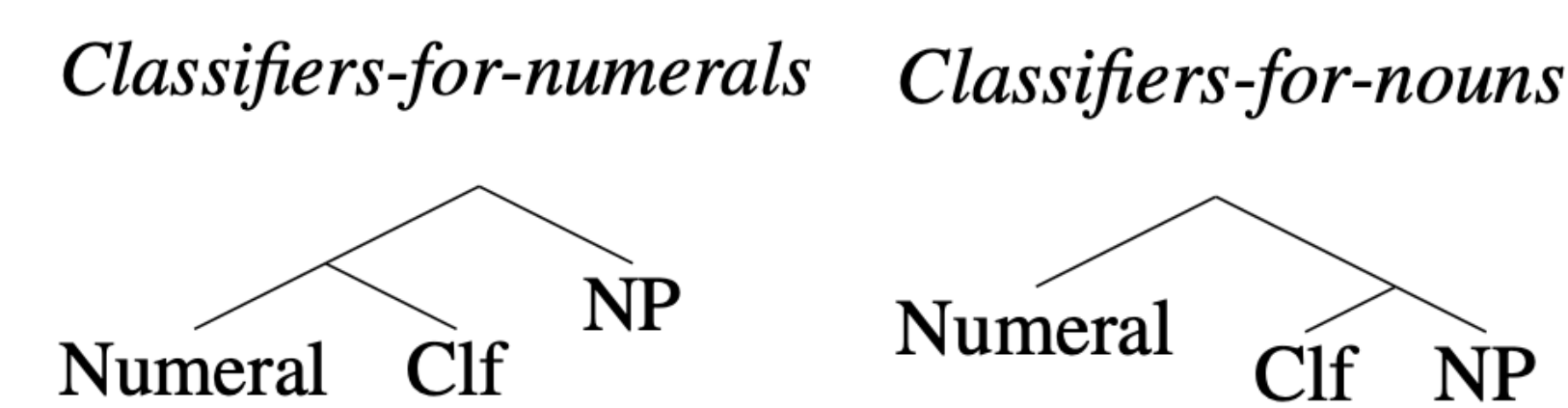# Syntactic position of numeral classifiers in Ch'ol and Chuukese

Joshua Kalempouw, Department of General Linguistics, University of Göttingen

Introduction

Ch'ol (Mayan) and Chuukese (Austronesian) exhibit **obligatory** use of **numeral** classifiers. It is one of several strikingly similar grammatical properties that the two unrelated language families share (cf. Coon, 2009). This poster compares both languages with respect to the syntactic position of said linguistic phenomenon.

Classifiers-for-numerals   *Classifiers-for-nouns*

Numeral Clf   NP   Numeral   Clf   NP

Materials and methods

The main reference for this crosslinguistic study is the proceedings paper on numeral classifiers in Ch'ol and Shan (Kra-Dai) by Little, Moroney and Royer (2020). The paper postulates that the two theories on the syntactic position of numeral classifiers (CL-for-N and CL-for-NUM) are both valid and vary across languages.

Using the same diagnostics conducted in the aforementioned paper, this poster attempts to categorize Chuukese into either one of the two types of classifiers with data collected and annotated by Benton (1968a). Parallels to Chuj, another Mayan language are also drawn to better understand how Chuukese classifiers work. The term 'classifier' is used as a shorthand to refer to numeral classifiers.

Results

PREDICTION 1 (CLF-for-NUM): If a classifier is a measure function required by a numeral, there might be idiosyncrasies in whether or not a numeral requires a classifier. Ch'ol classifiers are ungrammatical with Spanish numerals (1).

(1)   a. ux***(-kojty)** ts'i'
           three-**CLF** dog
           'three dogs'

           b. ocho***(-kojty)** ts'i'
           SP:eight-**CLF** dog
           'eight dogs'   (Ch'ol)

Current data suggest that such idiosyncracies are not present in Chuukese. Though this question is still yet to be further investigated.

PREDICTION 2 (CLF-for-N): If a classifier is used to create an atomic set from the noun predicate, there might be idiosyncrasies in whether or not a noun must combine with it. Meaning, some nouns may not need a classifier.

No such idiosyncracies are known in both Chuukese and Ch'ol. In Chuukese, even abstract and formless nouns are proceeded by a classifier (2) (Benton, 1968b, p. 65).

(2)   e***(-ew)** osupwan
        one-**CL** poverty   (Chuukese)

PREDICTION 3 (CLF-for-N): If a classifier is used to create an atomic set from the noun predicate, we might expect to find it in environments other than with numerals.

(3)   e-kke-we rúwe***(-mén)** reeTooiys
        DET-PL-CIRC two-**CLF** German
        'those two Germans'   (Chuukese)

Chuukese classifiers can appear in the presence of determiners (3) along with the interrogative quantifier *fite-* 'how many' (Benton, 1968a, p. 180). On the other hand, Ch'ol classifiers can only be combined with numerals and the interrogative quantifier *jay-* (Little et al., 2022, p. 13), otherwise the sentence is ungrammatical as seen below in (4).

(4)   ixä**(*-kojty)** ts'i'
        DEM-**CLF** dog
        Intended: 'that dog'   (Ch'ol)

PREDICTION 4 (CLF-for-NUM): If a classifier is a measure function required by a numeral, we would expect it to always appear with that numeral.

(5)   Ili jiñ ux-***(p'ej)**
        this DET three-**CLF**
        'this is (the number) three'   (Ch'ol)

Even in serial counting and when referring to the number, Ch'ol numerals require a classifier (6). Conversely in Chuukese, classifiers are absent when serial counting (Benton, 1968a, p. 104).

However, the Chuukese decimal base morpheme *-ŋon* (2) might be considered as a classifier, just like the classifier for 'twenty' in Chuj (Little, 2024), which could lead to the conclusion that Chuukese numerals **always** need a classifier but also that Chuukese might be of a hypothetical mixed-type like Chuj (Little et al., 2020).

(6)   e***(-ŋon)** me e***(-ew)** núú
        one-**CLF.NUM** and one-**CLF.N** coconut
        'eleven coconuts'   (Chuukese)

This finding could be compared with Chuj, a base-twenty Mayan language (Little, 2024). Though the noun classifier *-nok'* denotes specificity.

(7)   a. jun***(-k'al)** tz'i'
           one-**CLF.NUM** dog
           'twenty dogs'

           b. ixwab' ox***(-wanh)** ***(nok')** tzi'i'
           I.heard three-**CLF.NUM CLF.N** dog
           'I heard three (specific) dogs'   (Chuj)

Conclusion

The results of the diagnostics introduced by Little, Moroney and Royer (2020) applied to Chuukese are inconclusive. More research on Chuukese numeral classifiers as well as linguistic data are needed.

		Ch'ol	Chuukese
CLF-for-NUM	Prediction 1	✓	✗
CLF-for-N	Prediction 2	✗	✗
CLF-for-N	Prediction 3	✗	✓
CLF-for-NUM	Prediction 4	✓	?

Bibliography

Benton, R. A. (1968a). Numeral and Attributive Classifiers in Trukese. *Oceanic Linguistics*, 7(2), 104–146.

Benton, R. A. (1968b). *Substitutes and classifiers in Trukese* (Doctoral dissertation, [Honolulu]).

Coon, J. (2009). Comments on Austronesian nominalism: A Mayan perspective. *Theoretical Linguistics*, 35(1), 73-93.

Little, C., Moroney, M., & Royer, J. (2020). *Classifying classifiers: Two kinds of numeral classifiers across languages*. Retrieved from osf.io/ph42q

Little, C., Moroney, M., & Royer, J. (2022) "Classifiers can be for numerals or nouns: Two strategies for numeral modification", *Glossa: a journal of general linguistics* 7(1).

Little, C., (2024). Numerals and classifiers in Mayan languages. In Gutiérrez Bravo, Rodrigo, Stavros Skopeteas, Elisabeth Verhoeven (eds.), *Glottothèque: Mayan Languages*. Berlin/Göttingen/Mexico City: online resource.

Further information

If you have any further inquiries and/or comments, you can reach me at j.kalempouw@stud.uni-goettingen.de.