as a degree modifier or differential operator. This does not, of course, indicate that Q'eqchi' *mas* has the same meaning as Spanish *muy* (or English *very*), as should become clear in the next section, when we demonstrate that it can

modify a much larger class of constructions than Spanish *muy*, functioning very similarly to Spanish *mucho* in many contexts.

2.2. The role of *mas* in other constructions. We have so far focused on the role of *mas* as a modifier of adjectives, and stative predicates more generally. As will be shown in this section, which relies on data from spontaneous usage, *mas* can occur with a wide range of other form classes: not just adjectives and adverbs, but also noun phrases, verb phrases, and quantities. In particular, *mas* immediately precedes the constituent it modifies, and it indicates that there is a very high degree of the dimension specified by that constituent. In all such constructions, *mas* continues to function as a degree modifier, indefinite quantity, or differential operator, rather than a comparative. For this reason, I will gloss it as ‘very’ or ‘much/many’, depending on context.

(10) shows constructions in which *mas* modifies adjectives.³

(10) Modify adjective

- a. pero mas kaw li r-ooq li ha’
 but very strong DM E3s-leg DM water
 ‘But the river is very strong.’
- b. mas neeb’a-q-at
 very poor-FUT-A2s
 ‘You will be very poor.’

(10b) contrasts with (10a), and prior examples of such constructions, in that the adjective in question (*neeb’a* ‘poor’) is explicitly inflected for tense/mood and person/number.

(11) shows constructions in which *mas* modifies adverbs.⁴

(11) Modify adverb

- a. mas najt t-e’-xik
 very far FUT-A3p-go
 ‘They will go very far.’
- b. mas junpaat n-at-po’ok
 very quickly PRES-A2s-become.angry
 ‘You become angry very quickly.’

³ As is well known from the work of such scholars as Kennedy and McNally (2005), English *very* exhibits a sensitivity to the class of adjectives it can modify. A separate article will document related facts for Q’eqchi’ *mas*. For present purposes it is enough to say that *mas* can only modify gradable predicates like *terto* ‘expensive’ in (2) and *nim* ‘big’ in (6b) and (12c). In particular, *mas* is generally judged ungrammatical with members of the positional class of stative predicates: **mas chunchuu* (he/she is very seated), **mas sumsuukeb’* (they are very married), and so forth.

⁴ In Q’eqchi’, adverbs usually occur before a verbal or stative predicate, are never inflected, and modify the manner or location in which the event or situation specified by the predicate occurs.

In example (11b), the token of *mas* has scope over *junpaat*, an adverb that means ‘quickly’. Contrast (12), otherwise very similar, in which *mas* operates on an achievement predicate. This should highlight the claim that *mas* modifies the constituent it immediately proceeds.

(12) Modify achievement predicates and accomplishment predicates

- a. junpaat mas n-at-po’ok
 quickly very PRES-A2S-become.angry
 ‘You become very angry quickly.’
- b. mas neb’a’-o’k yoo-k-o
 very poor-become do-PRES-A1P
 ‘We are becoming very poor.’
- c. mas x-∅-in-nim-ob’-resi
 very PERF-A3S-E1S-big-become-cause
 ‘I caused it to become very big.’

(12a–c) also show that *mas* interacts with achievement and accomplishment predicates the same way it does with adjectives: in particular, it modifies the degree of the state achieved, as opposed to the process of achieving it per se.

(13) shows a construction in which *mas* modifies an activity predicate.

(13) Modify activity predicate

- a. nek-e’-pleetik l-aj tzo’ naq mas naab’al=eb’
 PRES-A3P-fight DM-SD male:bird comp very many=PLR
 ‘The roosters fight when there are very many of them.’
- b. wi wan-∅-∅ kaahib’ o malaj oxib’ li
 if exist-PRES-A3S four or or three DM
 tzo’ kaxlan, mas nek-e’-pleetik
 male:bird chicken much PRES-A3P-fight
 ‘If there are four or three roosters, they fight a lot.’

In (13b), *mas* modifies the activity predicate *pleetik* (to fight), and I gloss it as ‘a lot’. (Speakers themselves translated this utterance using Spanish *mucho* ‘much/many’.) In (13a), which preceded it, *mas* modifies the indefinite quantity *naab’al* (many). We will return to this example below.

(14) shows constructions in which *mas* modifies two-place experiential state predicates.

(14) Modify experiential state predicates

- a. mas t-∅-aa-rahi naq t-at-wan-q
 much FUT-A3S-E2S-desire COMP FUT-A2S-exist-FUT
 r-ik’in
 E3S-RN
 ‘You intensely/much want to be with her/him.’

- b. mare x-b'aan aa-xiw ut mare x-b'aan
 perhaps E3S-RN E2S-fear and perhaps E3S-RN
 naq ink'a' mas t-∅-aa-paab'
 comp NEG much FUT-A3S-E2S-believe
 'Perhaps because of your fear and perhaps because you don't
 much believe it.'

In (14a), *mas* modifies *rahink* 'to desire/covet'. In (14b), it modifies *paab'ank* 'to believe'.

The next examples show *mas* modifying noun phrases and functioning as an indefinite quantity.

(15) Modify NP

- a. mas li saq'e x-∅-x-k'e
 much DM sun PERF-A3S-E3S-give
 'It gave a lot of sunshine.'
- b. mas=eb' li sis nek-∅-e'x-q'ol li hal
 many=PLR DM pizote PRES-A3S-E3P-harvest DM corn
 'Many pizote eat the corn.'

As example (15b) shows, with highly animate NPs, *mas* often takes the enclitic =*eb'*, indicating plurality of NP, and so is best translated as 'many' in English. As (15a) shows, *mas* can also modify non-pluralizable nouns, where it is best glossed as 'much' or 'a lot'.

The next example shows that *mas* not only functions as an indefinite quantity, it can also modify such quantities.

(16) Modify quantity (a subclass of adjectives)

- a. jarub' x-e'-kam
 how.many PERF-A3P-die
 Speaker 1: 'How many died?'
- b. mas naab'al, ma(re) nek-e'-kam jun-aq li,
 very many perhaps PRES-A3P-die one-NS DM
 sinkwent kok' kaxlan
 fifty small:numerous chicken

Speaker 2: 'Very many. Perhaps some fifty chicks died.'

By comparing the *mas* token in (16b) with the *mas* token in (13a), one sees that a construction such as *mas naab'al* ('very many') can reference a number as small as three when speaking about roosters and a number as large as fifty when speaking about chicks.

Although I have no tokens of *mas*, by itself, being inflected for person/number or tense/mood, it is caught up in the derivational machinery of Q'eqchi', and, in its derived forms, it can be so inflected. Here is one of only two such examples I have in my corpus.

(17) *Mas* in derived predicate

x-b'aan a'an naq x-e'-mas-ib'
 E3S-RN PRO3S COMP PERF-A3P-very/much-DER

'Because of that they were growing.'

(17) shows a predicate derived from *mas*: growing (in population, as opposed to size). The derivational suffix *-ib'(k)* takes a range of classes and usually returns an intransitive activity predicate. For example, *kej-ib'k* ('to deer-hunt', where *kej* is a noun meaning 'deer').

In short, Q'eqchi' *mas* modifies not only adjectives and adverbs, but also noun phrases, indefinite quantities, and a wide range of verbal predicates. In such a role, Q'eqchi' *mas* is almost always playing a role similar to Spanish *muy* or *mucho*, as a degree modifier and differential operator, rather than Spanish *más*, as a comparative.

2.3. The role of *chik*, and its contrast with *mas*. As should now be abundantly clear, Q'eqchi' *mas* is not at all similar in function to Spanish *más*. The closest equivalent to Spanish *más* is rather the Q'eqchi' particle *chik*, especially in regards to the types of constructions that incorporate it, and the kinds of presupposition such constructions carry. Here are some examples of such constructions, showing the way *chik* serves functions similar to Spanish *más*, especially in noncomparative contexts.

(18) Modify wh-word

ani chik
 who more

'Who else?'

(18) shows *chik* modifying a wh-word. This construction may be compared with its Spanish equivalent, *quién más?* or 'who else'. To demonstrate that the Q'eqchi' construction carries a presupposition would take us too far afield. Suffice it to say, to ask "who else" (did something), or to assert *maa-ani chik* (NEG-who more) 'no one else' (did something) is to presuppose that someone (did something). Similar considerations will hold in the following examples.

(19) Modify verb phrase

ink'a chik nek-∅-e'x-b'aanu
 NEG more PRES-A3S-E3P-do

'They no longer do it.' (Or: 'They don't do it anymore'.)

(19) shows *chik* modifying a verb phrase, and interacting with broad-scope negation (*ink'a*). As may be seen, *ink'a' chik* functions as a temporal adverb and carries a strong presupposition. This construction may be compared with its Spanish equivalents, *ya no lo hacen* ('they no longer do it') and, in some dialects, *(ya) no lo hacen más* ('they don't do it anymore').

(20) Modify existential construction

a. ma wan- \emptyset - \emptyset chik li kape'
 QUES exist-PRES-A3S more DM coffee

'Is there more coffee?'

b. maak'a' chik li-x tumin
 NEG.EXIST more DM-E3S money

'She has no more money.' (Or: 'She no longer has money.')

(20) shows *chik* interacting with existential constructions. (20a) may be compared with its Spanish equivalent *hay más café?* ('is there more coffee?'). (20b) may be compared with two related constructions in Spanish: *ella no tiene más dinero* ('she has no more coffee') and *ella ya no tiene dinero* ('she no longer has money'). Again, the closest Spanish equivalents to the Q'eqchi' constructions usually involve *más*, and again such constructions carry a presupposition.

(21) Modify quantity (number, indefinite quantity, measure phrase)

a. oxib' chik li sek'
 three more DM cup/bowl

'Three more cups.'

b. kach'in chik
 a.little more

'A little more.'

(21) shows *chik* interacting with noun phrases. (21a) may be compared with its Spanish equivalents: *tres tazas más* ('three more cups'). (21b) may be compared with its Spanish equivalent: *un poco más* ('a little more'). Again, the closest Spanish equivalents involve Spanish *más*, and again such constructions carry a strong presupposition.

(22) Modifying VP or clause, in conjunction with *wi'*

x- \emptyset -k'ulun wi' chik
 PERF-A3S-arrive PART more

'She arrived again.'

(22) shows *chik* occurring in conjunction with the particle *wi'*, the entire construction usually being translated into Spanish using *de nuevo*, *otra vez*, or *volver a* ('again'). Although Spanish *más* does not serve a similar function in Spanish, such constructions in Q'eqchi' still carry a strong presupposition: to say something happened 'again' is to presuppose it happened before.

(23) Modify stative predicate (self-comparison in achievement context)

nim chik anaqwan
 big more now

'He is bigger now [than he was before].'

(Compare Spanish: *ya es más grande [que antes].*)

As can be seen in (23), and in (24c) and (24d) below, the only comparative function that *chik* serves is in so-called achievement comparatives: what is being compared is not one entity's size with another entity's size, but rather one entity's size now (or at some topic time) with its size before (that is, prior to the topic time).

In short, these examples show that *chik* immediately follows the constituent it modifies, and it typically indicates that there is more (or no more) of the dimension specified by that constituent (be it a noun, verb, adjective, or quantity) than some contextually presupposed amount. As the next four examples show, *mas* and *chik* often occur together.

(24) Interaction of *mas* and *chik* in single utterance

- a. ani chik mas na- \emptyset -aatinak
 who more much PREP-A3S-speak
 'Who else speaks a lot?'
- b. maak'a' chik mas l-in k'anjel
 NEG.exist more much DM-E1S work
 'I no longer have a lot of work.'
- c. mas tertó chik li-x tz'aq anaqwan
 very expensive more DM-E3S price now
 'Its price is very expensive now [relative to how it was before].'
- d. mas chik li winq x-e'-k'ulun anaqwan
 many more DM man PERF-A3P-arrive now
 'Many more men came today [relative to yesterday].'

(24) shows that *chik* and *mas* can occur together and seem to specify independent semantic features, such as aspect and grade.

Not only is *chik* unique in its function (in that no other forms can substitute for it), it is also deeply woven into the grammar of Q'eqchi' (in that many frequently used constructions have long depended on it). Moreover, whereas many forms in Q'eqchi' are like *mas*, insofar as they serve as degree modifiers, indefinite quantities, and differential operators, there is no other form like *chik*. Forms of the first type (that is, those that are *mas*-like), then, seem to be relatively numerous and historically fluid (i.e., more like an open-class category), whereas the latter form (*chik*) is relatively singular and historically static (i.e., more like a closed-class category). Finally, as should also be clear, although most scholarship focuses on the role of comparatives in adjectival constructions (X is bigger/more big than Y), forms such as Spanish *más*, and Q'eqchi' *chik*, play a much more extended, and substantive role, in language.⁵

⁵ In terms of Thomas's (2018) categories, whereas Spanish *más* is used for comparison (e.g., X is more expensive than Y), additivity (e.g., I'll have three more), and, to some degree, continuation (e.g., it is no longer done), Q'eqchi' *chik* is used for additivity and (negative) continuation, but not comparison.

In short, although there is a superficial and erroneous resemblance between Q'eqchi' *mas* and Spanish *más*, there is a relatively deep semantic and structural similarity between Q'eqchi' *mas* and Spanish *muy* and *mucho*, and between Q'eqchi' *chik* and Spanish *más*.

3. The comparative construction, and comparative strategies, in Q'eqchi'. This section shows the structure and function of comparative constructions involving the adposition *chiru*, focusing on their interaction with *mas*. The comparative construction does not require Q'eqchi' *mas*, or any comparative marker like Spanish *más* (or Q'eqchi' *chik*), and thus seems to be an instance of implicit comparison (e.g., 'this is expensive in comparison to that'), rather than explicit comparison (e.g., 'this is more expensive than that'). When it occurs in a comparative construction, *mas* functions as a differential operator (indicating the magnitude of the difference in degree between the figure and ground of comparison). In short, not only is Q'eqchi' *mas* quite different from Spanish *más*, but the Q'eqchi' comparative construction has a very different logic than the Spanish comparative construction. **3.1** focuses on the direction of comparison: how to indicate that one entity, in comparison with another entity, has a greater or lesser degree of some dimension. **3.2** focuses on the magnitude of comparison: how to indicate the relative size of the difference in degree between the entities being compared. **3.3** focuses on strategies of comparison, involving processes such as discourse parallelism and focus constructions.

3.1. Constructions indicating direction. 2 showed many instances of the canonical comparative construction in Q'eqchi': (*mas*) *adjective NP₁ chiru NP₂*, or 'NP₁ is (very) *adjective* in the face of NP₂'. This construction has many variants.

- (25) Comparative construction with possessed NP
 nim r-ooq li winq chi-r-u li ixq
 big E3S-leg DM man PREP-E3S-RN DM woman
 'The man's legs are big in comparison to the woman's.'

(25) shows a comparative construction with a possessed NP as the topic of comparison. As may be seen, possessed body parts often serve to further specify the dimension of comparison: 'the man's legs are big' → 'the man is tall'.

- (26) Comparative construction with adverbial dimension
 kaw x-in-aalinak ch(i)-aaw-u
 strong PERF-A1S-run PREP-E2S-RN
 'I ran fast in comparison to you.'

(26) shows a construction in which the dimension of comparison is specified by an adverb as opposed to an adjective.

- (27) Comparative construction with adverbial figure and ground

anaqwan ra chi-r-u ewer
 today painful PREP-E3S-RN yesterday

'It is painful today in comparison to yesterday.'

(27) shows a comparative construction in which the figure and ground of comparison are specified by adverbs as opposed to NPs. (Note that the subject of *ra* 'painful' is not *anaqwan* 'today', but rather the speaker's headache—itsself part of the common ground given prior discourse.)

- (28) Comparative construction with existential predication

wan-∅-∅ x-tumin chi-w-u
 exist-PRES-A3S E3S-money PREP-E1S-face

'He has money in comparison to me.'

(28) shows a construction in which the dimension of comparison is specified by an existential predicate and a possessed noun, as opposed to an adjective or adverb.

Although all of these examples involve comparison, none of them involves Q'eqchi' *mas*, even though most of them could be translated into Spanish using *más*. The relative positioning of the arguments in the construction (rather than a morpheme such as *más* or *menos*) marks the comparative relation—that is, the figure of comparison is the main argument of the predicate; the ground of comparison is the argument of the adposition *chiru*. To encode a direction such as 'less than' (or Spanish *menos*), one needs a different strategy. For example, one may (1) switch the relative positioning of the arguments, (2) use an antonym for the dimension in question, or (3) nominalize the original dimension (making it part of the figure and ground) and use a predicate such as *kach'in* 'little' as the dimension.

- (29) Less (vs. more) through nominalization of dimension

b'ab'ay x-nim-al li r-ooq li winq chi r-u
 little E3S-big-NOM DM E3S-leg DM man PREP E3S-RN

li ixq
 DM woman

'The bigness/length of the man's legs is small in comparison to the woman's.'

(29) shows an instance of the third strategy, and directly contrasts with (25). That said, all three strategies have semantic and pragmatic implications that the original sentence would not have had. This means that they are not really equivalent, even though they might serve as reasonable translations.

All of these utterances (25–29) would be perfectly acceptable without the adposition *chiru* and its cross-referenced argument. In such cases they would constitute simple predications: *the man is tall; I ran fast; it is painful today;*

(30) shows that *mas* is not the only way of modifying the magnitude of an adjectival predicate in Q'eqchi', though it is currently the most frequently used form. Instead of *mas*, one can also use *jwal* 'very very' or *q'axal* 'exceedingly', inter alia.

(31) Large magnitude indicated through reduplication

q'es q'es li r-u l-in ch'iich' chi-r-u
 sharp sharp DM E3S-RN DM-E1S machete PREP-E3S-RN
 l-aaw-e
 DM-E2S-RN

'My machete (or 'the face/blade of my machete') is very sharp relative to yours.'

(31) shows a comparative construction in which magnitude is specified by a reduplication of the predicate. This may have been the preferred strategy in the past, at least for the limited classes of roots for which it was possible.

(32) Large magnitude indicated through *k'ajo'*

k'ajo' x-q'es-al li r-u l-in ch'iich'
 how E3S-sharp-NOM DM E3S-RN DM-E1S machete
 chi-r-u l-aaw-e
 PREP-E3S-RN DM-E2S-RN

'How much is the sharpness of my machete relative to yours!'

(32) shows that the particle *k'ajo'*, in conjunction with a nominalized adjective, or an NP more generally, may also be used to indicate magnitude. Such a construction is usually used with exclamatory illocutionary force (i.e., to indicate surprise at the magnitude of some dimension), or with interrogative illocutionary force (i.e., to question the magnitude of some dimension).

(33) Small magnitude indicated through *b'ayaq*

terto b'ay-aq l-in ch'iich' chi-r-u l-aa
 expensive a.little-NS DM-E1S machete PREP-E3S-RN DM-E2S
 ch'iich'
 machete

'My machete is a little expensive relative to your machete.'

As (33) illustrates, in contrast to the multiplicity of forms indicating a large magnitude, there is also one form that is frequently used to indicate a small magnitude: *b'ay-aq* (small-NS), sometimes *b'a-b'ay* (RDPL-small).

As should be clear from the previous two sets of examples, Q'eqchi' *mas* is doing work more similar to Spanish *muy* and *mucho* than to Spanish *más*. As should also be clear, Q'eqchi' hardly needed *mas* to do the work of indicating

magnitude: it had, and has long had, a wide variety of forms doing precisely that work. That said, such forms do not have equivalent meanings, as is evident not just from their distinct etymologies, illocutionary forces, class-specificities, connotations, and so forth, but also from their distinct magnitudes. Although it is quite difficult to get clear-cut distinctions in graded magnitudes, the following hierarchy often seems to pertain:

(34) Intensity Hierarchy: *b'ayaq* < \emptyset < *mas*, reduplication < *jwal*

The existence of such a hierarchy is evinced in a variety of contexts: when the application of a stronger form presupposes the applicability of a weaker form; when speakers explicitly rank the degree of such forms in elicitation contexts; when the second pair-part of an assessment upgrades or downgrades the first pair-part in discourse parallelism; and when speakers spontaneously paraphrase their own constructions. For present purposes, three examples should suffice.

(35) Paraphrase of *mas* using reduplicated predicate

mas tiiq in-jolom, o_sea tiiq-tiiq in-jolom
 very hot E1S-head in.other.words hot-hot E1S-head
 'Very hot is my head, in other words hot hot is my head.'

(35) occurred during an ethnographic interview, when an informant was explaining various illnesses and their symptoms. Here a speaker glosses a *mas* predicate construction as a reduplicated predicate construction.

(36) Paraphrase of *jwal* using reduplicated *mas*

jwal t- \emptyset -in-raahi raj li tzekemq
 very.very FUT-A3S-E1S-want CF DM food

 o_sea, mas mas t- \emptyset -in-raahi raj li
 in.other.words much much FUT-A3S-E1S-want CF DM

 tzekemq
 food

'I would *really* like the food, in other words I would much much like the food.'

(36) occurred when an informant was explaining the meaning of the predicate *rahink* 'to desire or covet'. Here a speaker glosses a *jwal* predicate construction with a reduplicated *mas* predicate construction.

(37) Contrasting Spanish glosses of *mas* and *jwal*

- a. junxil moko mas k'ih=eb' ta
 long.ago NEG very many=PLR IRR
 'Hace tiempo no eran muchos.'
- b. junxil moko jwal k'ih=eb' ta
 long.ago NEG very.very many=PLR IRR
 'Hace tiempo no eran muchísimos.'

(37) occurred when a speaker was contrasting the meaning of two otherwise identical constructions. Here a speaker contrasts *jwal* with *mas* using an (absolute) superlative construction in Spanish.

(35) involves *mas* and *jwal* operating on verbs (doing work similar to Spanish *mucho*, rather than *mu*), (37) involves *mas* and *jwal* operating on quantities, and none of these examples involves the adposition *chiru*. Nevertheless, (35–37) are illustrative of the magnitude contrasts in question, especially as they are evinced in the metalanguage of Q'eqchi' speakers. These data show how *mas* contrasts in its intensity with the two other forms (*jwal* and reduplication) it is otherwise most similar to.

In short, when occurring with the comparative adposition *chiru*, Q'eqchi' *mas* functions as a differential operator, indicating the (indefinite) magnitude of the difference between the degree of the figure and the degree of the ground. While many other forms in Q'eqchi' serve similar functions, they differ from *mas* in regards to the relative magnitude of the differences they specify.⁷

3.3. Comparative strategies. All that being said, it cannot be stressed enough that comparative constructions involving the adposition *chiru* are relatively rare in actual discourse. A far more frequent strategy for comparing two entities is through discourse parallelism. For example, the first utterance asserts some topic is big; the next utterance asserts some other topic is very big (or small, or not [very] big, and so forth), and together the two utterances implicitly compare the size of the first topic with the size of the second topic. In some sense, this too is a type of implicit comparison, but one involving multiple clauses for its construction. Given the Mayan emphasis on *difrasismo* (when two separate words are put together to form a single, metaphoric unit), as well as on couplets, poetic parallelism, and the like, this strategy may be particularly pertinent to Mayan speech communities in Mexico and Guatemala, and to Mesoamerican speech communities more generally (see, for example, Hull and Carrasco 2012). Here is an example of such discourse parallelism (see also 40), which Kockelman (2016a) takes up at length.

- (38) Comparative strategy through discourse parallelism
 a. li ch'iich' k'il moko mas ta li xam
 DM metal griddle NEG very IRR DM fire
 na-∅-r-aj
 PRES-A3S-E3S-want

'The metal griddle does not require a lot of fire (because the flame is very low).'

⁷ Moreover, *mas* is nowadays also recognized as a loan-word, deprecated by language purists because of that, and thus marginalized in various attempts to standardize the language—a fact that has important repercussions for language change (Kockelman 2016b).

- b. pero li ch'och' k'il, a'an naab'al li xam
 but DM earth griddle DEIC much DM fire
 na-∅-r-aj
 PRES-A3S-E3S-want

'But the earthenware griddle, that requires a lot of fire.'

Together, (38a and b) seem to imply that the earthenware griddle requires a lot of fire relative to the metal griddle, and hence more fire than the metal griddle.

Another way to achieve comparison, without using the adposition *chiru*, is through the contrastive focus construction.

(39) Contrastive focus constructions

- a. ha' li winq a'an nim x-teram
 EMP DM man DEIC big E3S-size
 'That man (as opposed to the others) is tall.'
 (SG: *ese hombre es más alto [que los otros].*)
- b. ha' li winq a'an jwal nim x-teram
 EMP DM man DEIC very.very big E3S-size
 'That man (as opposed to the others) is very very tall.'
 (SG: *ese hombre es el más alto [de todos].*)

As shown in (39a and b), by putting a figure in the preverbal focus position, marked with the emphatic particle *ha'* (and an optional deictic form), the comparative ground becomes the entity, or set of entities, the focus is currently contrasting with (in the context of the speech event). Such constructions may thereby function comparatively. Indeed, the construction in (39b), which involves the degree modifier *jwal* 'very very', when contrasted with the construction in (39a), can even function as a superlative, as seen by the speaker's Spanish gloss.

4. History of *mas*, and the comparative construction, in Q'eqchi'. If Q'eqchi' *mas* so clearly comes from Spanish *más*, was it originally borrowed with the Spanish meaning, changing gradually over time, was it borrowed and used with the new meaning right from the start, or did some other kind of transformation occur? As will be seen, *mas* seems to have entered Q'eqchi' during the last part of the nineteenth century and seems to have functioned as it now does, albeit in a restricted set of constructions, from the very beginning.

This section surveys twentieth-century grammars, dictionaries, and texts to sketch the history of *mas*, and the comparative construction, in Q'eqchi'. 4.1 will review Dixon's (2012) account of the widespread borrowing of *mas*, and the Spanish comparative construction, by indigenous languages in Latin America. 4.2 will discuss the usage and analysis of *mas*, and the comparative

construction, in the twentieth century, the period for which we have the most data. 4.3 will discuss their usage and analysis in the late nineteenth century, focusing on the work of the linguist Otto Stoll.

4.1. Borrowing Spanish *más*, and calquing its comparative construction. In his survey and synthesis of the large literature on comparative constructions, Dixon (2012:371–72) makes several points that are particularly salient in regards to the history of *mas*. First, he notes that one can often trace the history of comparative forms and standard markers, indicating their relatively recent origin. Second, the forms that make up a comparative construction are frequently borrowed, and the construction itself may be a calque. Finally, many indigenous languages that have been in contact with Spanish have borrowed its comparative form *más* ‘more’, but not *menos* ‘less’.⁸

In line with Dixon’s claims, Q’eqchi’ *mas* was certainly borrowed from Spanish, and relatively recently (certainly within the last 500 years, and probably within the last 150 years); *mas* can play a role in the comparative construction; and *menos* does not seem to have been borrowed. These parallels aside, we just saw that, unlike Spanish *más*, Q’eqchi’ *mas* is not a comparative, so it does not play the expected role. Indeed, strictly speaking, the Q’eqchi’ comparative construction does not actually involve *mas*. This means that the Q’eqchi’ comparative construction (*mas . . . chiru*) only seems to be a direct borrowing of the Spanish comparative construction (*más . . . que*) if one misconstrues the meaning of the Q’eqchi’ construction (apperceiving it, as it were, through a Spanish or English lens). Although the two constructions might look very similar, their underlying semantics are quite different. Furthermore, it cannot be stressed enough that Spanish *más* does so much more than comparison per se, as should be clear by our discussion of the functions of this form, in relation to those of Q’eqchi’ *chik*. It is very unlikely that all those indigenous languages borrowed *más* to serve all those functions—or, if they did, such functions are arguably as important to investigate as comparison per se. Finally, Q’eqchi’ has long had a comparative construction, not to mention a wealth of comparative strategies, so its borrowing of Spanish *más* is certainly not an indication that it needed one.

The tensions between Dixon’s account and the particular facts of Q’eqchi’ are worth exploring further. While a distinction between something like

⁸ As examples, Dixon lists Papantla Totonac (Levy 2004), Tagalog, Tzotzil, Pipil (Campbell 1987), and San Lucas Quiaviní Zapotec. We might add to these examples not just Q’eqchi’, but also Tzutujil (Dayley 1985), Quiche (Fox 1987), and Mam (England 1983), among other Mayan languages spoken in Guatemala. According to Stolz and Stolz (1995), other indigenous languages of the Americas that borrowed *más* and/or *que* to form comparative constructions include Chontal, Mayo, Mopan, Nahuatl, Otomí, Popoluca, Tlapanec, Yucatec, and Zoque.

TABLE 1
 TYPOLOGICAL CATEGORIES FOR ANALYZING COMPARATIVE CONSTRUCTIONS

Example of Comparative Construction: 'the woman is much heavier than the man'				
Ultan (1972)	Stolz & Stolz (1995)	Dixon (2012)	Used Here	Components
Item	Topik	Comparee	<i>Figure</i>	the woman
Standard	Standard	Standard	<i>Ground</i>	the man
Quality or quantity	Kommentar	Parameter of comparison	<i>Dimension</i>	heavy
Marker of standard	Relator	Mark of standard	<i>Relation</i>	than
Degree marker	Grad	Index	<i>Direction</i>	-er (more/less)
			<i>Magnitude</i>	much (a little)

Types of Magnitude (evinced in the use of Q'eqchi' *mas*, or Spanish *my* and *mucho*):

1. degree marker or intensifier (e.g., he is *very* tall)
2. indefinite quantity (e.g., she ran *a lot*, there are *many* children)
3. differential operator (e.g., he is *much* bigger than she is)

Types of Direction (evinced in the use of Q'eqchi' *chik*, or Spanish *más*):

1. comparative more (e.g., this is *more* expensive/taller than that)
2. aspectual more (e.g., he doesn't do it *anymore*, he no *longer* does it, he did it *again*)
3. quantity more (e.g., I'll have three *more* beers, no *more* is left)
4. constituent more (e.g., who *else* went, nowhere *else*)

direction (more/less) and magnitude (very/much) organizes two distinct but interrelated domains in both Q'eqchi' and Spanish (and probably many other languages), it is often overlooked in typological accounts of comparative constructions, which tend to conflate both these components into a single analytic category. For example, in Ultan's (1972) and Dixon's (2012) well-known schemata for analyzing comparative constructions, a single category is meant to cover not only comparative morphemes such as English *-er*, but also intensive adverbs such as *very*, *too*, and *extremely* (and even verbs such as *surpass*). Ultan calls this category the "degree marker," and Dixon calls it the "index." Table 1 compares the schemata of these authors with the one used here, and with the one introduced by Stolz and Stolz (1995; and see Stassen 1985 and Suárez 1983) in their important study of the borrowing of the Spanish comparative construction by indigenous languages in the Americas.

As should now be apparent, this analytic collapse (the shaded region in table 1) of a highly salient distinction is especially debilitating in accounts of language

contact and linguistic borrowing, insofar as it primes language typologists to misconstrue the original function of such forms, as well as the subsequent changes they went through. Insofar as the Spanish comparative construction has influenced many other indigenous languages of the Americas, its meaning in those languages cannot be treated as a simple borrowing or calque of the original construction, but should instead be subject to careful investigation.

To be sure, the analysis offered so far is just an account of what *mas* currently means, and how the comparative construction is currently used, at least in the area where I have worked for the past 20 years. Q'eqchi' might be odd with respect to other indigenous languages of the Americas, which themselves might be more in line with Dixon's account. Alternatively, the Q'eqchi' comparative construction could indeed have originally been a direct borrowing from Spanish (with *mas* serving more or less the same function as *más*, and *chiru* serving more or less the same function as *que*), and it just so happens that the language has changed substantially since it was first borrowed. Several other linguists working in the 1970s, and as far back as the 1890s, did indeed analyze the Q'eqchi' comparative construction as a direct borrowing of the Spanish construction. As such, it is worth tracing the history of the comparative construction, and the role of *mas*, as well as the analysis of such forms by linguists, as far back as we can.

4.2. *Mas* throughout the twentieth century. Stewart (1980), in his groundbreaking grammar of Q'eqchi', glosses the *mas . . . chiru* construction on the Spanish model (*más . . . que*), while treating Q'eqchi' *mas* as Spanish *más* in one interlinear translation and as Spanish *muy* in another.

- (40) Stewart's analysis of a comparative construction (1980:119–20)
- a.
- | | | | | | |
|----------------------|------|--------|---------|------|----------------|
| | mas | nim | aaw-oq | chi | w-u |
| (Stewart's analysis) | más | grande | tu-pie | a | mi-comparativo |
| (my analysis) | very | big | E2S-leg | PREP | E1S-RN |
- 'tú eres más alto que yo' (Stewart's gloss)
'You are very tall in comparison to me.' (my gloss)
- b.
- | | | | | |
|----------------------|------|-----------|--------------|------|
| | mas | sa | na-∅-wa7ak | chi |
| (Stewart's analysis) | muy | sabroso | él-come[sic] | a |
| (my analysis) | very | good/well | PRES-E3S-eat | PREP |
- w-u
mi-comparativo
E1S-RN
- 'él come más que yo' (Stewart's gloss)
'He eats very well in comparison to me.' (my gloss)

Although these examples might reveal a genuine difference in dialects or points in language history (when Q'eqchi' *mas* might really have served a

function similar to Spanish *más*), I suspect that these glosses were probably due to a quick or simply indecisive analysis, as may be seen by my alternative translations. Moreover, one probably shouldn't fault speakers, or linguists, for translating *mas . . . chiru* as *más . . . que*, since the latter construction is good enough as a gloss of the former, and the seemingly more accurate translations (*muy ADJ en comparación con* 'very adjective in comparison to', or something similar) would be quite marked. However, as already discussed, systematically analyzing a form that marks magnitude as a form that marks direction, or simply conflating this distinction, is a major mistake insofar as it elides the important distinction—in Spanish as well as Q'eqchi'—between magnitude and direction, two form-functional domains that are highly distinct in regards to the semantic features they encode and the pragmatic functions they serve, as well as in regards to their diachronic development.

My reanalysis of Stewart's examples is not just based on my own work on the same forms as used in the same area twenty years later; it is also grounded in other work in the same area around the same time that Stewart was working, as well as even earlier work. For example, in a very serviceable dictionary compiled between 1975 and 1986 (Sam Juarez et al. 1997), for which Stewart is credited as a technical advisor, there are examples of *mas* translated as *muy* (see, for example, the entries for *mas mem* and *mas q'eel*, 1997:204). There are examples of *chiru* (without *mas*) doing the work of Spanish *más . . . que* (see the entry for *b'ab'ay*, 1997:24). Finally, *mas* itself is glossed as *muy* and *mucho*, as opposed to *más*.

Eachus and Carlson (1980), working around the same time as Stewart, and also with speakers of the Cobán dialect (1980:xi), say this about *mas*: "It indicates comparison. . . . The particle *más* is taken from Spanish. It represents an idiomatic perversion (*perversión idiomática*), but is frequently used in popular conversations" (1980:207, translated from Spanish). Although they offer one example of a comparative construction (involving *mas . . . chiru*) that they translate as *más . . . que* (1980:208), in line with Stewart's analysis, the many other examples and glosses they offer are in line with my analysis. In particular, they offer three examples of comparative constructions (involving just *chiru*, without *mas*) that they also translate as *más . . . que* (1980:165), and they offer one example of a comparative construction (involving *q'axal . . . chiru*) that they translate as *mucho mejor que* 'much better than' (1980:207). Moreover, in other places throughout their grammar, they consistently gloss *mas* as *muy* or *mucho* depending on whether it modifies an adjective/adverb or a NP/VP. To be sure, theirs is a prescriptive grammar, and they were not professional linguists; however, they lived and worked in the area for many years and were clearly very fluent speakers and quite competent linguists.

Mas and *chiru* seem to have served similar functions throughout the twentieth century, and even in the late nineteenth century, as may be seen by

analyzing the available literature. In particular, the adposition *chiru*, along with a predicate adjective (but without *mas*), is glossed as Spanish *más . . . que* in this literature.⁹ The adposition *chiru*, along with a predicate adjective and a degree modifier such as *rajwal* or *q'axal*, is glossed as *mucho más . . . que* (or English 'much more than'). *Mas*, along with a predicate adjective (and no adposition *chiru*), is glossed as *muy*, or, when it modifies an NP or VP—which occurs much less frequently—it is glossed as *mucho*. Here are a few examples of such constructions from this literature.

- (41) Comparison using *chiru*, without *mas*
- a. li winq a'in najt r-ooq ch-aaw-u l-aa'at
 DM man DEIC far E3S-leg PREP-E2S-RN DM-PRO2S
 'este hombre es más alto que usted' (Eachus and Carlson's translation)
 'This man is tall relative to you.' (my translation)
 (Eachus and Carlson 1980:165)
- b. l-ix Juana ch'ana'-us ch-aaw-u
 DM-SD Juana small-good PREP-E2S-RN
 'Juana is more beautiful than you.' (Pinkerton's translation)
 (Pinkerton 1976:158)
- c. chaab'il a'in chi-r-u a'an
 good DEIC PREP-E3S-RN DEIC
 'mejor esto que aquello' (Sedat's translation)
 'This is good relative to that.' (my translation)
 (Sedat 1976 [1955]:64)
- d. ch'inaj chi-r-u
 small PREP-E3S-RN
 'más joven que' (Sedat's translation)
 'young relative to' (my translation)
 (Sedat 1976 [1955]:236)

(41a–d) show Q'eqchi' constructions involving predicate adjectives and the adposition *chiru*, but without *mas*. As may be seen, three of the constructions are translated into Spanish using a *más . . . que* construction, and one of the constructions is translated into English using a *more . . . than* construction.

⁹ Shaw (1971:401) offers a token of a comparative construction in which the adposition *chiru* seems to be immediately preceded by the Spanish complementizer *que* 'that'. Although I have met several bilingual speakers from San Juan Chamelco who engage in this practice of "syntactic doubling," this is the earliest token I have found of such a construction. See Hill and Hill (1986) on "aggregation" in Nahuatl, and Karttunen (2000) on "paired forms" in Latin American indigenous languages more generally.

(42) *Mas* as *muy* (very) with predicative adjectives

a. mas aal li b'on
very heavy DM paint

'The painting is very heavy.'

(Pinkerton 1976:89)

b. mas kach'in li ch'ina ixq
very small DM small woman

'The young woman (or maiden) is very small.'

(Shaw 1971:396)

(42a and b) show *mas adjective* constructions being glossed into English as 'very adjective', as opposed to 'more adjective', constructions.

(43) Modifier . . . *chiru* glossed as *mucho más . . . que* (much more . . . than)

a. li hu a'in q'axal chaab'il chi-r-u a'an
DM book DEIC surpass good PREP-E3S-RN DEIC

'este libro es mucho mejor que ese otro' (Eachus and Carlson's translation)

'This book is exceedingly good in comparison to that one.'
(my translation)

(Eachus and Carlson 1980:207)

b. ye-om-aq r-e a'an naq rajawal us kamk chi
say-IMP-OPT E3S-RN DEIC COMP very good die PREP
xerim-b'il chi-r-u x-q'axtesink-il li
cut-PRT PREP-E3S-RN E3S-hand.over-NOM DM
ki-0-x-k'e ch in-k'ul-a'
INF-A3S-E3S-give PREP E1S-receive-PSV

'Say to [him] that it is very much better to die cut in pieces,
than to deliver up what he put into my keeping.' (Burkitt and
Kaál's translation)

(Burkitt and Kaál 1920:211)

(43a and b) show Q'eqchi' constructions involving degree modifiers such as *q'axal* and *rajawal* operating on adjectives, in conjunction with the adposition *chiru* indicating a comparative ground. Again, such constructions are translated into Spanish or English using comparative forms such as Spanish *mejor* or English 'better' in conjunction with a differential operator such as Spanish *mucho* or English 'much'.

In short, just as in the early-twenty-first-century usage described in 2 and 3, in twentieth-century documents Q'eqchi' *mas* usually occurred in non-comparative contexts (functioning as a degree-marker, indefinite quantity, or differential operator like *muy* or *mucho*). It was not required in comparative constructions, and when it did occur in comparative constructions, it continued to mark magnitude rather than direction.

As we go back to the nineteenth century, tokens of *mas* disappear altogether, aside from the handful that appear in Stoll's grammar, as will be discussed in the next section. For example, in the extensive Q'eqchi' dictionary compiled in the late 1930s and 1940s by Sedat (1976 [1955]), comparison is done using only the adposition *chiru*, which Sedat uniquely glosses as *en comparación con* 'in comparison with' (1976:64). Indeed, *mas* itself does not receive an entry in this dictionary, nor does it occur in any of the many Q'eqchi' utterances that are used to exemplify other entries. (Sedat includes many other loan words from Spanish, so its absence was probably not due to linguistic purism.) In Burkitt's essay, *Notes on the Q'eqchi' Language* (1902), there are no tokens of *mas*, nor of the comparative construction. There are, however, many utterances involving reduplication, and many tokens of *jwal* 'very very' doing work similar to Spanish *muy* 'very'. In a classic and lengthy Q'eqchi' myth (Estrada Monroy 1990; Kockelman 2010), which was recounted and written down in 1904, there are no tokens of *mas*, nor of the comparative construction. There are, however, many instances of *chik* 'more/else' doing work similar to Spanish *más*, several tokens of *naab'al* and *b'ab'ay* doing work similar to Spanish *mucho* 'many/much' and *poco* 'a little/few', and lots of reduplication marking high degrees of the dimension at issue. In *The Hills and the Corn* (Burkitt and Kaál 1920), an extended Q'eqchi' myth that was recounted in the early part of the twentieth century (and somewhat edited and amended), there are no tokens of *mas*. Moreover, in this text is the only other token I've found of a comparative construction that involves an early form of *jwal* expressing magnitude rather than *mas*.¹⁰ See (43b). Finally, in the few manuscripts we have from the sixteenth, seventeenth and eighteenth centuries, such as those analyzed by Freeze (1980), Burkitt (1905), Weeks (1997), Estrada Monroy (1979), and Berendt (1875), there are no tokens of *mas* (though there is otherwise an abundance of Spanish loan words). Instead, we see that reduplication, and forms such as *naab'al*, *q'axal*, *-ajwal*, and *k'ajo' naq* do the work of magnitude.

In short, although the function of *mas* is quite similar to current usage, albeit more constrained in regards to the lexical types it could modify, tokens of *mas* are less and less frequent as one moves back toward the nineteenth century. That said, there was still a strong tendency to gloss *mas . . . chiru* constructions as *más . . . que* constructions. More notable is that linguists analyzing such *mas . . . chiru* constructions tended to analyze them in terms of the Spanish *más . . . que* construction. Indeed, whereas the late-twentieth-century linguist Stewart seemed only mildly committed to such an analysis,

¹⁰ To be sure, the absence of *mas* tokens in this literature is probably due to the fact that the corpus is small and the texts in question are myths, prayers, and so forth (and so tend to be recountings of older texts and instances of more conservative genres).

the late-nineteenth-century linguist Otto Stoll was strongly committed, as the next section will show.

4.3. Usage in the (late) nineteenth century in Otto Stoll's analysis. The oldest examples I have found of the modern comparative construction come from Otto Stoll (1896), who carried out research in Guatemala from 1878 to 1883. He argued that this construction was essentially a direct borrowing from the Spanish construction—not just of form, but also of function. He even went so far as to suggest that, for speakers of Q'eqchi', the idea of comparison with other things of the same quality was originally absent. His discussion of *mas*, and related constructions, is worth quoting at length:

Although, as we saw earlier, the concept of intensification [*Steigerung*] is not alien to the K'e'kchi [*sic*], but is achieved through reduplication of the root syllable (*sak-sak* completely white [*ganz weiss*], *rax-rax* completely green [*ganz gruen*], and so forth), the idea of comparison with other things of the same quality is completely lacking. And all representations related to it are taken from Spanish: the comparative is thus replaced by Spanish *mas* [*sic*] and the conjunction 'as' [*als*] by the synthesis of the preposition *chi* with the noun *u* and its pronoun (1896:121–22, my translation).

To support his analysis, Stoll provided one example of a comparative construction (44), and one example of a relative superlative construction (45).

- (44) ha' kab' a'in mas nim chi r-u li wan le'
 EMP house DEIC very big PREP E3S-RN DM exist DEIC
 'dieses Haus ist grösser als jenes' (Stoll's translation)
 'This house is very big relative to that one there.' (my translation
 of Q'eqchi')
 'This house is bigger than that (one).' (my translation of Stoll's
 translation)
 (Stoll 1896:121)

- (45) ha' kab' a'in mas nim chi r-u li wan-k-eb' le'
 EMP house DEIC very big PREP E3S-RN DM exist-PRES-A3P DEIC
 'dieses Haus ist das groesste von allen' (Stoll's translation)
 'This house is very big relative to those there.' (my translation of
 Q'eqchi')
 'This house is the biggest of all.' (my translation of Stoll's translation)
 (Stoll 1896:121)

Both of these examples involve *mas* working in conjunction with the adposition *chiru* and a figure of comparison in focus position (recall our discussion of focus constructions in 2.3).

Stoll even claimed that Spanish *más* was beginning to replace reduplication as the preferred means for indicating magnitude, even when no comparison was being made (1896:121). Here are two of the examples he offered.

(46) Stoll's examples of noncomparative uses of *mas*

- a. jun winq mas nim r-ooq
 one man very big E3S-leg

'en sehr grosser Mann' (Stoll's gloss)
 'a very tall man' (my gloss of Q'eqchi')

(Stoll 1896:121)

- b. mas ha' li uq'un
 very water DM gruel

'ganze waesserig ist der Atole' (Stoll's gloss)
 'The atol is very watery.' (my gloss of Q'eqchi')

(Stoll 1896:121)

As may be seen from these examples, Stoll glossed constructions involving *mas* and an adjective (but without the adposition *chiru*) using German *sehr* (or *ganz*), and thus as 'very' (or 'completely') as opposed to 'more'. In other places in his grammar (1896:52, 160), Stoll translated reduplicated adjectives using *ganz* (quite, completely) or *sehr* (very). For example, he glossed *moy* as 'truebe' (cloudy), and *moy moy* as 'sehr trueube' (very cloudy). He glossed *sak* as 'weiss' (white), and *sak sak* as 'ganz weiss' (entirely white).

In short, Stoll argued that (1) intensity or magnitude (*sehr, ganz, muy*) was originally handled in Q'eqchi' by means of reduplication; (2) *mas* originally came into Q'eqchi' to do the work of direction in the comparative construction (German *-er* and Spanish *más*), in conjunction with the already available adposition *chiru* (German *als* and Spanish *que*); and (3) *mas* came to replace reduplication as the preferred way to indicate magnitude. In effect, although Q'eqchi' *mas* originally meant 'more' (like Spanish *más*), and still did (in the comparative construction) at the time Stoll was writing, it also came to mean 'very' (*muy*) in noncomparative constructions.

Note how well Stoll's analysis conforms with modern accounts of the borrowing of the Spanish comparative construction by indigenous languages in Latin America, as per our review of Dixon (2012:371–72) and the literature he cites. Nonetheless, as inspired and prescient as Stoll's analysis is, I think it is wrong for a variety of reasons. First, there were many other ways of indicating magnitude (or intensity) besides reduplication. Recall our discussion of words such as *rajawal* and *q'axal*. Second, as we saw in 3.3, there have probably always existed comparative strategies, so it is very unlikely that "die Idee des Vergleiches mit andern Dingen derselben Qualitaet" (the idea of comparison with other things of the same quality) was unknown to the Q'eqchi'. Indeed, as we saw in 2, even a bare adjective involves comparison with respect to an implicit ground, or tacit standard. Moreover, though not known by Stoll, there had long been at least one other comparative construction in Q'eqchi', which was still in use at the time he conducted his research (Berendt 1875). Third, we have seen that Q'eqchi' has long had the particle *chik*, which is

very close to Spanish *más* in certain aspects (insofar as it indicates direction and carries a presupposition). So, insofar as this borrowing of *mas* did not affect the functioning of *chik*, speakers of Q'eqchi' certainly didn't borrow it to duplicate its function. Fourth, I suspect that Stoll, as the relative of recent immigrants and plantation owners, spent a lot of time among bilingual speakers of Q'eqchi' and Spanish. So he might have been conducting linguistic fieldwork among a very particular group of speakers. As noted at the end of the previous section, in all the texts we have from this period, and before, there are no tokens of *mas*, nor of the modern comparative construction *per se*. By virtue of the kinds of speakers he did his fieldwork with, Stoll may have been overemphasizing the role of *mas* in the Q'eqchi' of his day—not just its frequency, but also its productivity. Fifth, there is no evidence that Q'eqchi' *mas* ever indicated direction or carried a presupposition, and so the idea that it was borrowed with its original function (*qua* direction), and then came to serve as a degree marker (*qua* magnitude), is not very likely. In the next section, I will argue that it served as a degree marker from the very beginning. Finally, I think Stoll, like other linguists after him, apperceived the Q'eqchi' construction through a Spanish (or German) lens and thus failed to see the salient differences in meaning. Like Dixon, he too collapsed the distinction between magnitude and direction. To conclude this article, I will speculate on why it is so easy to overlook this distinction, and how this fact is coupled to the original borrowing of *mas*.

5. Conclusion: the origins (and apperception) of Q'eqchi' *mas*. As should now be clear, aside from the fact that linguists such as Stewart and Stoll analyzed the Q'eqchi' comparative construction on the Spanish model, and the fact that speakers of Q'eqchi' sometimes gloss *mas* . . . *chiru* constructions as *más* . . . *que* constructions, nothing about past or present usage provides evidence that Q'eqchi' *mas* has ever functioned like Spanish *más*: it has long marked magnitude, as opposed to direction, and it has never carried a strong presupposition. Given these facts, as well as discourse frequency more generally, I strongly suspect that *mas* was not originally borrowed as part of a construction involving an *explicit* comparative ground (*mas* . . . *chiru*), itself based on the Spanish model (*más* . . . *que*). Rather, it was originally borrowed as part of a construction involving an *implicit* comparative ground. For example, the reanalysis of the direction marker (Spanish *más*) as a magnitude marker (Q'eqchi' *mas*) came about in the context of the near synonymy of the following sorts of constructions:

This is big, but that is bigger.

This is big, but that is very big.

As may be seen, direction is relatively easy to assimilate to magnitude. In particular, it would have been easy for speakers to overlook the presupposition

and increase the magnitude with relatively minimal effects on shared comprehension. For example, a construction such as ‘bigger [than some specific referent]’ could be interpreted as ‘very big [relative to the typical member of the class in question]’. Indeed, given the fact that the Q’eqchi’ comparative strategy involved parallel utterances (‘that is big, but this is very big’ → ‘this is bigger than that’), the translation of *mas* as *más* is even more felicitous, insofar as the presupposition would often have existed via the previous utterance. Moreover, the change in magnitude would not only be interactionally contingent and hard to notice, but also relatively inconsequential in function to subsequent truth-conditions. This is because increases in magnitude, or upgradings of degree, are very often: (1) person-specific (when I say “it’s very big,” I am foregrounding my personal experience of it); (2) performative (utterances help create, and don’t simply evince, comparative grounds); and (3) alignment dependent (in turn-taking, second pair-parts of assessments often align with first pair-parts).¹¹

Given the fact that speakers of Q’eqchi’ can add the adposition *chiru* to most any predication, and thereby create a comparative construction (this is [very] big → this is [very] big in comparison to *some comparative ground*), the use of *mas* to indicate magnitude carried over to constructions involving explicit comparative grounds without strain. So *mas* could easily be seen as similar in function to reduplication, or modification by a degree modifier such as *jwal* or *q’axal*. It could easily spread so as to be able to modify other word classes. Indeed, it is quite possible that Q’eqchi’ *mas* came to modify not only adjectives and adverbs (serving a function akin to *muŷ*), but also NPs and VPs (serving a function akin to *mucho*), because Spanish *más* could already function in conjunction with such types (this is more heavy → this is very heavy; he ran more quickly → he ran very quickly; he ate more ice-cream → he ate a lot of ice-cream; he ran more → he ran a lot; and so forth).

To be sure, Q’eqchi’ *mas*, at some times, for some speakers, may have been used with a meaning similar to Spanish *más*—thereby indicating direction rather than magnitude, and carrying a strong presupposition. One might imagine, for example, that highly bilingual speakers, or speakers who were dominant in Spanish, might have originally construed the meaning of the Q’eqchi’ construction on the Spanish model (*mas* as ‘more’, *chiru* as ‘that’), whereas monolingual speakers of Q’eqchi’, or simply speakers dominant in Q’eqchi’, of whom there were many many more, would have construed the meaning of the Q’eqchi’ construction on the Q’eqchi’ model (*mas* as ‘very’, *chiru* as ‘in comparison to’). Additionally, one might take note of the deep power asymmetries among such speakers, such that speakers dominant in Spanish might impose a formal equivalence on the Spanish and Q’eqchi’ constructions, while speakers dominant in Q’eqchi’ might maintain, or even

¹¹ On these, and related points, see Kockelman (2016b, 2016c) and Carruthers (2017).

exploit, a functional difference. Given all these other considerations, however, including the fact that *chik* was never displaced by *mas*, I suspect this function was unstable and thus tended to be assimilated to *mas* as magnitude (qua 'very' or 'much'). In short, a form (Spanish *más*) that indicates direction (more vs. less), is indifferent to magnitude (*a little more* vs. *a lot more*), and has a strong contextual presupposition (*more than* some X), maintained its form (Q'eqchi' *mas*) and changed its function. In particular, it lost the presupposition, it no longer indicated direction (*very much more* or *very much less*), it came to specify magnitude (*much more* and *much less* vs. *more* and *less*), and it came to modify most constituent types in such a way: not just adjectives and adverbs, but also NPs, VPs, and quantities.

In line with these facts, it is likely that Stoll was working at the spatial and temporal origins of *mas* usage. In part, this is because he conducted most of his research in Cobán, the capital city of Alta Verapaz, and surrounding towns such as San Juan Chamelco, where the so-called prestige dialect of Q'eqchi' is spoken. This area was also the center of foreign immigration and economic liberalization in Alta Verapaz during the end of the nineteenth century, when Stoll conducted his fieldwork. Around this same time many Q'eqchi' speakers were removed from their land (which was appropriated for coffee cultivation) and forced to work on coffee plantations, or government projects such as building roads. This initiated 100 years or so of displacement and flight, as speakers of Q'eqchi' moved north, into the less-populated lowlands of Alta Verapaz, and then into the Petén, and neighboring countries such as Belize. This movement was amplified by the Guatemalan civil war (1960–1996), and the radical dislocation of indigenous people that it brought about. Stoll was thereby probably working at the beginning of a linguistic trend that would come to spread very far given the migration of Q'eqchi' speakers, and the increase in their population, that occurred during the twentieth century. Indeed, Q'eqchi' is now the third largest of some twenty-four Mayan languages, with upwards of a million speakers. It has the largest percentage of monolinguals, and its speakers are the fastest growing and geographically most extensive population of any ethnic group in Guatemala.

In the midst of this relatively unremarked-upon semantic and pragmatic transformation of a linguistic form, and the radical geographic expansion and population increase of speakers, *mas* came to play a seemingly equivalent—but actually radically nonequivalent—role in a frequently misanalyzed comparative construction. In particular, whereas the Q'eqchi' *mas . . . chiru* construction is not at all equivalent to the Spanish *más . . . que* construction, linguists have analyzed them as identical constructions, and native speakers often use one to translate the other. Although the semantic and pragmatic differences between these constructions are quite substantial, they are difficult to notice, or articulate, for several reasons. First, linguists and speakers

are primed to see the two constructions as semantically equivalent given their superficial formal equivalence. In some sense, an iconicity between two signs, one of which is an interpretant of the other, primes speakers to see the constructions as having similar objects. One construction looks like a calque of the other, or is apperceived (Boas 1889; and see Lucy 1993 and Silverstein 1981) on the model of the other, as per the opening discussion of example (1). Second, as just discussed, the differences in meaning are small enough, and the kind of meaning per se is slippery enough, for false equivalence to be overlooked by speakers in actual discourse. Third, while one might expect this false equivalence to give rise to semantic change, leading to real equivalence over time, this did not happen because, language-internally, the key forms are mediated by radically different grammatical patterns. In some sense, the mediating force of discursive practices is not enough to overcome the mediating inertia of grammatical structures.¹² Finally, this formal resemblance between the two otherwise distinct comparative constructions enabled an important point of passage between the two languages, one particularly useful in an inherently comparative/contrastive world of contact: different languages, religions, values, technologies, social relations, items of exchange, and so forth. Because of the morphosyntax, semantics, and pragmatics of such constructions, it was not just easy for speakers of Q'eqchi' to borrow Spanish *más* (more) as *mas* (very, much), and thereby transform a form that indicated direction into one that indicated magnitude, it was also easy for speakers to overlook, ignore, utilize, or even exploit, the difference.

¹² Contrast the radically distinct function and distribution of *chik* in Q'eqchi' (and *más* in Spanish) with the function and distribution of *mas* in Q'eqchi' (and *mu*y and *mucho* in Spanish).

REFERENCES

- ARISTOTLE. 2001. *Categories*. The Basic Works of Aristotle, ed. Richard McKeon, 7–39. New York: Modern Library.
- BERENDT, C. H., ed. 1875. *Arte de Lengua Cacchi para Bien Comun*. Cobán, Guatemala. Berendt-Brinton Linguistic Collection, Rare Book & Manuscript Library, University of Pennsylvania.
- BOAS, FRANZ. 1889. On alternating sounds. *American Anthropologist* 2:47–53.
- BURKITT, ROBERT. 1902. Notes on the Kekchí language. *American Anthropologist* 4:441–63.
- . 1905. A Kekchí will of the 16th century. *American Anthropologist* 7:271–94.
- BURKITT, ROBERT, AND TIBURTIUS KAÁL. 1920. The Hills and the Corn. A Legend of the Kekchí Indians of Guatemala Put in Writing by the Late Tiburtius Kaál and Others and Translated into English. University of Pennsylvania Anthropological Publications 3(2).
- CARRUTHERS, ANDREW. 2017. Grading qualities and (un)settling equivalences: Undocumented migration, commensuration, and intrusive phonosics in the Indonesia-Malaysia borderlands. *Journal of Linguistic Anthropology* 27(2):124–50.
- CAMPBELL, LYLE. 1987. Syntactic change in Pipil. *IJAL* 53:253–80.
- DAYLEY, JON P. 1985. *Tzutujil Grammar*. University of California Publications in Linguistics 107. Berkeley and Los Angeles: University of California Press.

- DIXON, ROBERT M. W. 2012. *Basic Linguistic Theory*, vol. 3: Further Grammatical Topics. Oxford: Oxford University Press.
- ENGLAND, NORA C. 1983. *A Grammar of Mam, a Mayan Language*. Austin: University of Texas Press.
- ESTRADA MONROY, AUSTÍN. 1979. *El Mundo K'ekchi' de la Vera-Paz*. Guatemala: Editorial del Ejército.
- . 1990. *Vida esotérica Maya-K'ekchi'*. Guatemala: Edición Cultural.
- EACHUS, FRANCIS, AND RUTH CARLSON. 1980. *Aprendamos Kekchi'*. Guatemala: SIL Publication.
- FOX, DAVID G. 1987. *Lecciones Elementales en Quiché*. Guatemala: SIL Publication.
- FREEZE, RAY. 1976. Possession in K'ekchi' (Maya). *IJAL* 42:113–25.
- . 1980. A petición of 1619 in K'ekchi' (Maya). *Tlalocan VIII*:111–29.
- HILL, JANE H., AND KENNETH C. HILL. 1986. *Speaking Mexicano*. Tucson: University of Arizona Press.
- HULL, KERRY M., AND MICHAEL D. CARRASCO, ed. 2012. *Parallel Worlds: Genre, Discourse, and Poetics in Contemporary, Colonial, and Classic Maya Literature*. Boulder: University of Colorado Press.
- KARTTUNEN, FRANCES. 2000. Approaching the semimillennium: Language contact in Latin America. Uto-Aztecan: Structural, Temporal and Geographic Perspectives. *Papers in Memory of Wick R. Miller by the Friends of Uto-Aztecan*, ed. Eugene H. Casad and Thomas L. Willett, 387–409. Hermosillo: Unison.
- KENNEDY, CHRISTOPHER. 2007. Modes of comparison. *Papers from the 43rd Annual Meeting of the Chicago Linguistics Society*, ed. M. Elliott, J. Kirby, O. Sawada, E. Staraki, and S. Yoon, 141–65.
- KENNEDY, CHRISTOPHER, AND LOUISE McNALLY. 2005. Scale structure, degree modification, and the semantics of gradable predicates. *Language* 81(2):345–81.
- KLEIN, EWAN. 1980. A semantics for positive and comparative adjectives. *Linguistics and Philosophy* 4:1–45.
- KOCKELMAN, PAUL. 2010. *Language, Culture, and Mind: Natural Constructions and Social Kinds*. Cambridge University Press.
- . 2016a. The Chicken and the Quetzal: Incommensurate Ontologies and Portable Values in Guatemala's Cloud Forests. Durham, NC: Duke University Press.
- . 2016b. Grading, gradients, degradation, grace, part 1: intensity and causality. *Hau: Journal of Ethnographic Theory* 6(2):389–423.
- . 2016c. Grading, gradients, degradation, and grace, part 2: phenomenology, materiality and cosmology. *Hau: Journal of Ethnographic Theory* 6(3):337–65.
- LEVY, PAULETTE. 2004. Adjectives in Papantal Totonac. *Adjective Classes: A Cross-Linguistic Typology*, ed. R. M. W. Dixon and A. Y. Aikhenvald, 147–76. Oxford: Oxford University Press.
- LUCY, JOHN. 1993. *Reflexive Language: Reported Speech and Metapragmatics*. Cambridge: Cambridge University Press.
- MATTHEWSON, LISA. 2004. On the methodology of semantic fieldwork. *IJAL* 70(4):369–415.
- PEARSON, HAZEL. 2009. How to do comparison in a language without degrees: a semantics for the comparative in Fijian. *Proceedings of Sinn und Bedeutung 14*, ed. Martin Prinzhorn, Viola Schmitt, and Sarah Zobel, 356–72. Vienna.
- PINKERTON, SANDRA, ed. 1976. *Studies in K'ekchi'*. *Texas Linguistics Forum* 3. Austin: Department of Linguistics, University of Texas at Austin.
- RETT, JESSICA. 2018. The semantics of many, much, few, and little. *Language and Linguistic Compass* 12:1–18.
- SAM JUAREZ, M., E. CHEN CAO, C. XAL TEC, D. CUC CHEN, AND P. TIUL POP. 1997. *Diccionario Q'eqchi'*. Antigua, Guatemala: Proyecto Lingüístico Francisco Marroquín.

- SAPIR, EDWARD. 1985 [1944]. Grading: a study in semantics. Selected Writings in Language, Culture, and Personality, ed. David G. Mandelbaum, 122–49. Berkeley: University of California Press.
- SAWADA, OSAMU. 2009. Pragmatic aspects of implicit comparison: an economy-based approach. *Journal of Pragmatics* 41:1079–1103.
- SCHWARZSCHILD, ROGER. 2008. The semantics of comparatives and other degree constructions. *Language and Linguistic Compass* 2:1–24.
- SEDAT, WILLIAM. 1976 [1955]. *Nuevo Diccionario de Las Lenguas K'ekchi' y Española*. Reprint. Guatemala: SIL Publication.
- SHAW, MARY, ed. 1971. *According to Our Ancestors: Folk Tales from Guatemala and Honduras*. SIL Publication 32. Norman: University of Oklahoma.
- SILVERSTEIN, MICHAEL. 1981. The limits of awareness. Sociolinguistic Working Paper 84. Austin: Southwest Educational Development Laboratory.
- STASSEN, LEON. 1985. *Comparison and Universal Grammar*. Oxford, New York: Basil Blackwell.
- STEWART, STEPHEN O. 1980. *Gramática Kekchí*. Guatemala: Editorial Académica Centro Americana.
- STOLZ, CHRISTEL, AND THOMAS STOLZ. 1995. Spanisch-amerindischer sprachkontakt: Die hispanisierung. *Iberoamericana* 19(2/3, 58/59):5–42.
- STOLL, OTTO. 1896. *Die Sprache der K'e'kchi-Indianer*. Paderborn, Germany: Verlag.
- SUÁREZ, JORGE A. 1983. *The Mesoamerican Languages*. Cambridge: Cambridge University Press.
- THOMAS, GUILLAUME. 2018. Underspecification in degree operators. *Journal of Semantics* 35:43–93.
- ULTAN, RUSSELL. 1972. Some features of basic comparative constructions. *Working Papers on Language Universals* 9, 117–62. Stanford University.
- WEEKS, JOHN M. 1997. Subregional organization of the sixteenth-century Q'eqchi' Maya, Ita Verapaz, Guatemala. *Revista Hispánica de Antropología Americana* 27:59–93.
- WHEELER, SAMUEL. 1972. Attributives and their modifiers. *Noûs* 6:310–34.