

## **UC Berkeley**

### **Survey Reports, Survey of California and Other Indian Languages**

#### **Title**

The Nature of the Standard of Comparison in San Lucas Quiaviní Zapotec Comparatives

#### **Permalink**

<https://escholarship.org/uc/item/5f3915zv>

#### **Author**

Galant, Michael

#### **Publication Date**

2004

# The Nature of the Standard of Comparison in San Lucas Quiavini Zapotec Comparatives<sup>1, 2, 3</sup>

MICHAEL GALANT

*California State University, Dominguez Hills*

## 1. Introduction

Consider the following comparative sentences in San Lucas Quiavini Zapotec (SLQZ):<sup>4</sup>

- (1) Zyèeiny-ru' li'ebr b-zìii' Li'eb **cah** Rrodriegw.  
MUCH<sup>5</sup>-ER<sup>6</sup> book perf-buy Felipe **than** Rodrigo  
'Felipe bought more books than Rodrigo.'
- (2) Nsehe's-ru' r-uhny Beed zêêi'ny **cah nih** r-ralloh Lia Paamm.  
fast-ER hab-do Pedro work **than** hab-think Ms. Pam  
'Pedro works faster than Pam thinks (he does).'
- (3) Zyuàa'll-ru' Lia Oli'eb **loh** Rrodriegw.  
tall-ER Ms. Olivia **than** Rodrigo  
'Olivia is taller than Rodrigo.'

In each of these sentences, the SLQZ expression corresponding to English *than* - that is, the expression used to introduce the standard of comparison - is different. The goal of this paper is to provide an analysis of these various expressions.

---

<sup>1</sup> I would like to thank my primary SLQZ consultant, Rodrigo García, for providing me with this data. I would also like to thank Pamela Munro for her input about the issues I discuss here as well as for proofreading my SLQZ spelling. Any errors are of course my own responsibility.

<sup>2</sup> Unless otherwise stated, the SLQZ data taken from Galant (1998) or from the collective field notes of the UCLA SLQZ group 1994-1999.

<sup>3</sup> SLQZ is spoken in southern Mexico, mostly in the state of Oaxaca, and belongs to the Valley Zapotec group within Zapotecan family, which in turn belongs to the Otomomanguean stock.

<sup>4</sup> In this first section, I gloss any word or expression that naively occurs in the same slot as English *than* as 'than'. Later, I adjust these glosses to reflect the discussion at hand. Note that there are also constructions in which an SLQZ word seems to be translatable as 'than' but which due to space considerations are not discussed here.

<sup>5</sup> I gloss *zyèeiny* as MUCH, although it corresponds to either *much* or *many* in English, as long as the noun it modifies is non-liquid, non-gas. See Galant (1998) for more details regarding this quantifier.

<sup>6</sup> I gloss the suffix *-ru* as 'ER' meaning that this is the morpheme in comparisons of inequality that roughly means 'more'. For a more detailed analysis of this morpheme, see Galant (1998).

## 2. The particle *cah*

What is perhaps the most common comparative particle in SLQZ is *cah*, which can be followed by a variety of overt constituent types. I discuss instances in which *cah* is not followed by an overt clausal predicate, a construction which I call Comparative Ellipsis (CE), in §2.1, and in §2.2, I discuss instances in which *cah* is followed by an overt clausal predicate.

### 2.1 Comparatives which *cah* is not followed by an overt clausal predicate

First I present various constituent types not containing an overt clausal predicate that may follow the particle *cah*, and then I discuss the nature of this construction.

#### 2.1.1 Types of constituents that may follow *cah* in this type of construction

Some constituent types that may follow the particle *cah* in are noun phrases, prepositional phrases, and adverbs.

##### 2.1.1.1 *Cah* followed by a noun phrase

A noun phrase that follows *cah* may be either a lexical noun, as in (4) and (5), or an independent pronoun,<sup>7</sup> as in (6):

- (4) R-zh:ùu'nny-ru' Li'eb **cah** Rrodriiegw.  
 hab-run-ER Felipe than Rodrigo  
 'Felipe runs more than Rodrigo.'
- (5) Nsehe's-ru' r-guieb ra bùunny wnnààa' **cah** ra zhyàa'p.  
 fast-ER hab-sew pl. person woman than pl. girl  
 'The women sew faster than the girls.'
- (6) Zyèeiny-ru' bx:àady b-da'uw-a' **cah** liu'.  
 MUCH-ER chapulin perf-eat-1sg than you.inf.sg.  
 'I ate more chapulines than you.'

In terms of grammatical function, a noun phrase that follows *cah* may be a subject, as in (7) and (8), a direct object, as in (9) and (10), an indirect object, as in (11) and (12), a locative, as in (13) and (14), or a directional, as in (15).<sup>8</sup>

[subject]

- (7) Connte'enn-ru' n-u' Jwaany **cah** Wsee.  
 content-ER neut-be Juan than José  
 'Juan is more content than José.'

<sup>7</sup> See Munro, López, et al. (1999) for a discussion of SLQZ pronoun morphosyntax.

<sup>8</sup> In SLQZ, case is not overtly marked on lexical NP's or independent pronouns, so I define the syntactic functions of NP's that follow *cah* [in boldface] as being the same as the NP's preceding *cah* whose functions they parallel [underlined]. There are cases in which the syntactic function of the NP following *cah* is ambiguous, since in such cases, there is more than one NP in the main clause whose function it could parallel, but in each case I have only indicated one interpretation, for the sake of illustrating a particular grammatical function. Also, note that some dative, locative and directional expressions in SLQZ do consist of an appropriate preposition followed by an NP, some examples of which are included below in the section on PP's.

- (8) Zyèeiny-ru' me's b-zèhnny cah studya'ann.  
MUCH-ER teacher perf-arrive than student  
'More teachers arrived than students.'

[direct object]

- (9) Zyèeiny-ru' bèe'cw w-nnàa-a' cah bu'uhdy.  
MUCH-ER dog perf-see-1sg than chicken  
'I saw more dogs than chickens.'

- (10) Zyèeiny-ru' mu'ully r-àa'p-ëng cah amiegw.  
MUCH-ER money hab-have-3sg than friend  
'He has more money than friends.'

[indirect object]

- (11) Zyèeiny-ru' rrega'll b-dêi'dy-a' Li'eb cah Rrodriiegw.  
MUCH-ER present perf-give-1sg. Felipe than Rodrigo  
'I gave more presents to Felipe than to Rodrigo.'

- (12) Zyèeiny-ru' rrega'll r-dêi'dy Rrodriiegw ra studya'ann cah nàa'.  
MUCH-ER present hab-give Rodrigo pl. student than 1sg  
'Rodrigo gives more presents to the students than to me.'

[locative]

- (13) Zyèeiny-ru' ra rye'enngw n-u' yu' cah apartame'enn.  
MUCH-ER pl. American neut-be house than apartment  
'More Americans live in a house than in an apartment.'

- (14) Zyèeiny-ru' (ra) wnaàa' n-u' Lohs Aa'nngl cah Sann Lu'uc.  
MUCH-ER pl. woman neut-be Los Angeles than San Lucas  
'There are more women in Los Angeles than in San Lucas.'

[directional]

- (15) Zyèeiny-ru' bùunny a gweh Las Vegas cah Ldùu'ah.  
MUCH-ER person already perf.go Las Vegas than Oaxaca  
'More people have gone to Las Vegas than to Oaxaca.'

#### 2.1.1.2 *Cah* followed by a prepositional phrase

The particle *cah* can also be followed by a prepositional phrase, whether the preposition is native (16) or borrowed (17):

[native preposition]

- (16) Zyèeiny-ru' bchiilly b-cwàà-a' loh Rrodriegw cah loh Li'eb.  
MUCH-ER knife perf-throw-1sg face<sup>9</sup> Rodrigo than face Felipe  
'I threw more knives to Rodrigo than to Felipe.'

[borrowed prepositions]

- (17) Jo'oz-ru' n-yieny-ëng cwëhnn dii'zh rée' cah sihngg dii'zh-ag.  
good-ER neut-sound-3sg with word this than without word this  
'This sounds better with this word than without this word.'

### 2.1.1.3 *Cah* followed by an adverb

Lastly, *cah* may be followed by an adverb, as in (18) and (19):

- (18) Pi'tsah za'c-ru' b-da'uw-a' nah cah chi'cy.  
pizza good-ER perf-eat-1sg now than then  
'I ate better pizza this time than last time.'
- (19) Xchih-ru' w-ta'isy-a' nazh:ih cah nài'.  
long-ER perf-sleep-1sg today than yesterday  
'I slept more today than yesterday.'

## 2.1.2 Discussion of this construction

Here I classify this construction, discuss the nature of *cah*, and analyze the syntax involved.

### 2.1.2.1 Classification of this construction

In all of the cases presented in §2.1.1, what follows *cah* is a single, non-predicate constituent of what could be a covert clause paralleling the main clause. Such constructions are roughly compatible with a class of "particle comparatives" (Stassen, 1985), characterized as follows:

- (20) Characterization of Stassen's (1985) particle comparatives:
- a. the standard of comparison is introduced by some invariant element, called a particle
  - b. the NP constituent that follows the particle has derived case - it receives the same case as the NP in the main clause whose function it parallels

Note that since lexical NP's and independent pronouns in SLQZ do not show overt morphological case, there is no overt morphological proof that this construction in SLQZ actually fits Stassen's category of particle comparatives. Nevertheless, given the parallelism in syntactic function between the NP's in the main clause and the standard of comparison in SLQZ, it seems natural to include this construction in Stassen's category of particle comparatives after all.

---

<sup>9</sup> From this point on, I gloss *loh* as 'face', since that is perhaps its most literal translation, although cf. Lillehaugen (2003).

A complication is that Stassen does not discuss cases in which something other than an NP follows the comparative particle. However, it seems natural to expand Stassen's category of particle comparatives to include any comparatives in which what follows is an adjunct or argument that parallels a corresponding constituent in the main clause in syntactic function.

I will simply refer to this expanded category of comparatives as Comparative Ellipsis.

### 2.1.2.2 What is *cah*?

Here I discuss both the potential origin of *cah* and its synchronic syntactico-semantic status.

#### 2.1.2.2.1 Arguments in favor of *cah* being a Spanish borrowing

According to Munro, Lopez, et al. (1999), *cah* is a borrowing from Spanish, namely *que*, a claim supported by several arguments.

First of all, *cah* and *que* are fairly similar in phonetic shape. In fact, *cah* occurs in free variation with *queh*, whose phonetic shape is even more similar to Spanish *que*.

Secondly, the equivalent to *cah* in the Spanish translation of all of the sentences given so far is *que*, as seen in the following two examples:

- (21) Nsehe's-ru' r-guieb ra bùunny wnnààa' **cah** ra zhyàa'p.  
'The women sew faster than the the girls.'  
Las mujeres cosen más rápido **que** las muchachas. [Spanish]
- (22) Zyèeiny-ru' bx:àady b-da'uw-a' **cah** liu'.  
'I ate more chapulines than you.'  
Yo comí más chapulines **que** tú. [Spanish]

In fact, in addition to free variation between *cah* and *queh*, two other variants freely vary with these two – *cahno* and *quehno* – which both seem parallel to the Spanish variant *que no* which occurs in some dialects:

- (23) Zyèeiny-ru' rrega'll b-dêi'dy-a' Li'eb **cah** Rrodriegw.  
'I gave more presents to Felipe than to Rodrigo.'
- (24) Zyèeiny-ru' rrega'll b-dêi'dy-a' Li'eb **cahno** Rrodriegw.  
(25) Zyèeiny-ru' rrega'll b-dêi'dy-a' Li'eb **queh** Rrodriegw.  
(26) Zyèeiny-ru' rrega'll b-dêi'dy-a' Li'eb **quehno** Rrodriegw.
- (27) Le di más regalos a Felipe **que no** a Rodrigo. [ok in some Span. dialects]

Third, if *cah* were a native SLQZ word, and in particular, a native SLQZ preposition, it could not be followed by an independent pronoun - instead it would be followed by clitic pronouns, as seen with the native SLQZ preposition *de 'ts* in the following sentences, which must be followed by a clitic pronoun (28), rather than an independent pronoun (29):

- (28) De'ts-a' zuu me'es.  
back-1sg neut.stand table  
'The table is behind me.'
- (29) \*Dehts nàa' zuu me'es.  
[nàa' is the 1<sup>st</sup> sg. independent pronoun]

Hence, *cah* cannot be a native SLQZ preposition, although it could be a non-native preposition, since pronominal complements of SLQZ non-native prepositions are realized as independent pronouns, as in (30), not as clitics:

- (30) Z-yàall-a' cēhnn la'anng.  
def-come-1sg with 3sg  
'I came with him.'

Since Spanish *que* is not usually analyzed as a preposition, but rather, as a conjunction,<sup>10</sup> it would be desirable to prove that SLQZ *cah* is a conjunction, rather than a preposition.

For one thing, note that there are cases of conjunctions borrowed from Spanish, not only prepositions, thus showing that *cah* could in principle be a conjunction:

*cēhmm* [<Sp. *como*]<sup>11</sup> = 'as, since, because'

- (31) Cēhmm r-ap-ěng mùuully,  
since hab-have-3sg money...  
'Since he has money,...'  
[cf. Sp. *Como tiene dinero,...*]

*déhsdeh* [<Sp. *desde*] = 'from the time that'

- (32) Désdeh b'ichi'ih n-a'c-a' r-inàall-a' x:-ta'ad-a' dàany.  
since small neut-be-1sg hab-go.with-1sg poss-father-1sg mountain  
'From the time that I was little I went with my father to the mountain.'

*pahr* [<Sp. *para*] = 'to, for'

- (33) Pahr cye't bùunny n-àa pelo't-ag.  
for pot.play person neut-be ball-this  
'This ball is for people to play with.'

Moreover, there are actually specific arguments against *cah* being a preposition in SLQZ. To start with, prepositions in SLQZ can only take an NP complement, not a PP complement, but we saw above, in (16)-(17), that *cah* can be followed by a PP. In addition, SLQZ prepositions can pied-pipe, as seen below in (34)-(36), whereas *cah* cannot:

<sup>10</sup> I use the word "conjunction" here to refer collectively to all of these expressions which might be traditionally regarded as subordinators and those which might be traditionally regarded as coordinators. Cf. Galant (1998) for a further discussion of this matter.

<sup>11</sup> Etymology, translation, and examples (but not glosses) for this sentence and the following two are from Munro, López, et al. (1999).

- (34) Tu pahr b-ziii' Li'eb guehs?  
who for perf-buy Felipe pot  
'Who did Felipe buy a pot for?'
- (35) Tu cwe'eh zugwa'ah Jwaany?<sup>12</sup>  
who side is.standing Juan  
'Who is J. standing next to?'
- (36) Xi cuahnn b-cwààa' Jwaany ca'rt?  
what with perf-write Juan card  
'What did J write the card with?'

Lastly, native SLQZ preps can be stranded as long as the anaphoric pronoun *nii*' is suffixed to them, as in (37), but *cah* may not be stranded:

- (37) Tu zugwa'ah Jwaany cwe'eh-nii'?  
who is.standing Juan side-anaph  
'Who is J. standing next to?'

Hence, it is reasonable to conclude that *cah* is not a preposition, just as Spanish *que* is not, thus strengthening the claim that *cah* is a borrowed form of Spanish *que*.

#### 2.1.2.2.2 Arguments against *cah* being a Spanish borrowing

Despite these arguments in favor of *cah* being a borrowing of Spanish *que*, there are some potential problems with this analysis.

Firstly, *cah* is not phonetically identical to, although it is similar to, Spanish *que*. It would be more plausible to suggest this borrowing, despite the difference in phonetic shape, if there were other clear cases of borrowings of Spanish /e/ to SLQZ /a/, but there don't seem to be any.

Furthermore, although *cah* and *queh* are apparently in free variation, *cah* seems much more common in the data than *queh*. If they are truly the same underlying element, it is suspicious that one occurs much more often than the other.

Moreover, although there is some overlap in distribution with respect to the use of *que* in Spanish comparatives and *cah* in SLQZ comparatives, this overlap is incomplete—there are comparatives in SLQZ that use *cah* for which the equivalent in Spanish does not use *que*, as discussed in section 1.2 below.

Note also that *cah* is not used in non-comparative SLQZ sentences that correspond to non-comparative Spanish sentences that use *que*:

- (38) Nnah Li'eb zyuàa'll-a'.  
said Felipe tall-1sg  
'Felipe said that I'm tall.'
- (39) Felipe dijo **que** soy alto. [Spanish]

---

<sup>12</sup> This example as well as the following two (other than glosses) were very generously given to me by Pam Munro.



- (40) R-rallù-a' n-za'c n-àa Li'eb.  
 hab-think-1sg neut-good neut-be Felipe  
 'I think Felipe's nice.'
- (41) Pienso que Felipe es simpático. [Spanish]
- (42) R-càa'z-a' liu' y-gu'ty-u' bzihny.  
 hab-want-1sg 2.inf.sg. irr.-kill-2sg. mouse  
 'I want for you to kill the mouse.'
- (43) Quiero **que** mates al ratón.

Finally, although *cah* freely varies with *queh* in comparative sentences in SLQZ, there are other cases of *queh* in SLQZ, such as in the expression *dehqueh*, that are definitely borrowed from Sp. *que* but which cannot alternate with *cah*:

- dehqueh* [but presumably not *dehcah*?] [*<Sp. de que*]<sup>13</sup>
- (44) B-èi'ny-ëng combenseer n-àa' dehqueh g-a'c-a' me's.  
 perf-do-3sg convince neut-be that pot-be-1sg teacher  
 'He convinced me to become a teacher.'
- (45) N-àann Rro'd dehqueh Gye'eihlly y-tòò' x:-ca'rr-nii'.  
 neut-know Rodrigo that Mike perf-sell poss-car-anaph  
 'Rodrigo knows that Mike will sell his car.'

#### 2.1.2.2.3 Conclusion about the status of *cah* as a borrowing of Spanish *que*

Given that there are good arguments for and against the claim that *cah* is a borrowing of Spanish *que*, it appears that further research is necessary in order to decide this issue definitively.

Further evidence in favor of *cah* as a borrowing of Spanish *que* could include: (i) historical Zapotec data showing a similar construction in which some element phonetically similar to Spanish *que* is used either to the complete exclusion of, or much more often than, an element phonetically similar to modern SLQZ *cah*; and/or (ii) clearcut examples of Spanish borrowings in SLQZ in which a Spanish /e/ has been borrowed as an SLQZ /a/.

On the other hand, support for a native source for *cah*, or a syncretism of a native source with Spanish *que*, would be suggested by instances, in SLQZ, in other modern Zapotec languages and/or in historical variants of Zapotec, of lexical items phonetically similar to SLQZ *cah* with a syntactic function, as well as semantic import, if any,<sup>14</sup> compatible with their being a source or cousin of SLQZ *cah*.

#### 2.1.2.3 Syntax of constituent introduced by *cah*

I propose that the constituent introduced by *cah* in SLQZ comparatives without any overt clausal predicate is actually clausal in nature, albeit with most elements covert, and sentences

<sup>13</sup> Etymology, translations, and examples, but not the gloss, from Munro, López, et al. (1999).

<sup>14</sup> I discuss what such a syntactico-semantic role should be below.

with such constituents have a structure along the lines of one sub-type of Stassen's (1985) "conjoined comparatives" involving adversative coordination.

### 2.1.2.3.1 Stassen's conjoined comparatives (1985)

Stassen's conjoined comparatives are exemplified in the following examples (pp. 184-185):

ABIPON:

- (46) Negetink chik naâ , oagan nihirenak la naâ.  
dog not bad, yet tiger already bad  
'A tiger is more ferocious than a dog.'

DAKOTA:

- (47) Mastingcala king waste, tka singthela king sice.  
rabbit the good but rattle-snake the bad  
'The rabbit is better than the rattle-snake.'

In each of these sentences, the element that conjoins the two clauses is also used to conjoin clauses in non-comparative sentences, as seen in (48) and (49), respectively:

ABIPON:

- (48) Eneha klatum-keen evenek, oagan netachkaik.  
he maybe beautiful yet bashful  
'He is beautiful, but nevertheless bashful.'

DAKOTA:

- (49) 'Iyaye-waci , tka oyuspapi.  
want-go-3SG but catch-3SG.acc.-3pl  
'He wanted to flee, but they caught him.'

Stassen (p.44) further subclassifies the conjoined comparative sentences in these two languages into the two following types:

- (50) conjoined comparatives in which the two clauses "contain *antonymous predicates*" (Stassen's type 5A), schematically: A is X, B is -X (-X is antonym to X)
- (51) conjoined comparatives in which the two clauses "exhibit a *positive-negative polarity*" (Stassen's type 5B), schematically: A is X, B is not X

The Abipon comparative (46) is an example of a conjoined-comparative exhibiting positive-negative polarity, since the same predicate, *naâ* 'bad', is used in both clauses, the difference being that the first clause also has the negative element *chik* 'not'. On the other hand, the Dakota comparative (47) is an example of a conjoined-comparative exhibiting antonymous predicates, since the predicate *waste* 'good', in the first clause, has the opposite denotation of the predicate *sice* 'bad', in the second clause.

### 2.1.2.3.2 Application of Stassen to SLQZ *cah* comparatives without overt clausal predicate

Even though SLQZ comparatives with *cah* not followed by an overt clausal predicate may be classified, on the surface, as instances of particle comparatives, I propose that they are structurally conjoined comparatives, and since the constituent introduced by *cah* is not followed by any overt predicate paralleling the compared predicate in the main clause, it would be difficult to reconstruct a covert antonymous predicate, so I will assume that SLQZ has the subtype of conjoined comparative in which there is positive-negative polarity between the two clauses.

Therefore, the following SLQZ sentence in (7), repeated here as (52), may be thought to have the schematic interpretation given in (53):

(52) Connte'enn-ru' n-u' Jwaany cah Wsee.  
content-ER neut-be Juan than José  
'Juan is more content than José.'

(53) Juan is content, but not José.

The claim that the second clause in such comparatives is covert has support in non-comparative structures exhibiting the phenomenon of stripping deletion:

Stripping:

(54) phenomenon in which all but one contrastive constituent of the second clause, plus optionally a polarity-indicating element such as *also* or *but*, are covert

Stripping is exemplified in the schematic interpretation given for (52) in (53) as well as in the following sentence in English:

(55) Pam is tall, but not Bill.

Furthermore, Stassen himself proposes a connection between particle comparatives and conjoined comparatives:

Regarding the...class of Particle Comparatives,...their occurrence must be understood on the basis of a diachronic process of syntactization....Furthermore,...the coordinate status of the comparative clause in these languages is gradually undermined by the operation of a downgrading process. As a result, the comparative construction loses its semantic transparency to a greater or lesser extent. The comparative in these languages may thus eventually be reanalysed as a new, independent construction type. Alternatively, the comparative construction may come to be fitted into the mould of a construction type that already exists in the language...For some languages, "a coordinate input-structure consisting of two positive sentences seems to be the appropriate hypothesis. In other languages, the coordinate input-structure must be thought of as being more complex. Some of the languages at issue seem to have a negative sentence in their input-sentence; this may (but does not have to) lead to the incorporation of the negative element into the comparative particle. (p. 221).

One potential problem is the fact that although stripping does occur in non-comparative sentences in SLQZ, the word *cah* does not occur in such constructions, but rather, the Spanish loan word *pehr* is used, as shown in the following example:

- (56) R-rallù-a' n-za'c n-àa Li'eb pehr Usee tèe'bag.  
 hab-think-1sg neut-nice neut-be Felipe but José not  
 'I think Felipe's nice, but not José.'

Perhaps *cah* or some other form containing the same morpheme was used historically before the introduction of *pehr*. Alternatively, it is possible that this type of ellipsis was not possible in non-comparative sentences in SLQZ before contact with Spanish. Data from other modern Zapotec languages and from historical Zapotec documents may shed further light on this matter.

Despite this potential problem, the fact that *cah* has two allomorphs which incorporate Spanish *no*, namely *cahno* and *queno*, as seen above in (24) and (26), does lend support for my claim that the *cah* constructions studied in this section involve conjoined clauses with positive-negative polarity. Further support for this polarity would be provided by examples where negative polarity items are licensed after *cah*, suggesting a direction for future research.

## 2.2 Comparatives in which *cah* is followed by an overt clausal predicate: Null Complement Anaphora and Comparative Deletion<sup>15</sup>

SLQZ also has comparatives in which *cah* is followed by a clausal predicate. In such cases, there must be an intervening *nih*, a relative pronoun<sup>16</sup> that also occurs in non-comparative sentences:

- (57) B-zèhny bùunny **nih** n-u' Ldùu'ah.  
 perf-arrive person rel. neut-be Oaxaca  
 'A man who lives in Oaxaca arrived.'
- (58) Li'ebr **nih** b-dêêi'dy Lieeb studya'ann n-u' rée'.  
 book rel perf-give Felipe student neut-be here  
 'The book that Felipe gave to a student is here.'

### 2.2.1 Data

In the simplest case of *cah* followed by *nih*, *nih* follows *cah* directly:<sup>17</sup>

- (59) Nsehe's-ru' r-uhny Beed zêêi'ny **cah nih** r-ralloh Lia Paamm.  
 fast-ER hab-do Pedro work than rel hab-think Ms. Pam  
 'Pedro works faster than Pam thinks (he does).'
- (60) Zyèeiny-ru' ca'rr b-dii'by Li'eb **cah nih** r-zi'llàa'z-u'.  
 MUCH-ER car perf-wash Felipe than rel hab-think-2sg  
 'Felipe washed more cars than you think (he did).'

<sup>15</sup> SLQZ also allows Comparative Subdeletion, which due to space limitations I do not discuss here. I refer the interested reader to Galant (1998) for the relevant data.

<sup>16</sup> It appears in certain other constructions in which it is less obviously a relative pronoun, but it does appear to primarily function as a relative pronoun.

<sup>17</sup> In amount comparisons, there is overt material which can intervene between *cah* and *nih*, but due to space limitations I do not discuss such constructions here. I refer the interested reader to Galant (1998) for the relevant data.

The two preceding sentences are examples of null complement anaphora, but *cah nih* may also be used with comparative deletion, a construction in which the standard of comparison contains an almost complete clause within the standard of comparison - the only covert element is the constituent that parallels the head of comparison in the main clause:

- (61) Zyèeiny-ru' li'ebr b-ziii' Beed **cah nih** b-to:o' Lia Paamm.  
MUCH-ER book perf-buy Pedro than rel perf-sell Ms. Pam  
'Pedro bought more books than Pam sold.'
- (62) Zyèeiny-ru' ca'rr b-dii'by Li'eb **cah nih** b-dii'by Rrodriegw.<sup>18</sup>  
MUCH-ER car perf-wash Felipe than rel perf-wash Rodrigo  
'Felipe washed more cars than Rodrigo washed.'

### 2.2.2 Analysis of *cah nih*

It is worthwhile to explore whether the *cah* found in the *cah nih* constructions is the same as the *cah* discussed earlier. There is evidence both for a unified analysis and a split analysis.

#### 2.2.2.1 Evidence in favor of a unified analysis

There are several points in favor of a unified analysis for both types of constructions, some of which are: (1) both words occur only in comparatives, (2) both words freely vary with *queh* and are plausibly both a borrowed form of Spanish *que*, (3) both words are used to introduce a standard of comparison, (4) neither instance of *cah* can be pied-piped or stranded, hence, neither one appears to be a preposition, and (5) both instances of *cah* have allomorphs that end in *no*, which seems to be a borrowing of Spanish *no*.

#### 2.2.2.2 Evidence in favor of a split analysis

Despite evidence in favor of a unified analysis, there are some reasons to favor a split analysis. First of all, as we have seen earlier, *cah* without *nih* may not be followed by a predicate, whereas *cah nih* must be followed by a predicate. Secondly, some other languages, such as Spanish, use different words for each of these two usages of *cah*, respectively:

- (63) Pedro es más alto **que** yo. [**que** w/ non-clausal standard of comparison]  
vs.  
(64) Pedro es más alto **de** lo **que** piensas. [**de** followed by relative clause standard of comparison]

---

<sup>18</sup> Sentences like (62), in which the main verb is repeated within the standard of comparison, are actually dispreferred in comparison with a similar CE construction, probably due to some general tendency towards repeating as little as necessary in the standard of comparison:

Zyeeinny-ru' ca'rr b-dii'by Li'eb cah Rrodriegw.  
MUCH-ER car perf-wash Felipe than Rodrigo  
'Felipe washed more cars than Rodrigo'

Nevertheless, the sentence above in (62) is grammatical.

It is precisely the type of structure as seen in the Spanish example in (64) that seems to be involved in SLQS comparative sentences with *nih*, given that *nih* appears almost exclusively in relative clauses and *cah nih* comparatives in SLQZ.

### 2.2.2.3 Conclusions about *cah nih* construction

I analyze the construction containing *cah* followed by *nih* as involving a degree relative (Galant (1998)), although the degree element is covert. Thus, in an SLQZ sentences such as (59), repeated here as (65), the schematic interpretation is as in (66):

(65) Nsehe's-ru' r-uhny Beed zêêi'ny cah nih r-ralloh Lia Paamm.  
fast-ER hab-do Pedro work than rel hab-think Ms. Pam  
'Pedro works faster than Pam thinks (he does)'

(66) Pedro works faster than the degree to which Pam thinks that he works fast.

### 2.2.2.4 Reconciling *cah* and *cah nih*

Stassen (1985) actually provides a framework within which one can reconcile the differences between the conjunction-type structure of *cah* comparatives and the relative clause type structure of *cah nih* comparatives. He claims that in a historical process of "syntactization" from coordinate-type comparatives to particle comparatives, some language have incorporated both elements of coordination and elements of relative clause formation:

[Some]...languages must be assumed to have a coordinate input-structure with quantification over events; in these languages, signs of relativization (typically manifested in the form of the comparative particle) can be traced...there are some languages (viz. English...) in which both an underlying negation and an underlying existential quantification must be assumed for the coordinate input-structure of the comparative construction (pp. 221-222).

## 3. Comparatives with *lohoh*

As we saw in the Introduction, some comparatives in SLQZ include neither *cah* nor *cah nih*, but rather, *lohoh*.

### 3.1 Data

In comparisons with *lohoh*, *lohoh* may be followed only by an NP, either a lexical NP, as in (67), or a clitic pronoun, as in (68), but not by an independent pronoun, as in (69):<sup>19</sup>

(67) Zyuàa'll-ru' Lia Oliieb loh<sup>20</sup> Rrodriegw.  
tall-ER Ms. Olivia face Rodrigo  
'Olivia is taller than Rodrigo.'

<sup>19</sup> Note that this construction is mainly limited to those comparatives in which the compared property is an adjective, although there are some exceptions, such as (71). Note also that for a given sentence that uses this construction, the variant with *cah* is always available, as far as I can tell. For examples, cf. Galant (1998).

<sup>20</sup> This is the phrasal allomorph of *lohoh*.

- (68) Banguual-ru' n-a'c-u' lù-a'.  
old-ER neut-be-2sg face-1sg  
'You are older than me.'
- (69) \*Banguual-ru' n-a'c-u' loh nàa'.  
old-ER neut-be-2sg face 1sg  
'You are older than me.'

### 3.2 Analysis

Although the surface distribution *lohoh* partially overlaps with that of *cah*, *lohoh* is a preposition,<sup>21</sup> whereas *cah* is not. Some pieces of evidence that support this claim include: (1) *lohoh* can only be followed by an NP, not by a PP or *nih* plus a clause, (2) if *lohoh* is followed by a pronominal NP, the NP is manifested as a clitic, not as an independent pronoun, as seen in (68) vs. (69) above, (3), *lohoh* can pied-pipe, as seen in (70) and (71) below, and (4) *lohoh* can be stranded with the anaphoric clitic *-nii'*, as seen in (72) and (73) below:

[pied-piping]

- (70) Tu loh zyuà'll-ru' Jwaany?  
who face tall-ER Juan  
'Who is Juan taller than?'

- (71) Tu loh r-zh:ùu'nny-r-u' ?  
who face hab-run-ER-2sg  
'Who do you run more than?'

[preposition stranding]

- (72) Tu zyuà'll-ru' Jwaany loh-nii' ?  
who tall-ER Juan face-anaph  
'Who is Juan taller than?'

- (73) Tu r-zh:ùu'nny-ru' loh-nii' ?  
who hab-run-2sg face-anaph  
'Who do you run more than?'

Comparatives with *lohoh* appear to fall into Stassen's "adverbial type" of comparatives, in particular, a neutralized locative/allative subtype, since *lohoh*, in addition to literally meaning 'face', can mean 'on', as in (74), or 'to', as in (75):

- (74) Li'ebr zùub loh me'es.  
book neut.sit face table  
'There's a book on the table.'

---

<sup>21</sup> See Lillehaugen (2003) for an analysis of words like *lohoh* which are sometimes used as body parts and sometimes used as prepositions.

- (75) B-cwaàa-a' Jwaany pelo't loh Beed.  
perf-throw-1sg Juan ball face Pedro  
'Juan threw the ball to Pedro.'

Thus, the schematic interpretation of an SLQZ comparative with *lohoh* such as (3), repeated here as (76), seems to be as in (77), with no conjunction structures or degree relatives involved:

- (76) Zyuùà'll-ru' Lia Oliieb loh Rrodriiegw.  
tall-ER Ms. Olivia face Rodrigo  
'Olivia is taller than Rodrigo.'

- (77) Olivia is tall(er) [in comparison] to Rodrigo.

#### 4. Conclusions

In this paper, we have seen the following with respect to the syntax of the standard of comparison in SLQZ comparisons of inequality.

In SLQZ comparatives that include the word *cah* not followed by *nih*, what follows *cah* is typically an NP but may also be some other adjunct or argument to an understood elliptical predicate. In such a construction, *cah* behaves like a conjunction rather than a preposition, and is very plausibly a borrowing of Spanish *que*. The historical development of this construction may involve the syntactization of an adversative-coordination type comparative, either borrowed as such from Spanish or developing as such in SLQZ.

The comparative construction in which *cah* is followed by *nih* is somewhat different. Both instances of *cah* appear to be conjunctions rather than prepositions, but *nih* can and must be followed by an overt clausal predicate. This construction appears to involve a degree relative although the historical development of this construction may actually involve the syntactization of an adversative-coordination type comparative, either borrowed as such from Spanish or developing as such in SLQZ, with some degree of convergence with relative clause structures.

Lastly, the comparative particle *lohoh*, which may only be followed by an NP, definitely behaves as a native preposition. Since it cannot be followed by anything clausal, its interpretation is probably something akin to 'in comparison to'. The fact that it is mostly limited to comparison in which the comparative property is an adjective warrants further investigation.

Some future goals suggested by this paper are to (i) explore similarities and differences between the studied elements and other prepositions and subordinators in SLQZ, and (ii) acquire more data in other varieties of Zapotec, including historical varieties to better understanding of comparative types in Zapotec in general.

#### References

- Galant, M. 1998. *Comparative Constructions in Spanish and San Lucas Quiavini*. Ph.D. dissertation.
- Galant, M. 2003. "Spanish *mucho* and English *much*." Presented at the Linguistic Association of the Southwest (LASSO) 32nd Annual Meeting, October 19, 2003.
- Lillehaugen, Brook Danielle 2003. *The Categorical Status of Body Part Prepositions in Valley Zapotec Languages*. MA Thesis: UCLA.



*The Nature of the Standard of Comparison in San Lucas Quiavini Zapotec Comparatives*

Munro, Lopez, et al. 1999. Dicsyonaary X:tèe'n Dii'zh Sah Sann Luu'c. [San Lucas Quiavini Zapotec Dictionary, Diccionario Zapoteco de San Lucas Quiavini]. Los Angeles: UCLA Chicano Studies Research Center.

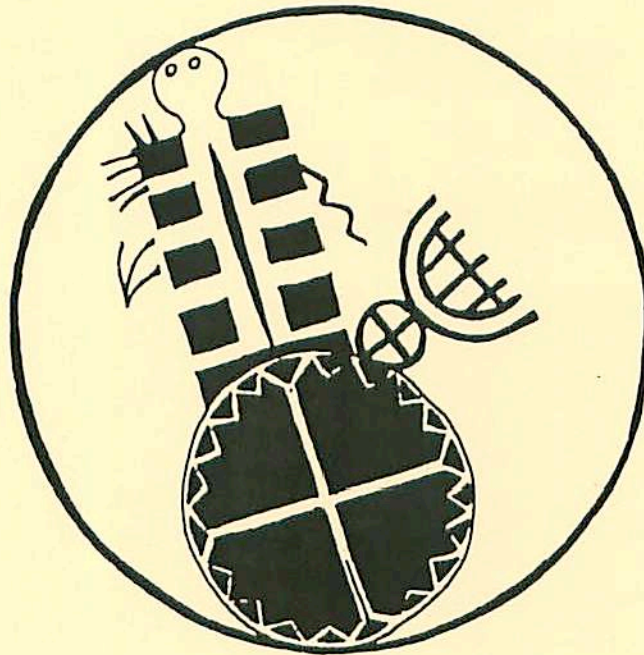
Stassen, L. 1985. Comparison and Universal Grammar. Oxford: Basil Blackwell.

California State University, Dominguez Hills  
Department of Foreign Languages  
1000 E. Victoria Street  
Carson, California 90747

[mikegalant@netzero.net](mailto:mikegalant@netzero.net)

**REPORT 13**

**SURVEY OF CALIFORNIA AND  
OTHER INDIAN LANGUAGES**



**CONFERENCE ON OTOMANGUEAN AND OAXACAN  
LANGUAGES**

**March 19-21, 2004  
University of California at Berkeley**

**Rosemary Beam de Azcona and Mary Paster, Editors**

**REPORT 13**

**SURVEY OF CALIFORNIA AND  
OTHER INDIAN LANGUAGES**

**CONFERENCE ON OTOMANGUEAN AND OAXACAN  
LANGUAGES**

**March 19-21, 2004**  
**University of California at Berkeley**

**Rosemary Beam de Azcona and Mary Paster, Editors**

**copyright © 2005  
by the Survey of California and Other Indian Languages  
Leanne Hinton, Series Editor**

**cover design by Leanne Hinton (Santa Barbara Chumash rock painting)**

## INTRODUCTION

This volume of Survey reports is a sample of the papers heard at the Conference on Otomanguean and Oaxacan Languages (COOL), which took place at UC Berkeley March 19-21, 2004. There is more scholarly investigation being done on Otomanguean languages and other languages of Oaxaca today than ever before, yet unlike other groups such as Uto-Aztecanists and Mayanists, Otomangueanist and Oaxacanist scholars have not had a regular forum in which to meet and share their ideas. In 2000 a one-time conference took place at UCLA called *La Voz Indígena de Oaxaca*, organized by Pamela Munro, G. Aaron Broadwell, and Kevin Terraciano. As a result of this conference many of the participant linguists were able to make new and fruitful contacts with each other and several proposed that the conference should become a recurring event. With the help of the UC Berkeley Graduate Assembly, Graduate Division, Center for Latin American Studies, and the departments of Linguistics, Anthropology, and Ethnic Studies, four years after the original UCLA conference COOL was finally able to follow in its footsteps. Now there are plans for a third conference to be held very appropriately in the city of Oaxaca at the Centro Cultural Santo Domingo in 2006, organized by Alejandro de Ávila. We all hope that this will become an on-going event and it appears that COOL is on its way to becoming a regular, biannual and international conference.

Rosemary Beam de Azcona  
COOL 2004 Organizer

## CONFERENCE ON OTOMANGUEAN AND OAXACAN LANGUAGES

March 19-21, 2004  
University of California at Berkeley

Cheryl A. Black – An Autosegmental Analysis of Me’phaa (Tlapanec) Noun Inflection	1
George Aaron Broadwell – The Morphology of Zapotec Pronominal Clitics	15
Flavia Cuturi & Maurizio Gnerre – Concomitance in Huave	37
Michael Galant – The Nature of the Standard of Comparison in San Lucas Quiavini Zapotec Comparatives	59
Edgar Martín del Campo – An Ethnopoetic Approach to a Copala Triqui Myth Narrative	75
Pamela Munro – Zapotec Grammar Without Tears (except perhaps for the grammarian)	87
Natalie Operstein – Spanish Loanwords and the Historical Phonology of Zaniza Zapotec	107
Aaron Huey Sonnenschein – The Grammaticalization of Relational Nouns in Zoogocho Zapotec	117
Søren Wichmann – Tlapanec Cases	133
Cindy Williams – An Analysis of Amuzgo Nominal Tone	147