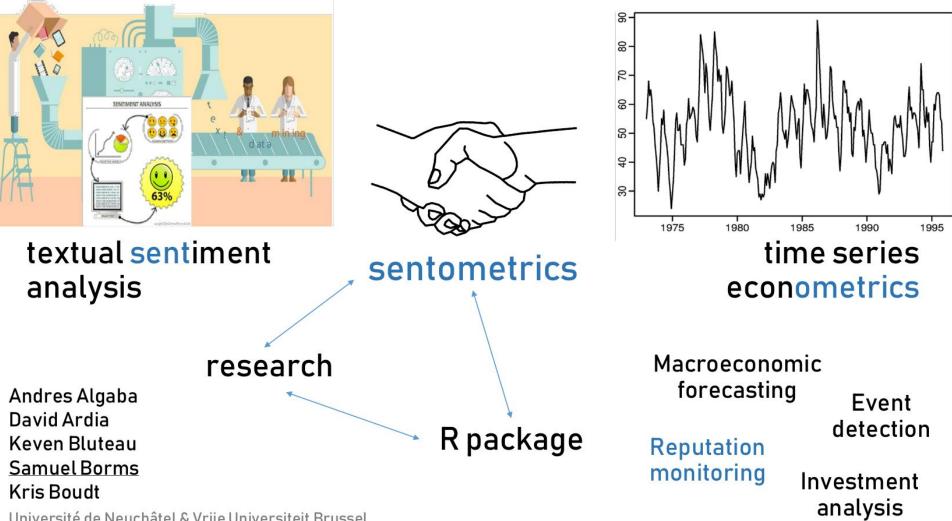
One-minute Poster Pitch Session

- Poster presenters pitch their posters
- Presentation order: Last name of first author, asc.

Presentation order (Last name of first author, asc.)

Samuel Borms Alexandros Paramythis Gerold Schneider Noëmi Aepli, Nora Hollenstein, <u>Simon Clematide</u> Christof Traber Don Tuggener Egon Werlen



Université de Neuchâtel & Vrije Universiteit Brussel



Enhancing Search with Facets, Categories and Clusters extracted from Free Text APPLICATION DOMAINS

business cluster search e-commerce enterprise search



Institute of Computational Linguistics

NOAH 3.0: Recent Improvements in a Part-of-Speech Tagged Corpus of Swiss German Dialects

Noëmi Aepli, Nora Hollenstein, Simon Clematide

Are you interested in NLP techniques and resources for syntactic analysis of Swiss German?

We are happy to show you what we did so far...

Do you want to know more about the annotation challenges of written Swiss German ... and how Machine Learning deals with it?

Let's have a discussion at our poster!



Institute of Computational Linguistics

A Morphological Toolset for Rumantsch Grischun

Simon Clematide

Are you interested in efficient lemmatization and morphological analysis of Rumantsch Grischun?

Any need for generating inflected word forms or full paradigms?

Do you want to know how little annotated data is needed for a decent part-of-speech tagger?

We are happy to share what we have done so far!

SlowSoft Speech Technology Components for Swiss German and Romansh

Author: Christof Traber, SlowSoft GmbH, June 12-13, 2018

Introduction to company and products

- Speech synthesis, speech recognition (together with other companies), dialog systems for (Swiss) minority languages
- First company to provide speech synthesis (Text-to-speech, TTS) in Romansh and Swiss German

• Focus on text analysis in TTS

- Role and importance of text analysis within a TTS system
- Problems of text entry and analysis for Swiss German in TTS
 → description of different realized and envisaged solutions (depending on application)

• Demos of TTS and dialog systems

slowsoft

SlowSoft GmbH, Baslerstrasse 30, CH-8049 Zurich, www.slowsoft.ch





SwissText 2018: Gerold Schneider (Vertretungsprofessur TU Dortmund, PD Uni Zürich)

Differences between Swiss High German and German High German via data-driven methods

We all know: Germans write *parken*, the Swiss use *parkieren* – but could we come up with a systematic list, completely driven by the data? **YES!** Let's spot the differences in lexis, morphosyntax, and syntax.

We use overuse metrics, document classification, automatic tagging and parsing.

E.g. Lexis:

Position	Feature	Frequency (CH)	Feature Influence \downarrow	Comment
6	welch	9664	11.595	Relative Pronoun
7	zürcher	1869	11.161	züricher
14	basler	1324	8.798	baseler
15	galle	1366	8.727	(dialect word not recognized as proper name)
16	gemäss	2424	8.624	zufolge
17	anlass	2660	8.572	veranstaltung

and thousands more.

E.g. Syntax:

- Longer sentences in German High German, more paratactic style in Swiss High German
- More genitive modifications and objects in German High German, typologically more synthetic
- Are the Swiss less direct?

Do you want to know?

Bei allfälligem Verlangen nach mehr Information ist das Poster an diesem Anlass zu besuchen

sorry, I mean

Zwecks Stillung Ihres etwaigen Informationsbedürfnisses erbitten wir zeitnahes Aufsuchen der Poster dieser Veranstaltung

Evaluating Neural Sequence Models for Splitting (Swiss) German Compounds

Don Tuggener, ZHAW

- Problem in German NLP: Is *Rindfleischetikettierungsüberwachungsgesetz* in your lexical resource (e.g. word embedding)?!
- Solution: Compound splitting Rindfleisch Etikettierung Überwachung Gesetz
- Poster: Evaluate neural nets for the task
- Apply and evaluate models on Swiss German

	Fuggener iciences, Winterthur, Switzerlan ⊉zhaw.ch	
Task: Compound splitting	Evaluation	
Autobahnanschlussstelle Autoo Bahn Anschluss Stelle Auto Bahn Anschluss Stelle • (Swiss) German: Compound words without whitespace (Autobahnanschlussstelle vs motorway junction). • Important preprocessing task, e.g. map words to lexical resources (e.g. word embeddings) -> alleviate out-of-vocabulary problem • This paper: Apply neural sequence models • Gold splits for Swiss German compounds	Data: GermaNet compounds, 80%-20%, train-less bill: Evaluation of split accuracy. Dictionary 95.18 CharSplit 93.26 Unsup. Bidir. LSTM 95.10 Seq2seq + attr. 92.40 Data: 150 Swiss German compounds from SB-CH corpus; sort of "out-of-domain" data Dictionary 20.67 CharSplit 36.67 Seq2seq + attr. 52.00 Seq2seq + attr. 52.00	
+	<u> </u>	
Unsupervised neural seq. model • Bidirectional LSTMs character language model: Score ach position / by probability of inverse probability of current character 1-p(x, x, 0x_0] + inverse inverse probability of current character 1-p(x, x, 0x_0] + inverse inverse probability of current character 1-p(x, x, 0x_0] + inverse inverse probability of current character 1-p(x, x, 0x_0] + inverse Baselines: • Characpilit: Unsupervised, using distributions of character pram-based • Dictionary: Unsupervised, lookup of short words contained in compounds	Seq2seq + attention: Ir output = head	th supervision: ition during training,

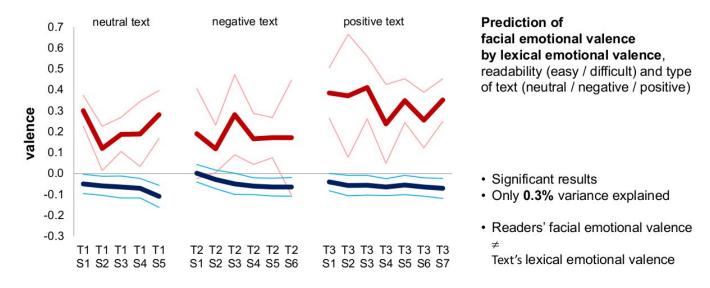


Is reading mirrored in the face?

A comparison of linguistic parameters and emotional facial expressions

Egon Werlen, Ivan Moser, Christof Imhof & Per Bergamin

Institute for Research in Open-, Distance- and eLearning (IFeL) Swiss Distance University of Applied Sciences (FFHS)



Lexical emotional valence sentiment analysis with BAWL-R text with difficult readability

Facial emotional valence FaceReader[®]