



# The acquisition of ideophones and split ergativity in Chuj

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# Ideophones

- In linguistic typology, ideophones are considered as an open lexical class that depict sensory imaginary (Dingemanse, 2019)
- They are considered as universal or near-universal feature of human language (Dingemanse, 2012), although, as Barret (2014) points out, they have been related to primitive languages
- Hierarchy of ideophones (Dingemanse, 2012)
- SOUND < MOVEMENT < VISUAL PATTERNS < OTHER SENSORY PERCEPTIONS < INNER FEELINGS AND COGNITIVE STATES

# Ideophones in Mayan languages

- In Mayan languages, two distinct lexical classes shared properties with ideophones: positional and affect roots (Barret, 2014)
- Positional roots refer to shapes and movements, while affect roots are onomatopoeic
- Ideophones are not considered as a lexical class in Mayan languages (Barret, 2014), although England (2009, 2017) considers affect words as ideophones

# Ideophones in Mayan languages

- Ideophones are very common and frequently used when making jokes and teasing (Barret, 2017) and found in narratives, e.g., Mam (England, 2009)
- Ideophones in K'iche' (1) and Q'anjob'al (2) (Barret, 2017: 453-454)

1. Kaqab'an puq' puq' puq' puq' puq'      We go puq' puq' puq' puq' puq'
2. Yet chi wab'on yay t'ujlab'oq ha' a'ej:      When I hear the water dripping:  
t'uj, t'uj, t'uj, t'uj...      t'uj, t'uj, t'uj, t'uj...

- puq': sound of a rock dropped into water
- t'uj: sound of water dripping

# Ideophones in Mayan languages

- Pérez González (2012: 154) argues that ideophones in tseltal appear in ideophonic quotative construction, as in (3)

3.     **xklaj**                             x-chi-∅-nax  
IDF:sound.of.wood     ICP-PCIT-B3=ADV:only  
‘It broke and thundered suddenly (the stick only did  
xklaj when it broke).’

# Ideophones in Mayan languages

- In Mam, ideophones usually appear before the verb with split ergativity (4a) or after the verb but no split ergativity (4b) (England, 2009)

4. a. **pe'q'** **t**-uul                      t-uj                      t-tzii'  
IDEO ERG3-arrive.here              ERG3-RN:in              ERG3-mouth  
'it (a fruit) fell all squished in his mouth.
- b. N=ch=ee-tz                      **juum**              txuu'              siichal  
INC=ERG3p-go.out-DIR              IDEO              mother              wasp  
t-i                      t-wi'.  
ERG3-RN:to              ERG3-head  
'The mothers of the wasps flew at his head.'

# Argument

- In Mayan languages, the morphology of the verb after an ideophone varies, e.g., ergativity, e.g., tseltal (Pérez González, 2012) or split ergativity, e.g., Mam (England, 2009)
- While there is discussion about the status of ideophones in Mayan languages, e.g., Barret (2014), it is important to evaluate how children acquire this word category
- Around the age of 2;0, in Chuj children produce ideophones following the split ergative alignment
- I assume that ideophones appear as a main clause and take a verb complement, as other syntactic patterns in Chuj, e.g., Coon & Carolan (2017)
- From my knowledge, no studies exist on the acquisition of ideophones in Mayan languages

# Outline

1. Chuj
2. Child data
3. Acquisition of ideophones
4. Conclusion



# 1. Chuj

- Chuj is a Mayan language spoken in Huehuetenango, Guatemala, and the southern part of Mexico (Hopkins 1967)
- It is an ergative and verb initial language
- Two dialects: San Mateo Ixtatán and San Sebastián Coatán (Hopkins, 1967; Domingo Pascual, 2007; and Buenrostro, 2013)
- The Chuj of San Mateo Ixtatán uses the word order verb-object-subject (VOS) (England 1991)

# Ergativity

5. a. Ix-**ach**-b'ey-i.

Coon & Carolan (2017: 2)

COM-ABS2-walk-IV

'You walked.'

b. Ix-**ach-ko**-chel-a'.

COM-ABS2-ERG1p-hug-TV

'We hugged you.'

- Intransitive subjects (4a) and transitive objects (4b) are cross-referenced by absolutive morphemes (Set B)
- Transitive subjects are cross-referenced by ergative morphemes (ko-) (4b) (Set A)

# Split ergativity

6. a. \*Lan        **hach**=b'ey-i.        Coon & Carolan (2017: 2-3)

PROG        ABS2=walk-IV

intended: 'You're walking.'

b. Lan        **ha**-b'ey-i.        **ABS** > **ERG**

PROG        ERG2-walk-IV

'You're walking.'

7. a. \*Lan        hach=ko-chel-a'.

PROG        ABS2=ERG1p-hug-TV

intended: 'We're hugging you.'

b. Lan        hach=ko-chel-**an**-i.        Suffix -**AN**

PROG        ABS2=ERG1p-hug-SUB-IV

'We're hugging you.'

# Ideophones and split ergativity

8. a. kixkon      y-el-i.      ABS > ERG  
kixkon      ERG3-exit-IV  
'Kixkon she goes backwards.'
- b. punh      y-ak'-an-i.      Suffix -AN  
punh      ERG3-give-SUB-SUF  
'Punh it does (it exploded).'

## 2. Child data

- Spontaneous data from two children acquiring Chuj from San Mateo Ixtatán, Huehuetenango, Guatemala (<https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/3VSDSK>) (Mateo Pedro 2012)
- The data was collected longitudinally for a period of 8 months; video/audio recordings were made every two weeks
- The children were recorded from the following ages Mat (2;2 to 2;10) Tes (2;1-2;11)
- The recordings took place at the children's home
- Extraction of ideophones—going through each of the children's files

# 3. Acquisition of ideophones in Chuj

- If children produce ideophones in Chuj, do they follow the split ergative alignment?
- An ideophone conditions the morphology of the complement verb
  - A child would not just produce an ideophone and produce a verb
  - The child must evaluate the kind of verb that appears after the ideophone, e.g., intransitive or transitive

# Ergative alignment: Intransitive verbs

9. a. xkani.                      Yen (2;0)

= ix-∅-kan-i

COM-ABS3-stay-IV

'She stayed.'

b. emmi.                      Mat (2;0)

= tz-in    em-i

INC-ABS1 go.down-SC

'I go down.'

# Ergative alignment: Transitive verbs

10.a. yam ken.                      Mat (2;0)

= yam k'en

touch CLF (it)

'Grab it (car toy).'

b. yama'.

= yam-a'

grab-TV

'Grab it.'



# Contexts of child ideophones

11.a. api. Mat (2;3)

ab'i.

Listen.

b. pommm bani. Mat (2;3)

ponh y-ak'-an-i

IDEO ERG3-give-SUB-IV

'Pom, it did.'

c. pomm y-a'-an-i. Researcher

IDEO ERG3-give-SUB-IV

'Pom, it did.'

# Contexts of child ideophones

12.a. tas xi?                      Researcher

what say?

What does it say?

b. puuunh yani.                      Mat (2;3)

punh yeli

IDEO ERG-fall-IV

'It exploded.'

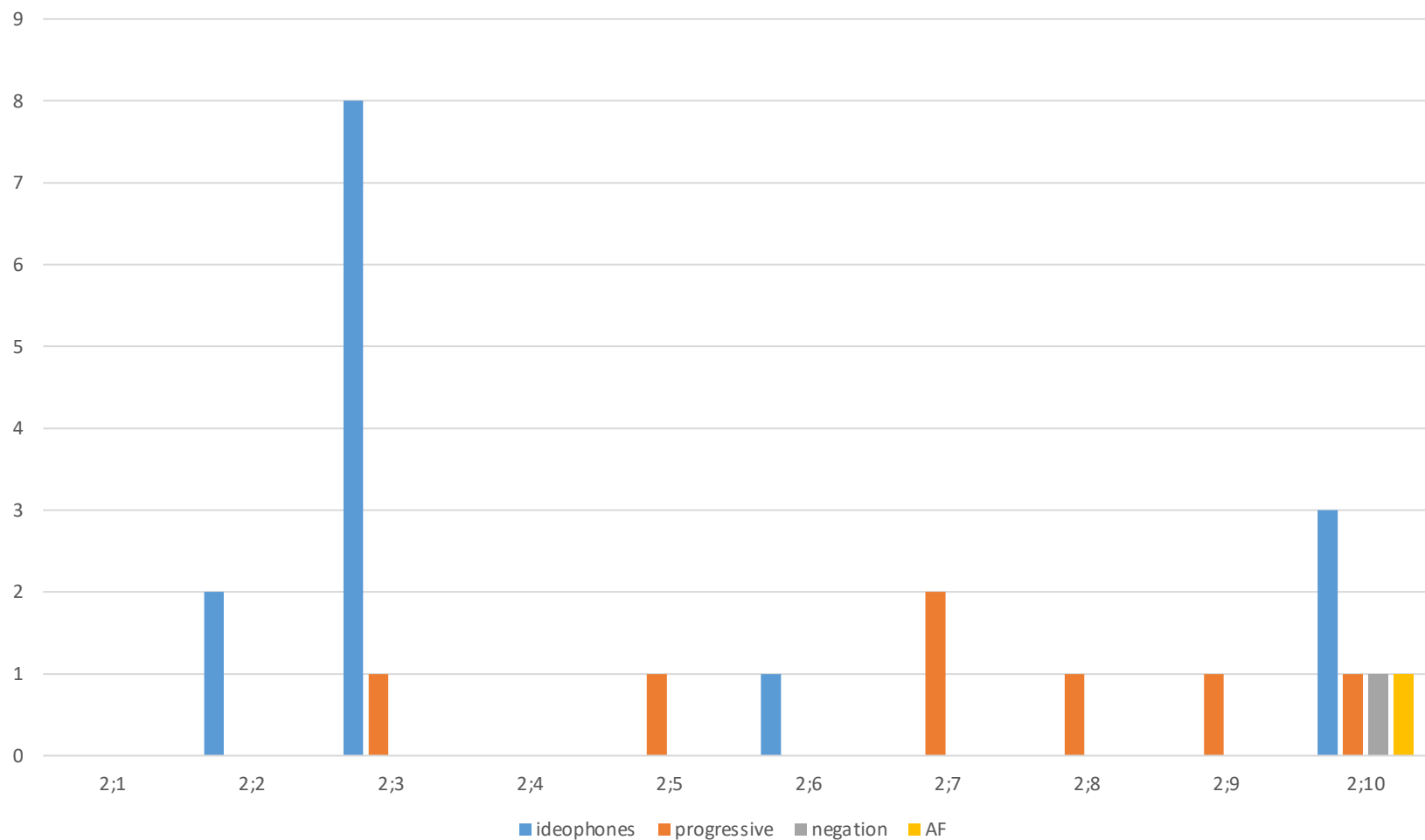
c. pomh yani.                      Researcher

ponh yeli.

IDEOERG-fall-IV

'It exploded.'

# Chuj child ideophones (Mat 2;1-2;10)



# Mat's ideophones

ages	child	adult	translation
2;2	kukala	?	'kukuruku'
	pum	punh	'sound of something falling, exploding'
2;3	ixti	ichatik	'like this'
	pum	punh	'sound of something falling, exploding'
	chopita	?	?
	kampana	kampana	'bell'
	te'	tek'	'kick'
	tinh	t'inh	'sound of something exploding'
	putul	putul	'something turning off'
2;6	punh	punh	'sound of something falling, exploding'
2;10	kisan	kixan	'bottom up'
	k'otnaj	k'otnaj	'something falling'
	kixkon	kixkon	'going backwards'

# Mat's ideophones and verb types

ages	ideophones	intransitive	transitive	
2;2	kukala		ak'	'to give'
	pum		ak'	'to give'
	ixti		ak'	'to give'
2;3	pum		ak'	'to give'
	chopita		ak'	'to give'
	kampana		ak'	'to give'
	te'		ak'	'to give'
	tinɦ		ak'	'to give'
	putul		ak'	'to give'
2;6	punh		ak'	'to give'
2;10	kisan	aj	---	'to go up'
	k'otnaj	em	---	'to fall'
	kixkon	el	---	'to exit'

# Ideophones with transitive verbs

13.a. pum ani.

Mat (2;0)

= punh y-ak'-an-i

punh ERG3-give-SUB-SUF

'Punh it does (it exploded).'

b. tinh hani.

Mat (2;3)

t'inh y-ak'-an-i

t'inh ERG3-give-SUB-SUF

'It exploded.'

# Ideophones with intransitive verbs

14.a. yo kisan yaj chan ni. Mat (2;10)

=yo kixan y-aj cha'anh ni'i

oh kixan ERG3-go up high see

'Oh, it's upside down, see.'

b. kixkon yeli. Mat (2;10)

= kixkon y-el-i

kixkon ERG3-exit-IV

'Kixkon goes backwards.'

# Productivity

15.a. em bomba.

Mat (2;3)

Indicative

= ix-∅-em            bomba

COM-ABS3-fall    bomb

‘A bomb exploded.’

c. pom pahani.

Mat (2;3)

Ideophone

= ponh        y-ak'-an-i

ponh        ERG3-give-DM-SUF

‘Boom, it does.’



# Productivity

16.a. em bomba.

= ix-∅-em                bomba

COM-ABS3-fall    bomb

‘A bomb exploded.’

Mat (2;3)

Ergativity

b. K'otnaj yemi'.

= k'otnaj    y-em-i

k'otnaj        ERG3-fall-IV

‘K'otnaj, it fell.’

Mat (2;10)

Ideophone

# The suffix -an in other contexts

	ideophones		progressive		negation		question		AF	
	Mat	Yes	Mat	Yes	Mat	Yes	Mat	Yes	Mat	Yes
2;1				1						
2;2	2			5				1		
2;3	8		1							
2;4										
2;5			1	2				1		
2;6	1									
2;7			2					1		
2;8			1	7				1		
2;9			1	2		1				2
2;10	3		1		1				1	
2;11				1						
total	14	0	7	18	1	1	0	4	1	2

# The suffix -an in other contexts

17.a. ban yo mali. Mat (2;7) Progressive

= wany-ok' ix malin

PROG ERG3-cry CLF Maria

'Maria is crying.'

b. wan wani. Mat (2;7) Progressive

wan w-ak'-an-i.

PROG ERG3-give-DM-SUF

'I am doing it.'

c. Ha winh papa' ix ak'ani. Mat (2;10) Agent Focus

= Ha winh papa' ix- $\emptyset$ -ak'-an-i

ENF CLF father COM-ABS3-give-AF-IV

'It was my father who gave it to me.'



# Ideophones in the input

	mother	cousin	RA
ideophone	0	0	8
progressive	6	0	4
question	6	1	12
AF	0	1	1

## 4. Conclusion

- Although ideophones are sporadic, one child used them following the split ergative alignment
- The child acquired ideophones of the categories: sound and movement
- Contribution to the study of ideophones in Mayan languages in general, but its acquisition in particular
- Contribution to the typological study of ideophones (Dingemanse, 2012; Barret, 2014; Karani & Andrason, 2022)
- If “these words are the most graphic in the language, they are the ‘colouring’ words, the stories and common speech of the people are full of them.” (White-head 1899:18, cited in Dingemanse, 2012:664), children would not miss the acquisition of ideophones

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