Voicing contrasts in Mòcheno and Cimbro
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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 Cimbro.

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 Cimbro - 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 comunity is high (see the activities of the Bersntoler Kulturinstitut, http://www.bersntol.it)
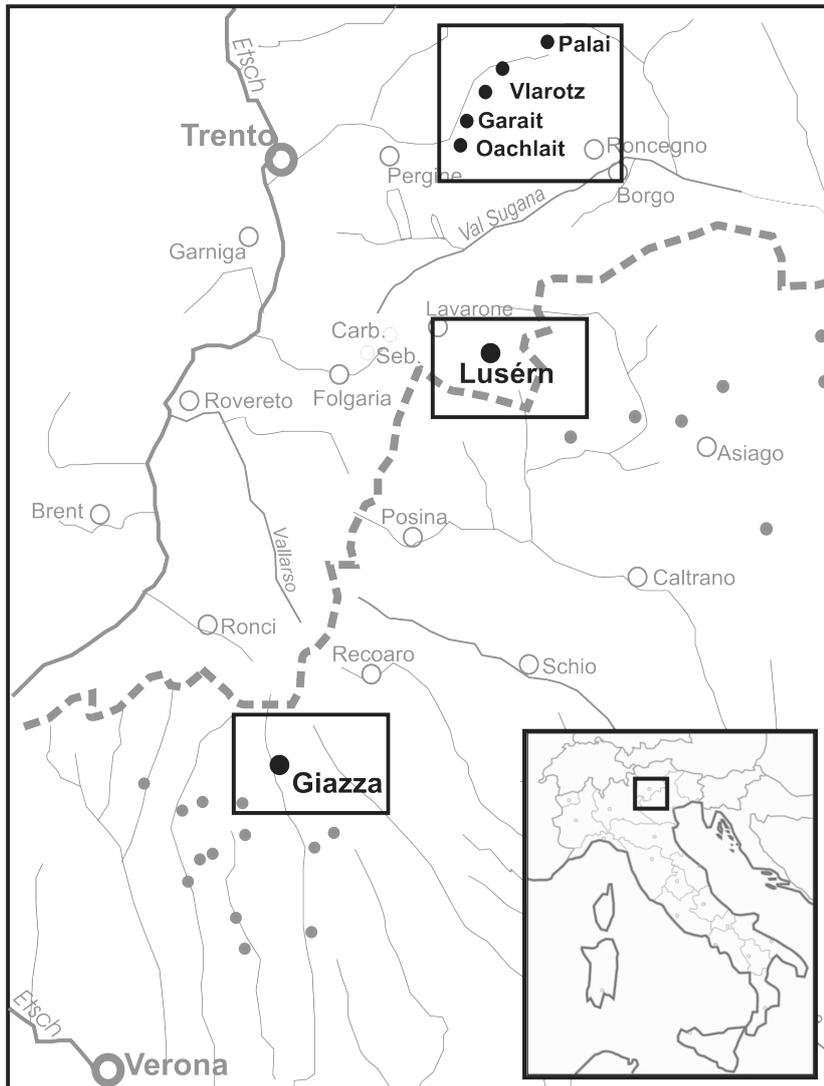
Cimbro

Where: Cimbro 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 comunity 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 Cimbro are Germanic languages spoken by comunities 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	**contrast**	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	**contrast**	tripm teatn makn	zɛlbər diandl śtri:gln	'bowel, self' 'to kill, girl' 'to hit, to groom'	diɐpm hɔɐter tsakl	ga:bl hɔɐder gɔRgl	'to steal, fork' 'cheerful, heather' 'tail, throat'
word-finally	**contrast***	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	**voiced**	vrɛsn	*'to eat (of animals)'*	varbe	*'color'*
			zɔk	*'to say, 3.P.Sg.'*	vlaiʃ	*'meat'*
					za:ge	*'saw'*
word-medially	after long vowel or sonorant consonant	**voiced**	ʃlo:vɛn	*'to sleep'*	tra:ven	*'beam, pl.'*
			hɛlvɛn	*'to help'*	hɛlvɛn	*'to help'*
			paizn	*'to bite'*	di:zɐr	*'this'*
	after short vowel	**voiceless**	ʃafl	*'little tub'*	ʃafɐn	*'to order'*
			pesər	*'better'*	basɐr	*'water'*
word-finally		**voiceless**	hilf	*'help, 1p.sg.'*	tra:f	*'beam, sg.'*
			ʃlo:f	*'sleep, noun'*	grɔɐs	*'big'*
			grɔɐs	*'big'*		

(1) Complementary distribution of voicing in fricatives:

    voiced: -in presonorant position:
            -   word-initially   #_V
            -   word-medially, when preceded by a *long* vowel   V:_V

    voiceless: - when not followed by a sonorant (word-finally)   _#
                - and - in presononarant 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-intially, 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: $CVV.C_{voiced}V$ ʃlo:.vɛn
    after sonorant consonant: $CVL.C_{voiced}V$ hɛl.vɛn
    after short vowel: $CVC.C_{voiceless}V$ ʃaf.fl

(3)   PROKOSCH'S LAW, *GEMVOICE >> VOICE_SON >> *[VOICE] >> 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					(*)¹
b. hilv				*!	(*)
/vrɛsn / or /frɛsn /					
☞ a. vrɛsn				*	(*)
b. frɛsn			*!		(*)
/hɛlvɛn/ or /hɛlfɛn/					
☞ a. hɛl.vɛn				*	(*)
b. hɛl.fɛn			*!		(*)
/ʃafl/ or /ʃavl/					
☞ a. ʃaf.fl			*		(*)
b. ʃa.vl	*!			*	(*)
c. ʃav.vl		*!		**	(*)

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¹ 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   >   him̩əl   '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'

(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 [ž] (voiced by presonorant voicing)

        <sîn>   [ž]   'to be'

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

        <krîsen>   [ž]   'to crawl'

        <krîze>   [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 Cimbro 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 Cimbro 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 Cimbo 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	**contrast**	fino	vino	*'fine, wine'*
	before sonorant consonant	**voiceless**	fresko		*'fresh'*
word-medially	between vowels/sonorant consonants	**contrast**	skafo ɛlfo	skavo selva	*'hull, excavation'* *'elf, forest'*
word-finally	native words do not end in obstruents				

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

word-initially	before vowel	**voiceless**	sale	*'salt'*
	before consonant	**assimilated**	zlavo	*'slavic'*
			zdrajo	*'deckchair'*
			strada	*'street*
word-medially	between vowels	**voiced**	kaza	*'house'*
	after sonorant consonants	**voiceless²**	tensjone	*'tension'*
	before consonants	**assimilated**	azma	*'asthma'*
			lεzbika	*'lesbian'*
			nεspolo	*'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, inter*vocalic* 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.

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² In Trentino sometimes assimilated, after [n]: [tenzjone].

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