

Common Language Resources and Technology Infrastructure and its Swiss node CLARIN-CH: serving the national applied linguistics community

VALS/ASLA Forum, 18 February 2022



# The research infrastructure for language as social and cultural data

CLARIN is a digital infrastructure offering data, tools and services to support research based on language resources.

## **SOME FACTS:**

- Designed and implemented between 2008–2012 by 9 founding countries.
- Significantly developed until 2016 and fully operational ever since.
- Currently, 26 European countries are members of CLARIN.
- Switzerland is in the process of joining the CLARIN Consortium.



ounding countries. ever since. IN.

Tools

## **CLARIN's mission**: Create and maintain an infrastructure to support the sharing, use and sustainability of language data and tools for research in the SSH.

Resources

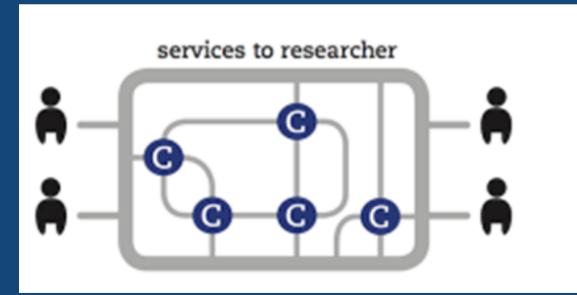


## Expertise

## Services

## Network

CLARIN is a **networked federation** of centers- academic and research institutions that offer the scientific community expertise, resources, tools and services.



Service Provider Centers B-centers

## **Researchers are service-users and service-providers**



#### Knowledge Centers K-centers

4

### Corpora

- Computer-mediated communication corpora
- Corpora of academic texts
- Historical corpora
- L2 learner corpora
- Literary corpora
- Manually annotated corpora

## Resources



- Multimodal corpora • Newspaper corpora • Parallel corpora • Parliamentary corpora • Reference corpora

- Spoken corpora

- Lexica
- Dictionaries



## Lexical resources

- Conceptual Resources
- Glossaries
- Wordlists

#### 5 https://www.clarin.eu/resource-families

**Tools** to discover, explore, exploit, annotate, analyse or combine language data.

**Families of tools:** 

Tools

- Text normalization
- Named entity recognition
- Part-of-speech tagging and lemmatization
- Sentiment analysis and opinion mining

https://www.clarin.eu/content/tools



CLARIN **Knowledge** Centers (K-centers) are academic or research institutions which share their knowledge and expertise on one or more aspects of the domain covered by the CLARIN infrastructure.

K-centers have their own specific areas of expertise, which can belong to many different categories, such as:

- Individual languages (e.g. Danish, Czech, Portuguese)
- Language families (e.g. South Slavic)
- Linguistic topics (e.g. language diversity, language learning, diachronic studies) • Data types other than corpora (e.g. lexical data, word nets, terminology banks)
- Groups of languages (e.g. morphologically rich languages, the languages of Sweden) • Language processing topics (e.g. speech analysis, building treebanks, machine translation) • Using or processing families of language data that will exist for most languages (e.g.

- newspapers, parliamentary records, oral history)
- Generic methods and issues (e.g. data management, ethics)

https://www.clarin.eu/content/knowledge-centres

Expertise



### Online courses and training materials

- **Best-practice** documents
- Guidance in getting access to and using data and tools • Digital Humanities Course Registry (CLARIN & DARIAH): an online platform for announcing and finding DH courses across Europe. • Training events carried out by a group of experts at prominent summer schools, conferences, COST Actions, etc. in disciplines
- relevant for CLARIN.
- **Depositing Services**: researchers can store language resources in a sustainable repository at a CLARIN centre.
- An online library of talks and tutorials from the CLARIN training and academic events: the VideoLectures.net video channel.
- Technical webservices

## https://www.clarin.eu/content/services

## Services



## 1.Funding opportunities:

- Bridging Gaps Call
- Resource Families Project Funding
- Workshop Funding
- User Involvement Funding
- CLARIN Training Calls
- CLARIN Seed Grants
- Mobility Grants

## 2.Support for preparing EU-funded Projects:

- Help for networking and documentation
- Assistance in writing the proposal
- Seed grants: a small grant that can be used to cover certain costs coming with the preparation of a project proposal
- Facilitation services regarding the Open Science and FAIR Data requirements.

https://www.clarin.eu/content/suport-eu-funded-projects

## Network



9

## https://www.clarin.eu/funding



# What is CLARIN-CH?



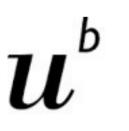
**CLARIN-CH is the Swiss node of CLARIN Europe.** 

**Concretely, CLARIN-CH is a network of six Swiss** academic institutions, supported by the ASSH, who founded the CLARIN-CH Consortium in December 2020.





UNIL | Université de Lausanne





UNIVERSITÄT BERN

**University of** Zurich<sup>⊍z</sup>∺











## **Our mission** Join the European CLARIN community, and build an active and impactful national network.



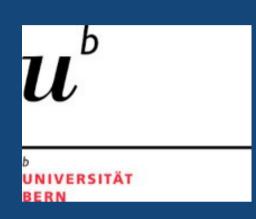
1.Obtain Switzerland's CLARIN membership and give Swiss researchers access to the entire CLARIN infrastructure.

2.Bring together the Swiss community using language resources and create national working groups.

3.Foster the sharing of expertise and of resources.

4.Encourage the initiation of national and international collaborations.

## Foster the sharing of expertise



Dialectology **Sociolinguistics** Language ideologies **Pragmatics** Psycholinguistics **Discourse Studies Prosody and regional** variation Semiology **Corpus Linguistics** Historical Linguistics Bilingualism Linguistic Antropology **Engendered languages Digital Humanities** 

UNIL | Université de Lausanne

Language variation Language change **Conversational analysis** Linguistic narrativity **Spanish linguistics** Italian language and culture Epistemology Dialectology Slavistics **Stylistics** Media discourse Language sound structure **Computational linguistics** Language teaching **Digital Humanities** 



**Cognitive Linguistics Corpus Linguistics** Historical Linguistics Language teaching Dialectology **Interactional Linguistics Discourse Studies Pragmatics Semantics Developmental pragmatics Cognitive anthropology Cognitive sociology Speech therapy** Language pathologies **Corpus statistics** 





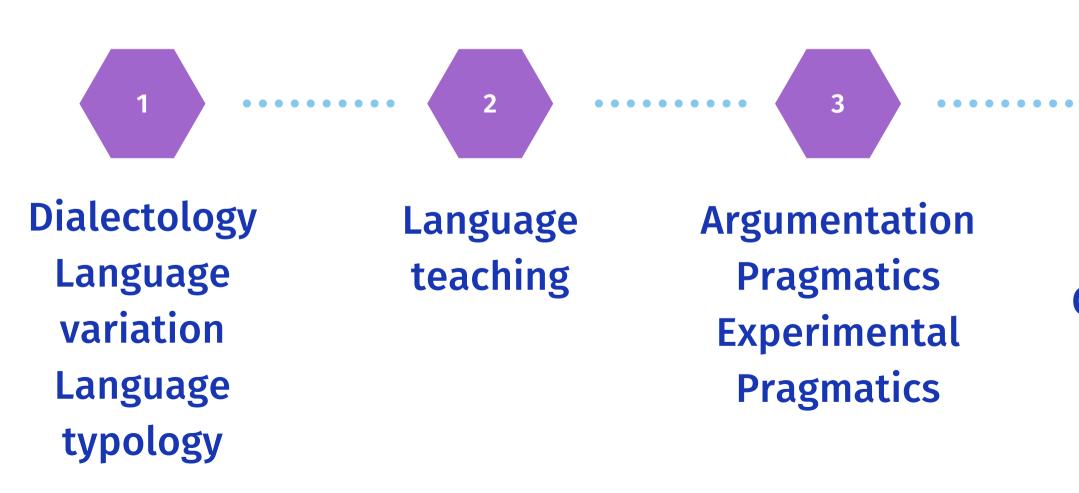
**Digital literacy** Language teaching **Political Linguistics** Legal Linguistics Swiss German Sign Language Institutional Communication Social multilingualism **Professional translation** Audio description **Multimodal communication** Information design Iournalism **Media Linguistics** NLP, Machine Learning **Deep Learning** 



Discourse Studies Argumentation Persuasion Intercultural pragmatics Financial Communication Semantics Multimodality Bilingualism Italian Linguistics Applied Linguistics Stylistics

## Foster the sharing of expertise and encourage collaborations









Applied Linguistics, Computational linguistics Language technology



English, French, German, etc. linguistics

## **Digital literacy in university contexts (DigLit)**

As digitalisation progresses, new technologies can offer valuable support to academic writers. However, research and practice show that students and their lecturers are often not aware of the applicability of available tools and are unable to exploit their full potential. These are the issues addressed by the DigLit project, supported by swissuniversities and the partner institutions.

Leading house: ZHAW School of Applied Linguistics

**Project financing:** P-8 Digital Skills programme, coordinated by swissuniversities and the partner universities

Overall budget: CHF 2.06 million

Project duration: January 2021 – December 2024



swissuniversities







Berner Fachhochschule

## Foster the sharing of resources: corpora and databases

UNIL | Université de Lausanne

- Interrogation
   Programme &
   Supersenses Extraction
   (IT)
- Lyra database (IT)
- ENIAT database (Slavic and South Asian Languages)
- FLORALE database (audio, FR)
- Phonocolor.ch (FR L2)



- ORFEUS databasis (FR)
- Glossaire de la Suisse Romande (FR)
- OFROM (audio and transcribed, FR)

zh	
aw	

 Swiss Web Corpus for Applied Linguistics (multilingual)





- Ortsnamen.ch/topnymes.ch (Swiss and international toponymy)
- Schweizer Textcorpus (DE)
- Schweizerisches Idiotikon (Swiss German)
- Vocabolario dei dialetti della Svizzera italiana (IT)
- Dicziunari Rumantsch Grischun (Romansh)
- Medieval Latin Dictionary
- Thesaurus linguae Latinae (ancient Latin)
- Historical Dictionary of Switzerland (DE, FR, IT)
- Collocation dictionary (DE)
- OLdPhras (DE)

## **Foster the sharing of resources: corpora and databases**



University of Zurich<sup>∞™</sup>

- BNC Dependency Bank (EN)
- Giessen-Long Beach Chaplin Corpus (EN)
- Zurich English Newspaper
- International Corpus of English
- PADLF-Les plus anciens documents linguistiques de la France (FR)
- Tzéro database (FR)
- SenS-Korpus (DE)
- Archimob (DE)
- Picture postcard corpus **(DE)**
- DAVADS -Digital Audio/Video Archive (DE)

- Metalanguage Discourses (DE)
- Zurich summer 1968 (DE)
- Temporal entity extraction from historical texts (DE)
- JAKOB lexicon (DE)
- SADS-Syntactic Atlas of German-speaking Switzerland
- bulletin4corpus (DE, FR, IT, EN)
- sms4science (DE, FR, IT, Romansh)
- SMULTRON-Stockholm Multilingual Treebank (Swiss German, DE, IT, FR, Romansh)
- eSSRQ-Electronic Collection of Swiss Legal Sources (FR, IT, DE, Romansh, Latin)

- Phonogram Archives (Swiss dialects)
- Text+Berg corpus (Swiss German, DE, IT, FR, EN, Romansh) • Bullinger Digital corpus (DE,
- Latin)
- CoNTra: the Federal Gazette (parallel FR-DE)
- PHOIBLE database (more than 1000 languages)
- Chintang Language Corpus
- Nepali National Corpus
- SEAlang corpus (South Asian languages)
- Corporum (Latin)



- European Language Equity resource collection (~60 corpora, ~40 applications, some lexica) (DE, IT, FR, Romansh)
- Genes and Languages Together database
- AUTOTYP database
- Macedonian Spoken Corpus
- Pre-Standardized Balkan **Slavic Literature**
- Torlak (a language from Timok area)
- Serbian Forms of Address (Serbian)



## Take home messages:

- CLARIN is a community: a networked federation of centers.
- CLARIN-CH is a consortium of scholars targetting the development of an active and impactful Swiss CLARIN community.
- CLARIN and CLARIN-CH are based on networking and sharing of expertise, resources, and tools.
- Researchers are both service-users and service-providers.
- Conducting research with digital language and text data can be challenging at the individual level, but much easier at the collective level.

## Meet the founding members of the CLARIN-CH Consortium



#### **Marianne Hundt**

National Coordinator Representative of UZH



Anita Auer

President Representative of UNIL



**Cristina Grisot** 

Scientific Coordinator



### Sandrine Zufferey

Representative of UNIBE

#### **Martin Hilpert**

Representative of UNINE

Andrea Rocci

Representative of USI



Representative of ZHAW





#### **Beat Immenhauser**

Representative of SAGW/ASSH



#### Information Sessions CLARIN-CH

#### What is CLARIN?

CLARIN is a pan-european digital infrastructure offering data, tools and services to support research based on language resources.

#### What is CLARIN-CH?

CLARIN-CH is a **national network** that gathers Swiss scholars working on language related issues and fosters the sharing of resources and expertise.

#### Join us for the information session and find out

more about how to gain access to all CLARIN resources and how to get involved !



**DR. CRISTINA GRISOT** Scientific Coordinator cristina.grisot@uzh.ch

#### TOUR DE SUISSE 2022: DATES

- UNINE: TUE 8 March
- UNIL: WED 16 March
- IDIAP: WED 23 March
- UNIBE: WED 30 March
- ZHAW: TUE 26 April
- UZH: FRI 6 May
- USI: TUE 17 May
- UNIBAS: TUE 14 June

## TOUR DE SUISSE 2022: DATES UNINE: TUE 8 March • UNIL: WED 16 March IDIAP: WED 23 March • UNIBE: WED 30 March ZHAW: TUE 26 April UZH: FRI 6 May USI: TUE 17 May UNIBAS: TUE 14 June





# Thank you!

Currently: <u>https://clarin-ch.linguistik.uzh.ch</u> Soon will become: https://clarin-ch.ch

### **EMAIL** cristina.grisot@uzh.ch

#### **WEB**