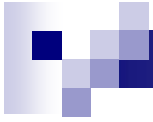


*In
Borrowing
Anything
Goes,
But
Not
Really*

**Dik Bakker, Amsterdam
Ewald Hekking, Querétaro**

There are *no constraints on what can be borrowed* by one language from an other language, the only real *explanatory factor* being *pragmatic*.

Cf. Campbell 1989, Thomason 2001



Overview



Overview

1. Hypotheses & Method



Overview

1. Hypotheses & Method
2. The Contact Languages



Overview

1. Hypotheses & Method
2. The Contact Languages
3. **The Data**



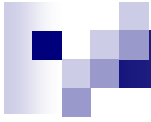
Overview

1. Hypotheses & Method
2. The Contact Languages
3. The Data
4. Testing the Hypotheses



Overview

1. Hypotheses & Method
2. The Contact Languages
3. The Data
4. Testing the Hypotheses
5. Conclusion



1. Hypotheses & Method



Hypotheses on Borrowing



Hypotheses on Borrowing

H1. Anything goes: **pragmatic** motivation

- 'useful'

- frequent / marked / transparent enough



Hypotheses on Borrowing

H1. Anything goes: pragmatic motivation

- 'useful'

- frequent / marked / transparent enough

H2. But: *Typological* constraints

- Grammar *source* < > Grammar *target* language



Method



Method

M1. One source language



Method

M1. One source language (= *constant factor*)



Method

M1. One source language (= *constant factor*)

M2. **Typologically different target** languages



Method

M1. One source language (= *constant factor*)

M2. **Typologically different target** languages (= *variation*)



Method

M1. One source language (= *constant factor*)

M2. Typologically different target languages (= *variation*)

M3. Per target: **2+ dialects**



Method

M1. One source language (= *constant factor*)

M2. Typologically different target languages (= *variation*)

M3. Per target: 2+ dialects (= *consistency*)



Method

M1. One source language (= *constant factor*)

M2. Typologically different target languages (= *variation*)

M3. Per target: 2 dialects (= *consistency*)

M4. Targets **socio-culturally close**



Method

- M1. One source language (= *constant factor*)
- M2. Typologically different target languages (= *variation*)
- M3. Per target: 2 dialects (= *consistency*)
- M4. Targets **socio-culturally close** (= *comparability*)



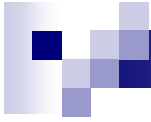
Method

- M1. One source language (= *constant factor*)
- M2. Typologically different target languages (= *variation*)
- M3. Per target: 2 dialects (= *consistency*)
- M4. Targets socio-culturally close (= *comparability*)
- M5. Spoken data from broad group



Method

- M1. One source language (= *constant factor*)
- M2. Typologically different target languages (= *variation*)
- M3. Per target: 2 dialects (= *consistency*)
- M4. Targets socio-culturally close (= *comparability*)
- M5. Spoken data from broad group (= *representativeness*)



2. The Contact Languages



Target languages



Target languages

Otomi

Oto-Mangue

(175 lgs)

Otomi



801490 (544170) 3-90



Target languages

Otomi

Oto-Mangue

(175 lgs)

Quechua

Andean

(45 dial/lgs)



Quechua



801490 (544170) 3-90



Target languages

Otomi

Oto-Mangue

(175 lgs)

Quechua

Andean

(45 dial/lgs)

Guarani

Tupi

(75 lgs)



Guarani



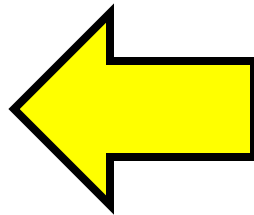
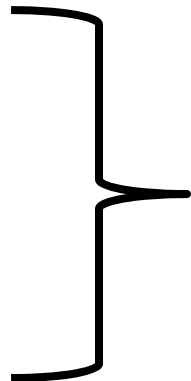
801490 (544170) 3-90

Source language

Quechua

Guarani

Otomi



Spanish (I.E.)



801490 (544170) 3-90



801490 (544170) 3-90



Language Types



Language Types

Parameter



Language Types

Parameter

Word Order



Language Types

Parameter

Word Order

Adpos



Language Types

Parameter

Word Order

Adpos

Articles



Language Types

Parameter

Word Order

Adpos

Articles

PartSpeech



Language Types

Parameter

Word Order

Adpos

Articles

PartSpeech

MorphType



Language Types

Parameter	SPANISH
Word Order	SVO
Adpos	Prep
Articles	Def / Indef
PartSpeech	V / N / A
MorphType	Fusion Suffix

Language Types

Parameter	SPANISH	OTOMI
Word Order	SVO	VOS/SVO
Adpos	Prep	(Prep)
Articles	Def / Indef	Def / -
PartSpeech	V / N / A	V / N / -
MorphType	Fusion Suffix	Fusion Suffix

Language Types

Parameter	SPANISH	OTOMI	GUARANI
Word Order	SVO	VOS/SVO	SVO
Adpos	Prep	(Prep)	Post
Articles	Def / Indef	Def / -	- / -
PartSpeech	V / N / A	V / N / -	V / N / A
MorphType	Fusion Suffix	Fusion Suffix	Fusion Prefix

Language Types

Parameter	SPANISH	OTOMI	GUARANI	QUECHUA
Word Order	SVO	VOS/SVO	SVO	SOV
Adpos	Prep	(Prep)	Post	Post
Articles	Def / Indef	Def / -	- / -	- / -
PartSpeech	V / N / A	V / N / -	V / N / A	V / N / A
MorphType	Fusion Suffix	Fusion Suffix	Fusion Prefix	Agglut Suffix



3. The Data



Data recorded (spoken)



Data recorded

Quechua

Respondents:	25
Dialects:	2
Tokens:	79,718



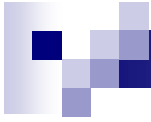
Data recorded

	<u>Quechua</u>	<u>Guaraní</u>
Respondents:	25	38
Dialects:	2	2
Tokens:	79,718	57,828



Data recorded

	<u>Quechua</u>	<u>Guaraní</u>	<u>Otomí</u>
Respondents:	25	38	59
Dialects:	2	2	2
Tokens:	79,718	57,828	110,540



4. Testing the Hypotheses



Borrowing: overall (tokens)



Borrowing: overall (tokens)

	Quechua	Guaraní	Otomí
Mimimum	4.0%	5.7%	6.7%
Maximum	27.0%	28.5%	26.0%
Mean	18.9%	17.4%	14.1%
SD	8.92	6.42	3.97

Borrowing: overall (tokens)

	Quechua	Guaraní	Otomí
Mimimum	4.0%	5.7%	6.7%
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Borrowing: overall (tokens)

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Borrowing: overall (tokens)

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~ same for dialects

Borrowing: overall (tokens)

	Quechua	Guaraní	Otomí
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Maximum	27.0%	28.5%	26.0%
Mean	18.9% >	17.4% >	14.1%
SD	8.92	6.42	3.97

Corresponds to contact history



Borrowing: specific



Borrowing (tokens)

PoS	QUE (18.9%)	GUA (17.4%)	OTO (14.1%)
Major (N,V,A)	81%	73%	48%
Minor (rest)	19%	27%	52%
TOT	100%	100%	100%

Borrowing

PoS	QUE (18.9%)	GUA (17.4%)	OTO (14.1%)
Major (N,V,A)	81%	73%	48%
Minor (rest)	19%	27%	52%
TOT	100%	100%	100%

Borrowing

PoS	QUE (18.9%)	GUA (17.4%)	OTO (14.1%)
Major (N,V,A)	81%	73%	48%
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Borrowing

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Major (N,V,A)	81%	73%	48%
Minor (rest)	19%	27%	52%
TOT	100%	100%	100%

~ same for dialects

Borrowing

PoS	QUE (18.9%)	GUA (17.4%)	OTO (14.1%)
Major	81%	> 73%	> 48%
Minor	19%	< 27%	< 52%

Why?

Borrowing

PoS	QUE (18.9%)	GUA (17.4%)	OTO (14.1%)
Major	81%	> 73%	> 48%
Minor	19%	< 27%	< 52%

Stage 1: **mainly lexical types/tokens**

Borrowing

PoS	QUE (18.9%)	GUA (17.4%)	OTO (14.1%)
Major	81%	> 73%	> 48%
Minor	19%	< 27%	< 52%

Stage 1: mainly lexical

Stage 2: **more grammatical**

Borrowing

PoS	QUE (18.9%)	GUA (17.4%)	OTO (14.1%)
Major	81%	> 73%	> 48%
Minor	19%	< 27%	< 52%

Stage 1: mainly lexical

Stage 2: more grammatical

Stage 3: **maximum grammatical**

Borrowing

PoS	QUE (18.9%)	GUA (17.4%)	OTO (14.1%)
Major	81%	> 73%	> 48%
Minor	19%	< 27%	< 52%

Stage 1: mainly lexical

Stage 2: more grammatical

Stage 3: maximum grammatical

Stage 4: **more lexical**

Borrowing

PoS	QUE (18.9%)		GUA (17.4%)		OTO (14.1%)
Major	81%	>	73%	>	48%
Minor	19%	<	27%	<	52%

- Stage 1: mainly lexical
- Stage 2: more grammatical
- Stage 3: maximum grammatical
- Stage 4: more lexical
- Stage 5: **still more lexical**

Borrowing

PoS	QUE (18.9%)	GUA (17.4%)	OTO (14.1%)
Major	81%	> 73%	> 48%
Minor	19%	< 27%	< 52%

Stage 1: mainly lexical

Stage 2: more grammatical

Stage 3: max. grammatical

Stage 4: more lexical

Stage 5: still more lexical

Continuum (?)

Borrowing

PoS	QUE 18.9%	GUA 17.4%	OTO 14.1%
Major	81%	> 73%	> 48%
Minor	19%	27%	52%

Stage 1: mainly lexical

Stage 2: **more grammatical**

Stage 3: **maximum grammatical**

Stage 4: more lexical

Stage 5: still more lexical

} **Claim**
dependent on
language pair!

Borrowing

PoS	QUE 18.9%	GUA 17.4%	OTO 14.1%
Major	81%	> 73%	> 48%
Minor	19%	27%	52%

+ 3.3 %

Percentage
Tokens!

Stage 1: mainly lexical types

Stage 2: **more grammatical**

Stage 3: **maximum grammatical**

Stage 4: more lexical

Stage 5: still more lexical

} Dependent on
Language pair!

Borrowing

PoS	QUE 18.9%	GUA 17.4%	OTO 14.1%
Major	81%	> 73%	> 48%
Minor	19%	27%	52%

+ 3.3 %

- 25 %

Percentage Tokens!

Stage 1: mainly lexical types

Stage 2: **more grammatical**

Stage 3: **maximum grammatical**

Stage 4: more lexical

Stage 5: still more lexical

} Dependent on Language pair!

Borrow

PoS	QUE 18.9%	GUA 17.4%	OTO 14.1%
Major	81%	73%	48%
Minor	19%	27%	52%

+ 1.5 %



Percentage
Tokens!

Stage 1: mainly lexical types

Stage 2: **more grammatical**

Stage 3: **maximum grammatical**

} Dependent on
Language pair!

Stage 4: more lexical

Stage 5: still more lexical

Borrow

	+ 1.5 %		
PoS	QUE 18.9%	GUA 17.4%	OTO 14.1%
Major	81%	73%	48%
Minor	19%	27%	52%
	- 8 %		

Percentage
Tokens!

Stage 1: mainly lexical types

Stage 2: **more grammatical**

Stage 3: **maximum grammatical**

} Dependent on
Language pair!

↪ Stage 4: more lexical

↪ Stage 5: still more lexical



Borrowing

1. Major parts of speech (N, V, A)



Major parts of speech

PoS	QUE	GUA	OTO
NOUN	55%	43%	42%
VERB	18%	21%	5%
ADJ	9%	9%	2%
TOT	81%	73%	49%

Absolute %

Major parts of speech

PoS	QUE (81%)	GUA (73%)	OTO (49%)
NOUN	68%	59%	86%
VERB	22%	29%	10%
ADJ	11%	12%	4%
TOT	100%	100%	100%

Relative %:

Semantic
Competition

V < > N < > A

Major parts of speech

PoS	QUE	GUA	OTO
NOUN	68%	59%	86%
TOT	100%	100%	100%

Major parts of speech

PoS	QUE	GUA	OTO
NOUN	68%	59%	86%
TOT	100%	100%	100%

Oto:

- Shortest contact
- N most open class
- Concrete meaning

Major parts of speech

PoS	QUE	GUA	OTO
NOUN	68%	59%	86%
VERB	22% < 29%	10%	
TOT	100%	100%	100%

- Que: SOV

- Gua: SVO (= Spa)

Major parts of speech

PoS	QUE	GUA	OTO
NOUN	68%	59%	86%
VERB	22%	29%	10%
ADJ	11%	12%	4%
TOT	100%	100%	100%

Major parts of speech

PoS	QUE	GUA	OTO
NOUN	68%	59%	86%
VERB	22%	29%	10%
ADJ	11%	12% >	4%
TOT	100%	100%	100%

- Que: N / V / **A**

- Gua: N / V / **A**

Major parts of speech

PoS	QUE	GUA	OTO
NOUN	68%	59%	86%
VERB	22%	29%	10%
ADJ	11%	12% >	4%
TOT	100%	100%	100%

- Que: N / V / A

- Gua: N / V / A

- Oto: N / V / -



Borrowing

1. Major parts of speech (N, V, A)
2. Minor parts of speech



Minor parts of speech

PoS	QUE	GUA	OTO
PREP			
TOT	16.0%	34.7%	48.1%

Minor parts of speech

PoS	QUE	GUA	OTO
PREP	0.5%	0.5%	
TOT	16.0%	34.7%	48.1%

Minor parts of speech

PoS	QUE	GUA	OTO
PREP	0.5%	0.5%	21.2%
TOT	16.0%	34.7%	48.1%



Spanish prepositions



Spanish prepositions

Total: ±40

Simple:	<i>a</i>	'to'
	<i>de</i>	'from'
	<i>para</i>	'for'
	<i>por</i>	'by'
	...	
Compound:	<i>antes de</i>	'before'
	<i>a través de</i>	'through'

RANK	FORM	FREQ
1	DE(L)	1355815
2	EN	516156
3	A(L)	445664
4	POR	180166
5	CON	170846
6	PARA	119632
7	ENTRE	33206
8	SOBRE	27704
9	HASTA	26313
10	SIN	25935
11	DESDE	25486

30	DELANTE DE	592

* Davies, Mark. (2002-) *Corpus del Español: 100 million words.*
at <http://www.corpusdelespanol.org> [Spoken, 20th century]

RANK	FORM	FREQ	RANK
1	DE(L)	1355815	1
2	EN	516156	6
3	A(L)	445664	7
4	POR	180166	15
5	CON	170846	17
6	PARA	119632	20
7	ENTRE	33206	48
8	SOBRE	27704	49
9	HASTA	26313	51
10	SIN	25935	61
11	DESDE	25486	65
	
30	DELANTE DE	592	

TOP 100

RANK	FORM	FREQ	RANK
1	DE(L)	1355815	1
2	EN	516156	6
3	A(L)	445664	7
4	POR	180166	15
5	CON	170846	17
6	PARA	119632	20
7	ENTRE	33206	48
8	SOBRE	27704	49
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Prep		3.023.514	

RANK	FORM	FREQ	RANK
1	DE(L)	1355815	1
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3	A(L)	445664	7
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5	CON	170846	17
6	PARA	119632	20
7	ENTRE	33206	48
8	SOBRE	27704	49
9	HASTA	26313	51
10	SIN	25935	61
11	DESDE	25486	65
	
Prep		3.023.514	
Corpus	(20th Century)	12.684.170	

RANK	FORM	FREQ	RANK
1	DE(L)	1355815	1
2	EN	516156	6
3	A(L)	445664	7
4	POR	180166	15
5	CON	170846	17
6	PARA	119632	20
7	ENTRE	33206	48
8	SOBRE	27704	49
9	HASTA	26313	51
10	SIN	25935	61
11	DESDE	25486	65
	
Prep		3.023.514	
Corpus		12.684.170	

} **1 : 4**



Quechua: Prep from Spanish



Quechua

SPANISH

1	DE
2	EN
3	A
4	POR
5	CON
6	PARA
7	ENTRE
8	SOBRE
9	HASTA
10	SIN

Quechua (tokens in corpus)

<u>SPANISH</u>		<u>QUECHUA</u>
1	DE	2
2	EN	-
3	A	2
4	POR	1
5	CON	-
6	PARA	-
7	ENTRE	2
8	SOBRE	-
9	HASTA	10
10	SIN	1
15	SEGUN	16
	other (3)	6

Quechua

<u>SPANISH</u>		<u>QUECHUA</u>	<u>NSP (25)</u>
1	DE	2	1
2	EN	-	-
3	A	2	1
4	POR	1	1
5	CON	-	-
6	PARA	-	-
7	ENTRE	2	2
8	SOBRE	-	-
9	HASTA	10	3
10	SIN	1	1
15	SEGUN	16	8
	other (3)	6	3

Quechua

<u>SPANISH</u>	<u>QUECHUA</u>	<u>NSP (25)</u>
1 DE	2	1
2 EN	-	-
3 A	2	1
4 POR	1	1
5 CON	-	-
6 PARA	-	-
7 ENTRE	2	2
8 SOBRE	-	-
9 HASTA	10	3
10 SIN	1	1
15 SEGUN	16	8
other (3)	6	3



Guarani: Prep from Spanish



Guarani

SPANISH

1	DE
2	EN
3	A
4	POR
5	CON
6	PARA
7	ENTRE
8	SOBRE
9	HASTA
10	SIN



Guarani (tokens in corpus)

<u>SPANISH</u>		<u>GUARANI</u>
1	DE	3
2	EN	-
3	A	1
4	POR	3
5	CON	1
6	PARA	3
7	ENTRE	6
8	SOBRE	-
9	HASTA	5
10	SIN	-
13	CONTRA	12
	other (3)	6

Guarani

<u>SPANISH</u>		<u>GUARANI</u>	<u>NSP (38)</u>
1	DE	3	2
2	EN	-	-
3	A	1	1
4	POR	3	1
5	CON	1	1
6	PARA	3	3
7	ENTRE	6	4
8	SOBRE	-	-
9	HASTA	5	4
10	SIN	-	-
13	CONTRA	12	6
	other (3)	6	5

Guarani

	<u>SPANISH</u>	<u>GUARANI</u>	<u>NSP (38)</u>
1	DE	3	2
2	EN	-	-
3	A	1	1
4	POR	3	1
5	CON	1	1
6	PARA	3	3
7	ENTRE	6	4
8	SOBRE	-	-
9	HASTA	5	4
10	SIN	-	-
13	CONTRA	12	6
	other (3)	6	5



Otomi: Prep from Spanish



Otomi (tokens in corpus)

	<u>OTOMI</u>
DE	269
EN	2
A	21
POR	81
CON	992
PARA	1134
ENTRE	83
SOBRE	14
HASTA	236
SIN	207
DESDE	223
DURANTE	11
SEGUN	10
CONTRA	1
DELANTE DE	14
DESPUES DE	3
ENFRENTE DE	18
JUNTO <+P>	2

Otomi

	<u>OTOMI</u>
DE	269
EN	2
A	21
POR	81
CON	992
PARA	1134
ENTRE	83
SOBRE	14
HASTA	236
SIN	207
DESDE	223
DURANTE	11
SEGUN	10
CONTRA	1
DELANTE DE	14
DESPUES DE	3
ENFRENTA DE	18
JUNTO <+P>	2

Otomi

	<u>OTOMI</u>	<u>NSP (59)</u>
DE	269	40
EN	2	2
A	21	16
POR	81	45
CON	992	*59*
PARA	1134	*59*
ENTRE	83	35
SOBRE	14	8
HASTA	236	54
SIN	207	45
DESDE	223	*59*
DURANTE	11	10
SEGUN	10	8
CONTRA	1	1
DELANTE DE	14	13
DESPUES DE	3	3
ENFRENTE DE	18	17
JUNTO <+P>	2	2

Otomi

	<u>OTOMI</u>	<u>NSP (59)</u>
DE	269	40
EN	2	2
A	21	16
POR	81	45
CON	992	*59*
PARA	1134	*59*
ENTRE	83	35
SOBRE	14	8
HASTA	236	54
SIN	207	45
DESDE	223	*59*
DURANTE	11	10
SEGUN	10	8
CONTRA	1	1
DELANTE DE	14	13
DESPUES DE	3	3
ENFRENTE DE	18	17
JUNTO <+P>	2	2

18 out of **30** types present

Otomi

	<u>OTOMI</u>	<u>NSP (59)</u>
DE	269	40
EN	2	2
A	21	16
POR	81	45
CON	992	*59*
PARA	1134	*59*
ENTRE	83	35
SOBRE	14	8
HASTA	236	54
SIN	207	45
DESDE	223	*59*
DURANTE	11	10
SEGUN	10	8
CONTRA	1	1
DELANTE DE	14	13
DESPUES DE	3	3
ENFRENTE DE	18	17
JUNTO <+P>	2	2

18 out of **30** types present

3 types by all informants

Otomi

	<u>OTOMI</u>	<u>NSP (59)</u>
DE	269	40
EN	2	2
A	21	16
POR	81	45
CON	992	*59*
PARA	1134	*59*
ENTRE	83	35
SOBRE	14	8
HASTA	236	54
SIN	207	45
DESDE	223	*59*
DURANTE	11	10
SEGUN	10	8
CONTRA	1	1
DELANTE DE	14	13
DESPUES DE	3	3
ENFRENTE DE	18	17
JUNTO <+P>	2	2

18 out of **30** types present

3 types by all informants

8 types > **50%** informants

Otomi

	<u>OTOMI</u>	<u>NSP (59)</u>	<u>RANK</u>
DE	<u>269</u>	<u>40</u>	<u>#54</u>
EN	2		2
A	21		16
POR	81		45
CON	<u>992</u>	<u>59</u>	<u>#19</u>
PARA	<u>1134</u>	<u>59</u>	<u>#12</u>
ENTRE	83		35
SOBRE	14		8
HASTA	<u>236</u>	<u>54</u>	<u>#65</u>
SIN	<u>207</u>	<u>45</u>	<u>#81</u>
DESDE	<u>223</u>	<u>59</u>	<u>#73</u>
DURANTE	11		10
SEGUN	10		8
CONTRA	1		1
DELANTE DE	14		13
DESPUES DE	3		3
ENFRENTE DE	18		17
JUNTO <+P>	2		2

6 types in **top 100**
of *overall*
frequency table,
i.e. **more frequent**
than some
very common
Otomi words



Minor parts of speech

PoS	QUE	GUA	OTO
PREP			
TOT	16.0%	34.7%	48.1%

Minor parts of speech

PoS	QUE	GUA	OTO	Postpositional
PREP	0.5%			
TOT	16.0%	34.7%	48.1%	

Minor parts of speech

Quechua:

FORM	CASE	MEANING	SPANISH PREP
-TA	ACC	'to'	<i>a</i>
-PA	GEN	'of'	<i>de</i>
-PI	LOC	'in'	<i>en</i>
-MAN	DIR	'up to'	<i>a</i>
-WAN	COM	'with'	<i>con</i>
-MANTA	ABL	'from'	<i>de</i>
-PAQ	BEN	'for'	<i>para</i>
-KAMA	TERM	'until'	<i>hasta</i>
-RAYKU	CAUS	'by'	<i>por</i>

Minor parts of speech

PoS	QUE	GUA	OTO
PREP	0.5%		
TOT	16.0%	34.7%	48.1%

Postpositional

Use of loans:

- Adverbial

- Postnominal

Minor parts of speech

PoS	QUE	GUA	OTO
PREP		0.5%	
TOT	16.0%	34.7%	48.1%

→ **Postpositional**

Minor parts of speech

Guaraní:

FORM	MEANING	SPANISH PREP
-aja	'during'	<i>durante</i>
-ari	'on'	<i>en</i>
-gotyo	'towards'	<i>hacia</i>
-gua	'from'	<i>de</i>
-gui	'from'	<i>desde</i>
-guara	'for'	<i>para</i>
-kue	'during'	<i>durante</i>
-mboyve	'before'	<i>antes de</i>
-ndive	'with'	<i>con</i>
-pe	'in, on, at'	<i>en</i>
-peve	'towards'	<i>hasta</i>
-re	'through'	<i>por</i>
-rehe	'by'	<i>por</i>
-rire	'after'	<i>despues de</i>
-rupi	'through'	<i>por</i>
-vo	'at'	<i>a</i>
-ypype	'next to'	<i>junto a</i>

Minor parts of speech

PoS	QUE	GUA	OTO
PREP		0.5%	
TOT	16.0%	34.7%	48.1%

Postpositional

Use of loans:

- Adverbial

- Pre/Postnominal

Minor parts of speech

PoS	QUE	GUA	OTO
PREP	0.5%	0.5%	21.2%
TOT	16.0%	34.7%	48.1%

→ **Prepositional (few)**

Minor parts of speech

PoS	QUE	GUA	OTO
PREP	0.5%	0.5%	21.2%
TOT	16.0%	34.7%	48.1%

Prepositional (few)

Use: Adpositional



Minor parts of speech

PoS	QUE	GUA	OTO
PREP	0.5%	0.5%	21.2%
DEF ART			
TOT	16.0%	34.7%	48.1%

Minor parts of speech

PoS	QUE	GUA	OTO
PREP	0.5%	0.5%	21.2%
DEF ART	-		-
TOT	16.0%	34.7%	48.1%

Minor parts of speech

PoS	QUE	GUA	OTO
PREP	0.5%	0.5%	21.2%
DEF ART	–	19.4%	–
TOT	16.0%	34.7%	48.1%

Minor parts of speech

PoS	QUE	GUA	OTO
PREP	0.5%	0.5%	21.2%
DEF ART	–	19.4%	–
TOT	16.0%	34.7%	48.1%

exclusively
FemSg
'la'

Minor parts of speech

PoS	QUE	GUA	OTO
PREP	0.5%	0.5%	21.2%
DEF ART	-	19.4%	-
TOT	16.0%	34.7%	48.1%

Que: No Art



Gua: No Art



Minor parts of speech

PoS	QUE	GUA	OTO
PREP	0.5%	0.5%	21.2%
DEF ART	-	19.4%	-
TOT	16.0%	34.7%	48.1%

Que: No Art

Gua: No Art

Oto: Def Art



Minor parts of speech

PoS	QUE	GUA	OTO
PREP	0.5%	0.5%	21.2%
DEF ART	-	19.4%	-
TOT	16.0%	34.7%	48.1%

Function in **Gua**
Topic marker
not **Def Art**

Minor parts of speech

PoS	QUE	GUA	OTO
PREP	0.5%	0.5%	21.2%
DEF ART	-	19.4%	-
TOT	16.0%	34.7%	48.1%

Que has suffix
'-ka'
marking *Topic*

Function in **Gua**
Topic marker
not **Def Art**

Minor parts of speech

PoS	QUE	GUA	OTO
PREP	0.5%	0.5%	21.2%
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TOT	16.0%	34.7%	48.1%

Que has suffix
'-ka'
marking *Topic*

Function in **Gua**
Topic marker
not **Def Art**

Oto has
Def Art



Borrowing

1. Major parts of speech (N, V, A)
2. Minor parts of speech
3. **Word Order**



Word Order

Otomí: basic order = VOS



Word Order

Otomí: basic order = VOS

mi=ñä-wi ár to ar Xuwa
PAST.3=speak-with his mother-in-law the Juan
'Juan spoke with his mother-in-law.'

Word Order

Otomí: VOS / SVO = *marked* for older speakers ...

mi=ñä-wi ár to ar Xuwa
PAST.3=speak-with his mother-in-law the Juan
'Juan spoke with his mother-in-law.'

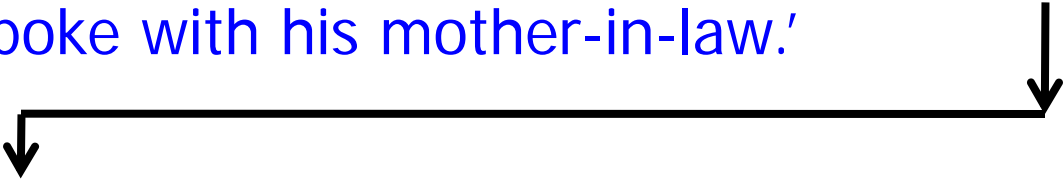
ar Xuwa mi=ñä-wi ár to
the Juan PAST.3=speak-with his mother-in-law
'**It was Juan who** spoke with his mother-in-law.'

Word Order

Otomí: VOS / SVO = marked for older speakers ...

but not for younger ones:

mi=ñä-wi ár to ar Xuwa
PAST.3=speak-with his mother-in-law the Juan
'Juan spoke with his mother-in-law.'



ar Xuwa mi=ñä-wi ár to
the Juan PAST.3=speak-with his mother-in-law
'Juan spoke with his mother-in-law.'

Word Order

Otomí: VOS / SVO = marked for older speakers ...
but not for younger ones:

mi=ñä-wi ár to ar Xuwa
PAST.3=speak-with his mother-in-law the Juan
'Juan spoke with his mother-in-law.'

ar Xuwa mi=ñä-wi ár to
the Juan PAST.3=speak-with his mother-in-law
'Juan spoke with his mother-in-law.'

↓ → = ***basic order in Spanish***



Word Order

Otomí: VOS / SVO = marked for older speakers
but not for younger ones

Guarani: SVO is (still) unmarked order



Word Order

Otomí: VOS / SVO = marked for older speakers
but not for younger ones

Guarani: SVO is (still) unmarked order

Quechua: SOV is (still) unmarked order



Borrowing

1. Major parts of speech (N, V, A)
2. Minor parts of speech
3. Word Order
4. Morphology



Morphology: on **native**

Morphology: on native

Otomí:

Guarani:

Quechua:

- **No borrowed Spanish morphology
on native stems**



Morphology: on borrowed



Morphology: on borrowed

Otomí: - **No** derivational and inflectional morphology
on borrowed words

Guarani:

Quechua:



Morphology: on borrowed

Otomí: - **No** derivational and inflectional morphology
on borrowed words

Guarani: - **Some** derivational morphology (-AG and -DIM)
on borrowed words (*lexical?*)

Quechua:



Morphology: on borrowed

Otomí: - **No** derivational and inflectional morphology
on borrowed words

Guarani: - **Some** derivational morphology (-AG and -DIM)
on borrowed words (*lexical?*)

Quechua: - **More** derivational morphology (-AG and -DIM)
and **some** inflectional morphology (-PL)
on borrowed nouns (*productive?*)

Morphology: on borrowed

T

Otomí:

- **No** derivational and inflectional morphology
on borrowed words

I

M

Guarani:

- **Some** derivational morphology (-AG and -DIM)
on borrowed words (*lexical?*)

E

Quechua:

- **More** derivational morphology (-AG and -DIM)
and **some** inflectional morphology (-PL)
on borrowed nouns (*productive?*)

?



Morphology: on borrowed

Spanish plural -s:



Morphology: on borrowed

Spanish plural -s:

Otomí: No plural marking on nouns, only in article
and verbal suffix



Morphology: on borrowed

Spanish plural -s:

Otomí: No plural marking on nouns, only in article
and verbal suffix

Guarani: No morphological plural, only optional
adjective for [+HUM]



Morphology: on borrowed

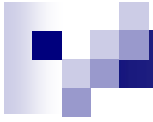
Spanish plural -s:

Otomí: No plural marking on nouns, only in article and verbal suffix

Guarani: No morphological plural, only optional adjective for [+HUM]

Quechua: Plural suffix, *-kuna*

Some double coding in corpus (-kunas)



5. Conclusions



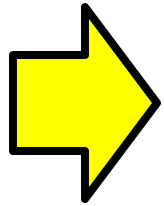
Conclusions

Anything goes? Well ...



Conclusions

Anything goes? Well ...



**Significant differences between
languages of different types**



Conclusions

Typology potential explanation for:



Conclusions

Typology potential explanation for:

- difference % N - V - A



Conclusions

Typology potential explanation for:

- difference % N - V - A
- borrowing of **adpositions**



Conclusions

Typology potential explanation for:

- difference % N - V – A
- borrowing of adpositions
- borrowing of **definite article**



Conclusions

Typology potential explanation for:

- difference % N - V – A
- borrowing of adpositions
- borrowing of **definite article**
- difference % **Lexical vs Grammatical** loans



Conclusions

Typology potential explanation for:

- difference % N - V - A
- borrowing of adpositions
- borrowing of definite article
- difference % Lexical vs Grammatical loans
- change in **word order system**



Conclusions

Typology potential explanation for:

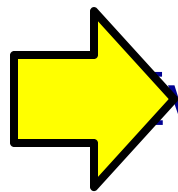
- difference % N - V - A
- borrowing of adpositions
- borrowing of definite article
- difference % Lexical vs Grammatical loans
- change in word order system
- borrowing **nominal plural suffix**



Conclusions

Typology potential explanation for:

- difference % N - V - A
- borrowing of adpositions
- borrowing of definite article
- difference % Lexical vs Grammatical loans
- change in word order system
- borrowing nominal plural suffix

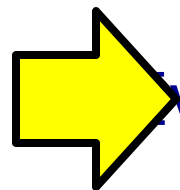


Evidence of **DIVERSITY** also in **BORROWING**

Conclusions

Typology potential explanation for:

- difference % N - V - A
- borrowing of adpositions
- borrowing of definite article
- difference % Lexical vs Grammatical loans
- change in word order system
- borrowing nominal plural suffix



Evidence of **DIVERSITY** also in **BORROWING**