Introduction to CMC Metadata & Language Data Repositories

Alexander König

CLARIN ERIC

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Metadata - Introduction

- Metadata is „Data about Data“
- Should be Structured, Machine-readable
- Helps (your) data to be **F**indable
  - For yourself
  - For others who want to re-use it

Metadata - Introduction

- Need to find the right balance between
  - Not enough detail
    - Makes it difficult to judge whether a dataset is „what I need“
    - „Fitting“ data might not turn up in a search
  - Too much detail
    - Might overwhelm users
    - Can also make it harder to find data (e.g. data labelled as „Austrian“ might not turn up in a search for „German“ even though the user would probably want it to be found as well)

Metadata – Standards

- No agreed standard for CMC corpora yet
- Common standards in linguistics
  - Dublin Core/OLAC
  - CMDI
- But there are a lot of others
- Often come with the choice of repository (cf. next section)

Metadata – Standards - DC

- Dublin Core (DC)
  - Comes from the Library World
  - Very basic information (e.g. author, description, language)
  - Widely supported by software
- OLAC (Open Language Archives Community)
  - Extends DC with additional linguistic MD fields
  - e.g. linguistic field, linguistic data type

Metadata – Standards - CMDI

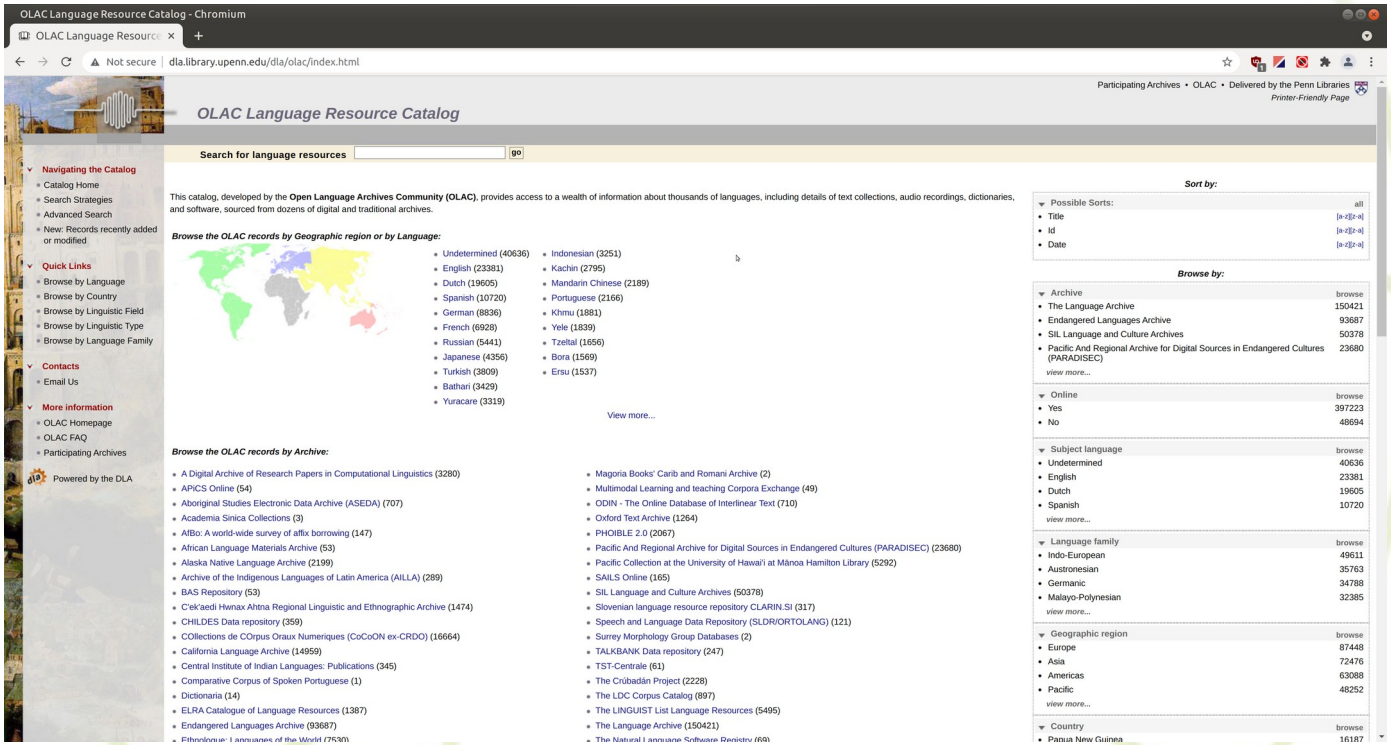
- Component MetaData Infrastructure
  - Developed by CLARIN
  - Tries to accommodate the wide variety of users
  - Modular design
    - Metadata profiles
    - Reusable metadata components
- Different CMDI profiles are linked through shared concepts (e.g. „title“ and „name“ will have the same concept (if used to name a resource))

Metadata – Standards - Findability

- Both OLAC and CMDI come with discovery services as part of their infrastructure
  - OLAC search
  - Virtual Language Observatory (VLO)
- Repositories can register their metadata with one or both (if they can provide it in OLAC/CMDI form)

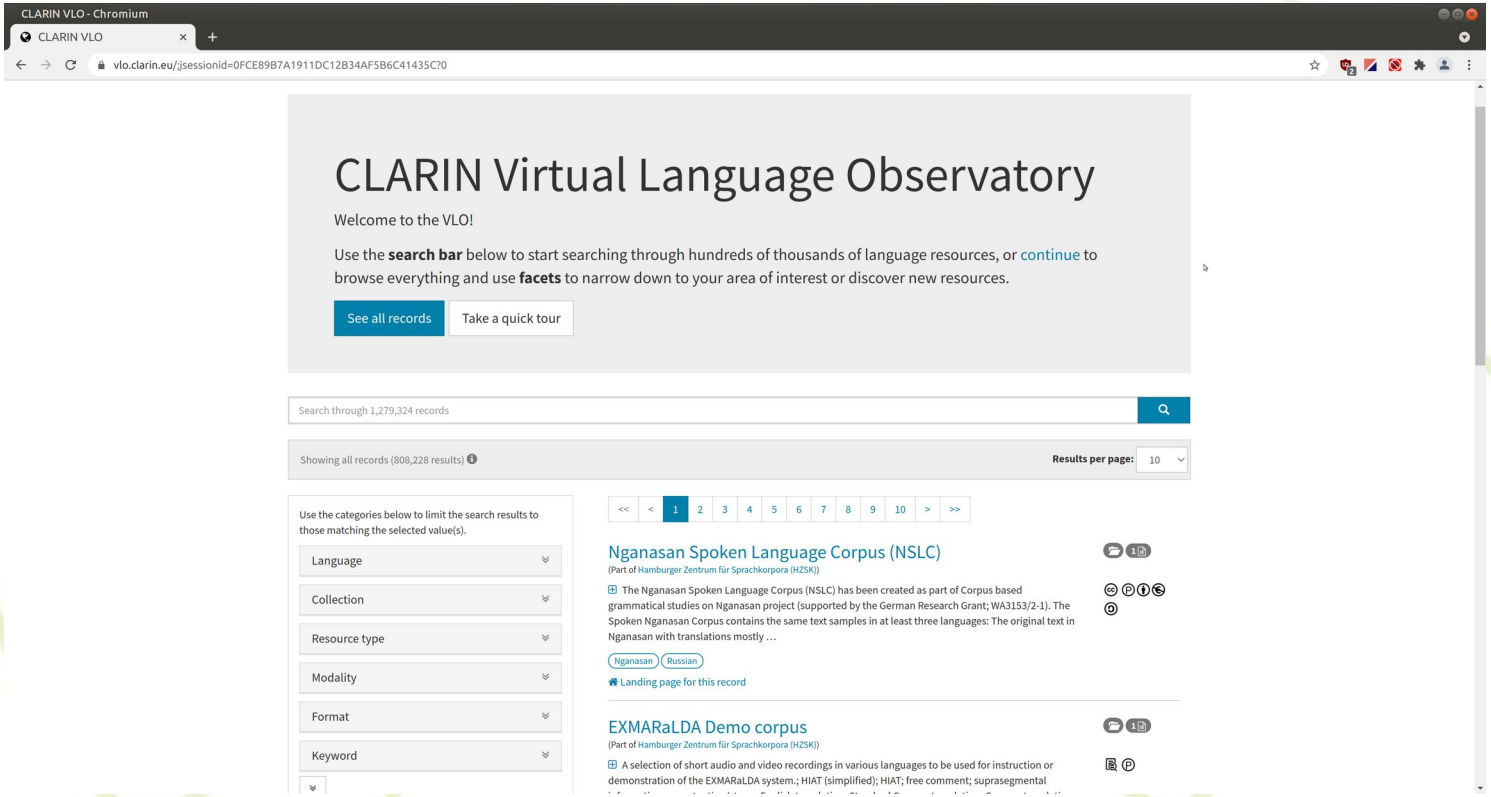
Metadata – Standards - Findability

http://search.language-archives.org/



Metadata – Standards - Findability

https://vlo.clarin.eu/



Metadata – Standards - CMC

- No commonly agreed standard
- But apart from general linguistic metadata, some additional fields are „obvious“, most of them pertaining to provenance
  - When was the data collected?
  - Where is the data coming from (e.g. Twitter, Facebook, WhatsApp)?
  - What format is the data in (e.g. full tweets, links to tweets, blog articles)?
  - How was the data processed (anonymized, pos-tagged, „cleaned up“ in some way)?
  - What are the licensing conditions?

Repositories - Introduction

- Research Data Repositories
  - Can be found in most academic institutions
  - Can be general purpose (one repository for the whole university)
  - Or domain-specific (e.g. only hosts linguistic data)

Repositories – FAIR

- Repositories help with **Findability** and **Accessibility**
- They store data safely (backups) and securely
- Automatically assign a PID
- Force you to add some essential metadata (e.g. license)
- Usually provide easy access, e.g. through single sign-on
- Often propagate information about the data to (domain-specific) search interfaces

Repositories - Types

- Common repository types
  - Fedora Commons
  - DSpace
  - Dataverse

Repositories - Instances

- General repositories
  - Zenodo
  - Figshare
- Infrastructures
  - META-SHARE
  - CLARIN Centres

Repositories - CLARIN

- CLARIN is a network of centres
- Each CLARIN member country hosts at least one centre where you can deposit your data
- Overview:
  - https://centres.clarin.eu/
  - https://www.clarin.eu/content/depositing-services
- Specialised Centre for CMC data:
  - Eurac Research CLARIN Centre (https://clarin.eurac.edu/)

Repositories - CLARIN

Repository type	Number of centres
DSpace	14
Fedora	10
META-SHARE	4
Git	2
LAT	2
Dataverse	1
Custom	8
TOTAL	**41**

Repositories - CLARIN

- All CLARIN Centres provide
  - PID for your corpus
  - Metadata in CMDI and DC (fields are usually fixed)
  - Assistance with depositing (e.g. with writing metadata, choosing a license)
  - Automatic addition to the CLARIN data catalogue (VLO) (and often also to the OLAC search)
  - Authentication and Authorisation through Single Sign-On

Repositories - Choice

- First have a look at your institute and see if they host a dedicated repository
- If your insitution has a general purpose repository, you might use that
- Or look for a domain-specifc one outside of your institution
- Talk to your national CLARIN coordinator
- Take a look at the list of CLARIN depositing services
- Ask at the CKCMC or at the ERCC.

Thank you for your attention!

Now it's time for **questions.**