

# Code-mixing patterns

Investigating variation in a German-Italian bilingual corpus

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# This presentation

- Bi- plurilingual corpora and the documentation of bilingual speech.
- The sociolinguistic context: German and Italian in South Tyrol.
- Modelling bilingual speech: a corpus-based research on insertions.

# Documenting bilingual speech

A corpus-based perspective

# The priority of language use in contact linguistics

Studies of contact-related language change, while usually acknowledging the importance of sociolinguistic norms and constellations in motivating change [...], tend largely to disregard aspects of **actual bilingual linguistic performance at the discourse level**.

**(Matras / Sackel, 2007: 848)**

# The priority of systematic empirical research in contact linguistics

From the point of view of grammar and sociolinguistics, the priority is to set up comparative studies which will allow us to gauge the effect of the different types of variable which have been found to affect CS, both linguistic and sociolinguistic. (Gardner-Choloros, 2009: 177)

Some authors treat the corpora collected primarily as the potential source for individual codeswitching examples, meant to confirm or argue against a particular 'model' or 'constraint' for codeswitching in general. In this case the overall features of the corpus play much less of a role, if any role at all. This is not the approach we want to take here. On the contrary, we want to link the study of codeswitching to the insight from the sociolinguistic research of the last 40 years or so that bilingual speech, just as monolingual speech, shows variation, but that this variation is patterned or structured, not random. (Deuchar, Muysken & Sung-Lan Wang, 2007: 298-299)

The situation is exacerbated by the fact that there is so little pertinent data, as will be detailed herein, the (possibly related) methodological predilection for butterfly collecting, and a concomitant devaluing of accountable analyses of large corpora of spontaneous bilingual speech. (Poplack & Dion, 2012: 280)

# «Plurilingual» vs. «multilingual» corpora

To differentiate our materials from these multilingual corpora, here we use the term “**plurilingual corpora**” to designate corpora that illustrate not only instances of codeswitching and codemixing but also *linguaging* through the use of various linguistic resources [...].

(**Léglise / Alby, 2016**)

# The issue of defining a corpus of bilingual speech

## **GIVEN:**

- a potentially bilingual community and
- potentially bilingual speakers

## **WE LOOK FOR:**

- contact phenomena being or not being present and
- the type of contact phenomena actually been observed

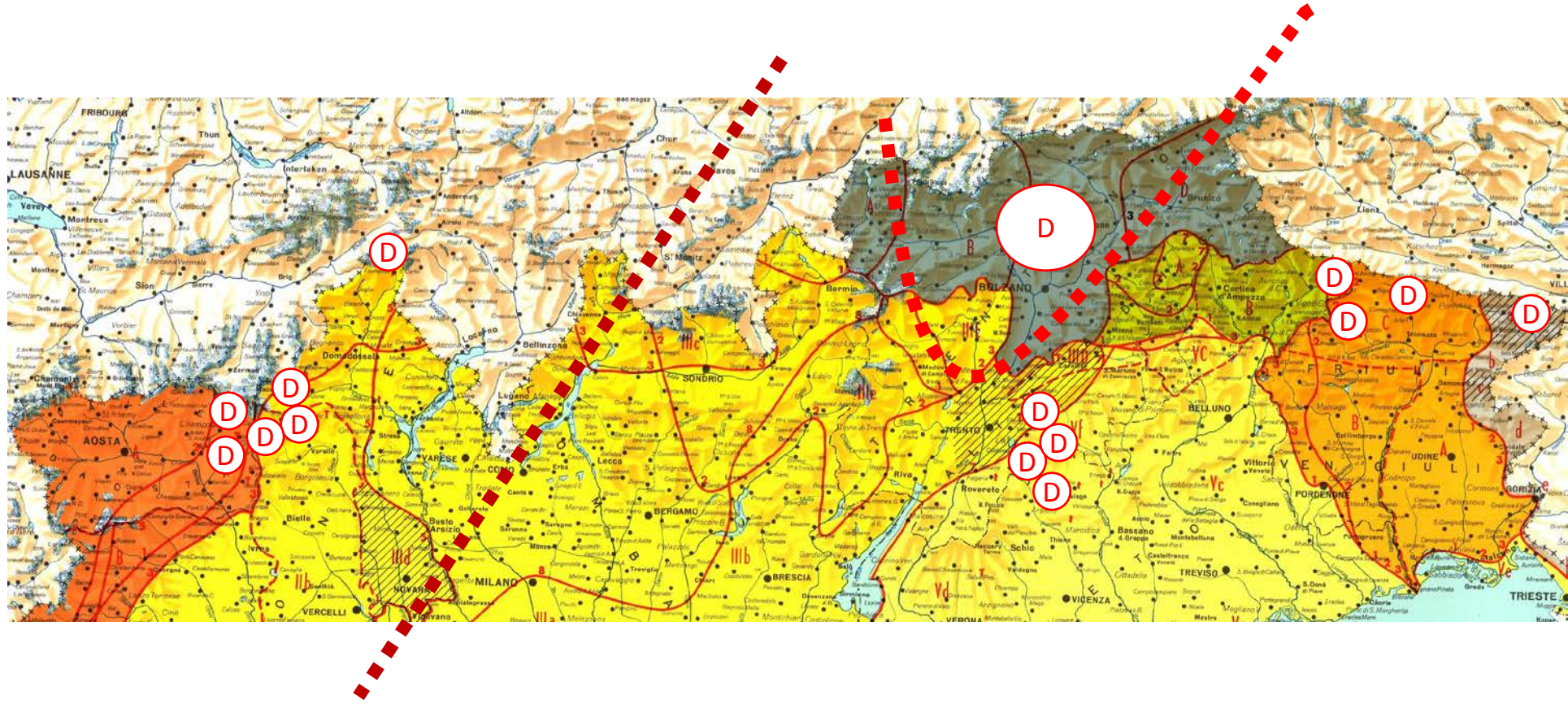
Fieldworkers «force» speakers into a «bilingual mode» (Grosjean, 2008) by letting members of the same bilingual community interact in natural or naturalistic situations.

# The sociolinguistic context

German as a minority language in Italy



# German minorities in Italy



Excerpt from the *Carta dei dialetti d'Italia* (G.B. Pellegrini)



South Tyrol

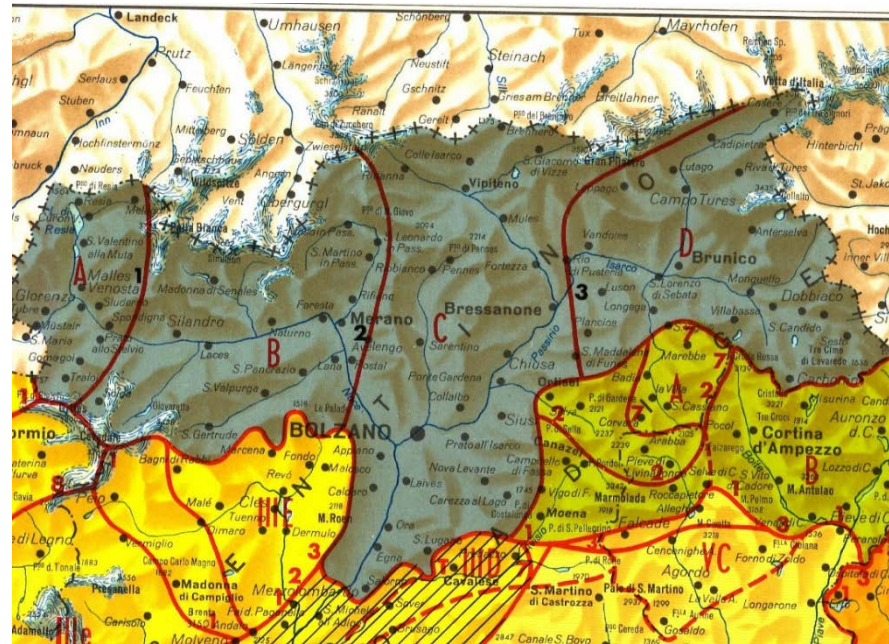


# Focus on South Tyrol

*De jure* bilingualism (Standard German / Standard Italian)



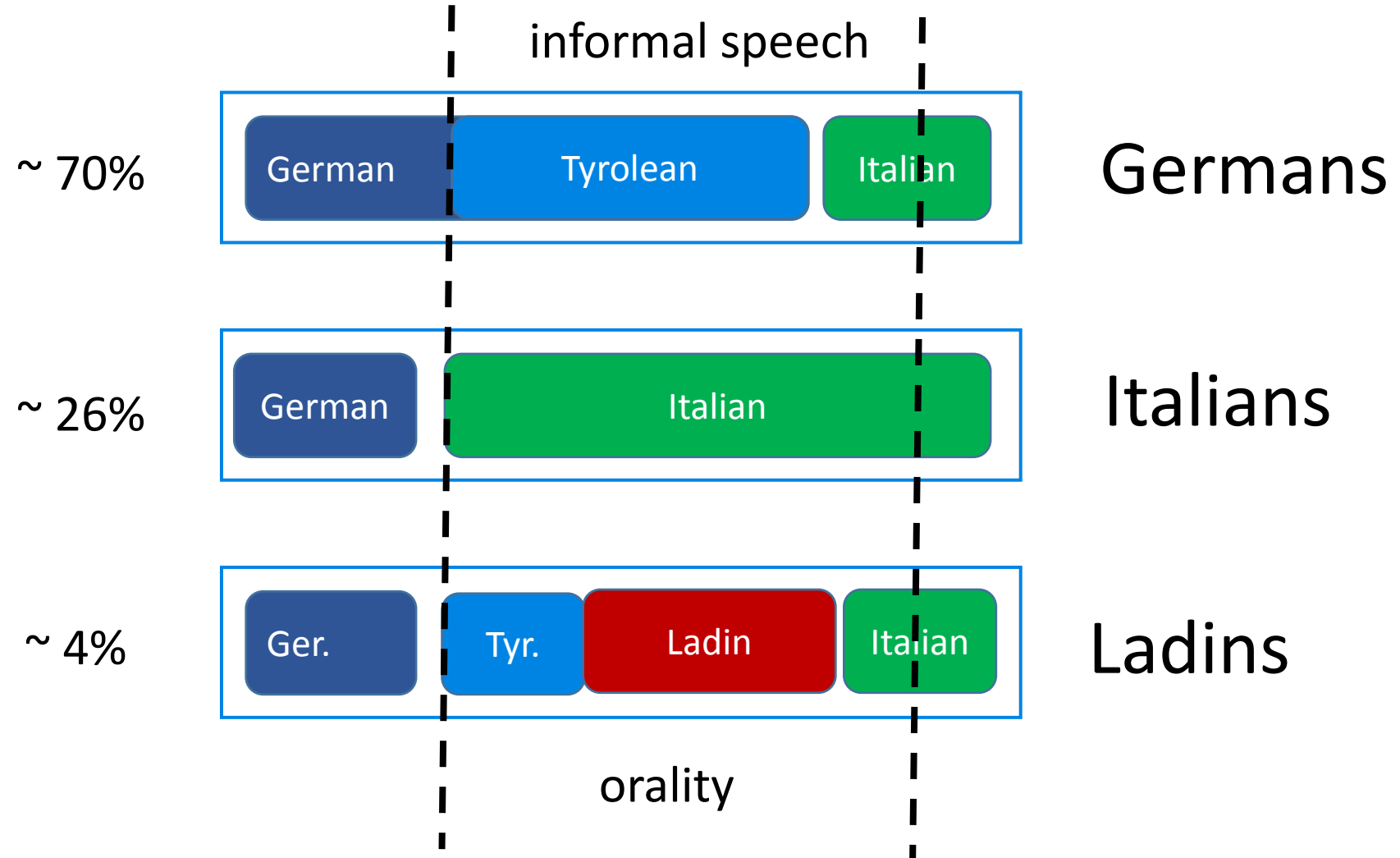
South Tyrol has been part of Italy for «only» 100 years. Forced italianization policies between 1922-1945. Full recognition of German since 1972.







*De jure* trilingualism (Standard German / Standard Italian / Ladin) in two valleys



# Three main speech communities

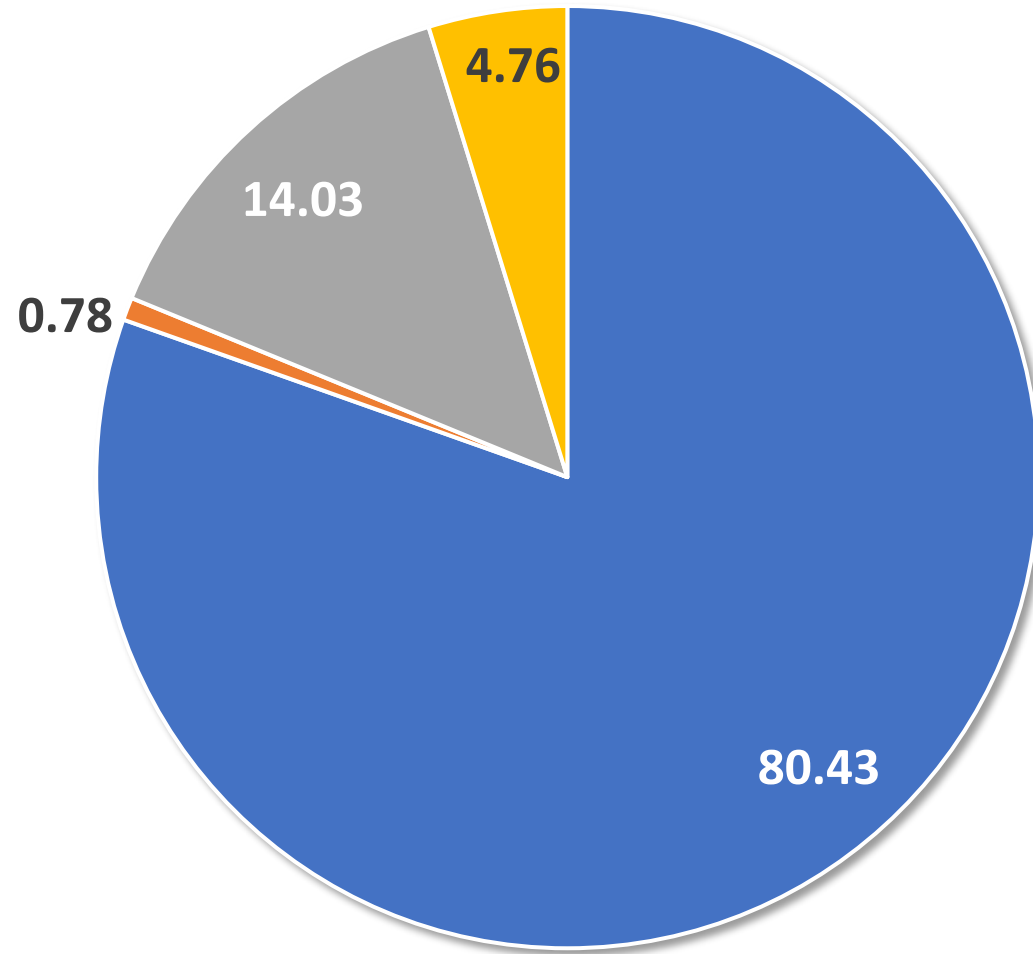


# «Kontatto»: a corpus-based project

			
<b>South Tyrol</b> (special focus on <b>bordering areas</b> )	<b>55 (61)*</b>	<b>17:57 h</b>	<b>147.596 words</b>

ELAN  
MPI - TLA

# language tags



■ German ■ other ■ Italian/Trentino ■ unclassifiable

# Modelling bilingual speech

Focus on **insertions** and their role in triggering bilingual speech  
[Muysken 2000; Clyne 2003; Matras 2009]



# Investigating patterns: single word insertions

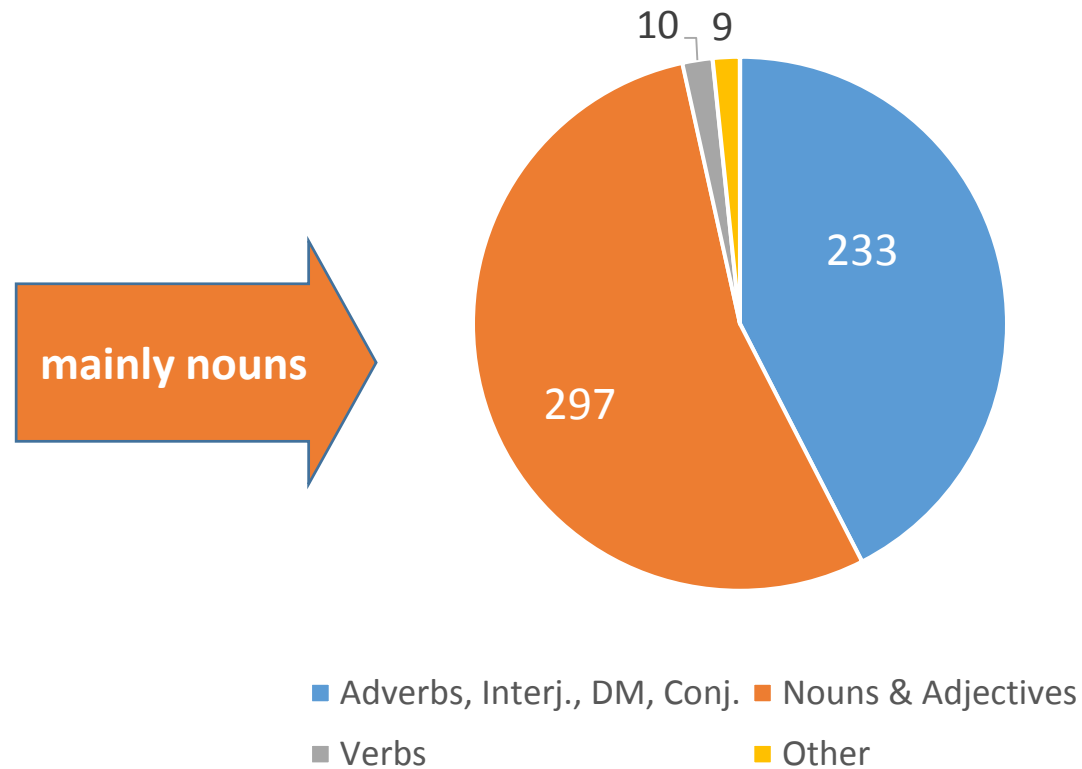
	Towards Italian	Towards German	Total
Peripheral	735 <sup>(1)</sup>	127 <sup>(4)</sup>	862
Nested	495 <sup>(2)</sup>	54 <sup>(3)</sup>	549
<b>Total</b>	<b>1230</b>	<b>181</b>	<b>1411</b>

Italian/Trentino > German  
Peripheral insertions > Nested insertions

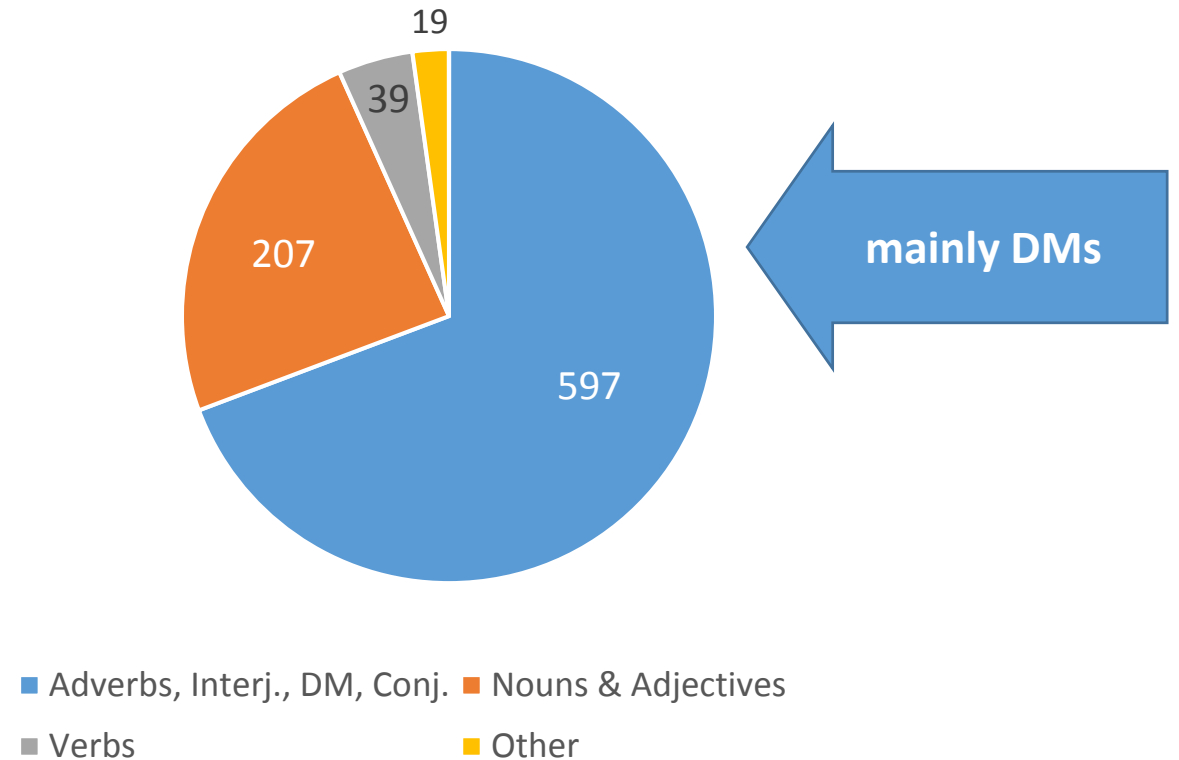
- 1) **ecco** # si arbetet a ba schportlår  
'there you are, she also works for Sportler'
- 2) zäm wo där **calcetto** isch  
'there where the table-football is'
- 3) in dialetto tedesco **unt** italiano standard  
'in German dialect and Standard Italian'
- 4) sono favorevole alle scuole bilingui xxx  
**jå** quello molto d'accordo  
'I am in favour of bilingual schools, yes, that I approve of very much'

# Insertional patterns and POS frequency

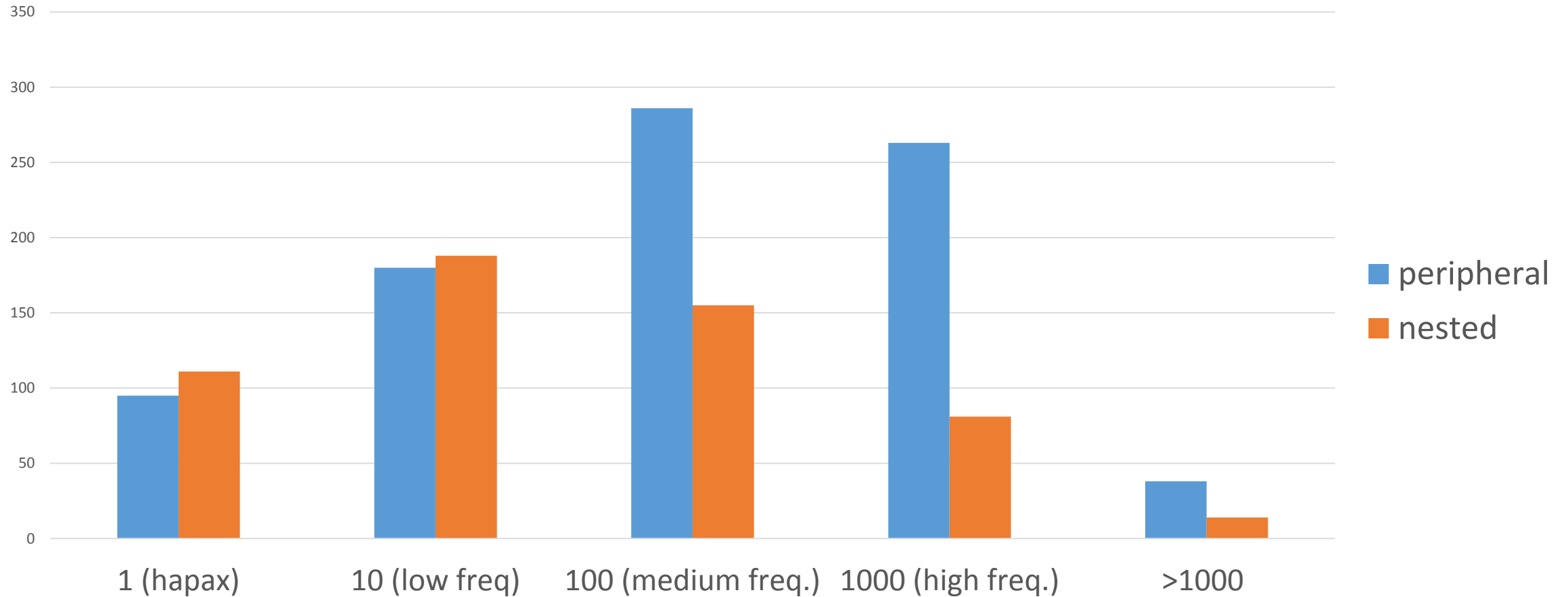
## Nested insertions



## Peripheral insertions



# Insertional pattern and type frequency



dår **acquist** des jaarhundårts wor des °wail i glab°

*The **purchase** of the century was that, because I think...*

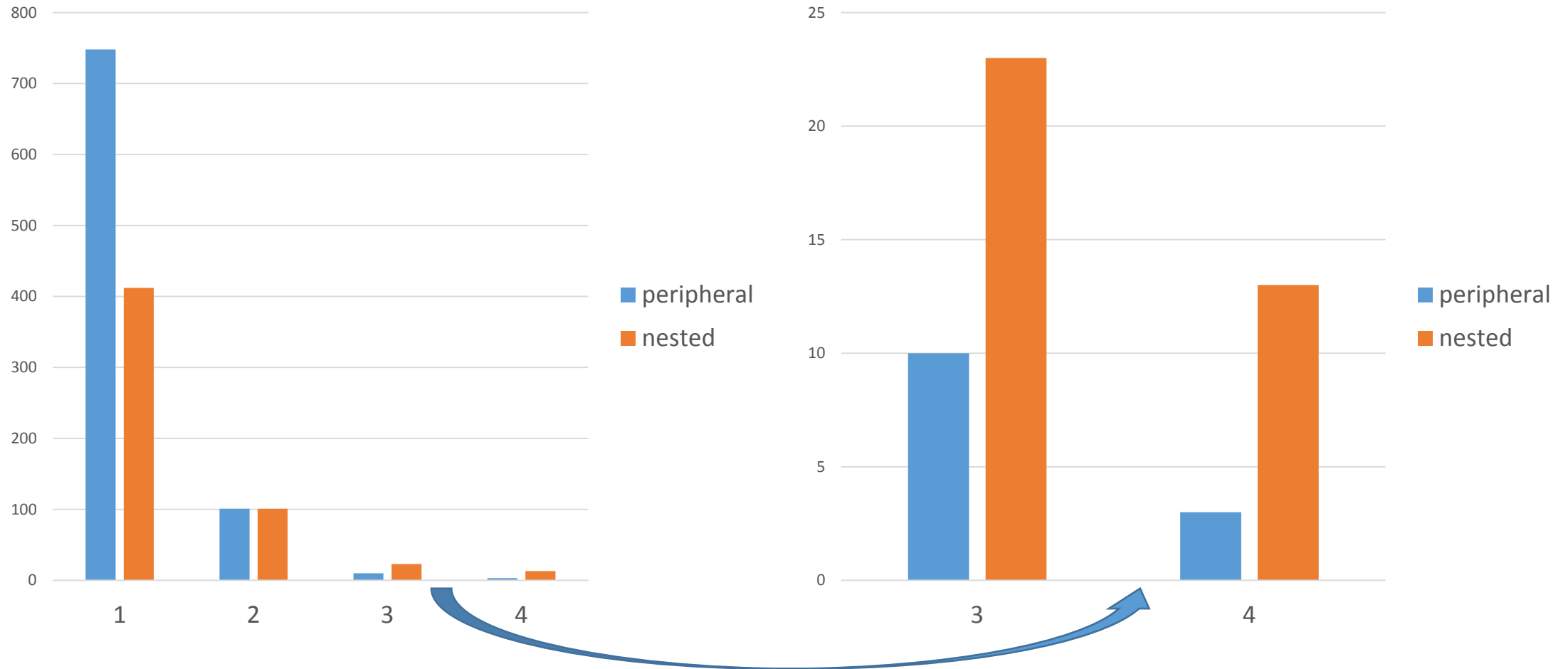
→ nested insertion: noun, hapax in the corpus

**dai** kimm her zwischn zwåa mandår # **madonna**

*Come on! Come here between to men, **bloody hell!***

→ two peripheral insertions: interjections (freq 213 and 18)

# Insertional type and n. of switches/utterance



dånn jaz muscht di **ve\_tre** få di **effe\_ventitré** in hundårt  
**comuni** fåscht **italiani** schikkn

*Then now you must send the **V-3** of the **F-23** (forms) to almost one  
hundred **Italian municipalities**.*

- **lexical insertions** with referential function denoting specific referents **trigger**
- further lexical insertions that may lead to
  - language alternation, i.e. the change of the base language or
  - congruent lexicalization

# Factors favoring the activation of the L2

## Logistic regression with VARBRUL

### Dependent variable:

- two or more switches in the utterance

### Factor groups:

1. type of insertion
2. direction of switch
3. POS of inserted word
4. frequency of inserted word
5. speaker's dialect area



Input: 0.171

Factor group # 1

Peripheral insertion: 0.425

Nested insertion: 0.617 ←

Log likelihood = -645.181 Significance = 0.000

### Dependent variable:

- one switch only in the utterance

### Factor groups:

1. type of insertion
2. direction of switch
3. POS of inserted word
4. frequency of inserted word
5. speaker's dialect area



Input: 0.829

Factor group # 1

Peripheral insertion: 0.575

Nested insertion: 0.383 ←

Log likelihood = -645.181 Significance = 0.000

# Two insertional styles were detected

## Nested insertions

- have a lexical content, involve low frequency words

- activate the «embedded language» and trigger alternation

- pertain the domain of code-mixing and more generally bilingual speech

## Peripheral insertions

- have a discursive function, involve high frequency words

- do not activate the «embedded language»

- have much in common with loanwords in monolingual speech



# Thanks for your attention

