

## Voicing contrasts in Mòcheno and Cimbrio

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#### 1 Characteristics of endangered languages

- isolation from related languages → preservation of historical features
- independent innovation
- contact with some dominant language → erosion of structures by contact

Goal of the talk: exploration of the relevance of these factors w.r.t. voicing contrasts in Mòcheno and Cimbrio.

Conclusions: although nowadays phenomena of contact are often discussed as being the prominent feature of endangered languages, phenomena of preservation and innovation are at least equally important, when it comes to deeper linguistic structure.

#### 2 Mòcheno and Cimbrio - two endangered languages of Northern Italy

##### Mòcheno

- Where: Mòcheno is spoken in the Bersntol (valle del Fersina, Fersental), province of Trento, in the villages of Palai (Palù del Fersina), Vlarotz (Fierozzo), Oachlait (Frassilongo) and Garait (Roveda);
- Speakers: about 600 (no reliable census available), at present 8 of 24 children attending the local day care (age 3-5) are growing up as native speakers;
- Status: recognized as an official minority language by the province of Trento; official support for the language community is high (see the activities of the Bersntoler Kulturinstitut, <http://www.bersntol.it>)

##### Cimbrio

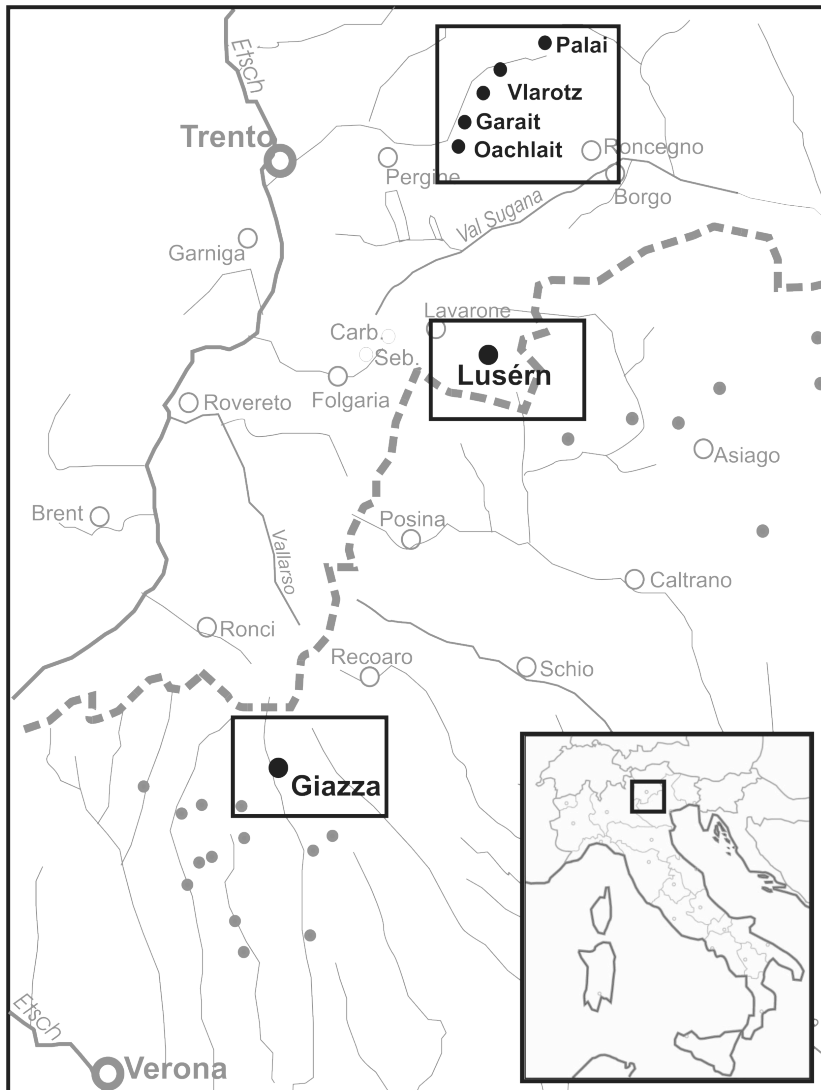
- Where: Cimbrio is spoken in the village of Lusérn (Luserna), province of Trento, and in Giazza, province of Verona;
- Speakers: about 600 (no reliable census available) for the variety of Lusérn, about 10 older speakers in Giazza;
- Status: recognized as an official minority language by the province of Trento; official support for the language community in Lusérn is high (see the activities of the Kulturinstitut Lusérn, <http://lnx.kulturinstitut.it>), it is non-existent for the few speakers left in Giazza.

**Contact/isolation situation:** Mòcheno and Cimbrio are Germanic languages spoken by communities which have resided in the Northern Italian regions since the Middle Ages. Inside the German dialect spectrum they can be classified as Southern Bavarian varieties. They have always lived in close contact with the Italian dialects surrounding them and, in modern times, with Standard Italian, taught at school and conveyed through the media. There is almost no contact with Standard German although some contact with areas speaking other German dialects exists (especially for the Mòcheno *Wanderhändler* - itinerant traders).

Germanic language islands have been surrounded by Romance varieties for centuries - the ideal testing ground for the influence of isolation and contact on the structure of a language.

(for work on Cimbrian syntax driven by a similar interest see, among others, Bidese et al. 2006, Bidese & Tomaselli 2007, Bidese 2008, Poletto & Tomaselli 2009, Agosti et al. 2010 and the project on Cimbrian syntax at the university of Verona: <http://ims.dei.unipd.it/websites/cimbrian/>)

Table 1 Geographical location of Mòcheno (Palai, Vlarotz, Garait, Oachlait) and Cimbro (Lusérn, Giazza)



### 3 Voicing contrasts in Mòcheno and Cimbro

Mòcheno examples are from Rowley 1982, 1986 and my own observation; Cimbro (Lusérn) examples are from Tyroller 2003. Transcription has been adapted to IPA, when necessary.

#### 3.1 Voicing contrasts in stops

		Mòcheno			Cimbro (Lusérn)		
word-initially	<b>contrast</b>	pintn to: kasl	bintn do: guat	'to bind, to wind, 'day, here' 'ladle, good'	pax ta ka:Rt	bax da ga:Rt	'river, awake' 'day, here' 'paper, garden'
between vowels/sonorant consonants	<b>contrast</b>	tripm teatn makn	zɛlbər diandl štri:ɡln	'bowel, self' 'to kill, girl' 'to hit, to groom'	diəpm hœtər tsakl	ɡa:bl hœdər ɡəRɡl	'to steal, fork' 'cheerful, heather' 'tail, throat'
word-finally	<b>contrast*</b>	ek	leig	'corner, lay, 1p.sg.'	balt	beldar	'forest sg., pl.'

\* but also traces of final devoicing, see the Cimbro example

### 3.2 No voicing contrasts in fricatives

			Mòcheno	Cimbro (Lusérn)
word-initially	before vowel or sonorant consonant	<b>voiced</b>	vɾɛsn 'to eat (of animals)' zɔk 'to say, 3.P.Sg.'	varbe 'color' vlaiʃ 'meat' za:ge 'saw'
word-medially	after long vowel or sonorant consonant	<b>voiced</b>	ʃlo:vɛn 'to sleep' hɛlvɛn 'to help' paizn 'to bite'	tra:vɛn 'beam, pl.' hɛlvɛn 'to help' di:zɛr 'this'
	after short vowel	<b>voiceless</b>	ʃafl 'little tub' pɛsər 'better'	ʃafɛn 'to order' basər 'water'
word-finally		<b>voiceless</b>	hɪlf 'help, 1p.sg.' ʃlo:f 'sleep, noun' grɔəs 'big'	tra:f 'beam, sg.' grɔəs 'big'

#### (1) Complementary distribution of voicing in fricatives:

voiced: -in presonorant position:	
- word-initially	#_V
- word-medially, when preceded by a <i>long</i> vowel	V:_V
voiceless: - when not followed by a sonorant (word-finally)	_#
- and - in presonorant position - when preceded by a short vowel	V_ V

### 3.3 Analysis

(following van Oostendorp 2003 and Alber, to appear):

#### Presonorant voicing: fricatives are voiced before sonorants

→ word-initially, before vowel or sonorant consonant:	voiced
→ word-finally:	voiceless

#### Prokosch's Law (PL), alias the **Stress-to-Weight principle: stressed syllables must be heavy**

- the native lexicon of these languages consists mostly of mono- or disyllables with initial stress;
- when the root vowel is short, the syllable has to be closed by a following consonant, to obey PL;
- fricatives following short vowels are phonologically long (or ambisyllabic), in order to close the preceding syllable
- long fricatives must be voiceless, due to the universal markedness of long voiced obstruents

→ word-medially, after long vowel/sonorant consonant:	voiced (presonorant voicing)
→ word-medially, after short vowel:	voiceless (Prokosch's Law)

#### (2) Word-medial context:

after long vowel:	CVV.C <sub>voiced</sub> V	ʃlo:vɛn
after sonorant consonant:	CVL.C <sub>voiced</sub> V	hɛl.vɛn
after short vowel:	CVC.C <sub>voiceless</sub> V	ʃa.fl

## (3) PROKOSCH'S LAW, \*GEMVOICE &gt;&gt; VOICE\_SON &gt;&gt; \*[VOICE] &gt;&gt; IDENT(VOICE)-FRIC

- a. PROKOSCH'S LAW: stressed syllables are heavy
- b. \*GEMVOICE: no voiced geminate consonants
- c. VOICE\_SON: an obstruent preceding a sonorant is voiced
- d. \*[VOICE]: obstruents are not voiced
- e. IDENT(VOICE)-FRIC: correspondent fricatives have the same value for the feature [±voice]

- voicing is not contrastive in fricatives since the markedness constraint \*[VOICE] dominates the faithfulness constraint IDENT(VOICE)-FRIC
- Word-finally, fricatives will therefore be voiceless
- voicing is mandatory before vowels and sonorant consonants because of the constraint VOICE\_SON (presonorant voicing).
- When the fricative follows a short vowel it has to be long in order to close the preceding light syllable, thus satisfying PROKOSCH'S LAW. I will assume with van Oostendorp that the long fricative is attached to two positions (two X-slots or two root nodes), having the structural representation of a geminate.
- As a geminate, the fricative is targeted by the constraint \*GEMVOICE, prohibiting the realization of voiced geminates, which are universally marked. Therefore the long consonants following short vowels emerge as voiceless.

Tableau 1: Distribution of voiced and voiceless fricatives

	PROKOSCH'S LAW	*GEMVOICE	VOICE_SON	*[VOICE]	IDENT(VC)-FRIC
/hilf/ or /hilv/					
☞ a. hilf					(*) <sup>1</sup>
b. hilv				*!	(*)
/vrɛsn / or /frɛsn /					
☞ a. vrɛsn				*	(*)
b. frɛsn			*!		(*)
/helven/ or /helfen/					
☞ a. hɛl.vɛn				*	(*)
b. hɛl.fɛn			*!		(*)
/ʃafɪ/ or /ʃavɪ/					
☞ a. ʃaf.fl			*		(*)
b. ʃa.vɪ	*!			*	(*)
c. ʃav.vɪ		*!		**	(*)

<sup>1</sup> Since we cannot determine whether the underlying fricative in these examples is voiced or voiceless, we cannot determine whether the constraint IDENT is violated or not. What is crucial is that *if* a voiced fricative was present underlyingly, it could never emerge because of the dominant position of \*[VOICE].

#### 4. Preservation and innovation

Prokosch's Law and presonorant voicing, the ingredients of complementary distribution in voicing in Mòcheno/Cimbro, are already present in Middle High German.  
(following generalizations and examples from Paul (1881 [2007]))

##### 4.1 Prokosch's Law from Middle High German (MHG) to New High German (NHG)

MHG still had stressed light syllables, i.e. open syllables containing a short vowel. In NHG, these syllables are either lengthened or closed by an ambisyllabic consonant:

(4) MHG	NHG	
gɛ.bən	> ge:.bən	'to give'
hi.məl	> himəl	'heaven'

→ Mòcheno and Cimbro fulfill Prokosch's Law by closing a stressed light syllable with a following consonant, similarly to NHG.

##### 4.2 Presonorant Voicing in MHG

Presonorant voicing of fricatives was active already in Old High German (OHG) both word-initially before vowels and in intersonorant contexts (Althochdeutsche Spirantenschwächung):

(5) OHG/MHG	
<velt>	'field'
<hof - hoves>	'court, court gen.'
<wolf - wolves>	'wolf, wolf gen.'

However, in MHG there is still a contrast between /f/ **and** /v/ since a "new" /f/ has entered the system - in intervocalic contexts - through the High German consonant shift (2. Lautverschiebung):

(6) MHG: <prüeven> vs. <ruofen>	'to proof, to shout'
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(7) NHG has mostly undone presonorant voicing of /f/:

ho:f - ho:fəs	'court, court gen.'
vɔlf - vɔlfəs	'wolf, wolf gen.'
fɛlt	'field'
pry:fən	'to proof'

→ Mòcheno and Cimbro, on the other hand, have generalized presonorant voicing, to include both "old" and "new" /f/ (e.g. hɛl.vɛn, 'to help')

A similar, though slightly more complicated story can be told with respect to /s/ vs. /z/:

Presonorant voicing, both word-initially and in intervocalic position, is assumed for the OHG/MHG sibilant written <s>, which probably had a postalveolar realization indicated in Paul (1881 [2007]) as [š, ž]. This "old" sibilant contrasts in intervocalic position with the new alveolar /s/, a product of the 2. Lautverschiebung (/t/ > /s/, in intervocalic contexts) which is orthographically realized as <z> or <sz>:

## (8) MHG alveolar and postalveolar sibilants

- a. Word-initially: <s>, presumably realized as [ʒ] (voiced by presonorant voicing)

<sin> [ʒ] 'to be'

- b. Intervocalic context: contrast between <s> and <z> (i.e. [ʒ] and [s])

<krīsen> [ʒ] 'to crawl'

<krīze> [s] 'to scream'

- (9) In NHG, the postalveolar pronunciation disappears, resulting in reorganization of the system, where /s/ and /z/ contrast intervocalically, while they neutralize to [z] word-initially, before vowels:

<sein> [zain] 'to be'

<reisen> [raizən] 'to travel'

<reißen> [raisən] 'to tear'

Thus, NHG preserves some rest of presonorant voicing - albeit only word-initially.

→ Mòcheno and Cimbri exhibit the same word-initial voicing of /s/, but in addition *extend* presonorant voicing also to "new"/s/ in intervocalic position (e.g. paizn, 'to bite').

**Conclusion:**

- Mòcheno and Cimbri follow the general trend of German dialects in that they have a strategy for obeying Prokosch's Law (compare also van Oostendorp 2003)
- Mòcheno and Cimbro are *conservative* in that they preserve the process of OHG/MHG presonorant voicing of fricatives, both word-initially and word-medially (while NHG abandons it for labial /f/).
- They are *innovative* in that they extend presonorant voicing to all instances of /f/ and /s/ (in the limits of Prokosch's Law).

**5 Contact****Distribution of voicing in fricatives in Northern Italian (Standard pronunciation)****Labial /f/-/v/: contrast in most contexts**

word-initially	before vowel	<b>contrast</b>	fino	vino	'fine, wine'
	before sonorant consonant	<b>voiceless</b>	fresko		'fresh'
word-medially	between vowels/sonorant consonants	<b>contrast</b>	skafo	skavo	'hull, excavation'
			elfo	selva	'elf, forest'
word-finally	native words do not end in obstruents				

### Alveolar/dental [s]-[z]: complementary distribution

word-initially	before vowel	<b>voiceless</b>	sale	'salt'
	before consonant	<b>assimilated</b>	zlavo zdrajo strada	'slavic' 'deckchair' 'street'
word-medially	between vowels	<b>voiced</b>	kaza	'house'
	after sonorant consonants	<b>voiceless<sup>2</sup></b>	tensjone	'tension'
	before consonants	<b>assimilated</b>	azma lezbika nespolo	'asthma' 'lesbian' 'medlar'
word-finally	native words do not end in obstruents			

### Differences between Northern Italian and Mòcheno/Cimbro

- labial fricatives contrast in almost all contexts
- alveolar fricatives show complementary distribution, but:
  - o word-initially, before vowels, they are *voiceless*
  - o their distribution is not linked to vowel length (which is not contrastive in Italian)
  - o they are *voiced before* a voiced consonant, but not *following* a sonorant consonant.

The only way Italian might have influenced the Mòcheno/Cimbro pattern: as in Mòcheno/Cimbro, *intervocalic* voicing is pervasive for alveolar fricatives. This fact might have supported the extension of generalized presonorant voicing in Mòcheno and Cimbro.

## 7. Conclusions

- Mòcheno and Cimbro are *conservative* in the sense that they preserve the process of presonorant voicing attested for OHG/MHG (and partially revised in NHG)
- However, they are also *innovative* in the sense that they extend presonorant voicing beyond the contexts attested in OHG/MHG.
- Finally, they are *in line* with the development of Westgermanic varieties in the direction of obeying Prokosch's Law (notwithstanding their isolation)
- *Contact*, on the other hand, seems to play a minor role, when it comes to deeper characteristics of the sound system, such as voicing contrasts in the obstruent system

Thus, isolation may lead to preservation of historical features of a linguistic system, but it makes also space for independent innovation and does not necessarily mean erosion of the system by language contact.

<sup>2</sup> In Trentino sometimes assimilated, after [n]: [tenzjone].

## References

- Agosti, Maristella, Birgit Alber, Giorgio Maria Di Nunzio, Marco Dussin, Stefan Rabanus, and Alessandra Tomaselli. 2010. *Cimbrian as a Test Case for Synchronic and Diachronic Language Variation: a Conceptual Approach for the Information Space*. In: Atti del Congresso Nazionale AICA 2010. AICA Associazione Italiana per l'Informatica ed il Calcolo Automatico. Milano, Italy.
- Alber, Birgit (to appear). Past Participles in Mòcheno: Allomorphy, Alignment and the distribution of Obstruents, in: M. Putnam (ed.), *German-language speech islands: generative and structural approaches*, John Benjamins, Amsterdam.
- Bidese, Ermenegildo, Cecilia Poletto and Alessandra Tomaselli 2006. The Relevance of Lesser-Used Languages for Theoretical Linguistics: The Case of Cimbrian and the Support of the TITUS Corpus. In: Ties I., *LULCL Lesser Used Languages Computer Linguistics*. Bolzano-Bozen, Europäische Akademie (EURAC), 77-96.
- Bidese, Ermenegildo and Alessandra Tomaselli. 2007. Diachronic Development in Isolation: The Loss of V2 Phenomena in Cimbrian. In: *Linguistische Berichte* (210), 209-228.
- Bidese, Ermenegildo. 2008. *Die diachronische Syntax des Zimbrischen*. Narr, Tübingen.
- Oostendorp, M. van. 2003. Ambisyllabicity and Fricative Voicing in West Germanic Dialects, in: , C. Féry & R. van de Vijver (eds.), *The Syllable in Optimality Theory*. CUP, Cambridge, 304-337
- Paul, Hermann. 1881 [2007]. *Mittelhochdeutsche Grammatik*. 25. Auflage, neu bearbeitet von Thomas Klein, Hans-Joachim Solms, Klaus-Peter Wegera. Max Niemeyer Verlag, Tübingen.
- Poletto, Cecilia and Alessandra Tomaselli. 2009. Die Syntax der Pronominalobjekte und die Form des Partizips. Konservative Merkmale in der Sprachgeschichte des Zimbrischen. In: Di Meola, C. et al. (eds.), *Perspektiven Drei*, Akten der 3. Tagung Deutsche Sprachwissenschaft in Italien (Rom, 14.-16.2.2008). Lang, Frankfurt a.M., 263-274.
- Rowley, A. 1982. *Fersentaler Wörterbuch. Fersentaler Dialekt – Deutsch – Italienisch. Vocabolario del dialetto tedesco della Valle del Fèrsina nel Trentino. Dialetto – Tedesco – Italiano*. Helmut Buske Verlag, Hamburg.
- Rowley, A. 1986. *Fersental (Val Fèrsina bei Trient/Oberitalien)- Untersuchung einer Sprachinselmundart*. Max Niemeyer Verlag, Tübingen.
- Tyroller, Hans. 2003. *Grammatische Beschreibung des Zimbrischen in Lusern*. Franz Steiner Verlag, Wiesbaden.