

Predicting the
output of language
contact:
the view from
microcontact



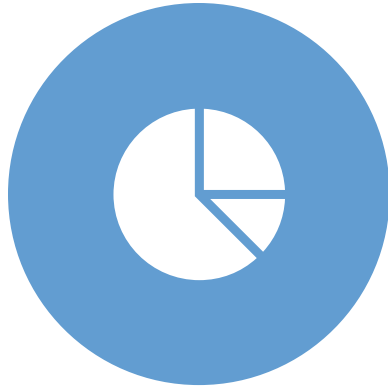
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Workshop: Language and Migration, IGG47

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Language Change



CHANGE IN CONTACT



EVERYTHING IN BETWEEN



DIACHRONIC/ENDOGENOUS
CHANGE

What happens when languages get in contact?

- Can the output of language change in contact (CLC) be predicted, given some conditions?
- Are CLC and diachronic change underlyingly the same?

Two kinds of language change: EC and CIC

Two kinds of language change:

- Endogenous /Diachronic change (EC)
- Change-in-contact (CIC)

Are CIC and EC underlyingly the same mechanism?

Is there some sort of generalized tendency towards simplification / less markedness?

(How do we tell them apart, to start with?)

Is this the right question to ask? Is what we see totally accidental?

EC

- Language change (change in diachrony) scholars have mostly been preoccupied with:
 - the **directionality** of change (Kiparsky 1968, Hopper 1990, 1991, Keller 1994, and more recently Newmeyer 1998, Campbell 2001, Traugott 2001, Haspelmath 1999, 2004 and many others)
 - the **causes and mechanisms** of change (Roberts & Roussou 2003, Roberts 2007, Roeper 1993ff, Lightfoot 1991, Kroch 1994, Lightfoot & Westergaard 2007, Westergaard 2008| 2011 ...)

EC / The grammaticalization path

- In typological terms: universals of language change, often called grammaticalization paths (Lehman 1993, Hopper & Traugott 1993, Haspelmath 1999)
- Traditional historical studies all postulate some sort of direction for language change (Meillet 1912 ff)
- Keyword: ~ simplification

CIC (typological perspective)

- A totally different story: Socio-historical factors are much more relevant
- “Converging languages in an area are likely to adopt new patterns from multiple sources, or acquire new shared grammatical structures, creating a “compromise pattern”. Alternatively, one language may adopt the grammar of another.
- Balanced language contact, without one language trying to oust the other, goes together with long-standing multilingualism and promotes contact-induced **increase in language complexity**.
- **The opposite (‘displacive’ language contact) promotes language loss and tends to diminish diversity.**” (Aikhenvald & Dixon 2006: 48-49)

CIC

Facilitating factors that have to do with grammar:

- Pragmatic salience
- Tendency to achieve word-for-word intertranslatability
- Frequency
- Existence of perceivable gap
- Typological naturalness
- Pre-existing structural similarity
- Existence of lookalike...

CIC

Facilitating factors that have nothing to do with grammar:

- Degree of knowledge of each other's languages ('lingualism')
- Kinds of contact
- Language attitudes
- Balanced and displacive contact
- Incomplete language acquisition
- Polyglossia

Increase or decrease of complexity

... depends on a number of factors (Aikhenvald 2006:43)

TABLE 1. Balanced and displative language contact: a comparison

Parameters	Balanced contact	Displative contact
Relationships between languages	roughly equal, or involving a traditional hierarchy; stable	dominance; unstable
Linguistic effects	rise in complexity; gain of patterns	loss of patterns; potential simplification
Results	language maintenance	potential replacement of one language with another

EC vs CIC

EC: path (simplification?)

CIC: everything goes

Is it really like that?

How can we tell apart EC from CIC?
Most of the times it is impossible

Heritage languages

A kind of language contact



Unbalanced contact

Mostly studied from a
psycholinguistic/acquisition viewpoint

Kupisch & Polinsky (2021):

EC vs CIC

“Based on the example of article use, we show that heritage languages undergo the same processes of grammaticalization and degrammaticalization as (other) natural languages do. Therefore,

**GRAMMATICAL PATTERNS IN HERITAGE
LANGUAGES CAN BE PREDICTED ON THE BASIS OF
DIACHRONIC CHANGE,**

and heritage languages can AMPLIFY and foreground developments that are known to take place in language diachrony and are potentially already taking place in the homeland variety” (Kupisch & Polinsky 2021:2).

What do they look at?

The formation of:

- Articles from demonstratives
- Numerals

(grammatical elements, having to do with phi-features)

Simplification

Of what?

**(Marked)
phenomena
becoming
unmarked?**

**observable in
diachrony?
(attested for
several centuries)**

**What is marked
then?**

Twelve senses of markedness (and that's not even all...)

(Haspelmath 2006:26)



MARKEDNESS AS COMPLEXITY	
1. Trubetzkoyan markedness: markedness as specification for a phonological distinction	'In German, the phonological opposition <i>t:d</i> is neutralized syllable-finally in favor of <i>t</i> , which shows that <i>d</i> is the mark-bearing member of the opposition.'
2. Semantic markedness: markedness as specification for a semantic distinction	'In the English opposition <i>dog/bitch</i> , <i>dog</i> is the unmarked member because it can refer to male dogs or to dogs in general.'
3. Formal markedness: markedness as overt coding	'In English, the past tense is marked (by <i>-ed</i>) and the present tense is unmarked.'
MARKEDNESS AS DIFFICULTY	
4. Phonetic markedness: markedness as phonetic difficulty	'On the scale <i>b > d > g > G</i> , the consonants to the right are increasingly more marked.'
5. Markedness as morphological difficulty/unnaturalness	'A singular/plural pair like <i>book/books</i> is less marked than <i>sheep/sheep</i> because the latter is not iconic.'
6. Cognitive markedness: markedness as conceptual difficulty	'The plural category is marked because it requires more mental effort and processing time than the singular.'
MARKEDNESS AS ABNORMALITY	
7. Textual markedness: markedness as rarity in texts	'For direct objects, coreference with the subject is marked and disjoint reference is unmarked.'
8. Situational markedness: markedness as rarity in the world	'For marked situations, languages typically use complex expressions.'
9. Typological markedness: markedness as typological implication or cross-linguistic rarity	'The syllable coda position is marked in contrast to the onset position.'
10. Distributional markedness: markedness as restricted distribution	'Object-verb word order is the marked case: it occurs only with negation.'
11. Markedness as deviation from default parameter setting	'Absence of noun incorporation is the unmarked case, and the presence of productive noun incorporation has to be triggered by a specific parametric property.'
12. MARKEDNESS AS A MULTIDIMENSIONAL CORRELATION	'The singular is more marked than the plural, and the plural is more marked than the dual.'

Table 1
Twelve senses of 'markedness' and their typical uses

Defining complexity

What is complexity? What counts as simplification?

For this research we consider:

Markedness

1. Morphological markedness (irregular paradigm, featural richness)
2. Syntactic markedness (reconstruction effects, dislocation for interface reasons)
3. Semantic markedness (expression of more meanings, or the same meaning more than once)

The borders between contact and diachrony

- Contact studies: **1-to-1**
- “if languages are genetically related, we expect them to develop similar structures, no matter whether they are in contact or not. And if genetically related languages are in contact, trying to prove that a shared feature is contact-induced and not a chance result of Sapir’s drift may be next to impossible”
Aikhenvald (2006:9)
- **> genetically-related languages are the worst to understand the difference between CIC and EC**

One problem at a time

To identify the primitives of
CIC we need:

**Two, three, or more
(marked) phenomena**

observable in diachrony
(attested for several
centuries)

**in contact with similar
phenomena**, within
grammars that are exactly
the same BUT for the
phenomena we are
checking

**Grammars that come into
contact at the same time**,
in very similar socio-
linguistic and historical
conditions

This way we can identify
the real output of contact –
not the result of several
interacting external and
internal factors

Microcontact

Grammars: A, B, C, D, E

...identical (in the same domain) but for one element X

- Feature X in grammar A **in contact** with

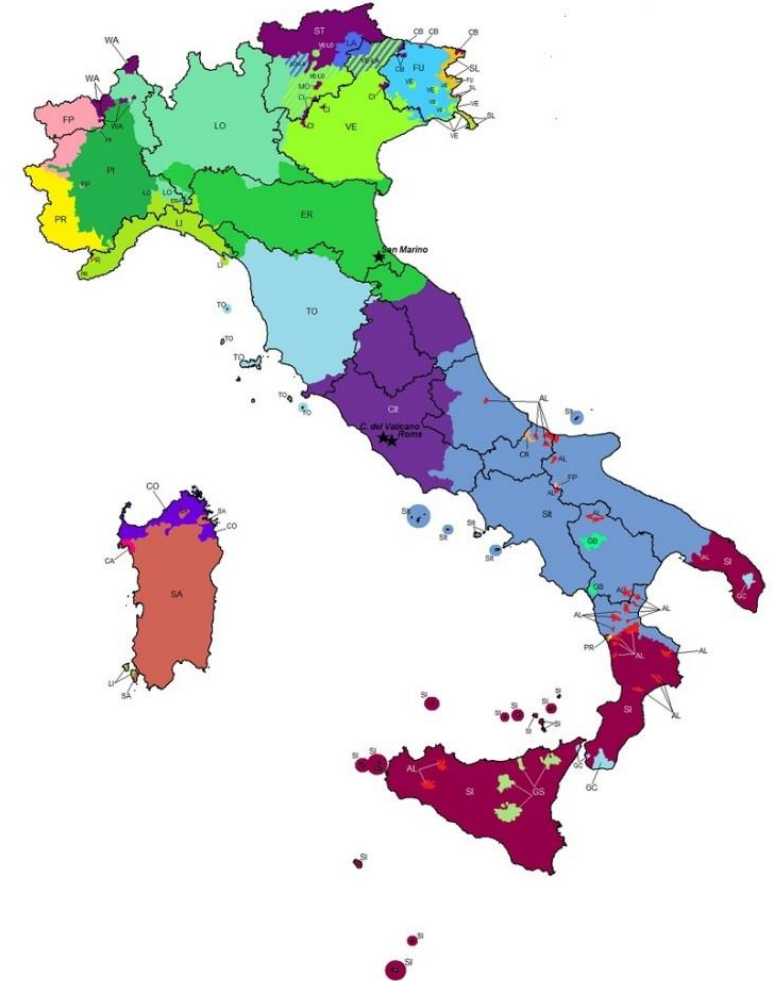
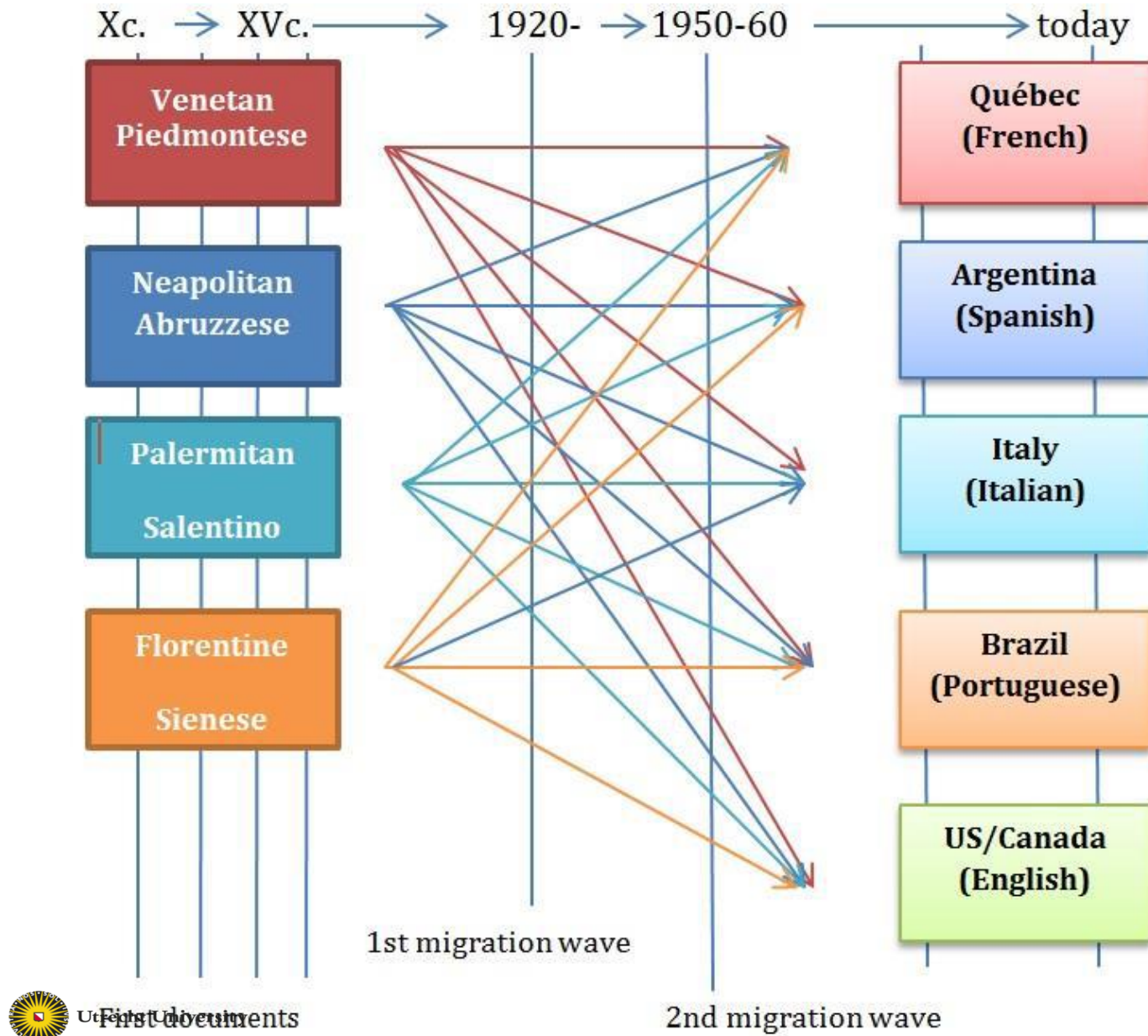
Grammar B

Grammar C

Grammar D

Grammar E

- Feature X in grammar A **in isolation**
- **AND** with one and the same external setup



The socio-historical conditions in which the languages came in contact are practically identical; we can factor out most external factors

We can still observe optional structures in 1st generation emigrants

We can observe internal factors at work, by selecting the right features
D'Alessandro (2015)



Microcontact

The team



Manuela



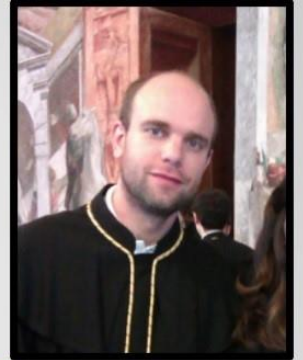
Roberta



Gigi



Francesco



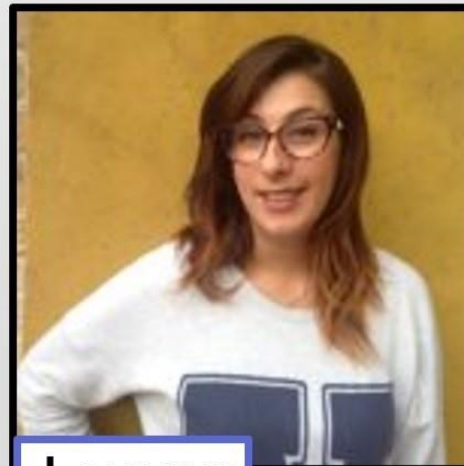
Jan



Alberto



Silvia



Luana



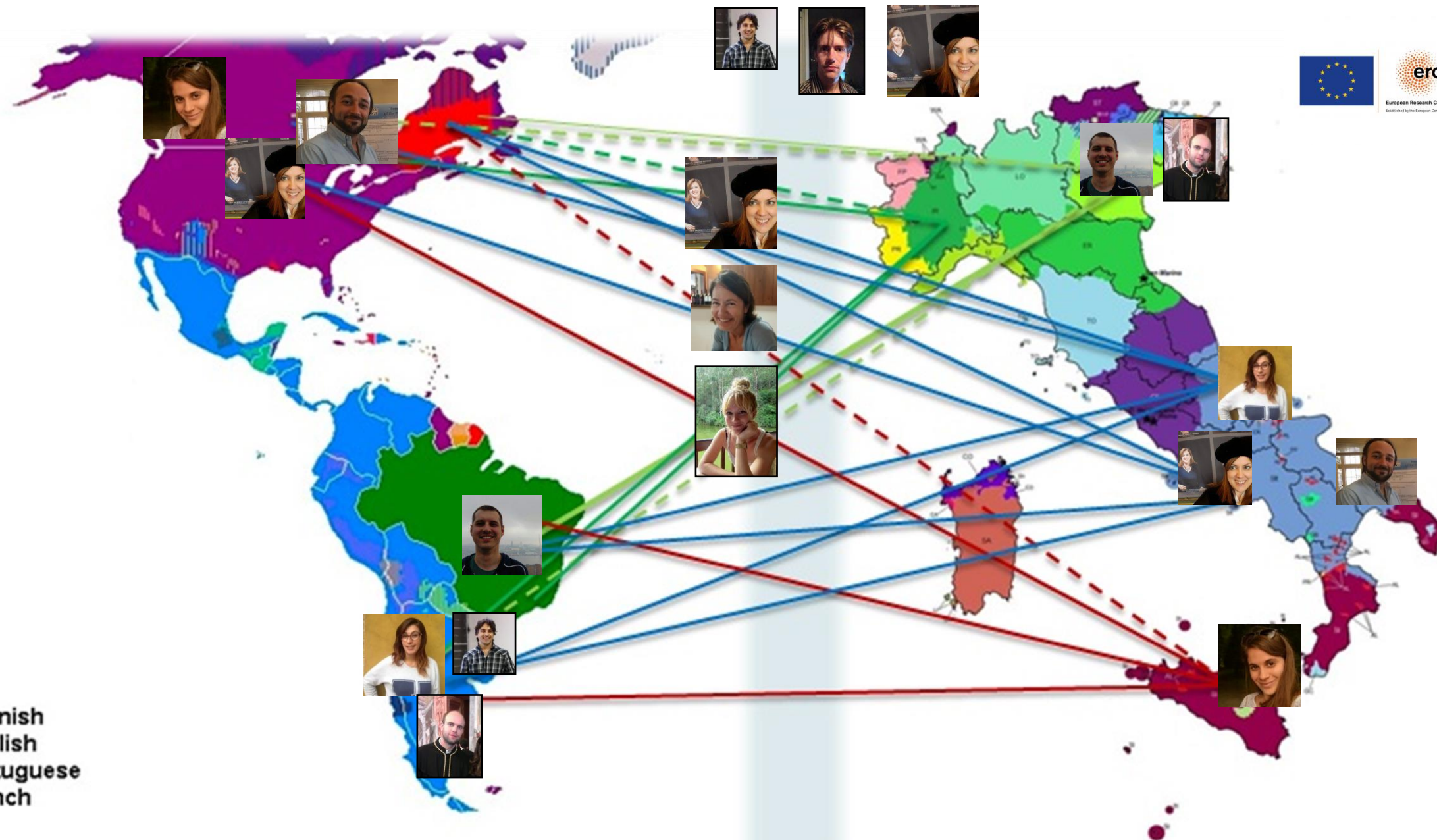
Brechje



Julian



Spanish
English
Portuguese
French



What we found/ speakers

Fieldwork 1 / interviews

Brazil	Argentina	Canada	US	Belgium	Italy	Total
50 total	74 total	36 total	58 total	8 total		226
G1: 7	G1: 50	G1: 34	G1: 32	G1: 6		129
G2: 1	G2: 14	G2: 2	G2/G3: 26	G2: 2		45
G3ff: 42	G3ff: 10					52

What we found/ speakers

Brazil	Argentina	US	Belgium	Italy
29 total	24 total	4 total	8 total	75 total

DOM in Italy	SCLs in Veneto
389	788

E-fieldwork

BR	ARG	US	Canada	Belgium	Italy
46	94	17	35	8	83

Syntactic phenomena

- Pronouns and demonstratives
- Differential Object Marking
- Auxiliary selection
- Subject clitics

Pronouns and demonstratives

Pronominal and possessive paradigms

- **In diachrony:** they are **stable** > they don't restructure

(1) *Pronominal paradigms in diachrony*

	1SG	2SG	3SG.M	1PL	2PL	3PL.M
Latin	ego	tu	ille	nos	vos	illi
Galician	eu	ti	el	nós	vós	eles

Terenghi (2021:2-4)

(2)

Possessive paradigms in diachrony

	POSS.1SG	POSS.2SG	POSS.3SG	POSS.1PL	POSS.2PL	POSS.3PL
Latin	meus	tuus	suus	noster	vester	suus
Italian	mio	tuo	suo	nostro	vostro	loro

Pronouns in contact

- Pronouns in contact also stay stable (29 Romance-based creoles, Terenghi 2021:3)

(3) *Pronominal paradigms in contact varieties*

a. Ternary

(4) *Possessive paradigms in contact varieties*

	POSS.1SG	POSS.2SG	POSS.3SG	POSS.1PL	POSS.2PL	POSS.3PL
French	mon	ton	son	notre	votre	leur
A Reunion C.	mon	ton	son	nout	zot	zot
B Haitian C.	mwen	ou	li	nou	nou	yo
C Tayo	pur mwa	pur twa	pur lja	pur nu	pur usot	pur sola
Zamboangueno	(i)yo	etu	éle/'le	kamé	kitá	kamó silá

Interim conclusion

personal and possessive
pronouns are stable



no change in the system
(we'll discuss why later)

Demonstratives in diachrony

- Demonstratives are more telling (Terenghi 2021)

(5)

Demonstratives in diachrony: from ternary to binary systems

a. Participant-oriented: Catalan (Ledgeway and Smith 2016:886)

	near the speaker	near the hearer	far from both
Conservative	aquest	aquess	aquell
Innovative	aquest	aquest	aquell

b. Speaker-oriented: Italian

	near the speaker	near the hearer	far from both
Tuscan varieties	questo	codesto	quello
Standard Italian	questo	quello	quello

Demonstratives in contact

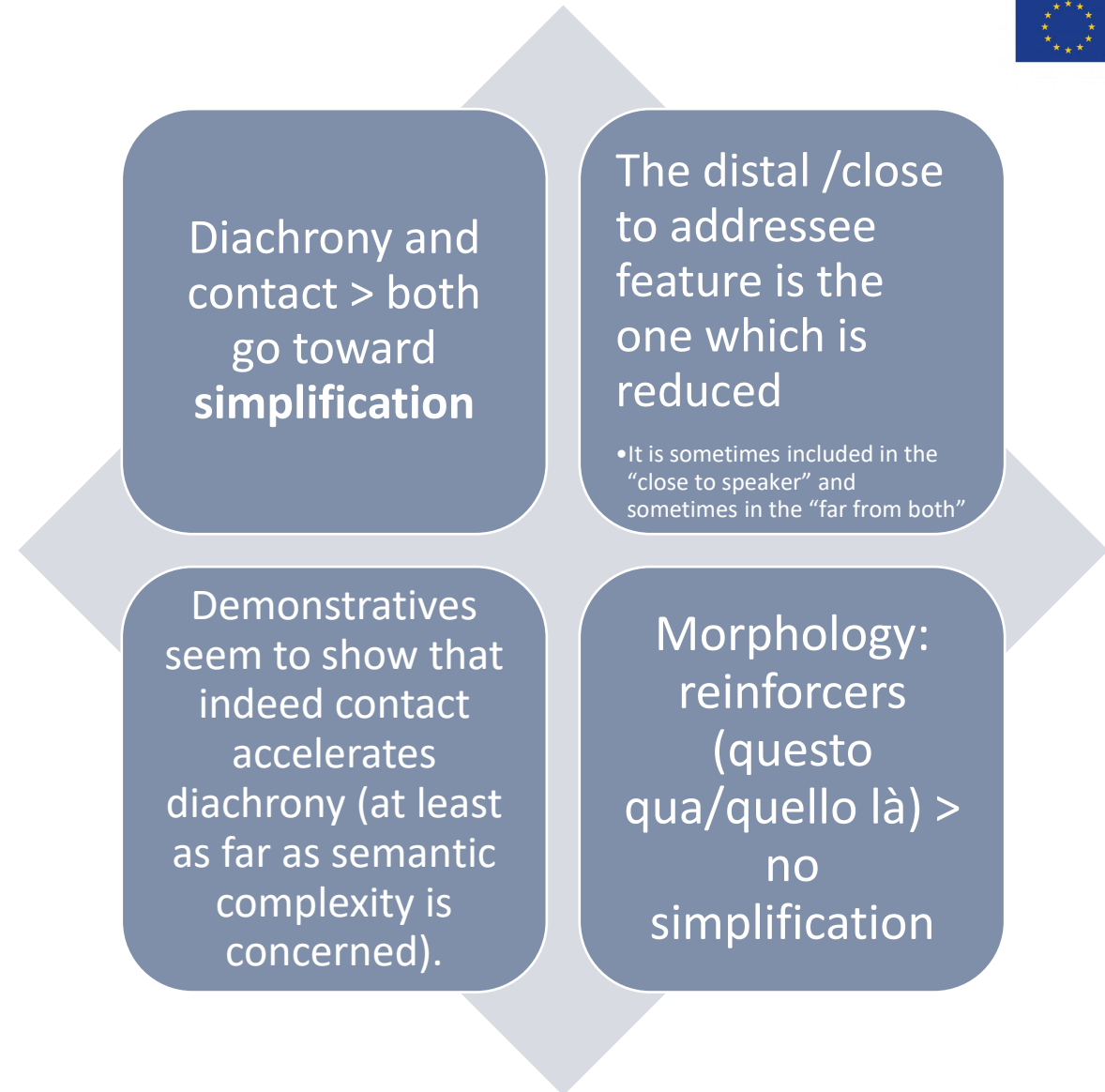
- Reduction > simplification

(6)

Demonstratives in contact: from ternary to binary systems

		near the speaker	near the hearer	far from both
Portuguese		este	esse	aquele
Sri Lanka Portuguese		isti	aka	aka

Demonstratives



Kupisch &
Polinsky
are right

**GRAMMATICAL PATTERNS IN HERITAGE
LANGUAGES CAN BE PREDICTED ON THE
BASIS OF DIACHRONIC CHANGE**

Differential Object Marking (DOM)

DOM in diachrony

- Emergence in different syntactic environments (Irimia & Pineda 2021)
- Relevance of **TOPICALITY**

lemmolo (2009, 2020): overview of > 100 languages
Topics are DOM-ed

- (7) 14th-c. Neapolitan *Romanzo di Francia* (Ledgeway 2009:834-36)
- a E a **mene** me 'de volleva mandare in outramare (1SG, C-top)
and DOM me me= hence want.PST.3SG send.INF in oversea
'And he wanted to send me overseas'
- b vóy fare morire **mene** (1SG, v-top)
want.PRS.2SG make.INF die me
'you want to have me die'

DOM in contact

- In contact DOM tends to disappear (Silva-Corvalán 1994; Montrul 2004; Luján & Parodi 1996; Montrul & Bowles 2009; Montrul & Sánchez-Walker 2013; Montrul, Bhatt & Girju 2015) have shown that DOM weakens in Heritage Spanish spoken in the US.
- Italo-Romance in NYC: same (Andriani et al, 2021)

(10) Oh, salutə Ø **questo qqua**, salutə Ø **questa persona qqua**.
hey greet.2SG DOM this here greet.2SG DOM this person here
'hey, say hi to this one here, say hi to this person here.'

(11) Mi zio [...] portato Ø **tutta la famijja** là.
my uncle brought DOM all the family there
'my uncle [...] brought all his family there.'

DOM in microcontact

- Things are rather different in microcontact: extension of DOM

(12) *Heritage Abruzzese in Argentina*

Lu lopə s'a magnatə **a** **nu** gnillə.
the wolf SI=has eaten DOM a lamb
'The wolf ate a lamb.'

Extended DOM

Emergent DOM

(13) *Heritage Friulian in Argentina*

Tu as fât un sium. Tu as bussât **a** **to** **fie**.
you.SCL have made a dream you.SCL have kissed DOM your daughter
'You had a dream. You kissed your daughter.'

CIC vs EC

Microcontact behaves like diachronic change

COMPLEXIFICATION

Macrocontact/ “normal” contact doesn’t

SIMPLIFICATION

What can we conclude from this?



Auxiliary selection



Romance: spreading of HAVE

- HAVE > generalized in stative/unaccusative syntax (at the expense of the selection of BE) in old Spanish (Stolova 2006), old Catalan (Mateu 2009), old Portuguese (Huber 1933:221), old French (Nordhal 1977), old Neapolitan (Formentin 2001:94-99; Cennamo 2002:198; Ledgeway 2009:§15.1.1.6), old Sicilian (La Fauci 1992: 202ff.) (see Ledgeway 2003, 2012: 334-335; Loporcaro 2016: 803; cf. also McFadden & Alexiadou 2006, 2010 for old English).

(14) Old Neapolitan (Ledgeway 2009:602)

Averria=me	ben	potuto bastare,	commo èy	bastato ad onnuno
have.COND.3SG=me	well	been-able suffice	like is	sufficed to each-one

‘it could have sufficed me, like it sufficed each one’

Aux in contact

Extension of HAVE

Andriani & D'Alessandro (2021)

Table B: Heritage Barese auxiliary selection – 4 speakers (US)

(15)

sp	Heritage Barese	1	2	3	4	5	6
1	U_bar _JC_009 Casamassima	B	H	H(\approx B)	B	---	H
2	U_bar _B_011 Bitetto	B	B	H(\approx B)	H	---	H
3	U_bar _B_012 Bitetto	B	B	H(\approx B)	H	---	H
4	U_ba r_B_013 Bitetto / Grumo Appula	H	H	H(\approx B)	H	---	H

Parallel development?

CIC and EC seem to have the same result

SIMPLIFICATION

BUT: we need to be careful because

1. we might be comparing apples with pears
2. HAVE is not simpler than BE

Upper-Southern Italo-Romance

Spreading of BE into HAVE-selecting predicates, Upper Southern Italo-Romance

(16)

Different
outcome
than in the
rest of
Romance
(Andriani &
D'Alessandro
(2021))

	1SG	2SG	3SG	1PL	2PL	3PL
[+active] transitive/unergative	H	H	H	H	H	H
Introdacqua (AQ)	H	B	H	H	H	H
Lanciano (CH)	H/B	B	H	H/B	H/B	H
L'Aquila/Avezzano/Pescara	B	B	H	B	B	H

Tuttle (1986:270)

Upper-Southern Italo-Romance

Spreading of BE into HAVE-selecting predicates, Upper Southern Italo-Romance

(17) Casi particolari – attività non dinamica (Acerno)

Izzo &
Cerullo
(2021)

Estensione di ESSERE sui domini di AVERE (?)

	Anziani classe medio-alta		Adulti classe medio-alta		Giovani classe medio-alta		Anziani classe medio-bassa		Giovani e adulti classe medio-bassa	
1sg	sorrur'mutə	E	addʒə rur'mutə	A	addʒə rur'mutə	A	sorrur'mutə	E	addʒə rur'mutə	A
2sg	sirrur'mutə	E	arur'mutə	A	a rur'mutə	A	sirrur'mutə	E	arur'mutə	A
3sg	Errur'mutə	E	arrur'mutə	A	a'rrur'mutə	A	Errur'mutə	E	arur'mutə	A
1pl			amma rur'mutə	A	amma rur'mutə	A			amma rur'mutə	A
2pl	sitə rur'mutə	E	ata rur'mutə	A	ata rur'mutə	A			atə rur'mutə	A
3pl	surur'mutə	E	annə rur'mutə	A	annə rur'mutə	A	surur'mutə	E	annə rur'mutə	A

Simplification?

Paradigmatic > YES

HAVE or BE? HAVE is more complex featurally

- Freeze (1992): possessive HAVE = BE+preposition
- Kayne (1993): auxiliary HAVE = BE+ preposition

Is this simplification?

YES for the paradigm (2 >1)

NO for the single auxiliary (HAVE>BE)



Subject clitics



Anti-agreement effects in Venetan

Unaccusative verbs in
Veneto and Trentino: anti
agreement with post-
verbal subject

D'Alessandro & Frasson
(2022)

(18)

- a. Le tose ze rivade.
the girls are arrived-PL.F
'The girls have arrived.'
- b. Ze rivà le tose.
is arrived-SG.M the girls
'The girls have arrived.'



Heritage Venetan

Same aae but specialized subject clitic

L'è (invariable) + postverbal subject

D'Alessandro & Frasson (2022)

- (19) L'è vegnesto la nona.
is come-SG.M the grandmother
'My grandmother came.'

L'è rivà i bisnoni quà tal Brasil.
is arrived-SG.M the great-grandparents here in=the Brazil
'The great-grandparents arrived here in Brazil.'

Heritage Venetan

Ze with preverbal subject + PPA

D'Alessandro & Frasson (2022)

- (20) La so mare ze nasesta in Italia.
the his mother is born-SG.F in Italy
'His mother was born in Italy.'



Heritage Venetan

È with 3rd person plural subjects

D'Alessandro & Frasson (2022)

- (21) I noni è vegnesti de navio.
The grandparents are come-PL.M by ship
'The grandparents came by ship.'



Complexification

...which is however in line with **one form-one meaning** -> a typical strategy of heritage language speakers

Are no
generalizations
possible then?

Two kinds of items

D'Alessandro & Terenghi (2022)

Phi- features, grammatical items

> Monotonic functional values <

Edge features / interface items

Change is more random

Pronouns & Demonstratives

Terenghi (2022)

- sequences of consistently positive features ([+F]) can be construed as sequences of additions
- sequences of consistently negative features ([−F]) can be conceived as sequences of subtractions
- sequences which include both positive and negative features ([+F,−G] or [+G,−F]) are to be conceived as sequences of both additions and subtractions.
- These sequences can be flagged as being **more complex due to a third-factor rooted monotonicity bias** (Terenghi 2021)

Pronouns & Demonstratives

Terenghi (2022)

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Terenghi (2021)

- a. 1st person: [+speaker, +participant]
- b. 2nd person: [−speaker, +participant]
- c. 3rd person: [−speaker, −participant]

- (3)
- a. singular: [+atomic, +minimal]
 - b. dual: [−atomic, +minimal]
 - c. plural: [−atomic, −minimal]

Monotonic sequences are more stable

Interface phenomena

- DOM
- Subject clitics and null subjects
- Person-driven auxiliaries?

➤ Unpredictable?

Asking the
right
questions?

Null Subjects

TOPICALITY

DOM



Null subjects in microcontact

Catalan-Spanish

Spanish-Portuguese

Italian-Portuguese

Different output of CIC in micro- vs
macrocontact

Null subjects tend to be preserved, or
even extended

NS in
microcontact
(for the
general
picture)

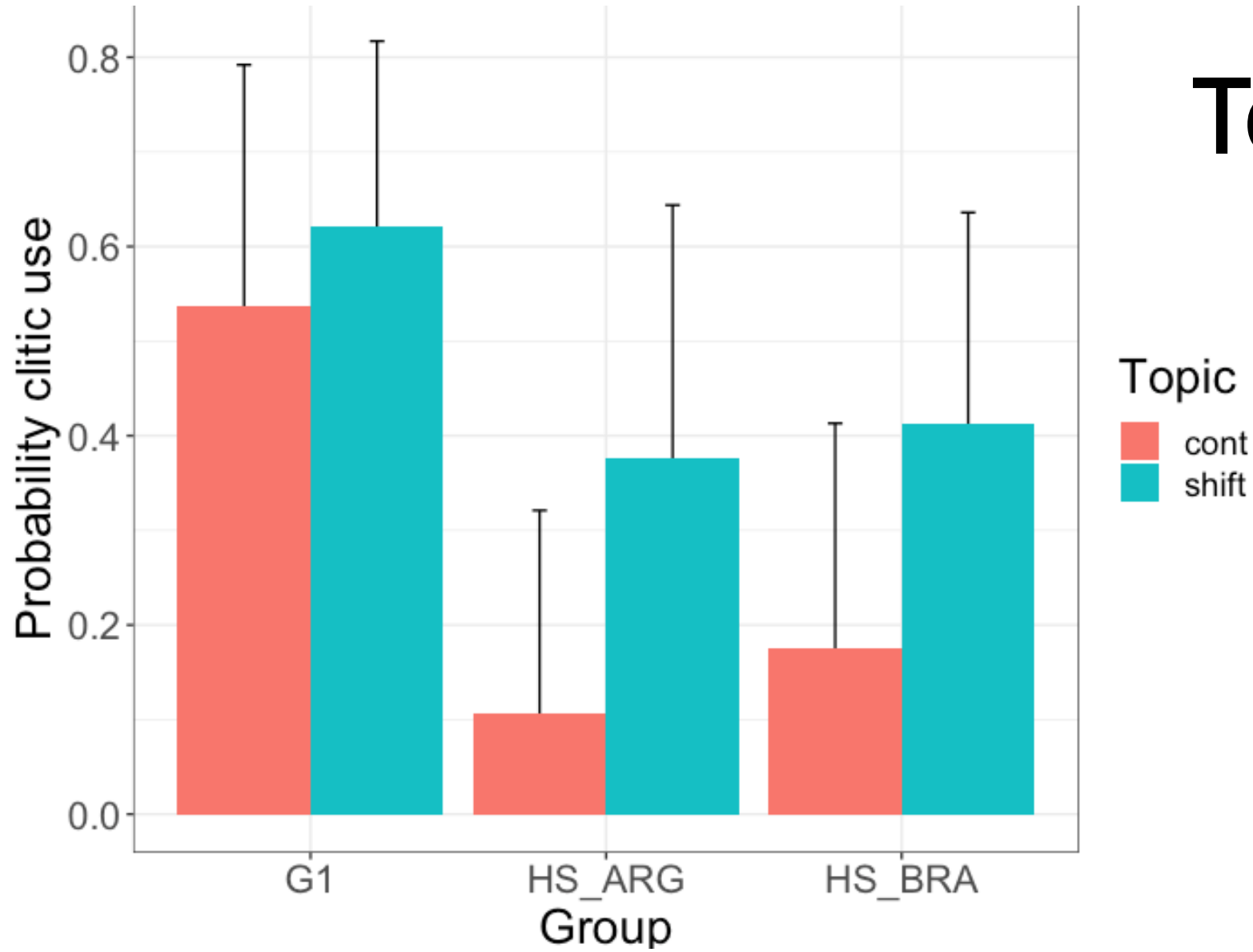


**Heritage Friulian SCLs (Frasson,
D'Alessandro & Van Osch 2021)**

They are pronominal (Frasson 2021)

They get dropped much more than in
the homeland variety

They get dropped in topic continuation
contexts (old information)



Topicality

Argentinian HSs were significantly more likely to produce clitics in topic shift contexts than in topic continuity contexts. Frasson & Van Osch (2020)

More in Frasson (2020)

DOM in microcontact

- Things are rather different in microcontact: extension of DOM

(12) *Heritage Abruzzese in Argentina*

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Extended DOM

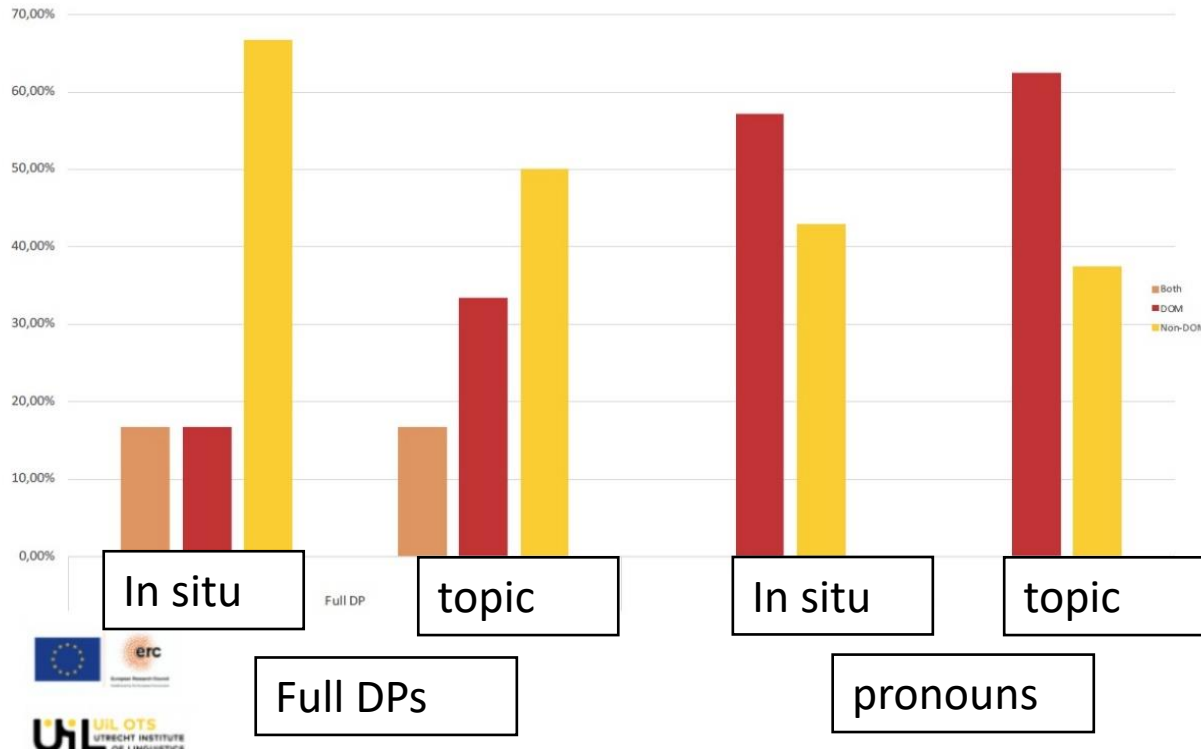
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Topics

DOM with topics



**Non-DOM meets DOM:
Friulian in Argentina,
G1**

RED is DOM

Speakers chose the DOM options more often with DOs in topic position.

Topicality

“50% of full DPs in situ are marked for DOM, whereas 92% of full DPs in topic are marked for DOM. Pronouns in situ are marked for 35% of the cases whereas they are marked 100% of the cases when in topic”

Sorgini (2020: 15)

The situation is the same for all languages: DOM remains stable or increases

Southern varieties: no erosion

Topicality

Macrocontact is “the odd one out”

Topicality plays an important role in language CIC

In macrocontact you lose DOM *in situ*; in microcontact you gain DOM on topic/dislocated objects

Linkers

Topics and deixis are linkers

Link to what was said before or to share knowledge

Link to the external world

- When speakers need to make order among conflicting inputs, they start systematizing from the linkers
- Universal strategy of human languages

In between grammar and cognition: Perception of the locus variation



Perceived typological similarity (Kellerman 1978, Rothman 2019 *ff.*)



Speakers borrow more readily from the language that is perceived to be more similar typologically (starting from the lexicon, going on with morphology/phonology etc)



It's slightly different: If speakers cannot perceive **the locus of variation** they don't follow the macro-contact pattern, and rely instead on general cognitive strategies, the same that children adopt for language acquisition



Two strategies

Two contexts of Change in Contact (CIC)

A. Phi-features and grammatical elements

> Monotonic bias < disruption of the monotonic functional sequence is where change happens

B. Interface-determined phenomena

Interface phenomena

A. a strategy involving “grammar” (lato sensu)

- If speakers are able to perceive the point of variation (macrocontact): Strategy linked to interfaces/performance/avoid pronouns (grammar)

B. a cognitive strategy, involving general principles at work in language (but not necessarily language-specific)

- If speakers are NOT able to perceive the point of variation: they resort to general cognitive strategies to resolve CIC output, like *linking*

Conclusions

Microcontact offers important insights into language change

Diachronic change and contact-induced change might or might not go in the same direction

Simplification or complexification? – is a vacuous question

Speakers resort to some universal strategies to 'solve conflicts'

Phi-feature based change is more predictable – it mostly depends on monotonic sequences

... we've only just started!

References and questions

THANK YOU!

reference list and questions:

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So why not only one strategy?

Why do languages
in contact resort to
different
strategies?

Why do we see a
difference between
microcontact and
macrocontact?

Some help from creoles

	Macrocontact	Microcontact	Extreme MacroContact
<i>Null subjects</i>	Weakened /rarely stay unaffected	Stay unaffected/ strengthened	Stay unaffected (if they exist at all)
<i>DOM</i>	Weakened	Strengthened/unaffected	Might exist
<i>Deixis/indexicals</i>	Unaffected	Unaffected	unaffected