## Numerals and classifiers in Mayan languages

Glottothèque: Mayan Languages


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## Mayan languages



Fieldwork with Ch'ol and Chuj


## Numerals and classifiers in Ch'ol and Chuj

## Ch'ol

1. Tsa' kubi [ux-kojty ts'i' ].

PFV I.heard three-CLF.NUM dog 'I heard three dogs.'

Chuj
2. Ixwab' [ ox-wanh nok' tz'i' ]. I.heard three-CLF.NUM CLF.N dog 'I heard three dogs.'


## Distribution of languages with and without classifiers



## Languages with obligatory classifiers



## Languages with optional classifiers



## What do classifiers do linguistically?

- Languages with classifiers usually have number neutral nouns

1. two cat-s
2. cha'-kojty mis

English must mark plural

Ch'ol doesn't mark plural

- Similar to plural in English, classifiers can be thought of as elements that mediate between a number and a noun with additional information about the noun class


## What do classifiers do linguistically?

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1. two cat-s

English must mark plural
2. cha'-kojty mis

Ch'ol doesn't mark plural

- Another way to think about classifiers:
- Similar to how it is strange to say two sands-we must specify grains, cups, handfuls, etc.
- Languages with classifiers do this with all nouns


## Types of classifiers in Ch'ol

| Form | Used to count | Example | Translation |
| :--- | :--- | :--- | :--- |
| -p'ej | inanimate | uxp'ej juñ | 'three books' |
| -kojty | animals | cha'kojty mis | 'two cats' |
| -tyikil | people | chäñtyikil ixik | 'four women' |
| -k'ej | flat, round objects | uxk'ej waj | 'three tortillas' |
| -ts'ijty | long things | juñts'ijty tye' | 'one tree' |
| -bujch | propped up things | jo'bujch bux | 'five propped up <br> bottles' |
| -k'al | multipes of 20 | uxk'al otyoty | 'sixty houses' |
| -bajk' | multiples of 400 | cha'bajk' k'iñ | 'eight hundred |
|  |  |  | days' |

## Nouns can be counted with more than one classifier


juñkojty lukum one snake


juñjijch' lukum one (hanging) snake
juñxojty lukum one (coiled up) snake
juñjajl lukum one (stretched out) snake

## Chuj numeral classifiers

| Form | Used to count | Example | Translation |
| :--- | :--- | :--- | :--- |
| -e' | inanimate | oxe' ch'at | 'three beds' |
| -wanh | animate | oxwanh mis | 'three cats' |
| -setanh | circular objects | oxsetanh ch'anh | three comals' |
| -tek'anh | long thin lots of <br> land | oxtek'anh ixim | three corn <br> fields |
| -k'al | multiples of 20 | junk'al tz'i' | 'twenty dogs' |

winak, the word for man,
also means twenty

## Chuj noun classifiers

| Form | Used with | Example | Translation |
| :--- | :--- | :--- | :--- |
| ix | female | ix chichim | 'the elder woman' |
| winh | male | winh ichan | 'the elder man' |
| nok' | animals and <br> derived products | nok' nholob' | 'the egg' |
| atz'am | salt | atz'am atz'am | 'the salt' |

Ixwab'[ oxwanh nok' tz'i'].
I.heard three.CLF.NUM CLF.N dog
'I heard three dogs.'

## Summary

## Ch'ol

1. Tsa' kubi [ux-kojty PFV I.heard three-CLF.NUM dog 'I heard three dogs.'

Chuj
2. Ixwab' [ ox-wanh nok' tz'i' ]. I.heard three-CLF.NUM 'I heard three dogs.' CLF.N dog

- Ch'ol has numeral classifiers
ts'i' ]. - Chuj has numeral and noun classifiers
- Mayan languages have classifiers that track features of the nouns they count
- Mayan numeral classifiers do similar things as classifiers in other unrelated languages such as Mandarin, Japanese and Indonesian


## More resources

Los clasificadores numerales y las clases nominales en ch'ol

Against a generalized quantifier analysis of certain quantity expressions in Ch'ol*

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## PRESENTA

Nicolás Arcos López Two strategies for numeral modification
 Mary Morone, Univesity of Rocheserer US, maxy.moroneyerocheseseredu



Wokolix la'wälä Yuj wal yos
Thank you
Danke

