



JUAN ZHONG JANUARY 10 2025

# NOMINAL COMPOUNDING

A comparative analysis of South Bolivian Quechua and Tarma Quechua



## ABOUT ME

**JUAN ZHONG**

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- Born and raised in China
- Hakka, Mandarin, English
- BA, Beijing Foreign Studies University
- MA, Columbia University
- A second-year PhD student at University at Buffalo
- <https://juan-zhong.github.io/me/>
- Current projects
  - Morphosyntax
  - Discourse pragmatics
  - Language documentation
- Fieldwork: Balti, Anyuan Hakka.

# ROADMAP

## 1. Introduction

## 2. Comparative analysis

### 2.1. Possible combinations

### 2.2. Binary and recursive structure

### 2.3. Headedness: Endocentric vs ecocentric

### 2.4. Interaction with inflection and derivation

## 3. Summary

# 1. INTRODUCTION



# 1. INTRODUCTION

- **Compounding (Haspelmath, M., & Sims, A. D., 2013)**
  - the process where two or more words are combined to create new words
  - word + word → word or phrase?
  - e.g., English: *blackboard*, *apple tree*.
- **Synthetic languages**
  - word or phrase (or sentence)?

***t'aka******ri******sha******n******taq***

<b>t'akay</b>	'to fall'
<b>-ri</b>	'Softly'
<b>-sha</b>	'progressive'
<b>-n</b>	'3 <sup>rd</sup> person, rain'
<b>-taq</b>	'again'

(SBQ example from Gladys Camacho-Rios)



# 1. INTRODUCTION (CONT')

- **Compounding in Quechua languages**
  - **South Bolivian Quechua (SBQ) (Camacho-Rios, 2024)**
    - Mainly spoken in Cochabamba, Oruro, Potosí, Chuquisaca, and Potosí
    - Data provided by Dr. Gladys Camacho-Rios
  - **Tarma Quechua (TQ) (Adelaar, 1977)**
    - Mainly spoken in the central highlands of Peru, specifically in the Tarma province of the Junín region
    - Belongs to the Yaru group of Quechua languages
    - Data: the dictionary section in Adelaar (1977)
- **Compounding is productive in forming names of plants, places, food/drinks, etc.**



# TARMA QUECHUA (TQ)

## SOUTH BOLIVIAN QUECHUA (SBO)

Google Maps Tarma





## 2. COMPARATIVE ANALYSIS



# 2.1. POSSIBLE COMBINATIONS

- In both SBQ and TQ, compound nouns can consist of two nouns.

## (1) [NN]N

- a. imilla papa (*imilla* ‘girl’ + *papa* ‘potato’ = a variety of potato) [SBQ]
- b. waxĩlaš akšu (*waxĩlaš* ‘horn’ + *akšu* ‘potato’ = a variety of potato) [TQ]



# 2.1. POSSIBLE COMBINATIONS (CONT')

- an adjective and a noun

## (2) [AN]<sub>N</sub>

- a. machu papa (*machu* 'old' + *papa* 'potato' = a variety of potato) [SBQ]
- b. puga akšu (*puga* 'red' + *akšu* 'potato' = a variety of potato) [TQ]

## (3) [NA]<sub>N</sub>

- a. molle pampa (*molle* 'a type of tree' + *pampa* 'flat' = a place name ) [SBQ]
- b. xara wanaku (*xara* 'corn' + *wanaku* 'shy, timorous' = a bird name) [TQ]



# 2.1 POSSIBLE COMBINATIONS (CONT')

- a verb and a noun. For the verb element, TQ allows both its root form (4c) and its infinitive form with the infinitive suffix -y (4b)

## (4) [NV]<sub>N</sub>

- a. *papa wayk'u* (*papa* 'potato' + *wayk'u* 'cook' = a variety of potato) [SBQ]
- b. *akšu yanuy* (*akšu* 'potato' + *yanuy* 'to cook' = a variety of potato) [TQ]
- c. *akšu lapči* (*akšu* 'potato' + *lapči* 'press out' = 'mashed potato') [TQ]

## (5) [VN]<sub>N</sub>

- a. *wayk'u papa* (*wayk'u* 'cook' + *papa* 'potato' = a variety of potato) [SBQ]
- b. *\*yanuy akšu* (*yanuy* 'to cook' + *akšu* 'potato' = a variety of potato) [TQ]

- For the order, TQ doesn't allow VN order.



# 2.1. POSSIBLE COMBINATIONS (CONT')

- Combination of two adjectives in SBQ not in TQ

(6) [AA]<sub>N</sub>

- a. juch'uy jatun (*juch'uy* 'small' + *jatun* 'big' = 'size') [SBQ]
- b. puka pampa (*puka* 'red' + *pampa* 'flat' = a place name) [SBQ]



# 2.1. POSSIBLE COMBINATIONS (CONT')

- complex compounds consisting of more than two elements

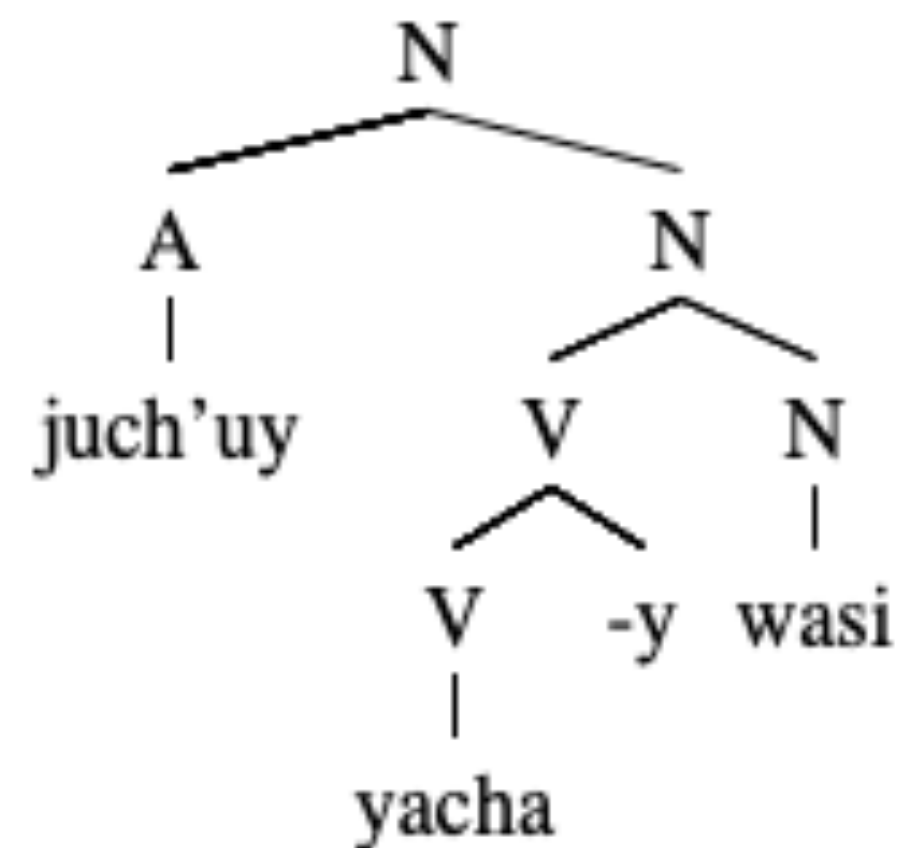
(7) a. juch'uy-yacha-y-wasi  
small-know-INF-house  
A-V-N  
'primary school' [SBQ]  
b. jatun-yachay-wasi  
big-know-INF-house  
A-V-N  
'university' [SBQ]

(8) varieties of potatoes [TQ]  
a. alxa-waĉuku-akšu  
striped-belt-potato  
A-N-N  
b. yana-wañku-y-akšu  
black-wrap-INF-potato  
A-V-N  
c. yagu-saba-yurax-akšu  
water-POSS-white-potato  
N-A-N

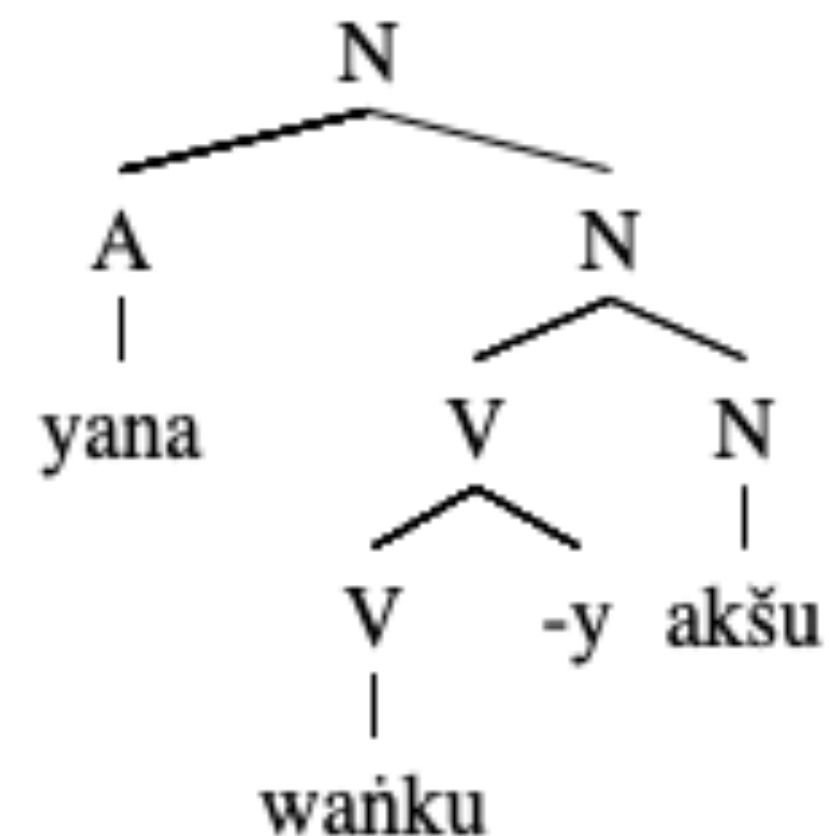
## 2.2. BINARY AND RECURSIVE STRUCTURE

- The internal structure of complex compounds seem to be both binary and recursive.

Figure 1: Tree diagrams for SBQ (7a) and TQ (8b)



- (7) a. juch'uy-yacha-y-wasi  
small-know-INF-house  
A-V-N  
'primary school' [SBQ]



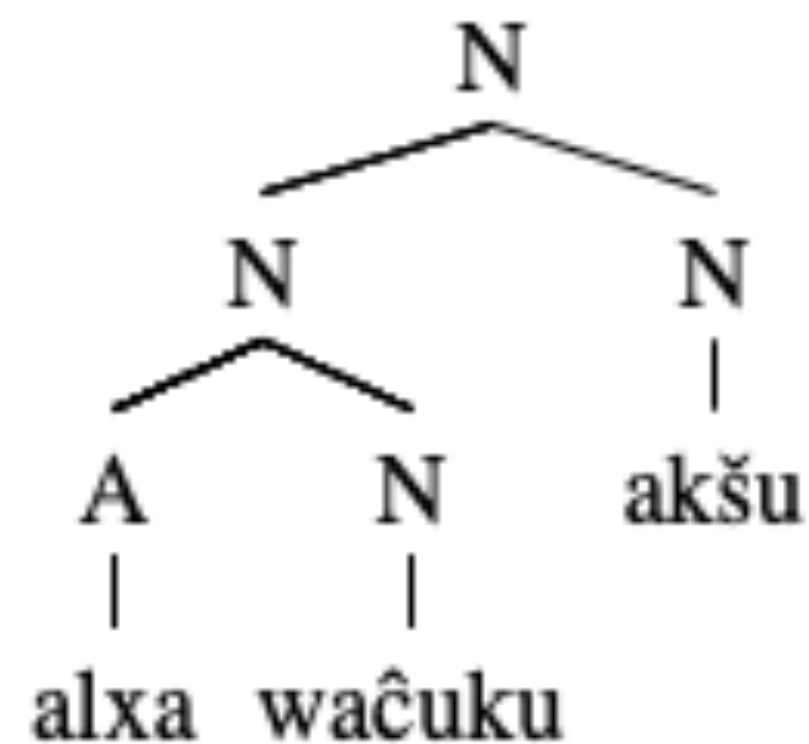
- (8) b. yana-wañku-y-akšu  
black-wrap-INF-potato  
A-V-N  
'a variety of potato'[TQ]



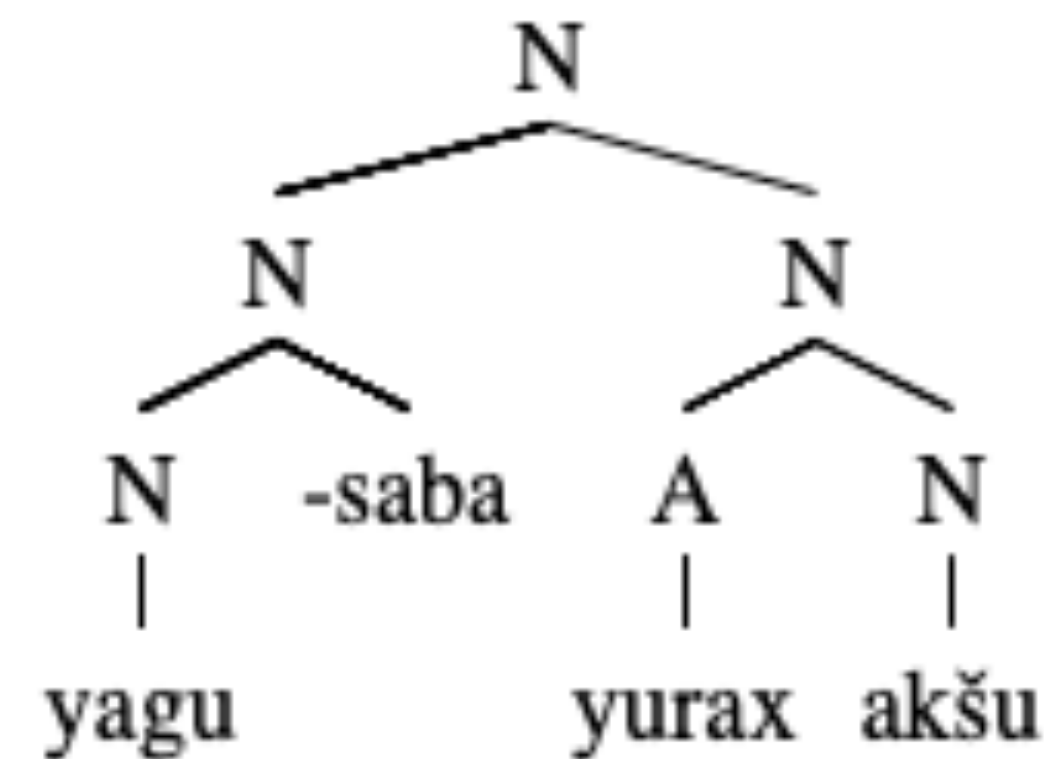
## 2.2. BINARY AND RECURSIVE STRUCTURE (CONT')

- binary structure of TQ nominal compounds

Figure 2: Tree diagrams for TQ (8a) (8c)



- (8) a. alxa-wačuku-akšu  
striped-belt-potato  
A-N-N  
'a variety of potato'[TQ]



- (8) c. yagu-saba-yurax-akšu  
water-POSS-white-potato  
N-A-N  
'a variety of potato'[TQ]

## 2.3. HEADEDNESS

- The head element of a compound
  - it has the same lexical category as the compound.
  - it is often a hypernym of the compound.
- Depending on whether there is a head element inside, compounds are classified into two types: **endocentric** and **exocentric**.
  - **Endocentric**
    - the head element is inside the compounds
    - e.g., English: *board* in *blackboard*
  - **Exocentric**
    - No head inside, non-compositional meaning
    - e.g., English: *forget-me-not*, *redhead*



# ENDOCENTRIC COMPOUNDS

- Most plant names in SBQ and TQ are endocentric compounds (see 1, 2, 4, 5, 8)
- SBQ and TQ shows both right-headed and left-headed patterns (2 vs 3, 4 vs 5)
- Right-headed compounds are more frequent than left-headed ones.

# EXOCENTRIC COMPOUNDS

- the SBQ place name *molle pampa* is not a kind of tree,
- the TQ bird name *xara wanaku* is not a kind of corn.

## (3) [NA]<sub>N</sub>

- molle pampa (molle ‘a type of tree’ + pampa ‘flat’ = a place name) [SBQ]
- xara wanaku (xara ‘corn’ + wanaku ‘shy, timorous’ = a bird name) [TQ]

- No head inside and meaning non-compositional

## (6) [AA]<sub>N</sub>

- juch’uy jatun (juch’uy ‘small’ + jatun ‘big’ = ‘size’) [SBQ]
- puka pampa (puka ‘red’ + pampa ‘flat’ = a place name) [SBQ]



# EXOCENTRIC COMPOUNDS (CONT')

## — More exocentric compounds

### (9) SBQ

- a. kala purka (kala 'rock' + purka 'buring' = a kind of soup)
- b. yaku q'uñi (yaku 'water' + q'uñi 'warm' = 'breakfast')

### (10) TQ

- a. xara šuxla (xara 'corn' + šuxla 'wild grass' = 'oat')
- b. xara kulu (xara 'corn' + kulu 'balk, log, tree-trunk' = a dance name)
- c. xa:yax sigi (xa:yax 'cold' + sigi 'button' = a plant name)

## 2.4. INTERACTION WITH INFLECTION AND DERIVATION

- pluralization:

- In SBQ, when a compound noun goes through pluralization, the plural suffix is attached to the whole compound, not the head element inside.

(11) a. papa-wayk'u-s

[papa-wayk'u]-PL

b. \*papa-s-wayk'u

[papa-PL]-wayk'u]

'cooked potatoes' [SBQ]



## 2.4. INTERACTION WITH INFLECTION AND DERIVATION

- Possession:

- In TQ, noun element inside a compound may take possessive suffix *-saba*.

(11) a. papa-wayk'u-s

[papa-wayk'u]-PL

b. \*papa-s-wayk'u

[papa-PL]-wayk'u]

'cooked potatoes' [SBQ]

(8) c. yagu-saba-yurax-akšu

water-POSS-white-potato

N-A-N

'a variety of potato' [TQ]

# 3. SUMMARY



# MAIN TAKE-AWAYS

- **both SBQ and TQ allow a variety of different combinations of lexical categories in forming compound nouns, combining nouns and adjectives or verbs.**
  - SBQ even allows two adjectives to form a compound noun.
- **both SBQ and TQ allow complex compounds consisting of three elements**
  - but this is only for neologism in SBQ.
  - The complex ones still follows a binary structure.
- **Both endocentric and exocentric compound nouns are attested in the two languages.**
  - For endocentric ones, SBQ and TQ can be either left headed or right headed.
  - inflection could occur inside compounds in both languages. While pluralization occurs outside the compound in SBQ.

# **LIMITATION & FUTURE DIRECTIONS**

- the semantic domain is restricted to mainly plant names, compounds in other domains such as toponyms, numerals, person names, dish names would also be interesting to investigate.
- This paper focuses on compound nouns, while other types of compounds such as compound adjectives and compound verbs also exist in these languages and should be further explored.

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THANK YOU!