SSHOC Webinar SSHOC'ing drama in the cloud

Encoding theatrical text collections for discovery, exploration, and visualisation;

the added value of SSHOC/CLARIN services







Housekeeping notes in the virtual space

- The webinar is being recorded. All participants will receive a link to the recording later today.
- Slides are available: See the chat box for the link.
- Questions? Put them in the chat box. The speakers will answer your questions at the end of the webinar.



SPEAKERS and the audience



Francesca Frontini
CLARIN ERIC Director & ILC CNR
SSHOC T3.1.
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Maria Eskevich
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SSHOC T3.3. Task leader
maria@clarin.eu



Iulianna van der Lek CLARIN ERIC Training and Education Officer SSHOC T3.1. iulianna@clarin.eu

What about you? Please tell us who you are by answering a couple of questions shared with you via Zoom.



Structure of the tutorial

- 13.30 13.50: Welcome and introduction
 - CLARIN ERIC and What it Offers (Research Infrastructure, tools and services)
 - SSHOC (project details)
- 13.50 14.05: Scenario of use and motivation
 - a researcher with SSH research questions and limited knowledge of TEI
 - a librarian aware of SSHOC and CLARIN
- 14.05 14.25: **TEI** in details
- 14.25 14.35: Interaction with the audience
- 14.35 14.40 Coffee-break (5 min)
- 14.40 15.10: **SSHOC/CLARIN** use case
- 15.10 15.25: Questions & answers
- 15.25 15.30: Wrap-up and useful references



Introduction



CLARIN ERIC and What it Offers

www.clarin.eu



CLARIN in a nutshell

- CLARIN is the Common Language Resources and Technology Infrastructure
- ESFRI ERIC status since 2012, Landmark since 2016
- that provides easy and sustainable access for scholars in the humanities and social sciences and beyond
- to digital language data (in written, spoken, video or multimodal form)
- to advanced tools to discover, explore, exploit, annotate, analyse or combine them, wherever they are located
- to education and training webinars and workshops with focus on digital literacy of scholars, lecturers and students
- through a single sign-on environment
- that serves as an ecosystem for knowledge exchange
- and is ready for integration in EOSC (European Open Science Cloud; <u>link</u>)

CLARIN Value Proposition: https://www.clarin.eu/content/value-proposition (link to pdf)

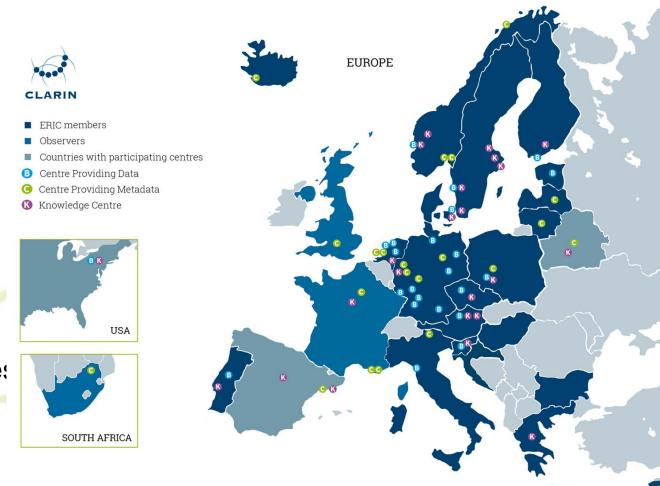
CLARIN ERIC in members and centres

Consortium:

- 21 members: AT, BG, CY, CZ, DE, DK, EE, FI, GR, HR, HU, IS, IT, LT, LV, NL, NO, PL, PT, SE, SI
- 3 observers: FR, UK, ZA 1 linked party: CMU >60 centres
- (incl. 25 CTS certified data centres)

Support for linguistic diversity

- Data covering more than 1500 languages
- Tools for many languages
- Language resources in all modalities

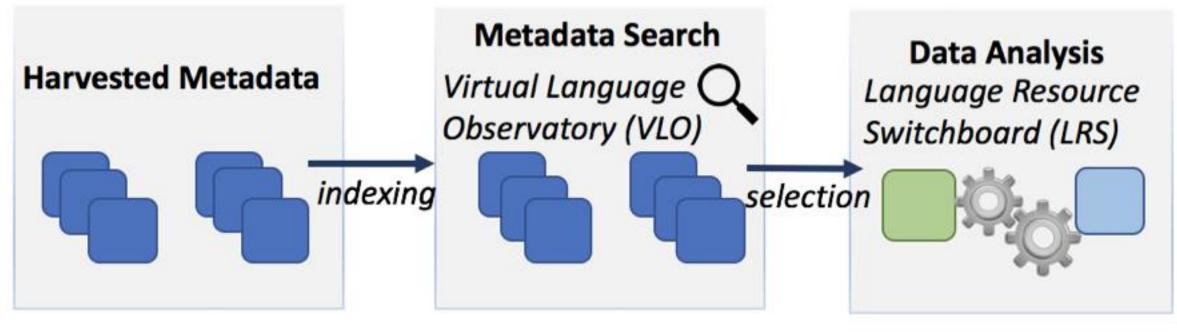


CLARIN data types and communities of use in SSH and beyond

- Newspaper archives
- Parliamentary records
- Literary texts
- Historical letters
- Broadcast archives
- Oral History data
- Social Media data
- L-2 Learner Resources
- Survey data
- Patient recordings
- Excavation reports

- Digital humanities
- Linguistics and Philology
- Data Science /Al
- Translation and Lexicography
- Literary Studies
- History
- Political and Social Sciences
- Media Studies
- Culture, Folklore, Anthropology
- Speech therapy
- General Public

The CLARIN data architecture: central processing of metadata





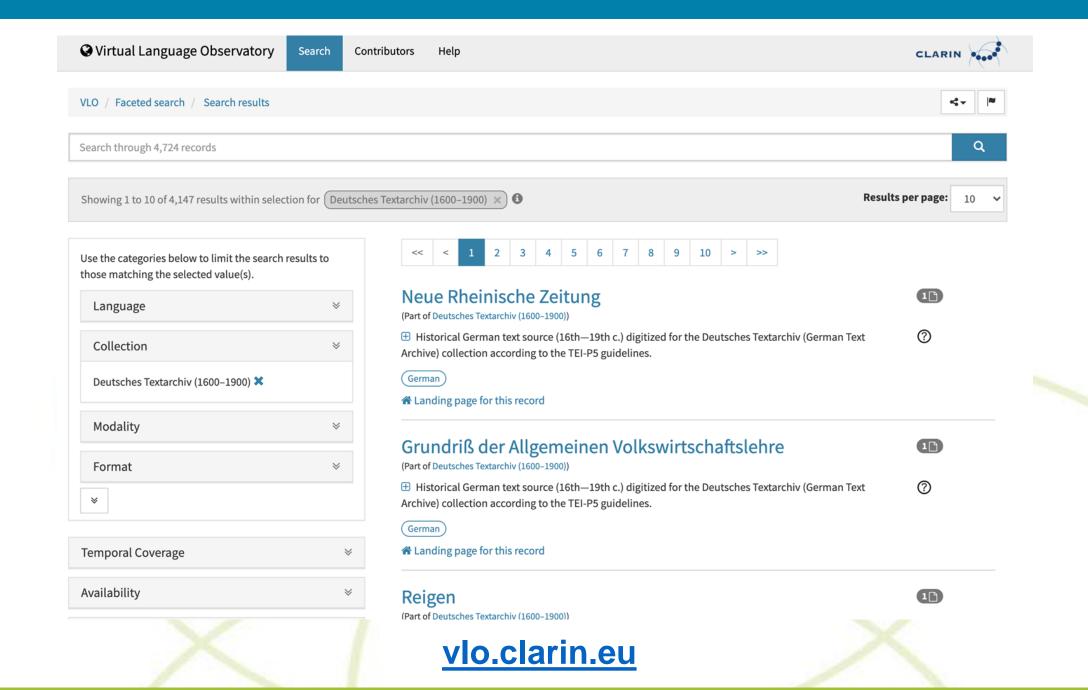
clarin.eu/fair



vlo.clarin.eu



switchboard.clarin.eu





https://www.deutschestextarchiv.de/book/show/nn_nrhz120_1848

Neue Rheinische Zeitung, Nr. 10. Köln, 10. Juni 1848.

Neue Rheinische Zeitung. Nr. 11. Köln, 11. Juni 1848.

• Neue Rheinische Zeitung. Nr. 10. Köln, 10. Juni 1848. Beilage.

Neue Rheinische Zeitung, Nr. 11, Köln, 11, Juni 1848, Beilage

Lemmata

Types

· Lemmata (nur Nomen)

Types (nur Nomen)

National Library of Norway

Website	https://www.nb.no/sprakbanken/en/sprakbanken/
Consortium	CLARINO
Type(s)	С
Type status	Aiming for B
Description	Providing metadata services and access to language resources
CoreTrustSeal/DSA	none
<u>PID</u> status	Handle via EPIC (prefix: 21.11146)
Repository system	Custom
Strict versioning?	X

Organisational information

Organisation name	Språkbanken (Speech & Language Data Bank)
organioation name	oprakbanken (opecon a Language Data Bank)

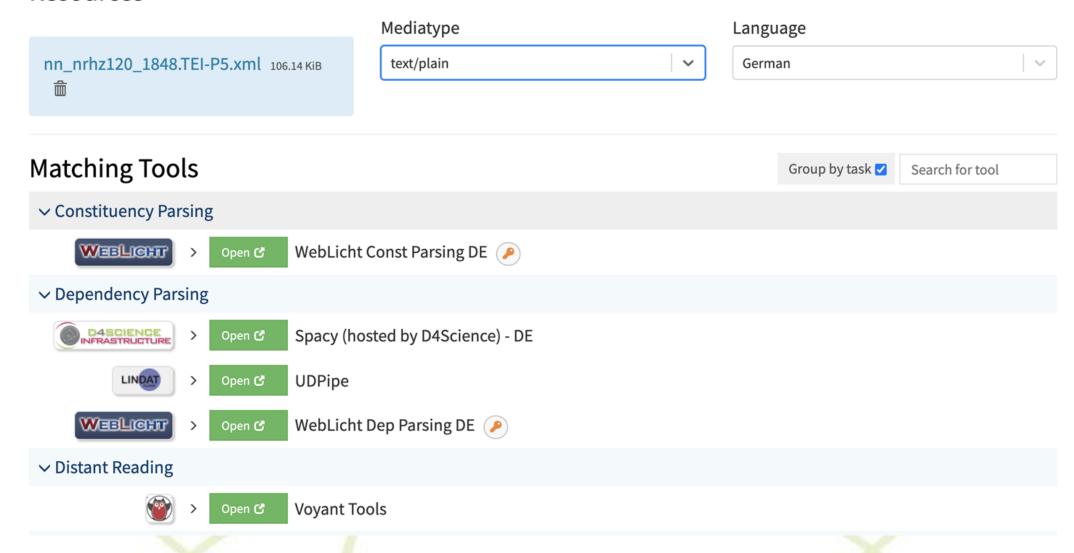
Endangered Languages Archive

Website	https://www.elararchive.org/
Consortium	CLARIN-UK
Type(s)	С
CoreTrustSeal/DSA	none
Repository system	Preservica
Strict versioning?	×

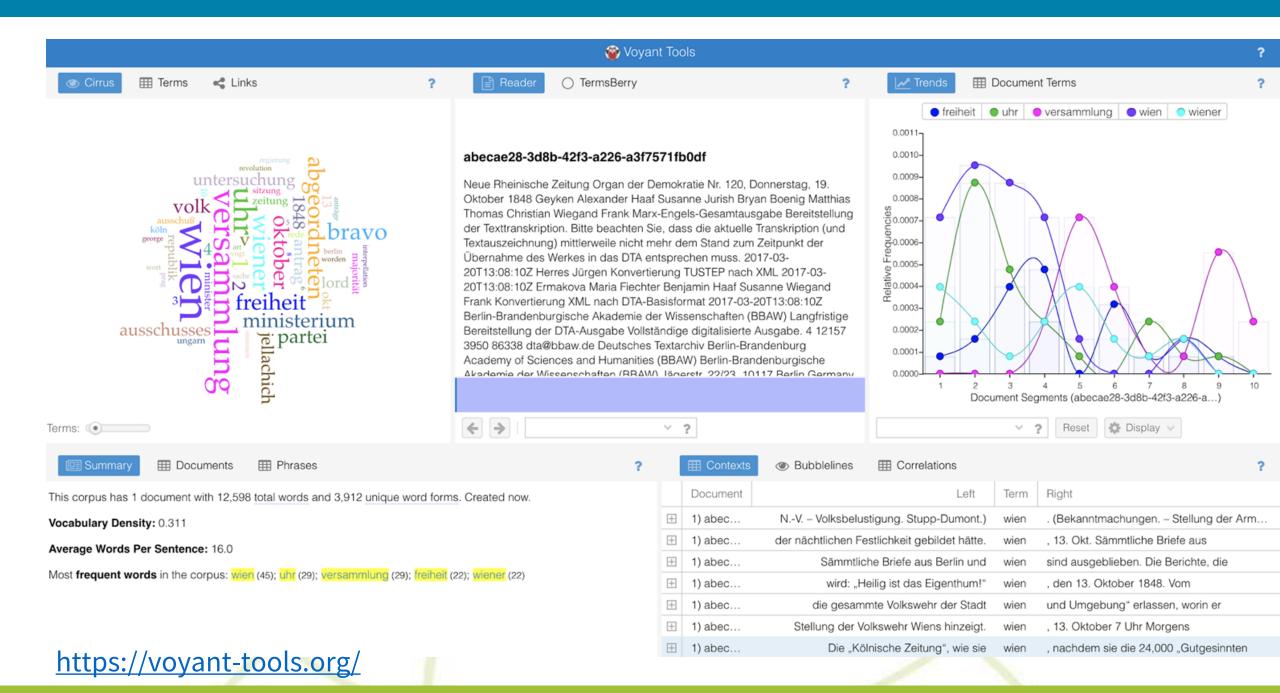
Organisational information

Organisation name	Endangered Languages Archive
Institution	SOAS University of London
Working unit	SOAS Library
Shorthand	ELAR

Resources



switchboard.clarin.eu

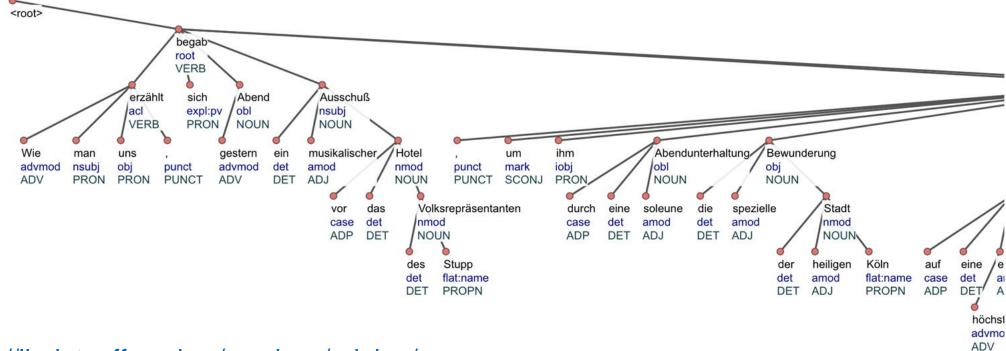


UDPipe

● About Run III REST API Documentation

♣ Save Tree as SVG

Wie man uns erzählt, begab sich gestern Abend ein musikalischer Ausschuß vor das Hotel des Volksrepräsentanten Stupp, um ihm durch eine soleune Abendunterhaltung die spezielle Bewunderung der heiligen Stadt Köln auf eine höchst eklatante Weise zu erkennen zu geben.



https://lindat.mff.cuni.cz/services/udpipe/

CLARIN as Ecosystem for Knowledge Exchange



CLARIN Knowledge Centres (abbreviated K-centres) are a cornerstone of the CLARIN knowledge infrastructure.

K-centres are institutions that have agreed to share their knowledge and expertise on one or more aspects of the domain covered by the CLARIN infrastructure.

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

CLARIN as Ecosystem for Knowledge Exchange



- •<u>Individual languages</u> (e.g. Danish, Czech, Portuguese), language families (e.g. South Slavic) or groups of languages (e.g. morphologically rich languages, the languages of Sweden)
- Written text and modalities other than written text (e.g. spoken language, sign language)
- •Linguistic topics (e.g. language diversity, language learning, diachronic studies)
- •Language processing topics (e.g. speech analysis, building treebanks, machine translation)
- •Data types other than corpora (e.g. lexical data, word nets, terminology banks)
- •<u>Using or processing families of language data</u> that will exist for most languages (e.g. newspapers, parliamentary records, oral history)
- •Generic methods and issues (e.g. data management, ethics, IPR, OCR)

IMPACT-CKC IMPACT centre of competence - CLARIN K-centre in digitisation

Areas of competence IMPACT-CKC (IMPACT centre of competence - CLARIN K-centre in digitisation), as knowledge centre

offers expertise and resources to institutions and researchers looking for advice in digitisation and related

fields. The IMPACT-CKC resources include a demonstrator platform for online testing tools, a collection of

high quality images with associated ground truth, historical lexica for 10 languages as well as training

materials and registries on tools, initiatives, datasets and competitions.

Audiences served - researchers; - librarians; - archivists; - digital humanists; - computer scientists in topics related to

digitisation

Types of services - Access to data; - Access to tools; - Training; - User assistance

Is portal for language(s) -

Other languages covered - Spanish; - English; - Polish; - French; - Dutch; - German; - Slovene; - Czech; - Latin; - Bulgarian

Modalities covered - Audio-visual; - Text

Linguistic topics - corpus linguistics; - diachronic language resources; - language learning

Language processing - basic language processing; - information extraction

- lexical data; - language models; - linked open data; - ontologies

- Historical corpora; - Lexica; - Literary corpora; - Newspaper corpora

Generic topics - OCR; - digitisation; - visualisation; - evaluation of tools

Other keywords - digitisation, - visualisation, - evaluation of tools

Tour de CLARIN Introduction Interview

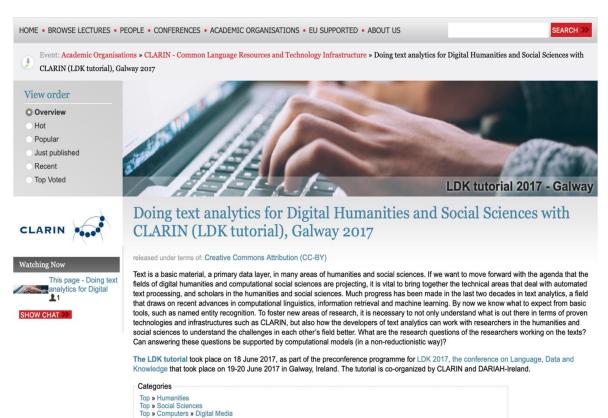
Data types

Resource families

19

CLARIN as Ecosystem for Knowledge Exchange







CLARIN as Ecosystem for Knowledge Exchange



Get to know the different types of resources in different languages CLARIN makes available for researchers from digital humanities, social sciences and human language technologies.

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

Corpora

- Computer-mediated communication corpora
- Corpora of academic texts
- Historical corpora
- L2 learner corpora
- Literary corpora
- Manually annotated corpora
- Multimodal corpora
- Newspaper corpora
- Parallel corpora
- Parliamentary corpora
- Reference corpora
- Spoken corpora

Lexical Resources

- Lexica
- Dictionaries
- Conceptual Resources
- Glossaries
- Wordlists

Tools

- Normalization
- Named entity recognition
- Part-of-speech tagging and lemmatization
- Tools for sentiment analysis

Historical corpora in the CLARIN infrastructure Monolingual corpora

Corpus	Language	Description	Availability
Open Richly Annotated Cuneiform Corpus, Korp	Akkadian	This corpus contains cuneiform texts from Ancient history.	Concordance
Version		The corpus is available through the	
Size: 741,100 tokens		concordancer Korp.	
Annotation: tokenised			
Licence: CC-BY-SA			
Greek Medieval Texts	Ancient	This corpus contains texts from the	Download
Size: 3.4 million words	Greek	4th to the 16th century.	
Licence: CC-BY		The corpus is available for download from the clarin:el repository.	
Sheffield Corpus of Chinese	Chinese	This corpus contains fictional and	Download
Annotation: no annotation		non-fictional texts from the Medieval and Modern Chinese periods.	
Licence: CC-BY-NC-SA 3.0		The corpus is available for	
		download from the Oxford Text Archive.	

TABLE OF CONTENTS

Introduction

Historical corpora in the CLARIN infrastructure

Monolingual corpora

Multilingual corpora

Other historical corpora

Additional materials

List of publications on historical corpora

ParlaMint: Towards Comparable Parliamentary Corpora

Motivation | Mission and Goal | Expected Outcome | Tasks | Workplan | Results | Observers | Dissemination | Events | Participants | Financial Support | Contacts

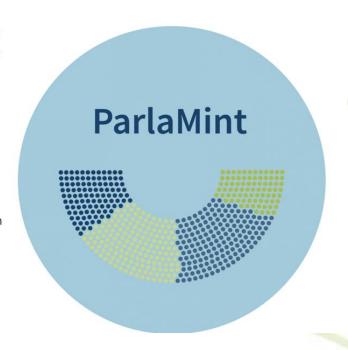
Motivation

National parliamentary data is a verified communication channel between the elected political representatives and society members in any democracy. It needs to be made accessible and comprehensive - especially in times of a global crisis. With the recent advances of artificial intelligence, analytics over unstructured parliamentary data for many languages is rapidly becoming a prerequisite for reliable and trustworthy approaches in checking the veracity of information in contemporary society.

One of the most important characteristics of new parliamentary data is its direct correspondence to the most recent events, including the ones with global impact on human health, social life and economics such as the current COVID-19 pandemic. By comparing the data synchronically and diachronically within a cross-lingual context, scientific and civil communities will be able to track pan-European discussion and can be quickly updated on any emerging topic.

Mission and Goal

The mission of the ParlaMint project is to turn existing contemporary multilingual and diverse cross-national parliamentary data into resources that are:



https://www.clarin.eu/content/parlamint-towards-comparable-parliamentary-corpora

SSHOC EU Horizon 2020 Project





Type of action & funding:

Research and Innovation action (INFRAEOSC-04-2018)



Objectives:

- creating the social sciences and humanities (SSH) part of European Open Science Cloud (EOSC)
- maximising re-use through Open Science and FAIR principles (standards, common catalogue, access control, semantic techniques, training)
- interconnecting existing and new infrastructures (clustered cloud infrastructure)
- establishing appropriate governance model for SSH-EOSC

Partners Home / Partners



































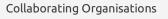






































































27 + 29 > 45!





Expected impact



The Social Sciences and Humanities are seamlessly integrated in the European Open Science Cloud



Availability of an EU-wide, easy-touse SSH Open Marketplace, where tools and data are openly accessible



EU-wide availability of high quality "cloud ready" SSH tools and high quality SSH data



EU-wide availability of trusted and secure access mechanisms for SSH data, conforming to EU legal requirements



State of the art Research Infrastructure in several pilot domains advanced trough dedicated SSH data pilots cluster projects

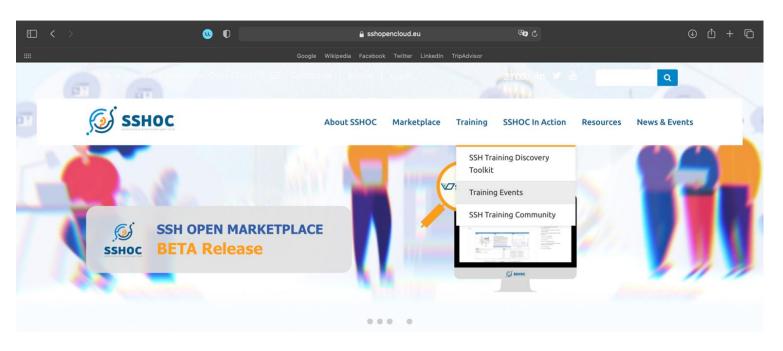


Maximising reuse through Open Science and FAIR principles (standards, common catalogue, access control, semantic techniques, training)





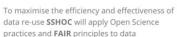
SSHOC website: past and future events (and relevant materials)



SSHOC Principal Goals



SSHOC will create the social sciences and humanities area of the European Open Science Cloud (EOSC) thereby facilitating access to flexible, scalable research data and related services streamlined to the precise needs of the SSH community.





SSHOC will leverage and interconnect existing and new infrastructures from the SSH ERICs to foster synergies across disciplines and expedite interdisciplinary research and collaboration.



SSHOC will set up an appropriate governance model for the social sciences and humanities area of the **EOSC**, taking into account the specificities of different sub-domains within

https://sshopencloud.eu/training/training-events

https://sshopencloud.eu/events/sshoc-workshop-data-citation-practice







SSHOC website



About SSHOC

Marketplace

Training

SSHOC In Action

Resources

News & Events

Search

Home / Search

Content

Users

Enter your keywords

librarian

Search

Search results

1. SSHOC Report on (meta) data interoperability problems: What research librarians need to know

... 02 December 2019 Are you a **librarian** with responsibility for data management? If so, you may gain valuable ...

Anonymous (not verified) - 01/10/2020 - 12:40

2. SSHOC-DARIAH Train-the-Trainer Research Data Management Bootcamp

... some other cases, we see the emergence of data steward, data **librarian**, Open Science officer roles (either full-or part-time or on ...

i.mazourine - 17/03/2021 - 09:33

News

SSHOC Takes Over @CLARINERIC Twitter Account

Between 10:00 and 13:00 on 21 June, SSHOC will take over the Twitter account...

ESFRI Science Clusters Position Statement on Expectations and Long-Term Commitment in Open Science

The Science Cluster (ENVRI-FAIR, EOSC-Life, ESCAPE, PANOSC and SSHOC) delivered...

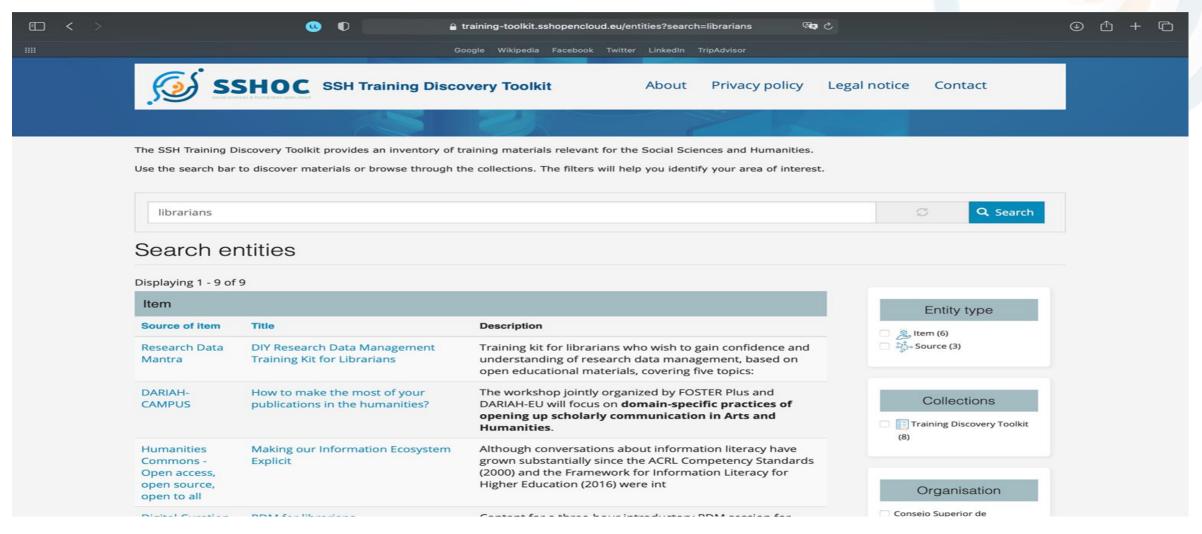
SSHOC Workshop Notes: Citizen Science & Cultural Heritage. Planning for Success

If you ever played with the idea of crowdsourcing your project, but you took a...



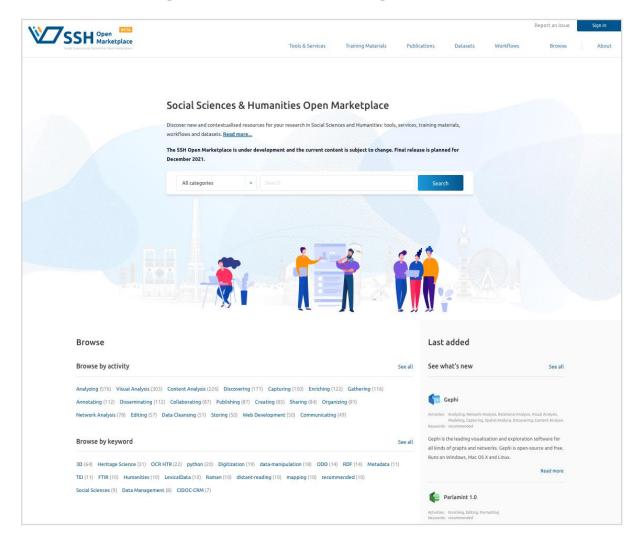


SSH Training Discovery Toolkit





SSH Open Marketplace



Discovery portal

with 3 key concepts in focus:

- Contextualisation
- Curation
- Community

Beta version:

marketplace.sshopencloud.eu/



SSH Open Marketplace: Training Materials





Tools & Services Training Materials Publications Datasets Workflows Browse About

Search

Home / Search

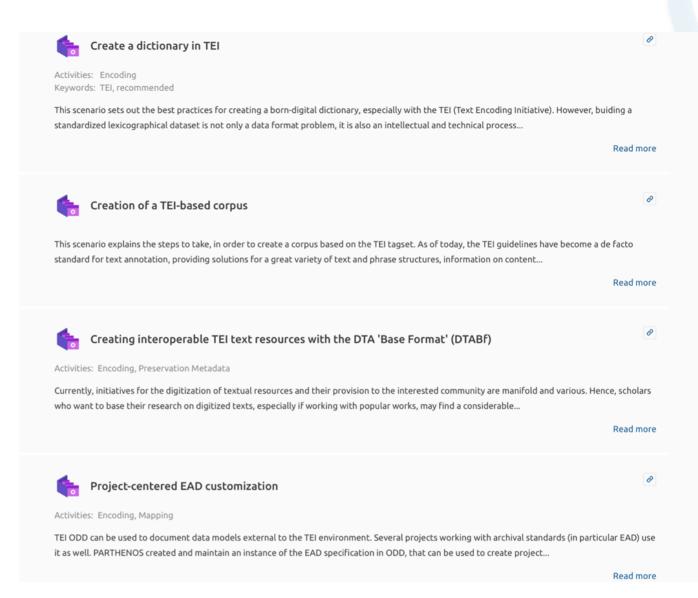
Search results (140)

Refine your search	Clear filters	Sort by name	Previous 1 of 7 Next
CATEGORIES		2.1 Error rates and ground truth - Text Digitisation	0
☐ Tools & Services	1606		
Training Materials	140	Keywords: OCR HTR	
Publications	2986	No description provided.	
Datasets	2		Read more
Workflows	29		
ACTIVITIES		3DHOP - How To	0
Analyzing	1	Keywords: 3D	
Content Analysis	1	No description provided.	
Contextualizing	1		2501.
Interpreting	1		Read more
Network Analysis	1		



SSH Open Marketplace: Workflows

CATEGORIES Tools & Services Training Materials Publications 56 Workflows **ACTIVITIES** Encoding Mapping Preservation Metadata **KEYWORDS** ☐ TEI recommended SOURCES SSK





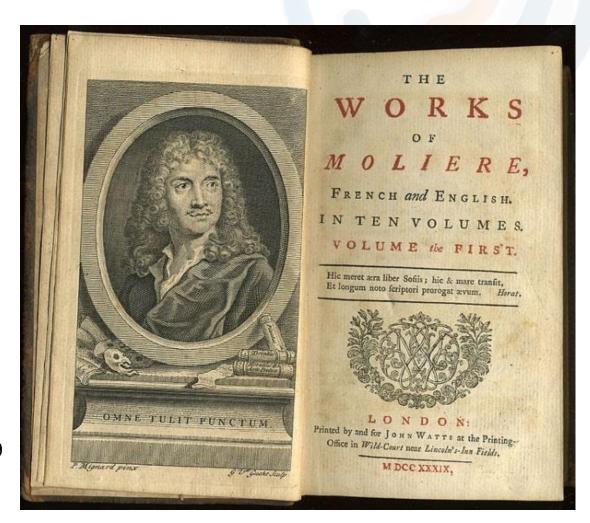
Scenario of use and motivation



Study of Theatrical Characters

Frontini, Francesca, Mohamed Amine Boukhaled, and Jean Gabriel Ganascia. 2018. 'Approaching French Theatrical Characters by Syntactical Analysis: A Study with Motifs and Correspondence Analysis'. In Grammar of Genres and Styles. From Discrete to Non-Discrete Units, by Dominique Legallois, Thierry Charnois, and Meri Larjavaara, 320:118–39. Trends in Linguistics. Berlin/Boston: De Gruyter Mouton. https://hal.archives-ouvertes.fr/hal-01832651

Galleron, Ioana. 2016. 'Playing with French Drama: from Old Research Questions to New Research Tools'. In Digital Humanities 2016: Conference Abstracts. Jagiellonian University & Pedagogical University, Kraków, pp. 522-523. https://dh2016.adho.org/abstracts/289





User: Researcher with Limited Knowledge of Digital Methods

Requiring access to:

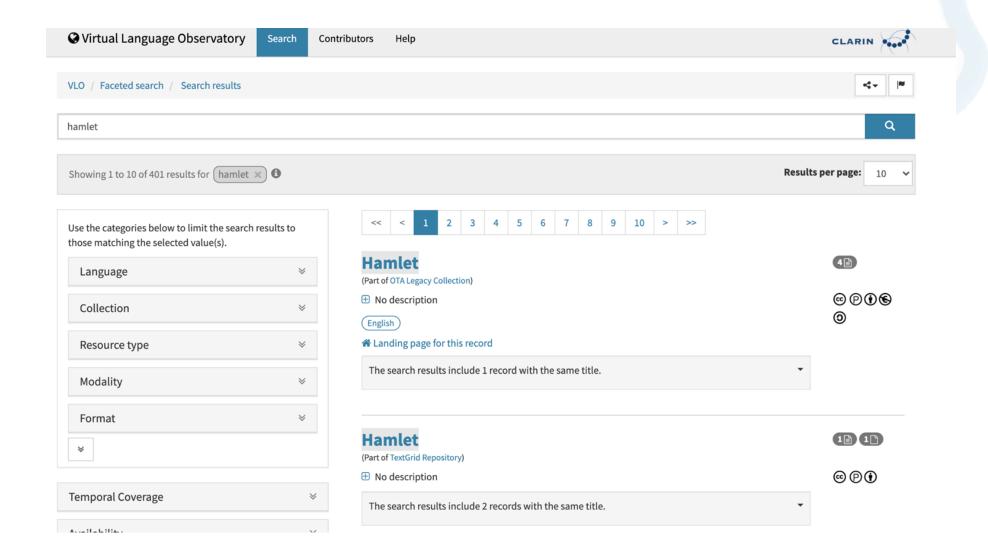
- quality digital source data
 - richly encoded
 - metadata (author, year of publication, list of characters, ...)
 - annotation (lines of characters, dialogue, ...)
- easy to use tools to
 - explore
 - enrich
 - analyse

How can librarians help?

How can infrastructures help librarians?

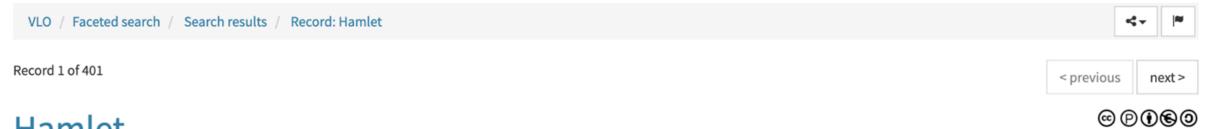


Use the CLARIN Virtual Language observatory to find data





Access to Source Material



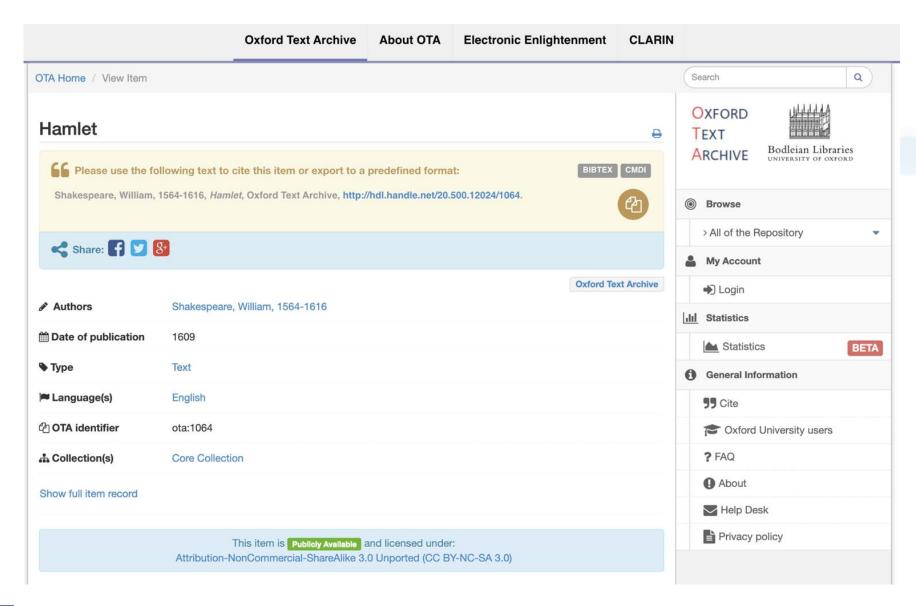
Hamlet

Record details	Links (5)	Availability	All metadata	Technical Details			
Name Type							
₩ HDL 0121				landing page		>	
dublin_core.x	ĸml			XML	•••	>	
metadata_lo	cal.xml			XML	•••	>	
header0121.x	ml			XML	•••	>	
hq11603-012	1.txt				Plain Text	•••	>



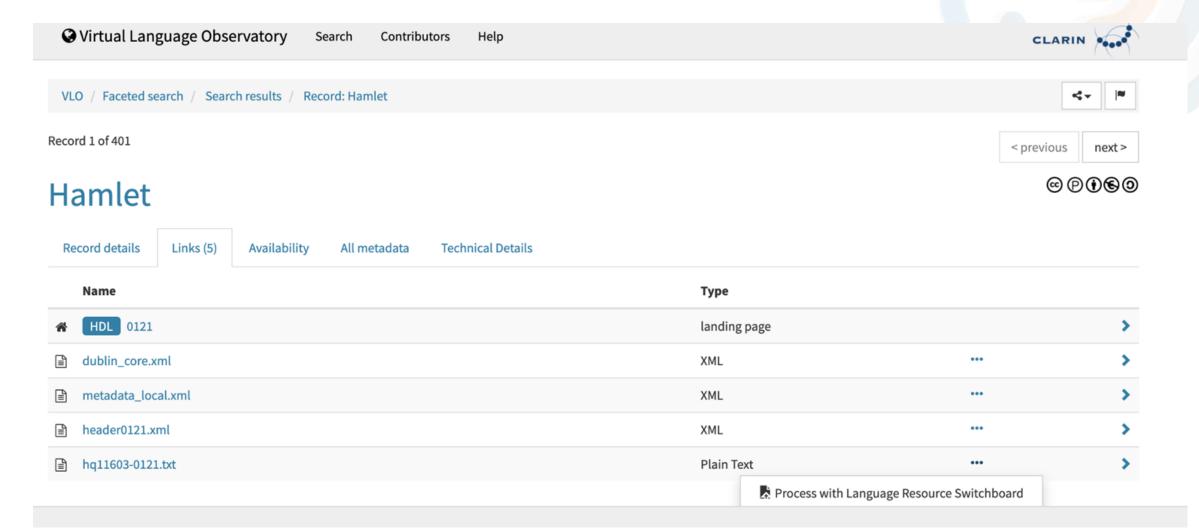


Where does it come from?



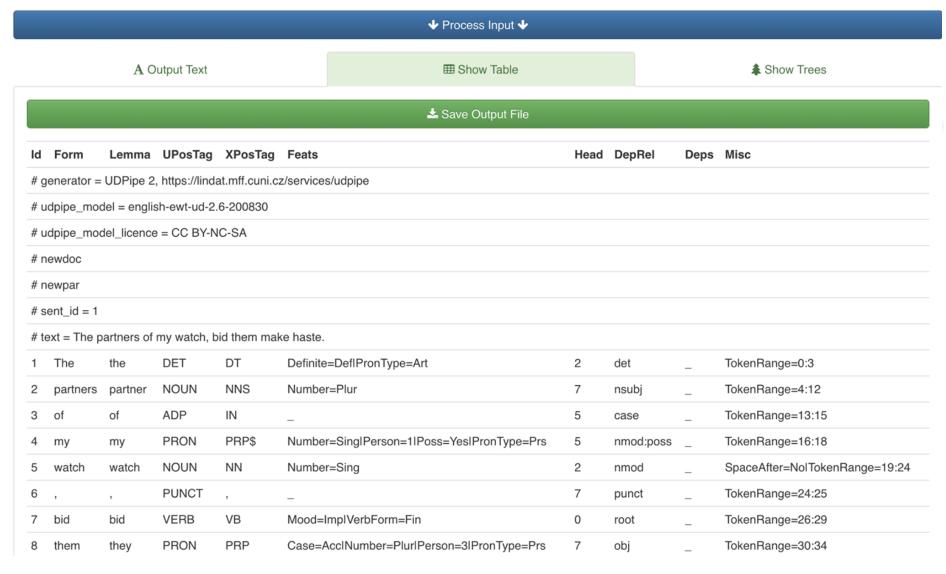


Process the text





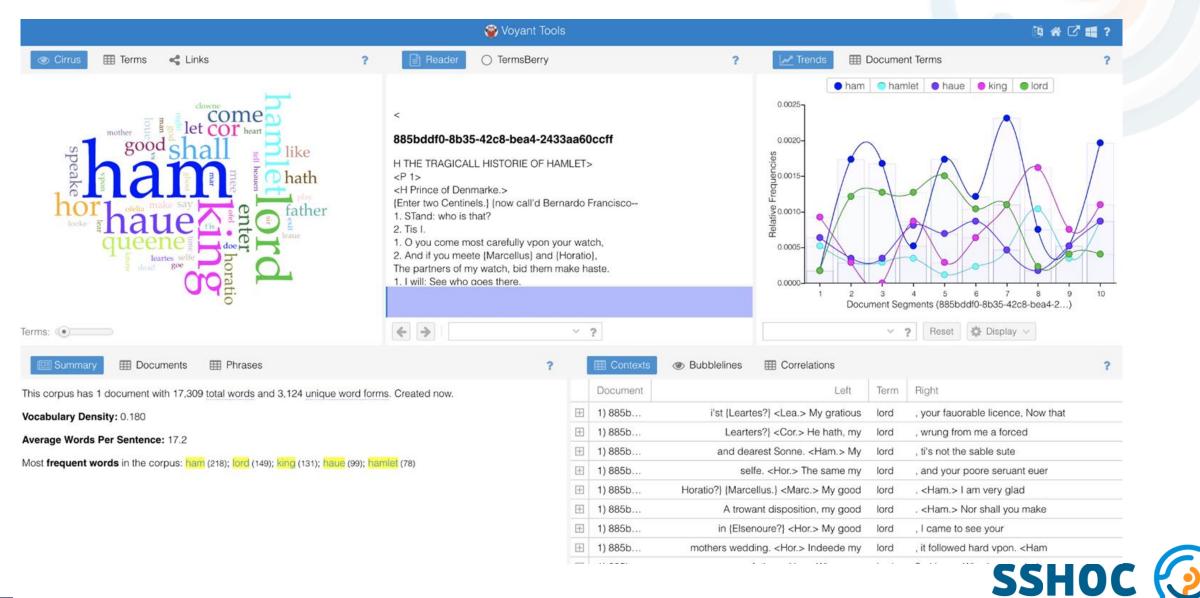
Annotate



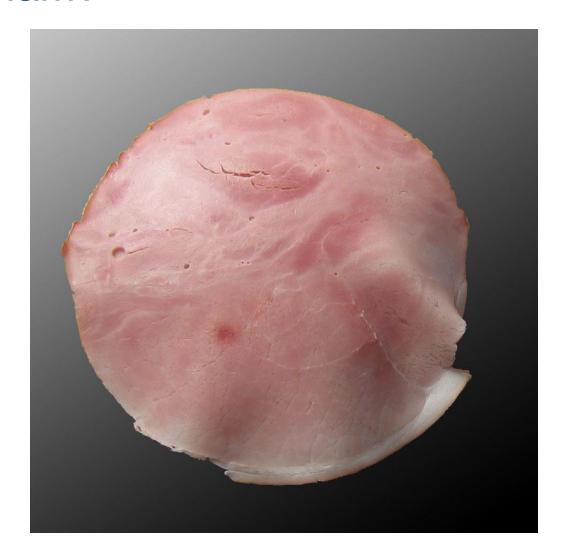




Visualize



Ham?



our coosin and dearest Sonne. <	ham	.> My lord, ti's not the
vs, go not to {Wittenberg.} <	ham	.> I shall in all my
Hamlet.} {Exeunt all but Hamlet.} <	ham	.> O that this too much
Hor.> Health to your Lordship. <	ham	.> I am very glad to
and your poore seruant euer. <	ham	.> O my good friend, I
Marcellus.} <marc.> My good Lord. <</marc.>	ham	.> I am very glad to
trowant disposition, my good Lord. <	ham	.> Nor shall you make mee
to see your fathers funerall. <	ham	.> O I pre thee do
Lord, it followed hard vpon. <	ham	.> Thrift, thrift, {Horatio}, the funerall
father. <hor.> Where my Lord? <</hor.>	ham	.> Why, im my mindes eye
he was a gallant King. <	ham	.> He was a man, take
Lord, the King your father. <	ham	.> Ha, ha, the King my
Gentlemen This wonder to you. <	ham	.> For Gods loue let me

Input format must match with tools to obtain good results



TEI in Details

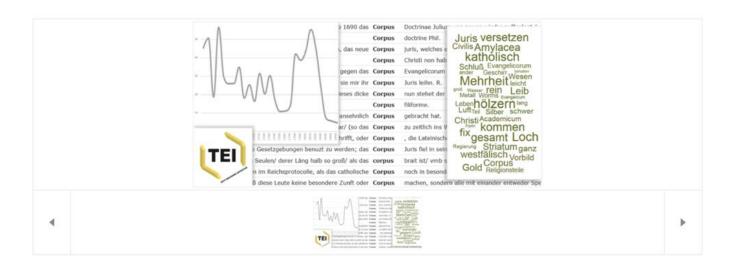


Existing SSHOC workflows



Creation of a TEI-based corpus

This scenario explains the steps to take, in order to create a corpus based on the TEI tagset. As of today, the TEI guidelines have become a de facto standard for text annotation, providing solutions for a great variety of text and phrase structures, information on content types, linguistic information on words or phrases, etc. In many digital text collections and digital edition projects annotation has been based on the TEI. Linguistic corpora based on TEI may thus be re-used in projects of other disciplines as well or may themselves benefit from the wide range of already existing resources.



Go to Workflow ☑

Details

Contributors: Susanne Haaf, Klaus Illmayer, Piotr Bański

Language: eng

License: Creative Commons Attribution 4.0 International

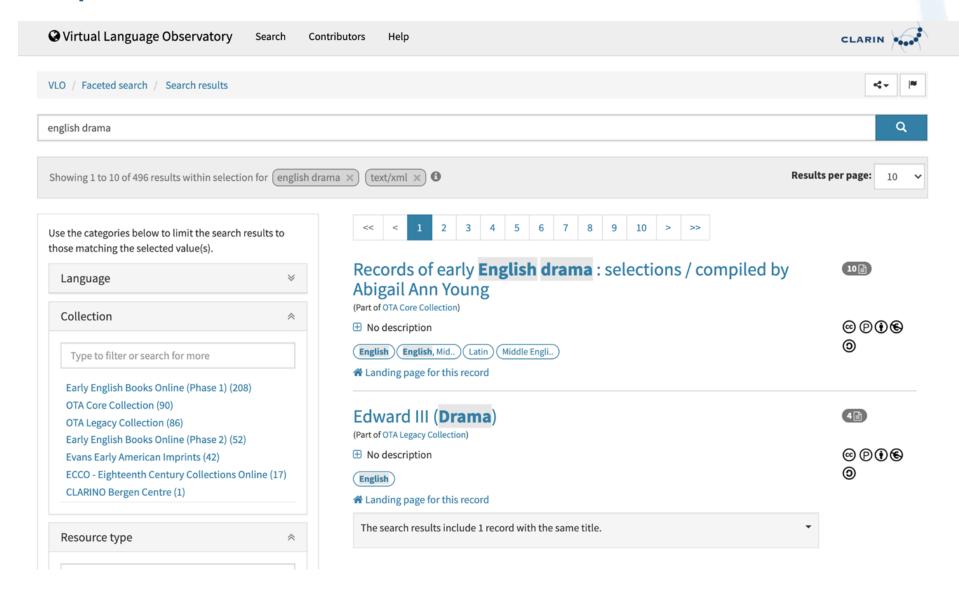
Source: SSK

https://marketplace.sshopencloud.eu/workflow/tEDt7j



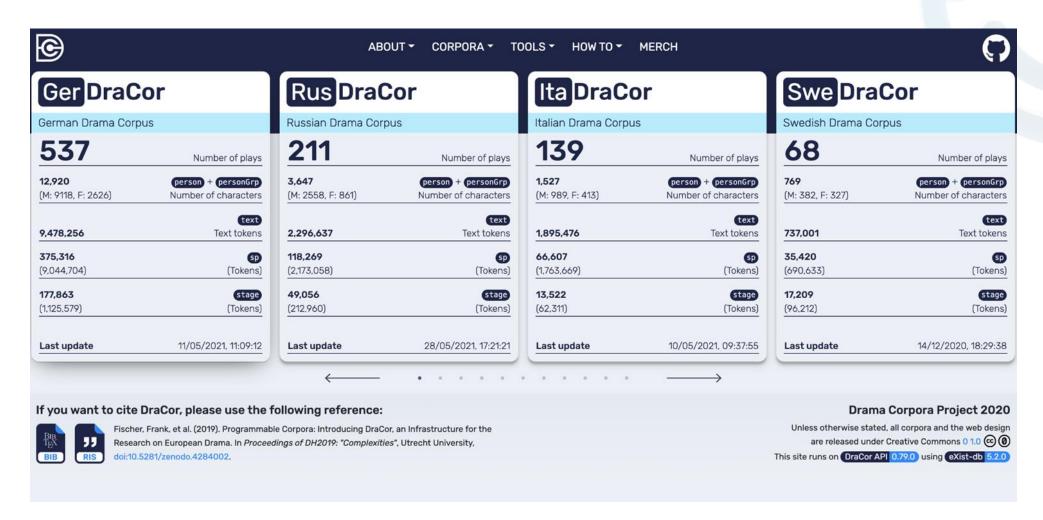


Corpora and collections in the VLO





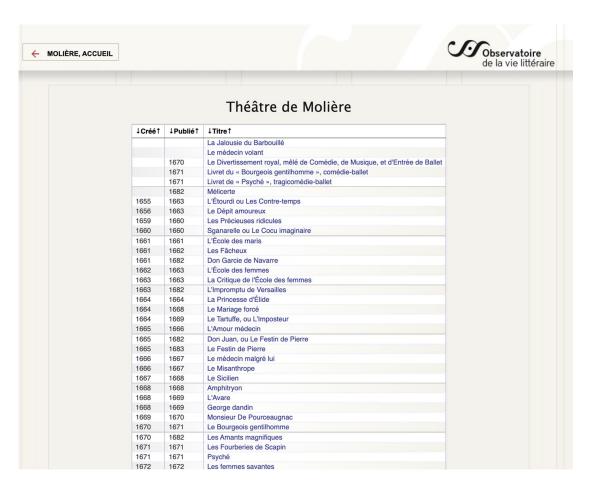
... and elsewhere

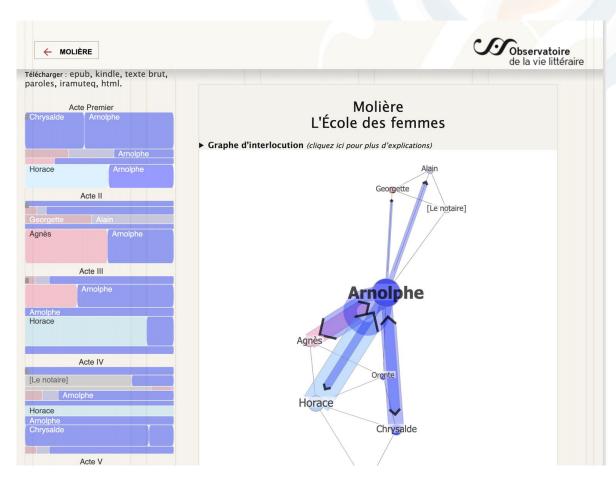


https://dracor.org/



... and elsewhere





https://obvil.sorbonne-universite.fr/corpus/moliere/moliere





Relevant publications

Search

Home / Publications / To Catch a Protagonist - Quantitative Dominance Relations in German-Language Drama (1730-1930)



To Catch a Protagonist - Quantitative Dominance Relations in German-Language Drama (1730-1930)

Go to Publication ☑

No description provided.

Details

Contributors: Frank Fischer 0005, Daniil Skorinkin, Peer

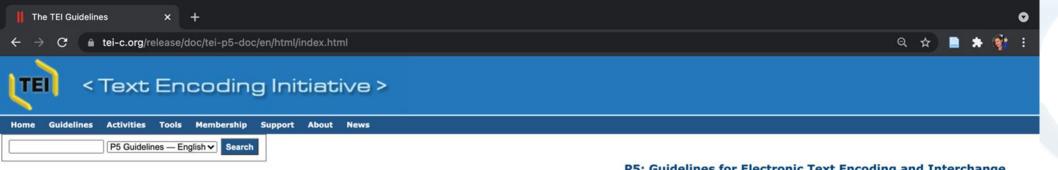
Trilcke, Christopher Kittel, Carsten Milling

Pages: 193-200

Year: 2018

Source: DBLP





P5: Guidelines for Electronic Text Encoding and Interchange

Version 4.2.2. Last updated on 9th April 2021, revision 609a109b1

[English] [Deutsch] [Español] [Italiano] [Français] [日本語] [한국어] [中文]



Front Matter

Title

- Releases of the TEI Guidelines
- ii. Dedication
- iii. Preface and Acknowledgments
- iv. About These Guidelines
- v. A Gentle Introduction to XML
- vi. Languages and Character Sets

Back Matter

- Appendix A Model Classes
- Appendix B Attribute Classes
- Appendix C Elements
- Appendix D Attributes
- Appendix E Datatypes and Other Macros
- Appendix F Bibliography
- Appendix G Deprecations
- Appendix H Prefatory Notes
- Appendix I Colophon

Text Body

- 1 The TEI Infrastructure
- 2 The TEI Header
- 3 Elements Available in All TEI Documents
- 4 Default Text Structure
- 5 Characters, Glyphs, and Writing Modes
- ⊕ 6 Verse
- 7 Performance Texts
- 8 Transcriptions of Speech
- 9 Dictionaries
- 10 Manuscript Description
- 11 Representation of Primary Sources
- 12 Critical Apparatus
- 13 Names, Dates, People, and Places
- 14 Tables, Formulæ, Graphics and Notated Music
- 15 Language Corpora
- 16 Linking, Segmentation, and Alignment
- 17 Simple Analytic Mechanisms
- 18 Feature Structures
- 19 Graphs, Networks, and Trees
- **20 Non-hierarchical Structures**
- 21 Certainty, Precision, and Responsibility
- **22 Documentation Elements**
- 23 Using the TEI

[English] [Deutsch] [Español] [Italiano] [Français] [日本語] [한국어] [中文]

TEI sourcecode

- · Getting and Using the TEI Sources.
- TEI GitHub Repository
- . Bug Reports, Feature Requests, etc.





TEI Default Text Structure

```
<TEI xmlns="http://www.tei-c.org/ns/1.0">
 <teiHeader>
<!-- ... -->
</teiHeader>
<text>
 <front>
<!-- front matter of copy text, if any, goes here -->
  </front>
  <body>
<!-- body of copy text goes here -->
  </body>
  <back>
<!-- back matter of copy text, if any, goes here -->
  </back>
</text>
</TEI>
```





TEI Header. Minimal and recommended headers

```
<teiHeader>
     <fileDesc>
          <titleStmt>
                <title>Thomas Paine: Common sense, a
                                     machine-readable transcript</title>
                <respStmt>
                     <resp>compiled by</resp>
                     <name>Jon K Adams</name>
               </respStmt>
          </titleStmt>
          <publicationStmt>
                <distributor>0xford Text Archive</distributor>
          </publicationStmt>
           <sourceDesc>
                <br/>

                                      by Phillip S. Foner (New York, Citadel Press, 1945)</bibl>
          </sourceDesc>
     </fileDesc>
</teiHeader>
```



TEI Text Body. Names, dates, people, and places

That silly man <name role="politician" type="person">David Paul Brown</name> has suffered ...

I never fly from <name key="LHR" type="place">Heathrow Airport</name> to <name key="FR" type="place">France</name>

<date when="1807-06-09">June 9th</date> The period is approaching which will terminate my present
copartnership. On the <date when="1808-01-01">1st Jany.</date> next, it expires by its own limitation.

<placeName period="#christian">Stauropolis</placeName>



To learn more about TEI ...

- TEI guidelines
 - https://tei-c.org/release/doc/tei-p5-doc/en/html/index.html
- TEI Tutorials (DARIAH TEACH)
 - Marjorie Burghart and Elena Pierazzo (2017). Digital Scholarly Editions:
 Manuscripts, Texts and TEI Encoding. DARIAH Teach. [Training module].
 https://teach.dariah.eu/course/view.php?id=32
 - Laurent Romary (2020). The TEI Guidelines: Born to be Open. Edited by Maria Wiederänders. Austrian Centre for Digital Humanities and Cultural Heritage (ACDH-CH). [Video]. https://youtu.be/hV-wtGlx8l8
 - Toma Tasovac (2016). Digitising Dictionaries. DARIAH Teach. [Training module]. https://teach.dariah.eu/course/view.php?id=20







Coffee-break (5 minutes)



SSHOC/CLARIN use case

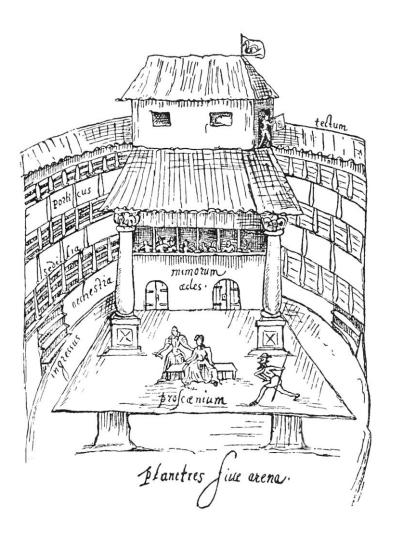
developed by

DARIAH/UGOE (Georg-August-Universität Göttingen) and

CLARIN/LINDAT (Charles University of Prague)



Intertextuality phenomena in European drama history. Research context



When?

 16th-17th century - the most productive time in the history of theatre -> Large body of texts in English, French, Spanish.

What?

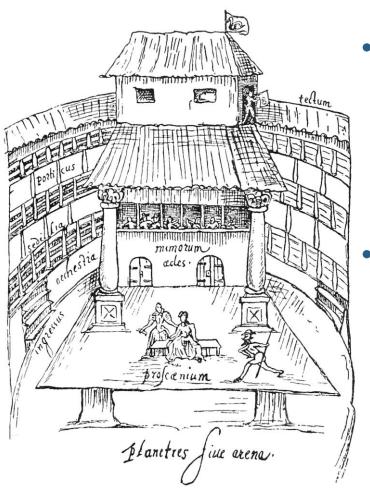
 "Servant" character or other representatives of lower social classes have the function to unveil the hidden order of discourse by incorporating a comical wisdom which can be solely represented by minor characters.

Why is it interesting?

- Comparative literary analysis
- Analysis of the literary language of individual dramas of the respective historical language level.



Intertextuality phenomena in European drama history. Challenges for a SSH scholar and RQ reformulation



- Challenges for a SSH scholar
 - Volume of material not feasible to do it manually
 - Multilinguality
 - Absence of annotation of such characters
- Research question as formulated in DH context:

Can the relationship between characters be quantitatively recorded algorithmically, and is there a recurring pattern discernible?



Data

Language	Data	Encoding format	Link	Num files
English	Dramas from Shakespeare Library	TEI-XML-P5	dracor-org/shakedracor: Folger Shakespeare Library	37 plays
French	Théâtre Classique by Paul Fièvre	TEI P5	<u>fredracor/tei</u>	1452 files
Spanish	Dramas from Pedro Calderón de la Barca	partially in plain text that is to be converted to TEI	dracor-org/caldracor	54 dramas



Data analysis

- The main issue to address inconsistency of available formats. Documents are sometimes:
 - available as TEI-XML, but not valid against any schema;
 - encoded with proprietary formats;
 - only available as plain text files.
- Approach
 - Different transformation XSLT and Python scripts for different parts of the corpus.
 - Itemization of parts of the corpus that can be taken into experiments.



William Shakespeare: »A Midsummer Night's Dream«ACT 1 Enter Theseus, Hippolyta, and Philostrate, with others.

THESEUS

Now, fair Hippolyta, our nuptial hour Draws on apace. Four happy days bring in Another moon. But, O, methinks how slow This old moon wanes! She lingers my desires Like to a stepdame or a dowager Long withering out a young man's revenue.

HIPPOLYTA

Four days will quickly steep themselves in night; Four nights will quickly dream away the time; And then the moon, like to a silver bow New-bent in heaven, shall behold the night Of our solemnities.

THESEUS

Stir up the Athenian youth to merriments. Awake the pert and nimble spirit of mirth. Turn melancholy forth to funerals; The pale companion is not for our pomp. Philostrate exits. Hippolyta, I wooed thee with my sword And won thy love doing thee injuries, But I will wed thee in another key, With pomp, with triumph, and with reveling

Enter Egeus and his daughter Hermia, and Lysander and Demetrius.

a-midsummer-night-s-dream.theseus mnd.txt

Now fair Hippolyta our nuptial hour Draws on apace Four happy days bring in Another moon But O methinks how slow This old moon wanes She lingers my desires Like to a stepdame or a dowager Long withering out a young man's revenue Go Philostrate Stir up the Athenian youth to merriments

Awake the pert and nimble spirit of mirth Turn melancholy forth to funerals The pale companion is not for our pomp Hippolyta I wooed thee with my sword And won thy love doing thee injuries But I will wed thee in another key With pomp with triumph and with reveling Thanks good Egeus What's the news with thee What say you Hermia Be advised fair maid To you your father should be as a god One that composed your beauties yea and one To whom you are but as a form in wax By him imprinted and within his power

To leave the figure or disfigure it

a-midsummer-night-s-dream.hippolyta_mnd.txt

Four days will quickly steep themselves in night Four nights will quickly dream away the time And then the moon like to a silver bow New-bent in heaven shall behold the night Of our solemnities I was with Hercules and Cadmus once When in a wood of Crete they bayed the bear With hounds of Sparta Never did I hear Such gallant chiding for besides the groves The skies the fountains every region near Seemed all one mutual cry I never heard





```
▼<?xml-model
  http://www.tei-c.org/release/xml/tei/custom/schema/relaxng/tei all.rng application/xml http://relaxng.org/ns/structure/1.0
▼<?xml-model
  http://www.tei-c.org/release/xml/tei/custom/schema/relaxng/tei_all.rng application/xml http://purl.oclc.org/dsdl/schematron
▼<TEI xmlns="http://www.tei-c.org/ns/1.0">
 ▼<teiHeader>
   ▼<fileDesc>
     ▼<titleStmt>
        <title>A Midsummer Night's Dream</title>
        <author key="wikidata:0692">William Shakespeare</author>
        <editor xml:id="BAM">Barbara A. Mowat</editor>
        <editor xml:id="PW">Paul Werstine</editor>
         <resp>Encoded in TEI Simple by</resp>
         <name xml:id="MM">Martin Mueller</name>
         <name xml:id="MSP">Michael Poston</name>
        </respStmt>
      ▼<respStmt>
         <resp>Linguistically annotated with MorphAdorner by</resp>
         <name>Philip R. Burns</name>
         <name>Martin Mueller</name>
        </respStmt>
      </titleStmt>
     ▼<editionStmt>
      ▼<edition n="0.5">
         An early release. Some encoding choices remain to be refined or extended.
        </edition>
      </editionStmt>
     ▼<publicationStmt>
        <publisher>Folger Digital Texts/publisher>
      ▼<address>
         <addrLine>http://www.folgerdigitaltexts.org</addrLine>
        </address>
      ▼<availability>
        ▼cence target="http://creativecommons.org/licenses/by-nc/3.0/deed.en US">
           Distributed under a Creative Commons Attribution-NonCommercial 3.0 Unported License
         </licence>
        </availability>
        <date>February, 2017</date>
        <idno type="wikidata" xml:base="https://www.wikidata.org/wiki/">Q104871</idno>
        <idno type="dracor" xml:base="https://dracor.org/id/">shake000008</idno>
      </publicationStmt>
     ▼<sourceDesc>
      ▼<biblFull>
        ▼<titleStmt>
           <title>A Midsummer Night's Dream</title>
           <author>William Shakespeare</author>
           <editor>Barbara A. Mowat</editor>
           <editor>Paul Werstine</editor>
```

```
▼<body>
 ▼<div type="act" n="1">
      <w xml:id="fs-mnd-0000010">ACT</w>
      <w xml:id="fs-mnd-0000030">1</w>
    </head>
   ▼<div type="scene" n="1">
       <w xml:id="fs-mnd-0000040">Scene</w>
       <0></0>
       <w xml:id="fs-mnd-0000060">1</w>
    ▼<stage xml:id="stg-0000" n="SD 1.1.0" type="entrance" who="#Theseus MND #Hippolyta MND #Philostrate MND #ATTENDANTS MND">
       <w xml:id="fs-mnd-0000070" n="SD 1.1.0">Enter</w>
       <w xml:id="fs-mnd-0000090" n="SD 1.1.0">Theseus</w>
       <pc xml:id="fs-mnd-0000100" n="SD 1.1.0">,</pc>
       <w xml:id="fs-mnd-0000120" n="SD 1.1.0">Hippolyta</w>
       <pc xml:id="fs-mnd-0000130" n="SD 1.1.0">,</pc>
       <w xml:id="fs-mnd-0000150" n="SD 1.1.0">and</w>
       <w xml:id="fs-mnd-0000170" n="SD 1.1.0">Philostrate</w>
       <pc xml:id="fs-mnd-0000180" n="SD 1.1.0">,</pc>
       <w xml:id="fs-mnd-0000200" n="SD 1.1.0">with</w>
       <w xml:id="fs-mnd-0000220" n="SD 1.1.0">others</w>
       <pc xml:id="fs-mnd-0000230" n="SD 1.1.0">.</pc>
     ▼<sp xml:id="sp-0001" who="#Theseus MND">
      ▼<speaker xml:id="spk-0001">
         <w xml:id="fs-mnd-0000240">THESEUS</w>
      ▼<l xml:id="ftln-0001" n="1.1.1">
         <w xml:id="fs-mnd-0000250" n="1.1.1" lemma="now" ana="#av">Now</w>
         <pc xml:id="fs-mnd-0000260" n="1.1.1">,</pc>
         <w xml:id="fs-mnd-0000280" n="1.1.1" lemma="fair" ana="#j">fair</w>
         <w xml:id="fs-mnd-0000300" n="1.1.1" lemma="Hippolyta" ana="#n1-nn">Hippolyta/w>
         <pc xml:id="fs-mnd-0000310" n="1.1.1">,</pc>
         <w xml:id="fs-mnd-0000330" n="1.1.1" lemma="our" ana="#po">our</w>
         <w xml:id="fs-mnd-0000350" n="1.1.1" lemma="nuptial" ana="#j">nuptial/w>
         <w xml:id="fs-mnd-0000370" n="1.1.1" lemma="hour" ana="#n1">hour
```



- 1. Count the number of <person> in listPerson> for each drama and store result in a separate plain text file.
 - a. With Terminal: cp -rfv xsl/CountingPersonInListPerson.xsl tei/.; cd tei
 - b. With Oxygen XML Editor
 - Run CountingPersonInListPerson.xsl in ~/testenvironment/english/tei.
 - ii. Create toc.txt ("table of contents") of directory >~/corpora/testenvironment/english/tei<.
- 2. Move both CountingPersonInListPerson.xsl and CountingPersonInListPerson.txt out of ~/testenvironment/english/tei.
 - a. With Terminal: sudo rm -rvf CountingPersonInListPerson.xsl; nSSHOC

 t is funded from the EU Horizon 2020 Research and Innovation Programme (2014-2020) under Grant Agreement No. 823782

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Counting Dorson Indict Dorson tyt /

- 3. Turn on virtual Python environment
 - a. via source ../../../.virtualenvs/test1/bin/activate or where else activate is located;
 - b. for Windows OS do cf. 12. Virtual Environments and Packages Python 3.9.5 documentation.
- 4. For extraction of master's and servant's spoken text as single plain text files itself run
 - a. for f in *.xml; do mkdir \${f%%.xml}; name=`echo \${f%%.xml} | sed 's#^.*/##g'`; ../.../../software/scriptsForAll/pyScripts/extract_speech.py --input-file \$f -- output-prefix \${f%%.xml}/\$name; done
 - b. It creates in ~/testenvironment/english/tei for every drama an eponymous subdirectory storing all files for single characters's spoken text into it.



- 5. Count the number of single files in every directory and store it into plain text file countingNumberOfCharactersInEveryFile.txt outside directory run
 - a. for f in *.xml; do echo \$f; ls \${f%%.xml} | wc -l; done > ../countingNumberOfCharactersInEveryFile.txt
- 6. Go with Terminal/Shell upwards to directory above.
- 7. Re-structrure every entry in countingNumberOfCharactersInEveryFile.txt
 - a. from

name of drama linebreak intent Number of files in directory

a. to

name of drama tabulator number of files in directory Sort them, alphabetically, afterwards, ie. in Terminal: python3.7 sortingContentOfPlainTextFileAlphabetically.py



- 8. Erase all occurrences of file:/Users/*username*/Documents/corpora/testenvironment/english/tei and sort entries alphabetically
 - a. in Terminal: python3.7 CountingPersonInListPerson.py
- 9. To create a special list as in example below (that is required for the check up) run a script that will store this output into counted.txt.

```
=IDENTISCH(B2; E2)
```

=IDENTISCH(B3; E3)

=IDENTISCH(B4; E4)

• • •

=IDENTISCH(B204; E204)



- 10.Copy both lists from >countingNumberOfCharactersInEveryFile.txt< and
 - >CountingPersonInListPerson.txt<into
 - >checkIfPyScriptSelectsAllCharactersCorrectly.xls<.
 - In this way, values are compared for every drama with >= IDENTISCH(B2; E2) < etc. in column f.
- 11. Create empty plain text file check If PyScript Selects All Characters Correctly.txt.
 - a. in Terminal: touch checkIfPyScriptSelectsAllCharactersCorrectly.txt and copy content of column >F< into plain text file >checkIfPyScriptSelectsAllCharactersCorrectly.txt<.



12. Run the check up script:

- a. python3.7 checkIfPyScriptSelectsAllCharactersCorrectly.py
- number of ERROR(s) is counted,
- their index number in >checkIfPyScriptSelectsAllCharactersCorrectly.xls < is shown,
- both is stored into >checkIfPyScriptSelectsAllCharactersCorrectly_done.txt<./li>



Steps to be taken by a SSH researcher

- Annotated data
 - Find via an aggregator, e.g. VLO, SSH Open Marketplace
 - Download from the original source of the data collection
- Workflows with scripts, processing examples, compatible tools
 - Find via SSH Open Marketplace, CLARIN LRS
- Data processing
 - Offline: following the instructions provided in a workflow
 - Online: LRS





Q&A

Wrap-up and useful references



Take home messages

 Collaboration with Research Infrastructures is valuable for researchers and librarians who support researchers

- Tools, resources, services, and various teaching materials can be found via aggregators:
 - Broad SSH: SSH Open Marketplace
 - Language tools and resources for the SSH Virtual Language Observatory
- The availability of standardised encoding for texts allows for more advanced analysis, and TEI in particular is a powerful annotation scheme for information extraction



FURTHER SSHOC EVENTS AND WORKSHOPS

- SSHOC at LIBER:
 - Wed, June 23, 11:00 12:30, Session #3: Working with Software & Data Paper "Data citation for the Humanities and Social Sciences: a special case?" by Barbara McGillivray (University of Cambridge, UK), Nicolas Larrousse (TGIR Huma-Num, France), Daan Broeder (CLARIN ERIC)
 - Poster on the SSH Open Marketplace "Requesting Crowd Expertise: The SSH Open Marketplace and LIBER" will be presented by Stefan Buddenbohm at the LIBER poster session - this Thursday 24 June from 12:30 - 13:00 CEST.
- Future SSHOC events https://www.sshopencloud.eu/sshoc-at-events
 - Workshop "SSHOC Vocabulary Initiative What Users Want" at <u>ICTeSSH</u> on Monday, June 28, 2021, 9:00 AM – 10:30 AM
 - Workshop on Data protection and the GDPR autumn 2021
 - Webinar on Data citation autumn 2021



CLARIN as ecosystem for knowledge exchange

- A network of Knowledge Centres (K-centres)
 - Help desk services
- Sharing of expertise and best practices
 - Annual Conference
 - Support for workshops and mobility
 - Ambassador network
- Training through life events, online courses and webinars
 - for developers
 - for end-users



Getting involved in CLARIN. Channels

- Subscribe to CLARIN NewsFlash <u>https://www.clarin.eu/content/newsflash</u>
- Check out our past and futures events <u>https://www.clarin.eu/events</u>
- Open calls
 https://www.clarin.eu/content/funding-opportunities
- Follow us on Twitter @CLARINERIC

Getting involved in CLARIN. Virtual events

- 11 CLARIN cafés https://www.clarin.eu/content/clarin-cafe
- First UPSKILLS Multiplier Event "Every time I hire a linguist... Emergent tech profiles for linguists, translators and language experts" - 25 June, 10.00 - 16.00 CEST https://www.clarin.eu/event/2021/first-upskills-multiplier-event
- ParlaMint Café 28th June 14:00-16:00 CEST
 https://www.clarin.eu/event/2021/clarin-cafe-parlamint-unleashed
- CLARIN Annual Conference 2021 coming up 27-29 September
 https://www.clarin.eu/event/2021/clarin-annual-conference-2021-virtual-event/
- Workshop "CLARIN and Libraries. Interoperability of Text Platforms for Digital Libraries" - 10-12 and 14-16 CET, 15 October 2021

Thank you for your attention!

Questions?

Please put them in the chat box.

Slides and a recording will be sent to all registered delegates.

Post-event survey is shared with you via chat, and will be sent to you via email.

https://forms.gle/1WwxzkNxGL8qdjkL9

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