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# Phonetic stability across time

## Linguistic enclaves in Switzerland

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# 1. The genesis of *Sprachinseln* in CH

## Preliminary facts on the Swiss ling. situation

### 4 languages & diglossia

- 4 language confined to more or less firm areas
- Diglossia in German-speaking Switzerland
- Swiss German (dialect) used as vernacular by all people
- Variation predominantly on the horizontal axis and not vertical axis

Verbreitung der vier Landessprachen in der Schweiz (2000)



Fig. 1: The linguistic situation in Switzerland (cf. BFS 2000)

# 1. The genesis of *Sprachinseln* in CH

## In medieval times

### Walserwanderungen

- 12<sup>th</sup>–14<sup>th</sup> centuries
- Settlers from the canton of Valais emigrate to various places
- Many settlements in the Romansh-speaking canton of Grisons

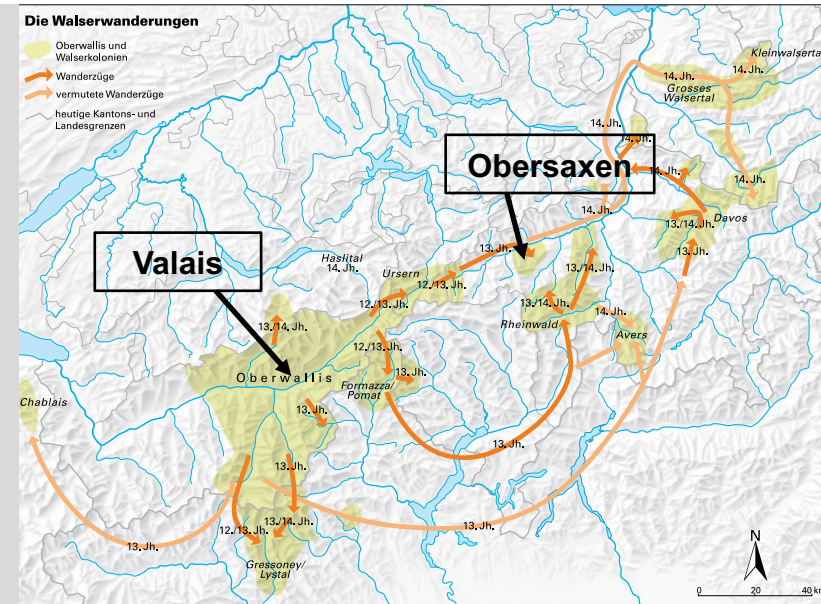


Fig. 2: The *Walserwanderungen* (cf. Waibel 2013)

# 1. The genesis of *Sprachinseln* in CH

## In recent times

### Surrounding language: Romansh

- Late 19<sup>th</sup> century: pressure of surrounding language increases
- From 1920 onwards: Romansh loses prestige, speakers become bilingual
- From 1950 onwards: Obersaxen becomes a popular winter-sport resort

### Dialect island

- Obersaxen was re-integrated into the German dialect speaking area during the 20<sup>th</sup> century



Sociolinguistic changes of the 20<sup>th</sup> century imply dialect contact

# 1. The genesis of *Sprachinseln* in CH

## Research

### *Sprachatlas der deutschen Schweiz*

- Most-recent large scale description
- Based on data elicited in face-to-face-interviews
- Representative of the *Sprachstand* of the first half of the 20<sup>th</sup> century

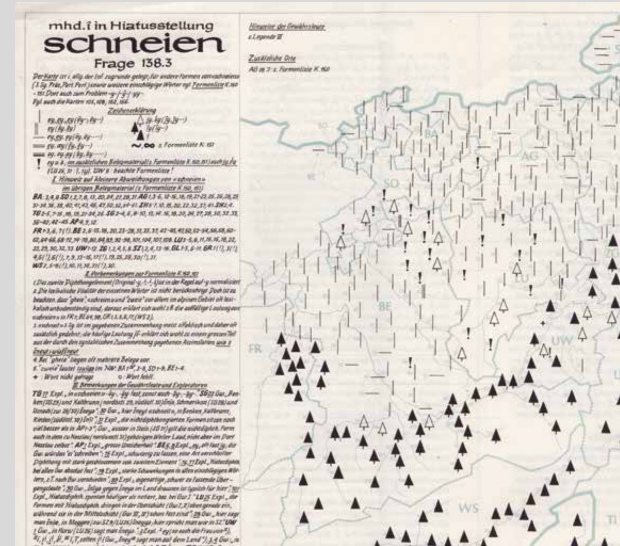


Fig. 3: Example from the *Sprachatlas der deutschen Schweiz* (taken from Schaller/Schiesser 2017: 58)

## 2. Aims and hypothesis

### Aims

1. Examine changes that have taken place in the past 60 years (since the Swiss German dialect atlas)
2. Study how similar the two varieties (Obersaxen and Valais) are

### Hypothesis

In line with previous research (cf. Christen 1988, s. also Glaser 2014) we expect

- Relative stability on the phon. level
- Less stability in morphology and syntax
- Substantial change for lexical features

## 3. Methods

# Participants & materials

### Participants

- 305 speakers of Swiss German from Valais and Obersaxen
- Mean age = 36.8 (median age = 33)
- 60.5% female and 39.1% male

### Materials

- 10 variables based on:
- **Comparability**: variables are featured in the Swiss German dialect atlas
- **Typicality**: variables are most typical to the southernmost Swiss dialects (including Valais and Obersaxen) (cf. e.g. Hotzenköcherle 1984, 1986 [1944])



# 3. Methods

## Materials

N°	Variable	Standard German	Ex. Of variants	Type
1	Unrounding of MHG <i>u, ü</i>	<i>Rücken</i> 'back'	<i>Rügg, Rigg</i>	<b>phon.</b>
2	Palatalisation of MHG <i>/s/</i> (initially)	<i>sie</i> 'they'	<i>sii, schii</i>	<b>phon.</b>
3	Palatalisation of MHG <i>/s/</i> (word-final)	<i>uns</i> 'us'	<i>isch, insch</i>	<b>phon.</b>
4	MHG <i>nk</i> ; Staub's Law	<i>trinken</i> 'to drink'	<i>triichu, triiche</i>	<b>phon.</b>
5	MHG <i>ns</i> ; Staub's Law	<i>uns</i> 'us'	<i>isch, insch</i>	<b>phon.</b>

Tab. 1: Variables tested (MHG = Middle High German; OHD = Old High German)

N°	Variable	Standard German	Ex. Of variants	Type
6	Prefixation (MHG <i>be-</i> )	<i>ich bekomme</i> 'I receive'	<i>verchume, b(e)rchume, überchume</i>	<b>morph.</b>
7	Past participle circumfix	<i>wir haben gebastelt</i> 'we have tinkered'	<i>gibaschtlu, baschtlet</i>	<b>morph.</b>
8	Positioning of AUX and PTCF of 'to be' in subord. cl.	<i>, ... wir ... gewesen sind</i> 'we have been'	<i>bin gsii, gsii bin</i>	<b>synt.</b>
9	Positioning of syntagmas with <i>lassen</i> 'to let'	<i>stehen lassen</i> 'to let stay'	<i>laa staa, staa laa</i>	<b>synt.</b>
10	OHG <i>anko</i> , MHG <i>buter, puter</i>	<i>Butter</i> 'butter'	<i>Aichu, Butter, Britschi</i>	<b>lexic.</b>

# 3. Methods

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## 3. Methods

# Procedures & analysis

### Procedures

- Online questionnaire (*Google Forms*)
- Elicitation via different tasks:
  - Translation from Standard German
  - Pictures + written options
  - Sentence completion tasks
  - Judgment tasks
- Questions on social background

### Analysis

- Statistical analysis using *R*:
  - Logistic regressions
  - Pearson's chi-squared tests
- Visualisation via *ggplot2*
- Comparison to the distributions featured in the Swiss dialect atlas

## 4. Results

### Phonetic level

#### Variable 1

- Variable: Unrounding of MHG.  $u, \ddot{u}$
- Standard German: *Rücken* 'back'
- Elicitation: picture + written options
- Variant SDS (Obersaxen): *rigg* (unrounded)
- Variant SDS (Valais): *rigg* (unrounded)

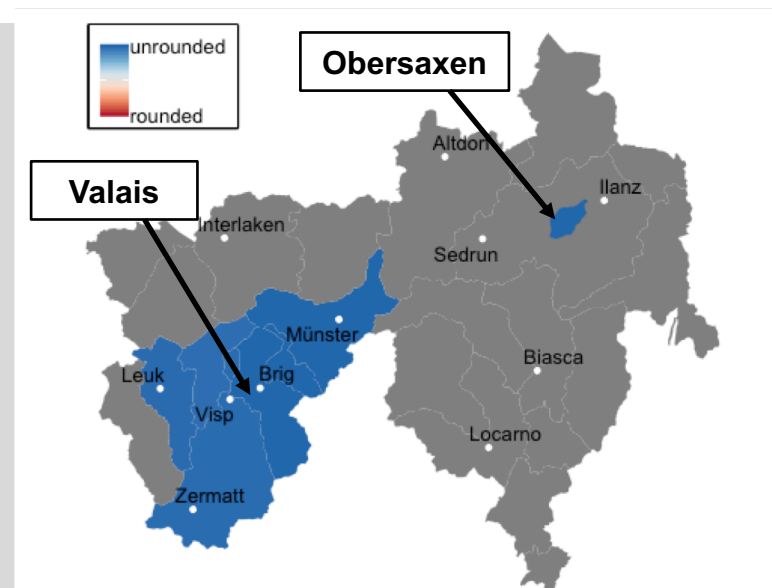


Fig. 4: Unrounding of  $u, \ddot{u}$  in *Rücken*

# 4. Results

## Phonetic level

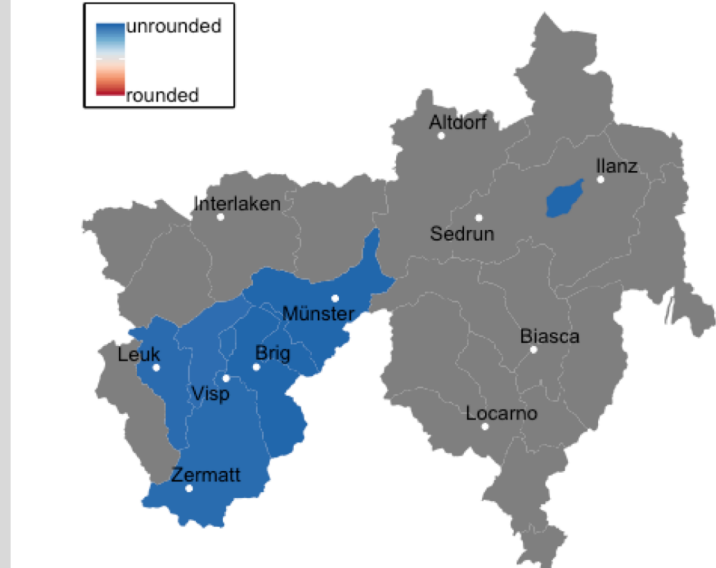
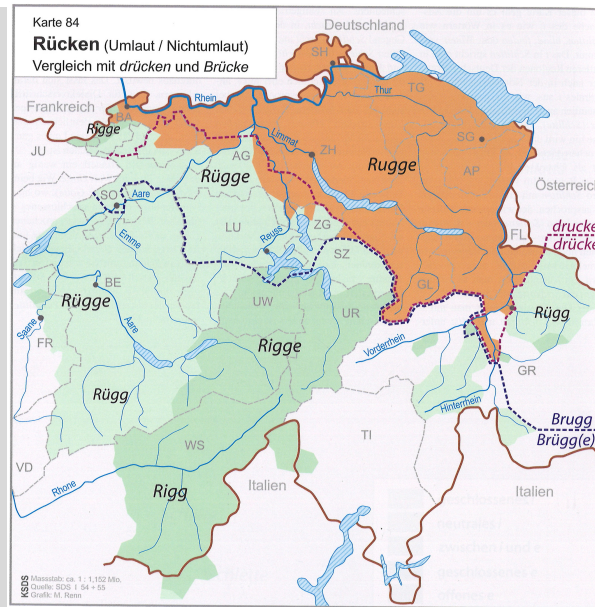


Fig. 4: Unrounding of *u, ü* in *Rücken*

Fig. 4a: Unrounding of *u, ü* in *Rücken* in the dialect atlas (SDS I, 54–55)

## 4. Results

### Phonetic level

#### Variable 2/3

- Variable: Palatalisation of MHG /s/
- Standard German: *sie* ‘they’ / *uns* ‘us’
- Elicitation: translation
- Variant SDS (Obersaxen): *schii*, *insch* (palatalised)
- Variant SDS (Valais): *schii*, *isch*, *insch* (palatalised)

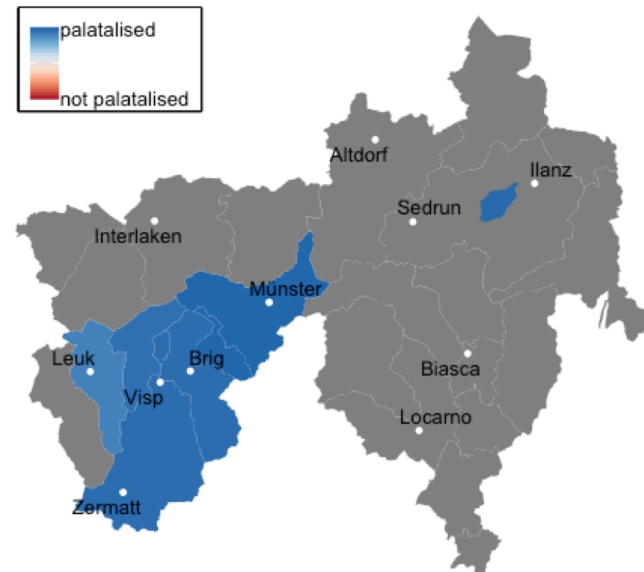
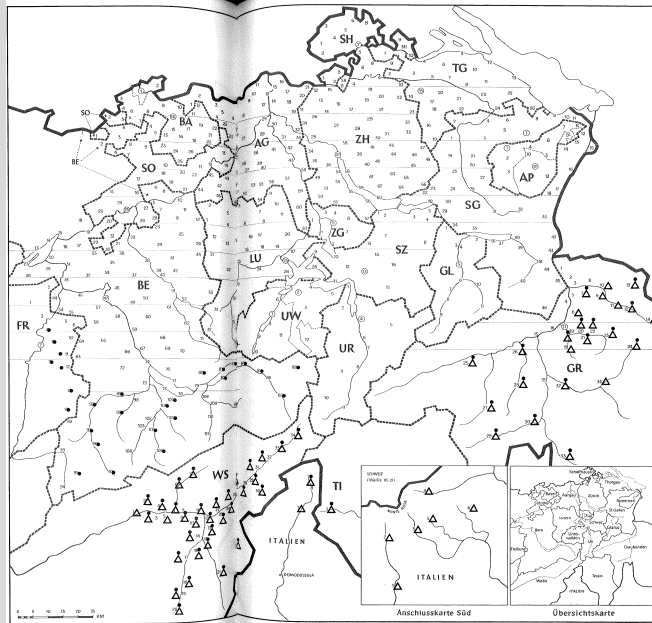


Fig. 5: Palatalisation of MHG /s/

# 4. Results

## Phonetic level



Map 5a: Palatalisation of MHG /s/ in the dialect atlas (SDS II, 144)

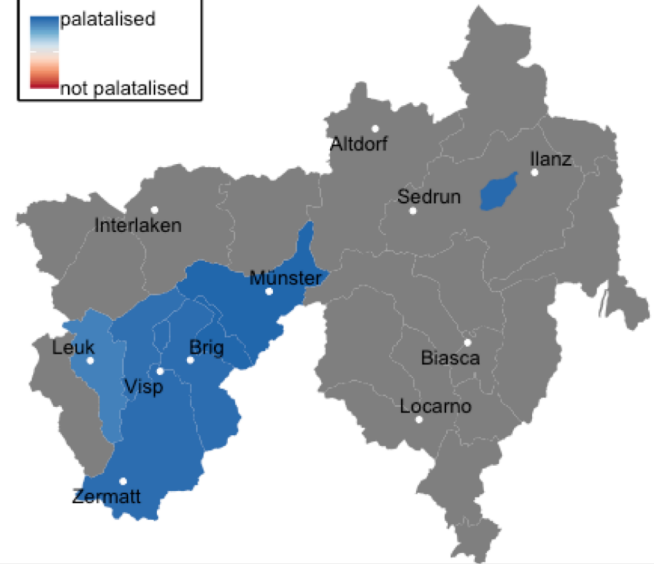
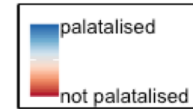


Fig. 5: Palatalisation of MHG /s/

## 4. Results

### Morphological level

#### Variable 6

- Variable: Prefixation (MHG *be-*)
- Standard German: *ich bekomme* 'I receive'
- Elicitation: judgment task
- Variant SDS (Obersaxen): *verchume*
- Variant SDS (Valais): *b(e)rchume*, *verchume*, *kriege*

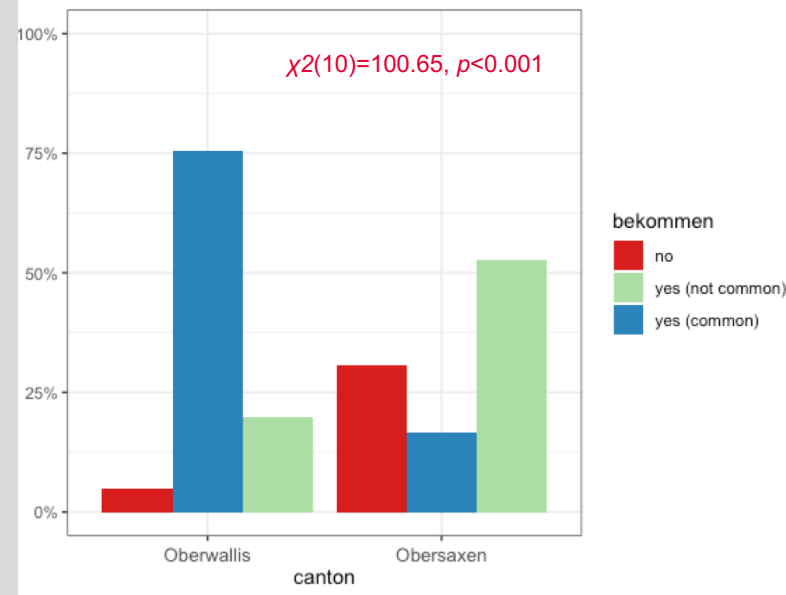


Fig. 6: Prefixation (MHG *be-*) in *bekommen*



## 4. Results

### Morphological level

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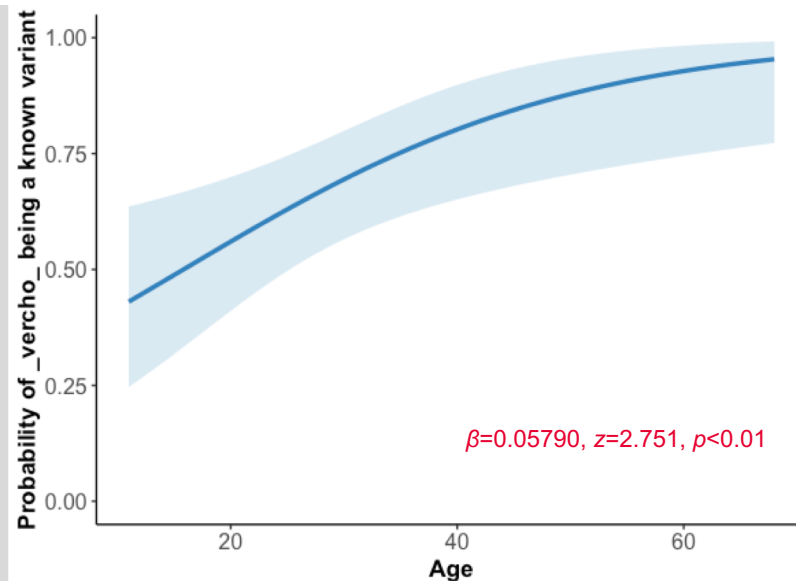


Fig. 7: Probability of *vercho* being a known Variant in Obersaxen according to age

# 4. Results

## Morphological level

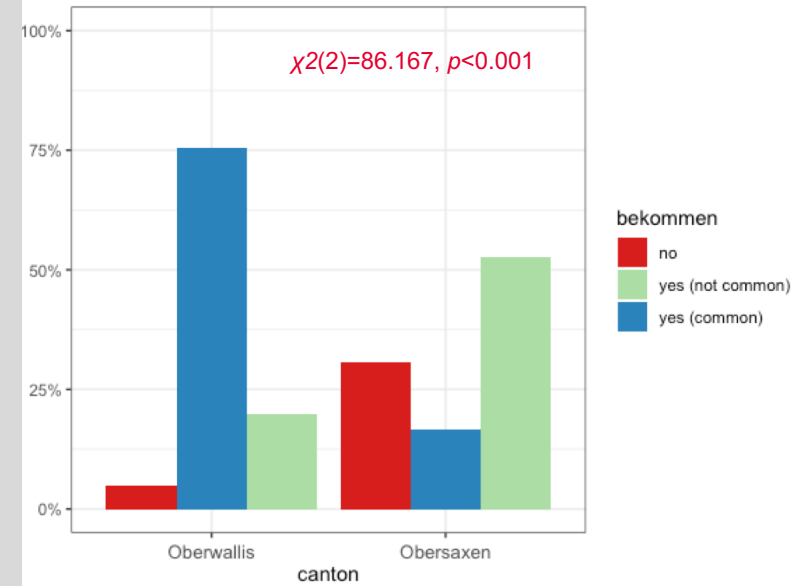


Fig. 6: Prefixation (MHG *be-*) in *bekommen*

Fig. 6a: Prefixation (MHG *be-*) in *bekommen* in the dialect atlas (SDS V, 214)

## 4. Results

### Syntactic level

#### Variable 8

- Variable: Positioning of AUX and PTCP of 'to be' in subord. cl
- Standard German: , ... *wir* ... *gewesen sind* 'we have been'
- Elicitation: translation
- Variant SDS (Obersaxen): *bii gsii* (AUX–PTCP)
- Variant SDS (Valais): *bii gsii* (AUX–PTCP)

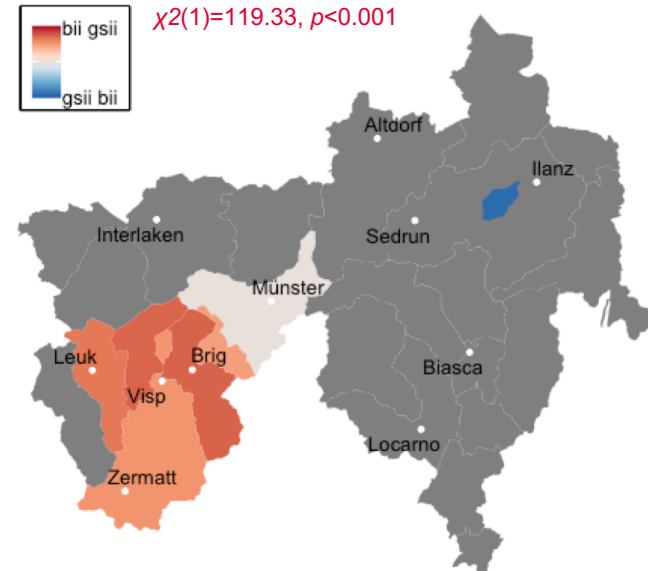
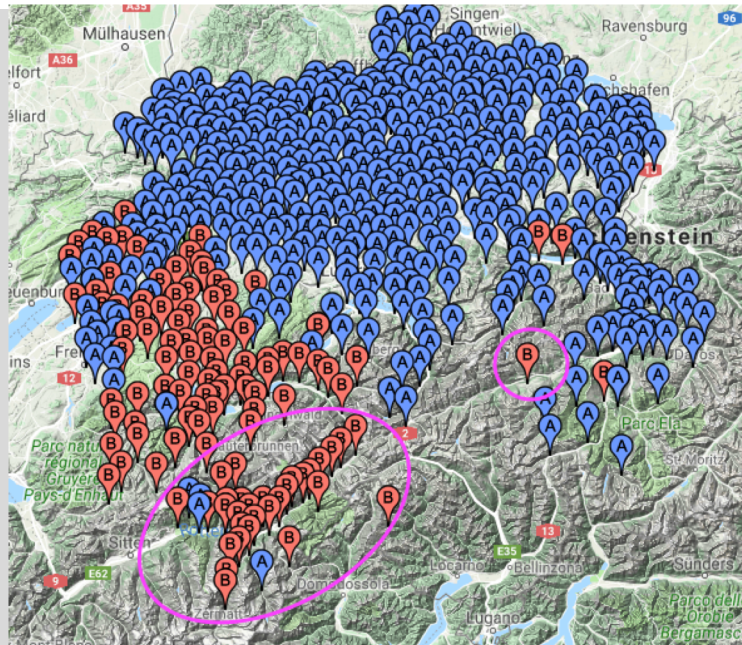


Fig 8: Positioning of AUX and PTCP of 'to be' in subord. cl

# 4. Results

## Syntactic level

RED = *bii gsii*  
 BLUE = *gsii bii*



Map. 8a: Positioning of AUX and PTCP of 'to be' in subord. cl. in the dialect atlas (SDS III, 261)

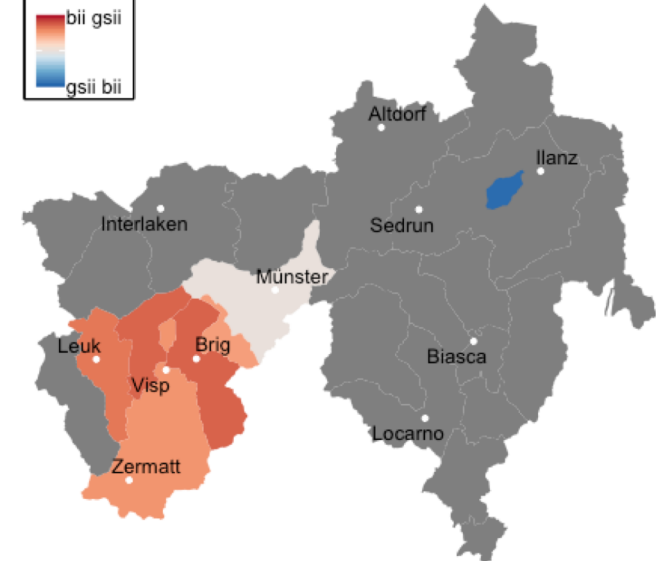
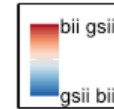


Fig. 8: Positioning of AUX and PTCP of 'to be' in subord. cl.

## 4. Results

### Lexical level

#### Variable 10

- Variable: OHG *anko*, MHG *buter*, *puter*
- Standard German: *Butter* 'butter'
- Elicitation: picture + written options
- Variant SDS (Obersaxen): *Britschi*
- Variant SDS (Valais): *Butter*, *Aichen*

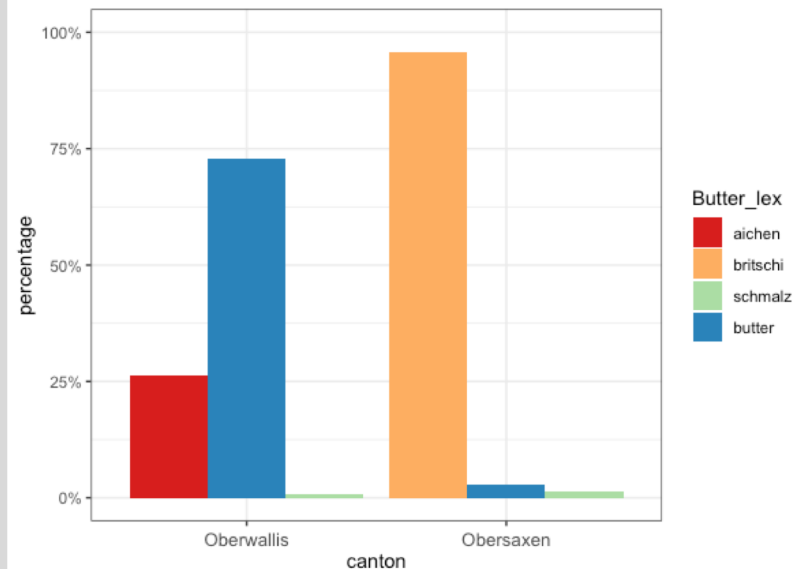


Fig. 9: OHG *anko*, MHG *buter*, *puter*

## 4. Results

### Lexical level

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- Standard German: *Butter* ‘butter’
- Elicitation: picture + written options
- Variant SDS (Obersaxen): *Britschi*
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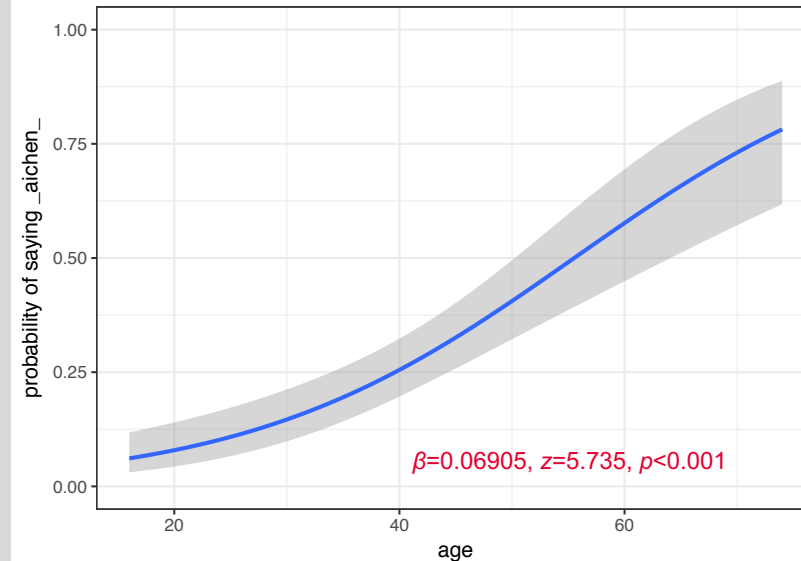


Fig. 10: Probability of saying *Aichen* according to age in Valais



## 5. Discussion and conclusion

### Frequency

- Frequency of occurrence of phonetic variables in the stream of speech is higher than individual morphosyntactic and lexical ones
- Requires a substantial amount of effort in order to accommodate

### Identity

- Phonetic features have come to serve as distinct markers of identity
- Christen (1988: 63): „[...] the information which enables us to localize a speaker within Switzerland is conveyed most clearly by means of morphology and phonetics/ phonology“



## 5. Discussion and conclusion

- Proof-of-concept needing more empirical studies
- Elicited written data might not capture some current changes
- Validity of the results will be assessed by interview data
- Placing the linguistic changes observed in a broader theoretical framework of language contact → challenging the methodological and theoretical distinction between dialect and language contact

Thank you  
for your attention



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