# Countability and distributivity in interaction with classfiers in Vaímajã

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### What do classifiers do?

• "The function of classifiers is to make count nouns enumerable by individualizing and classifying them. This is more or less the standard view on classifiers. In fact, there are many languages such as Modern Standard Chinese and Japanese in which this is their main function."

(Bisang 1999: 113)

• Are classifiers a part of the **construction**, or do they add a countability feature to the **noun itself**? How could we tell the difference when languages with classifiers have no count nouns to compare?

(Zhang 2013; Her 2017)

- Vaímajã provides an interesting case: it has **both** non-count nouns which must occur with classifiers, and basic singular nouns (count nouns) which do not need to bear classifiers.
- Classifiers appear to derive count nouns.



QUETÁ

#### GUAVIARE

SIERRA TUNAHI

EQUATOR

## Vaímajã

- "Bará" "Northern Barasano"
- Glottocode: waim1255, ISO 639-3: bao
- Eastern Tukanoan
- ~600 speakers
- Vaupés, Colombia

Mitú

Rio Negro

VAUPÉS

. Lérida

apura

### Inanimates: three root types

Take a plural?

Modified by a numeral?

Modified by a STUB?

Modified by distributive quantifier?

Modified by demonstrative?

<b>Basic singular</b>	General number	Mass
$\checkmark$		_
$\checkmark$	—	
$\checkmark$	$\checkmark$	
$\checkmark$	$\checkmark$	
$\checkmark$	(√)	

### Inanimates: three root types

#### **Basic singular roots**

Root	Gloss	Semantic subgrouping				
peta	'port'					
día	'river'	Gaagraphical				
veje	'swidden'	Geographical				
yepa	'soil'					
kĩma	'year'	Temporal				
ijéro	'mouth'					
(v)ãmo	'hand'					
diká	'arm'	Anotomical				
varúu	'flank (anatomy)'					
jibití	'anus'	-				
dipo	'foot'					
jope	'door'					
dipi	'stick'	Other				
tutú	'tree trunk'	Ouiei				
vãme	'name'	1				

#### **General number roots**

Root	Gloss	Semantic subgrouping				
kõmé	'metal'					
<i>ŧtá</i>	'stone'	Motorial				
juti	'fabric'	- Material				
yuki	'wood, tree'					
mijĩ	'liana'					
kĩ	'yuca'	Dlant spacios				
ó	'banana, flower'					
kũmu	'tree (sp.)'					
vajó	'bag'					
píi	'basket'	Monufacturad				
vaa	'drinking gourd'					
vevó	'panflute'					
kapé	'eye'					
ñeme	'tongue'	Anatomical				
ĩkĩ	'nose'					

## Classifiers

- Classifiers may occur with any root (18-19)
- About 60 classifiers, of which about 15 repeaters
- No distinction between sortal and mensural classifiers

Classifier	Gloss	Category		
$+y\tilde{o}$	CLF:PALMTREE	Organic		
-tõ	CLF:FRUITBUNCH			
-du	CLF:CLUMP			
-buro	CLF:HILL			
+ya	CLF:WATERWAY	Topographic		
-tabé	CLF:PLACE			
+ro	CLF:FLAT			
-tutú	CLF:THICK.CYLINDRICAL	Shape		
-da	CLF:LONG.FLEXIBLE			
-va	CLF:CALABASH			
-ri	CLF:POT	Other		
-rɨmɨ	CLF:DAY			

- (18) a. BASIC SINGULAR ROOT + CLASSIFIER
   *dipó-kajéro* foot-CLF:SHEET
   'toe nail'
  - b. MASS ROOT + CLASSIFIER *oko-ri*water-CLF:POT
    'a pot of water'
- (19) GENERAL NUMBER ROOT + CLASSIFIER

a. *juti+ro* fabric+CLF:FLAT 'a shirt'

b. *yuki+gi* tree+CLF:TREE 'a tree'

### Classifiers allow roots to pass all tests

Take a plural?

Modified by a numeral?

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Modified by demonstrative?

<b>Basic singular</b>	General number	Mass
$\checkmark$	_	
$\checkmark$	—	—
$\checkmark$	$\checkmark$	
$\checkmark$	$\checkmark$	
$\checkmark$	(√)	

### Classifiers allow roots to pass all tests

	Basic singular	General number + CLF	Mass + CLF
Take a plural?	$\checkmark$	$\checkmark$	$\checkmark$
Modified by a numeral?	$\checkmark$	$\checkmark$	$\checkmark$
Modified by a STUB?	$\checkmark$	$\checkmark$	$\checkmark$
Modified by distributive quantifier?	$\checkmark$	$\checkmark$	$\checkmark$
Modified by demonstrative?	$\checkmark$	$\checkmark$	$\checkmark$

- Take a plural?
- Modified by a numeral?
- Modified by a STUB?
- Modified by distributive quantifier?
- Modified by demonstrative?

#### • Take a plural?

- Modified by a numeral?
- Modified by a STUB?
- Modified by distributive quantifier?
- Modified by demonstrative?

- (5) a. BASIC SINGULAR ROOT
   *jopéri* jopé+ri
   door+PL
   'doors'
  - b. General number roots
    - *?juti+ri* fabric+PL

*juti+ro+ri* fabric+CLF:FLAT+PL 'clothes'

c. MASS ROOTS

??okó+ri

 $\rightarrow$ 

 $\rightarrow$ 

water+PL

*oko-ri+ri* water-CLF:POT+PL 'pots of water'

- Take a plural?
- Modified by a numeral?
- Modified by a STUB?
- Modified by distributive quantifier?
- Modified by demonstrative?

- (6) a. BASIC SINGULAR ROOTS
   *piá día+ri* two river+PL
   'two rivers'
  - b. General number roots
    - ?piá juti $\rightarrow$ piá juti+ro+ritwo fabrictwo fabric+CLF:FLAT+PL'two pieces of clothing'

 $\rightarrow$ 

- c. MASS ROOTS ?piá okó
  - two water

piá oko-ri+ri
two water-CLF:POT+PL
'two pots of water'

- Take a plural?
- Modified by a numeral?
- Modified by a STUB?
- Modified by distributive quantifier?
- Modified by demonstrative?

#### What is a STUB?

#### Stubbornly distributive predicates

- (7) a. *The boxes are heavy* 
  - b. *The boxes are large*
  - c. *??the wine was large*

(Schwarzschild 2009)

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#### STUBs in languages with classifiers: Vietnamese

- (8) a. Sụ' ăn táo
  Su eat apple
  'Su ate apple/an apple/apples'
  - b. *Sụ' ăn táo to* b. Su eat apple big 'Su ate a big apple/big apples' (Gil 1996: 55-6)
- (9) a. Huyền uống một côc nu'ó'c to Huyền drink one CLF water big 'Huyền drank a big glass of water'
  - b. ?*Huyền uống* Ø *nu'óc to* Huyền drink water big

(Huyên Thanh Mai, p.c.) 14

- Take a plural?
- Modified by a numeral?
- Modified by a STUB?
- Modified by distributive quantifier?
- Modified by demonstrative?

#### **STUBs in Vaímajã**

- (10) a. BASIC SINGULAR ROOT *pairi ijéro* big ijéro 'big mouth'
  - b. MASS ROOT ??pairi okó big water
  - c. GENERAL NUMBER ROOT pairi juti
    big fabric
    'big shirt/big shirts'

- Take a plural?
- Modified by a numeral?
- Modified by a STUB?
- Modified by distributive quantifier?
- Modified by demonstrative?

#### Much / many in English

- (11) ENGLISH
  - a. I drank too **much** coffee
  - b. ???I drank too many coffee
  - c. ???I ate too much cookies
  - d. I ate too many cookies

#### Pat 'many' and pairo 'much' in Vaímajã

- (12) BASIC SINGULAR ROOT *pa*<sup>*H*</sup> *v*ã*me*many name
  'many names'
- (13) MASS ROOT a. ??pau oko many water
  - b. *pairo oko* much water 'much water'

(14) GENERAL NUMBER ROOT
a. *pa*<sub>*H*</sub> *kape*many eye
'many eyes'
b. *pa*<sub>*H*</sub> *púũ*many leaf

'many leaves'

#### Demonstratives in Vaímajã

- Take a plural?
- Modified by a numeral?
- Modified by a STUB?
- Modified by distributive quantifier?
- Modified by demonstrative?

	ANIMATE			INANIMATE		
	Singular Plural Singular Non-singula		ngular			
	Feminine	Masculine			Bare	Mass
Proximal	atío/atigó	aní	aníjã	ati-CLF	ati	até
Distal	ikó	îĩ	íjã	<i>i-</i> CLF	i	ijé
Anaphoric	kõ	kĩ	kį́jã	<i>ti-</i> CLF	ti	téé

#### Bare demonstratives with bare noun roots

- (15) BASIC SINGULAR ROOT
  - a. *ati dipó* DEM.PROX foot 'this foot'
  - b. *ati* yepá DEM.PROX earth 'this earth' [1CO/1/20]
- (16) MASS ROOTS a. ?ati jĩnírike DEM.PROX chicha
  - b. *até jĩnírike* DEM.PROX.MASS chicha 'this chicha'
- (17) GENERAL NUMBER ROOTS *ati* yuki DEM.PROX tree 'these trees'

### Five tests: Comparing nouns across languages

			1.	2.	3.	4.	5.
	Language	Example noun	PL	NUM	STUB	QUANT	DEM
	English	water	—	_	_	_	
Mass	Vietnamese	nu'óc 'water'	—	_	_	—	
	Vaímajã	oko 'water'	—	_	_	_	_
	English	furniture	—	_	+	_	
↓ Vietnames Vietnames	Vietnamese	bàn ghế 'furniture'	_	_	+	+	
	Vietnamese	táo 'apple'	_	_	+	+	PL
	Vaímajã	<i>juti</i> 'fabric'	_	_	+	+	PL
	Yudja	y'a 'water'		+	+	+	
Count	English	box	+	+	+	+	
	Vaímajã	<i>dipo</i> 'foot'	+	+	+	+	SG

(Gil 1996; Ngô 2021: 26–7; Lima 2014a; 2014b)

### Five tests: Comparing nouns across languages

			Countability		Distril	outivity	
			1. 2.		3.	4.	5.
	Language	Example noun	PL	NUM	STUB	QUANT	DEM
	English	water	_	_		_	
Mass	Vietnamese	nu'óc 'water'				_	
Vaíz	Vaímajã	oko 'water'	_	_		-	_
	English	furniture	_	_	+	_	
↓ Vietnames Vietnames	Vietnamese	bàn ghế 'furniture'	_	_	+	+	
	Vietnamese	táo 'apple'		_	+	+	PL
	Vaímajã	<i>juti</i> 'fabric'	_	_	+	+	PL
	Yudja	y'a 'water'		+	+	+	
Count	English	box	+	+	+	+	
Vaímajã		<i>dipo</i> 'foot'	+	+	+	+	SG

(Gil 1996; Ngô 2021: 26-7; Lima 2014a; 2014b)

### Conclusions

- Cross-linguistically, nouns display gradients of countability and distributitivity
- In many classifier languages, e.g. Vietnamese, even the most count-like nouns require classifiers

- Vaímajã:
  - basic singular roots **never** need classifiers
  - $\circ~$  general number roots do in tests of  ${\color{black} \textbf{countability}}$
  - $\circ$   $\$  mass nouns do in tests of  $\mbox{countability}$  and  $\mbox{distributivity}$

ndivi	dua	ation						
(20)	a.	juti						
		fabric						
		' clothing	/	shirts	/	a shirt	,	
		[ mass	/	PL	/	SG	]	
	b.	juti+ro						
		fabric+CLF:F	LAT					
		' clothing	/	<del>shirts</del>	/	a shirt	,	
		[ <del>mass</del>	/	PL	/	SG	]	
	c.	juti+ro+ri						
		fabric+CLF:F	LAT-	+PL				
		' clothing	/	shirts	/	<del>a shirt</del>	,	
		[ mass	/	PL	/	<del>SG</del>	]	

### Conclusions

- Classifiers specify the semantics of the noun (*jutí 'fabric'* → jutí+ro 'shirt', cf. *jutí-kejero* 'sheet')
- Classifiers specify individuality (cf. bare general number roots)
- Classifiers specify dimensionally bounded units (licencing STUBs with mass roots)

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### What about animates?



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#### Animate: Basic singular

- (1) a. jiki ĩmi ñáávĩ
   ji-ki ĩmi nấ+vi
   one-SG.M man fall+3SG.M.DIR.IMPF
   'One man fell'
  - b. jikó numió ñáávõ

ji-kó numi+ó ñá+vo one-SG.F woman+SG.F FALL+3SG.F.DIR.IMPF 'One woman fell'

- c. jiki si nááví
  ji-ki si ná+vi
  one-SG.M snail fall+3SG.M.DIR.IMPF
  'One snail fell'
- d. numiá ñáávã

numi+a ñá+va woman+PL.ANIM fall+3PL.ANIM.DIR.IMPF 'women fell'

#### Animate: Basic plural

- (2) a. mekấ ñáávã mekấ ñá+va ants fall+3PL.ANIM.DIR.IMPF
   'Ants fell'
  - b. mekấmĩ ñáávĩ mekấ-mi ñá+vi ants-SG.M fall+3SG.M.DIR.IMPF 'An ant fell'

### What about animates?

#### Inanimate

(3) a. jikagá itagấ návi ji-ka+gá itã+gá ñá+vi one-INAN+CLF:ROUND stone+CLF:ROUND fall+OTH.DIR.IMPF 'one stone fell'
b. itãgấrĩ náávi itã+gá+ri ńá+vi

stone+CLF:ROUND+PL fall+OTH.DIR.IMPF 'stones fell'

c. *itấ náávi* 

itã ñá+vi
stone fall+OTH.DIR.IMPF
'a stone / stones fell'

d. okó ñáávĩ

oko ñá+vi water fall+OTH.DIR.IMPF 'water fell'

### Constituency and word-order

### Her (2017)

V

V

 $\sqrt{}$ 

V

a.

b.

c.

d.

- (3) Six Possible Word Orders of [Num, C/M, N]
  - [Num C/M N] (many languages, e.g., Chinese)
  - [N Num C/M] (many languages e.g., Thai)
    - [C/M Num N] (few languages e.g., Ibibio [Niger-Congo])
  - [N C/M Num] (few languages e.g., Jingpho [Tibeto-Burman])
  - e. \* [C/M N Num] (no languages)

f. * $[\text{Num N C/M}]$ (no	languages)	ļ
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