



Boost your eHumanities and eHeritage research with Research Infrastructures (PARTHENOS Webinar)

Darja Fišer, Ulrike Wuttke

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The New York Times.



PARTHENOS

Pooling Activities, Resources and Tools
for Heritage E-research Networking,
Optimization and Synergies

Boost your eHumanities and eHeritage research with Research Infrastructures

(Darja Fišer & Ulrike Wuttke)

A Webinar of the PARTHENOS eHumanities and eHeritage Series

Pictures clockwise :

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<https://pxhere.com/de/photo/1163578> CC0

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[https://de.wikipedia.org/wiki/Pariser_Manuskripte_\(Leonardo_da_Vinci\)#/media/File:Paris_Manuscript_F_Fol_18v19r.jpg](https://de.wikipedia.org/wiki/Pariser_Manuskripte_(Leonardo_da_Vinci)#/media/File:Paris_Manuscript_F_Fol_18v19r.jpg) CC0

Webinar start: **24.04.2018, 13:00 CEST**
Moderation: Ulrike Wuttke
(University of Applied Sciences Potsdam)

FH;P Fachhochschule Potsdam
University of
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PARTHENOS eHumanities and eHeritage Webinar Series





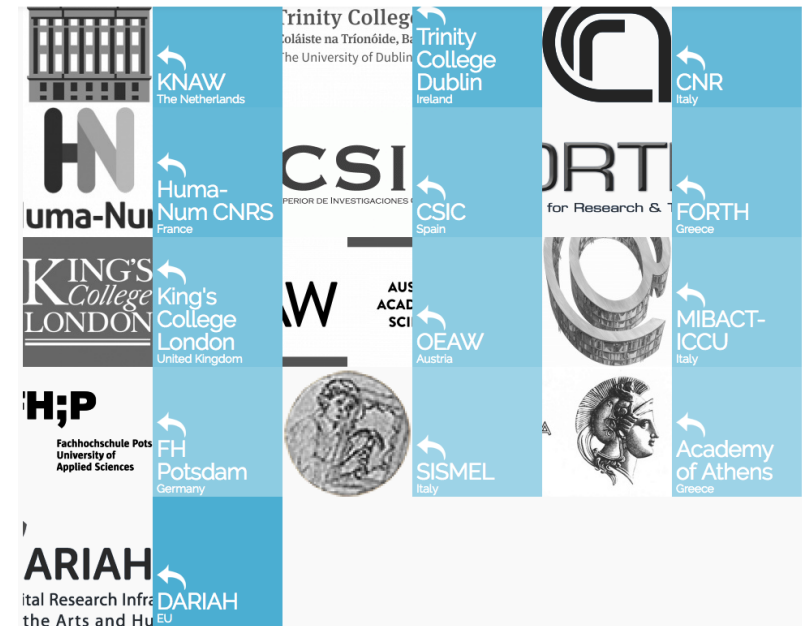
Some Housekeeping...

- As a participant you will be **muted** and not be seen throughout the webinar.
- For **questions** and **remarks** please use the **chat**. For questions, please use the word **question**.
- Your questions are going to be answered by the trainers during / after the presentation.
- If you have **sound problems**, please test your technical settings. You have to click on the **speaker symbol** on top to to be able to hear (it has to be **green**).
- **Help us improve:** Follow up e-mail with a link to a short **feedback survey**.



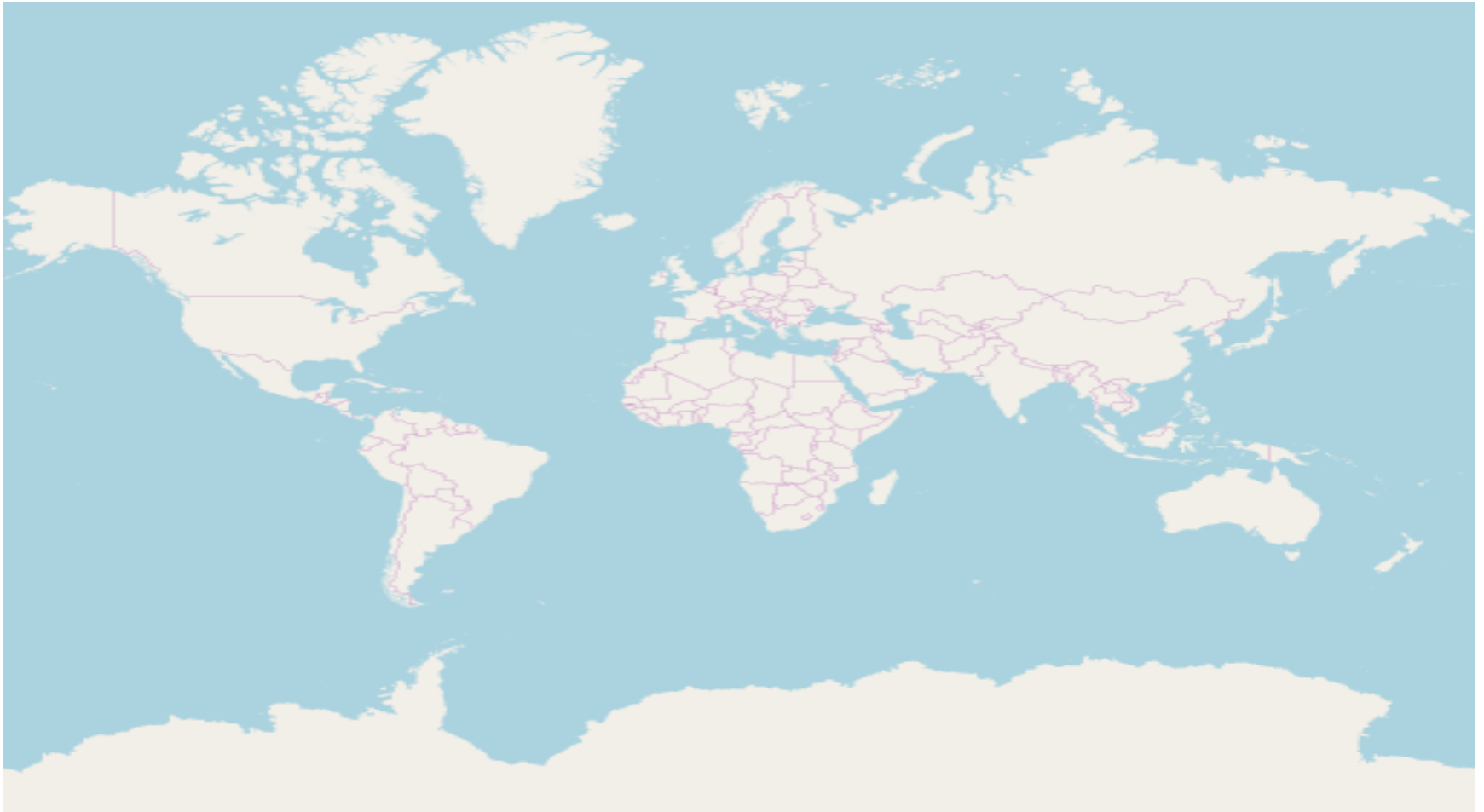
Some words about PARTHENOS...

- **PARTHENOS** stands for: Pooling Activities, Resources and Tools for Heritage eResearch Networking, Optimization and Synergies
- PARTHENOS is a **Horizon 2020** project with the aim to **strengthen the cohesion of Heritage related E-research**
- Running time: 1 May 2015 - 30 April 2019
- PARTHENOS has 16 partners from 9 European countries
- PARTHENOS Coordinator: PIN Scrl (Italy)
- The PARTHENOS webinar series is a **cross PARTHENOS training effort**





Which country are you participating from?



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Boost your eHumanities and eHeritage research with Research Infrastructures

Trainers



Darja Fišer
(University of Ljubljana, Slovenia)



Ulrike Wuttke
(University of
Applied Sciences
Potsdam, Germany)

Boost your eHumanities and eHeritage research with Research Infrastructures

Darja Fišer & Ulrike Wuttke



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What we will do in this webinar:

- highlight advantages of developing research questions in an „infrastructural way“
- exemplify aspects of finding, working, and contributing data to Research Infrastructures (RIs) and using Virtual Research Environments (VREs) and tools
- present Citizen Science approaches for Humanities and Heritage research

Poll: What is for you the first step in a research project? How do you start a project?

What is developing research questions in humanities?

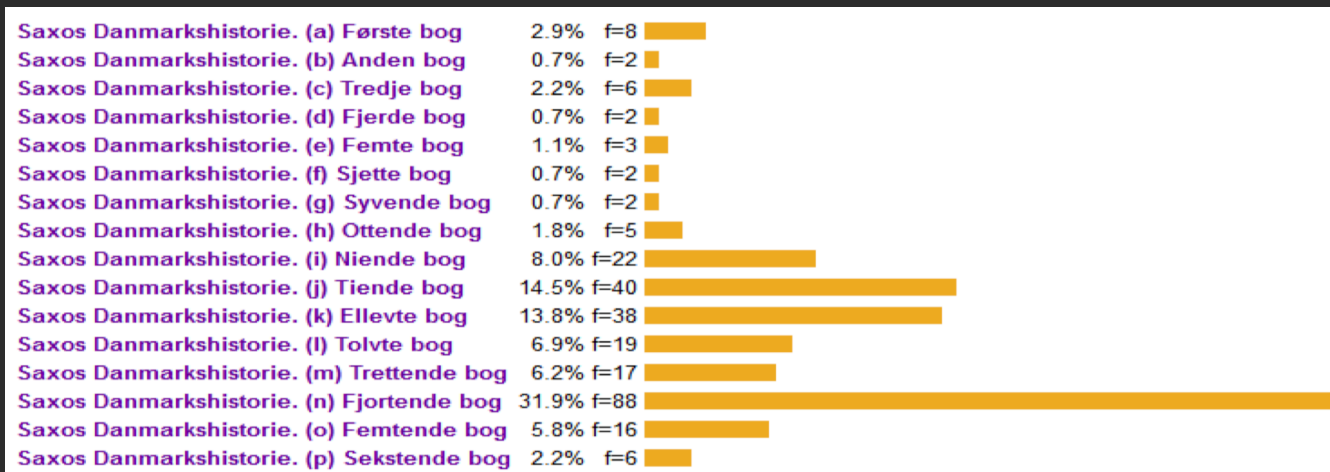
- Gesta Danorum
 - written in about 1200 in High Latin by Danish historian Saxo
 - describes in 16 books the period of time from King Dan to Canute VI of Denmark
 - traditionally divided into 2 parts: B1-9 Norse mythology & B10-16 describing Christianity

Research question: “Is it B9 or B10 that represents the transition from the heathen to the Christian period in the Gesta Danorum?”

What is developing research questions in humanities?

- frequent use of elements from the Christian register of words indicates that the topic described has to do with Christianity in this case the transition from heathen to the Christian period in the Gesta Danorum
- frequency per thousand of Christian elements for B8 is significantly lower compared to B9&10 (0.25, 2.0, and 2.0)
- the change in terms of Christian language usage lies between B8&9

helgen (eng: saint -> noun singular)
helgene (eng: saints -> noun plural)
kristent (eng: Christian -> adjective neuter singular)
kristen (eng: Christian -> adjective common singular)
kristendom (eng: Christianity -> singular)
synd (eng:sin -> noun singular)



Finding, working, and contributing data to RIs

CLARIN Resource Families

www.clarin.eu/resource-families

- parliamentary corpora
- newspaper corpora
- parallel corpora
- CMC corpora
- L2 learner corpora

Slovenian parliamentary corpus SlovParl 2.0 Size: 3.2 million tokens Annotation: tokenised, PoS-tagged, lemmatised Licence: CC-BY	Slovenian	The corpus contains Slovenian parliamentary debates from 1990 to 1992. The corpus is available for download from the CLARIN.SI repository and through noSketch Engine. For the relevant publication, see Pančur and Šorn (2016) .	Concordancer Download
Riksdag's Open Data Size: 1.25 billion tokens Annotation: tokenised, lemmatised Licence: CC-BY	Swedish	The corpus contains Swedish parliamentary debates from 1971 to 2016. It is annotated with Sparv . The corpus is available for download from Språkbanken (all entries with "Riksdag's Open Data" in the subtitle) and through the concordancer Korp. For the relevant publication, see Borin et al. (2016) .	Concordancer Download



Finding, working, and contributing data to RIs

Federated Content Search

<https://spraakbanken.gu.se/ws/fcs/2.0/aggregator/>

 Content Search

Aggregator

Help



Text layer CQL query

Elephant



Search for

Any Language ▾

Text layer Contextual Query Language (CQL) ▾

in

All available collections (209) ▾

and show up to

10 ▾

hits per endpoint

▼ eng_news_2012_3M — ASV Leipzig

 View

Today eight out of every 10 **elephant** deaths is the result of poaching, compared with four out of 10 deaths six years ago, the prosecutor's office said.

Tiger parts, **elephant** ivory, rhino horn and exotic birds and reptiles are among the most trafficked items.

Mayor Naheed Nenshi appeared unimpressed, calling it "the **elephant** not in the room.

Even before the spike in recent years, Africa's **elephant** population is estimated to have shrunk from 1.3 million in 1979 to 450,000 in 2007.

"The essence of the whole human-**elephant** conflict is basically that people have encroached on elephant habitat," says Ravi Corea, president of the Sri Lanka Wildlife Conservation Society.

"It's like the parable about the **elephant**," said Forrest.

"I think it's really brave to talk about the **elephant** in the room," Maya Walters, a teenager with high blood pressure who appeared in one of the ads, told the Atlanta Journal-Constitution.

He's a one-man gay pride parade in a series of Ms. Lauer's quirky costumes: a red-and-white-striped bodysuit topped by a yellow frizz wig; a demure Alice in Wonderland frock accessorized by a miniature tricycle; a bright pink, furry **elephant** outfit.

The 25-year-old **elephant** trainer who suffered strange symptoms.

Pieces include Chris Ofili's Holy Virgin Mary, which features **elephant** dung and porn-magazine cutouts of genitals.

Finding, working, and contributing data to RIs

Virtual Language Observatory

<https://vlo.clarin.eu/>

Virtual Language Observatory

Search

Help

CLARIN

VLO / [Faceted search](#) / [Search results](#)

parallel corpus

Showing 21 to 28 of 28 results within selection for parallel corpus Public English **Results per page:** 10

Language

English

Collection

Resource type

Modality

Format

Availability

☒ Public (28)

☐ Academic (3)

☐ Restricted for individual (91)

☐ Unspecified (59)

English-Czech **Corpus** from Wikipedia

(Part of LINDAT / CLARIN Data & Tools)

Parallel corpus made from English and Czech Wikipedias based on translated articles from English into Czech. The work done is described in the paper: ŠTROMAJEROVÁ, Adéla, Vít BAISA a Marek BLAHUŠ. Between Comparable and **Parallel**: English-Czech **Corpus** from Wikipedia. In RASLAN 2016 Recent Advances in Slavonic Natural Language Processing. Brno: Tribun EU, 2016. s. 3-8, 6 s. ISBN 978-80-263-1095-2.

Name

English-Czech **Corpus** from Wikipedia

Collection

LINDAT / CLARIN Data & Tools

Language

English

Czech

Organisation

NLP Centre, Masaryk university

National project

LINDAT (CLARIN-CZ)

More details...

Resources

1362553

cs-en.sentences.txt

Using VREs and tools

CLARIN Language Switchboard

<https://switchboard.clarin.eu>

- digitized by Slovenian National University Library
- about Bosnia
- written in German

[8719 tokens]

tokens	POSTags	lemmas	namedEntities
den	ART	d	
Schwerpunkt	NN	Schwerpunkt	
des	ART	d	
Reiches	NN	Reich	
nach	APPR	nach	
Ungarn	NE	Ungarn	B-GPE
zu	PTKZU	zu	
verlegen	VVINF	verlegen	

[etc., up to 144.000 tokens]

Virtual Language Observatory Search Help

Back to the search results

Record 49 of 379

Eine Reise durch Bosnien, die Saveländer und Ungarn

Show the original provider's page for this record

Record details Resources (5) Availability All metadata Technical details

Name	Type
edm	other
PDF	text document
URN:NBN:Si:doc-HWSP5Z57	other
HTML	text document
TEXT	text document

Process with Language Resource Switchboard

Named Entity Recognition

WEBLICHT-NAMEDENTITIES-DE

N-Gramming

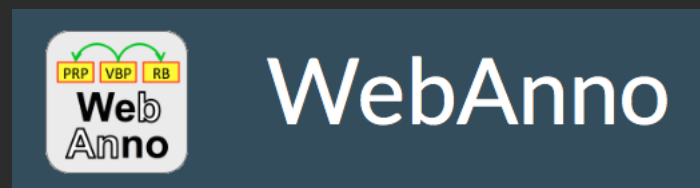
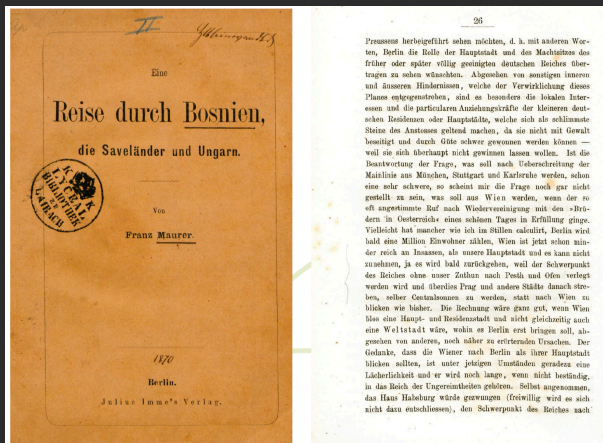
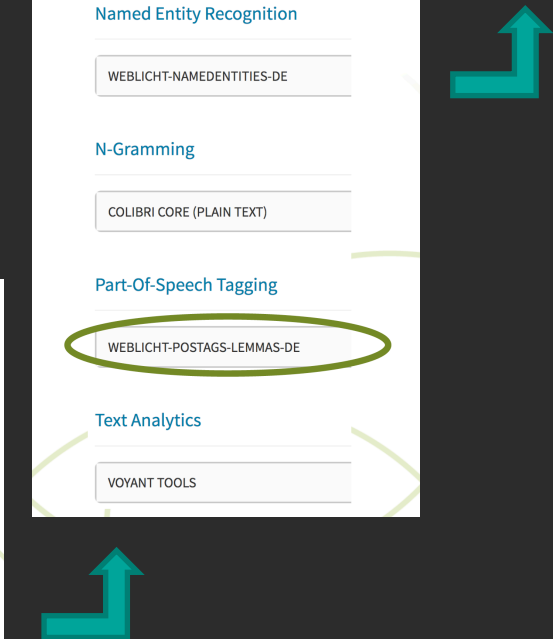
COLIBRI CORE (PLAIN TEXT)

Part-Of-Speech Tagging

WEBLICHT-POSTAGS-LEMMAS-DE

Text Analytics

VOYANT TOOLS



Where to find/store data/tools/expertise/training:

European RIs for SSH & CH

RIs set up under the auspices of ESFRI, each based on national consortia of universities, libraries, museums, archives etc.:



In addition a number of past or ongoing EC supported Infrastructure Projects, such as



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The Cultural Heritage Data Reuse Charter

- scenario: Researcher wants to use digital cultural heritage assets (=data) hosted by CHIs/datacentres/infrastructures for research
- at the moment, this is mostly far from easy to achieve
- users wish to re-use and share data = straightforward conditions of re-use



- Find the information about reuse and the relevant contact point
- Make a first request...

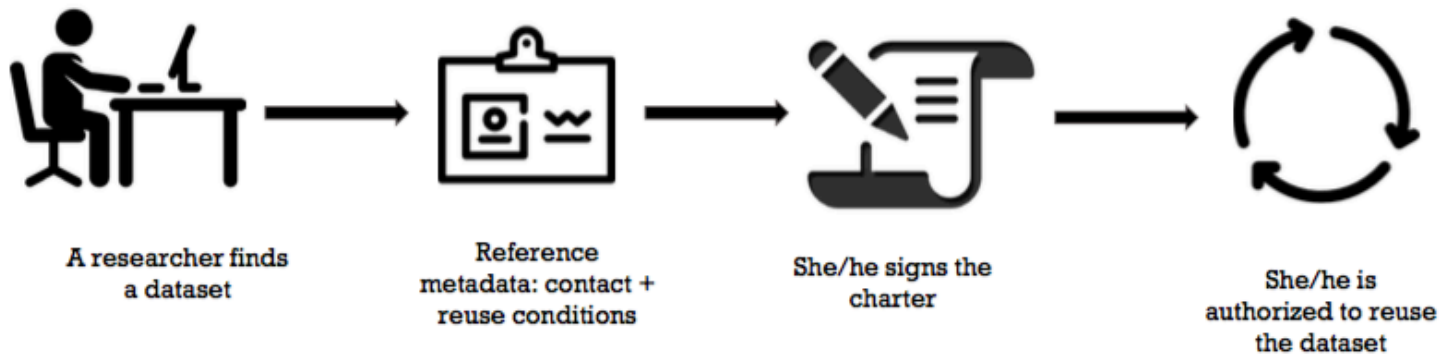
The Cultural Heritage Data Reuse Charter

- aim: Opening up Cultural Heritage data where possible and improve the interplay between scientific research and CHIs
- prerequisite: a non-restrictive, easy to understand and applicable general framework that provides incentives and best practices to all stakeholders about access, use, and reuse
- the **Cultural Heritage Data Reuse Charter** as a common online environment is currently under development with several supra-national infrastructures and projects involved (including CLARIN, DARIAH, PARTHENOS etc.)



The Cultural Heritage Data Reuse Charter: Vision

ACCESSING A DATASET WITH THE CHARTER



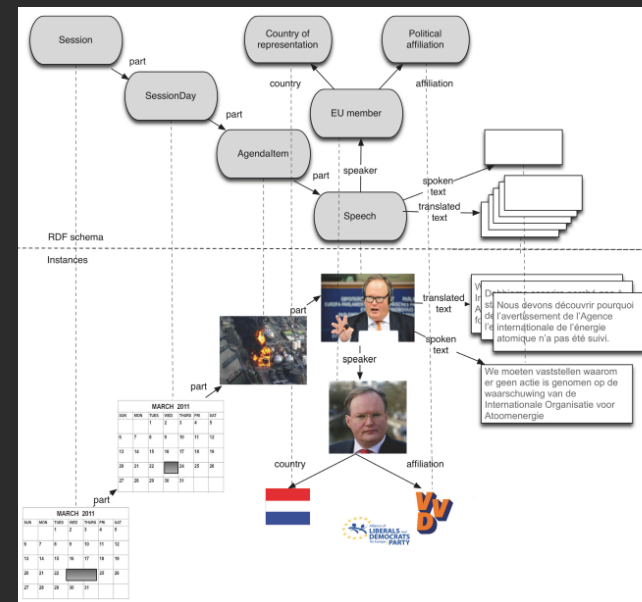
No waste of time ! Immediate answers !!



- go to [the Charter mission statement](#)
- read more in the PARTHENOS Training Suite about [Managing Cultural Heritage Assets](#) and the Cultural Heritage Reuse Charter

Talk of Europe (2014-2015)

- Erasmus University Rotterdam, University Amsterdam, DANS, Netherlands Institute for Sound and Vision
- goal: facilitate richer research of the European Parliament by turning the EP proceedings into Linked Open Data and organizing creative camps to spark collaborative development on the new database
- Linked Open Data
 - semantic: *Give me politicians who held a speech on 23 March 2011.*
 - linked: *Give me **politicians from the Committee on Foreign Affairs** who held a speech on 23 March 2011.*
 - open: *Give me politicians from the Committee on Foreign Affairs who held a speech **on the topic of human rights** 23 March 2011.*



Source:

<http://www.talkofeurope.eu/2014/01/about/>

A Digital Database of Manuscripts and Intercultural Dialogue in Post-Conquest England

- this Europeana Research Grant project draws on Europeana data to take a new approach to the status of French writing following the Norman Conquest of England in 1066
- aim: create and analyse an EDM-compliant digital database of all 958 manuscripts containing French literature from medieval England



British Library.
Additional MS 35283,
fol. 75v, CC0.

*“Digitisation of medieval manuscripts has been so important to medievalists in general. There are still many reasons to work with a manuscript in person, but among other benefits, the digitisation of medieval manuscripts allows us to visually compare manuscripts from different collections, to see new details on manuscripts and to access manuscripts remotely. The kind of project I’m working on now, which involves **checking linguistic data of a large number of manuscripts, wouldn’t be feasible without digitised manuscript collections.**”*

Krista Murchison (Leiden University)

<https://pro.europeana.eu/post/medieval-manuscript-databases-krista-murchison-europeana-research-grants-winner>

The JANES Project 2014-2017

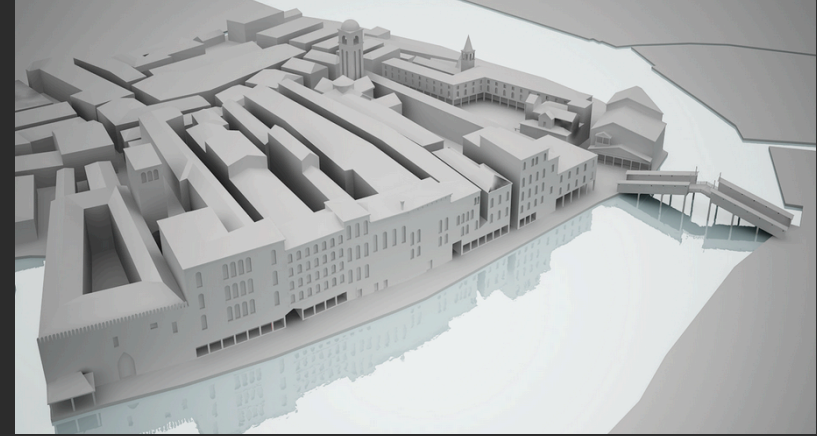
- University of Ljubljana, Jožef Stefan Institute
- goal: facilitate research of communication practices in social media by compiling a corpus of Slovenian UGC and developing tools and resources for processing Slovenian UGC
- Results
 - Richly annotated corpora: user metadata (**type**, **sex**, **region**), text metadata (**date**, **language**, **standardness level**, **sentiment**), linguistic annotation (**normalization**, **PoS-tagging**, **lemmatization**)
 - Manually annotated corpora: for training tools (**normalization**, **tagging**, **parsing**), for linguistic analysis (**abbreviation strategies**, **comma placement**, **code-switching**, **dialects**, **politicians**)



Source: <http://nl.ijs.si/janes/english/>

Venice Time Machine

- aim: capture 1,000 years of records of the Republic of Venice in dynamic digital form
- machine-learning technologies will enable the researchers to search and cross-reference the information
- for automated text recognition it cooperates with H2020 [READ-Transcribus](#)
- challenge: organize transparent processes linking historical records and computer-based visualizations
- first outcomes: development of the Rialto from AD 950
- many possibilities for e.g. language research, personal networks, economic history, medical history etc.
- Vision: link to similar time machines in Europe's historic centres of culture and commerce (e.g. Amsterdam, Paris etc.)



[3D reconstruction of Rialto neighborhood in 1500 ab. based on the documents of Venetian archives, © DHLAB / EPFL, AMstudio, Venice](#)



Citizen Science

Bürgerwissenschaft

Sciences Participatives



Galaxy Zoo

ABOUT

CLASSIFY

TALK

COLLECT

BLOG



Welcome to the new Galaxy Zoo!

**Few have witnessed what you're
about to see**

Learn more

Get started

Galaxy Zoo:
The most successful
Citizen Science project
ever (so far...)

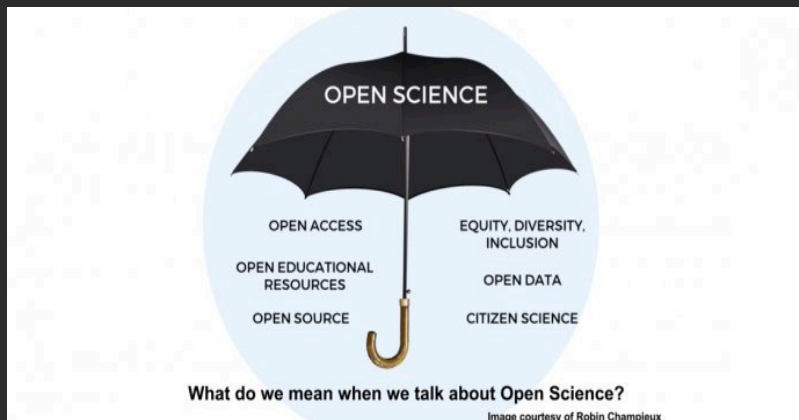


Screenshot of: <https://www.zooniverse.org/projects/zookeeper/galaxy-zoo/>

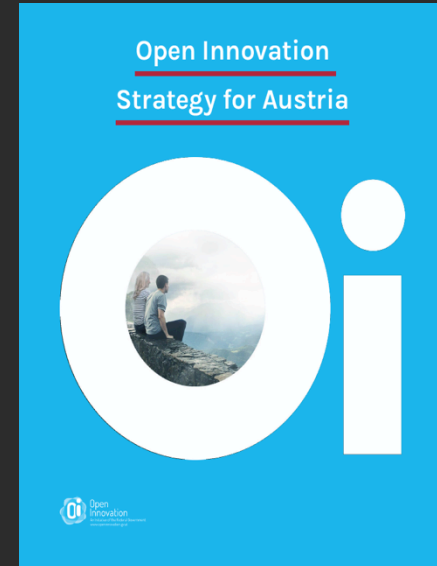
What is Citizen Science?

“Citizen Science refers to the **general public engagement in scientific research activities** when **citizens actively contribute** to science either with their intellectual effort or surrounding knowledge or with their tools and resources.”

Source: [Serrano Sanz et al. 2014, p. 8.](#)



Source: <https://twitter.com/OHBM/status/971793038543671296>

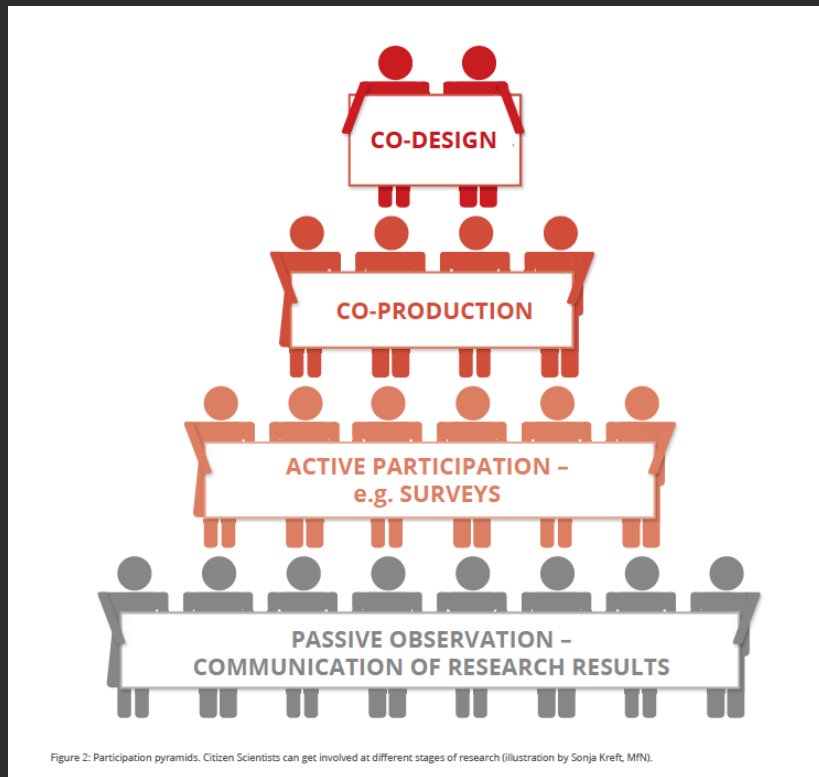


[Open Innovation Strategy for Austria
2016](#)

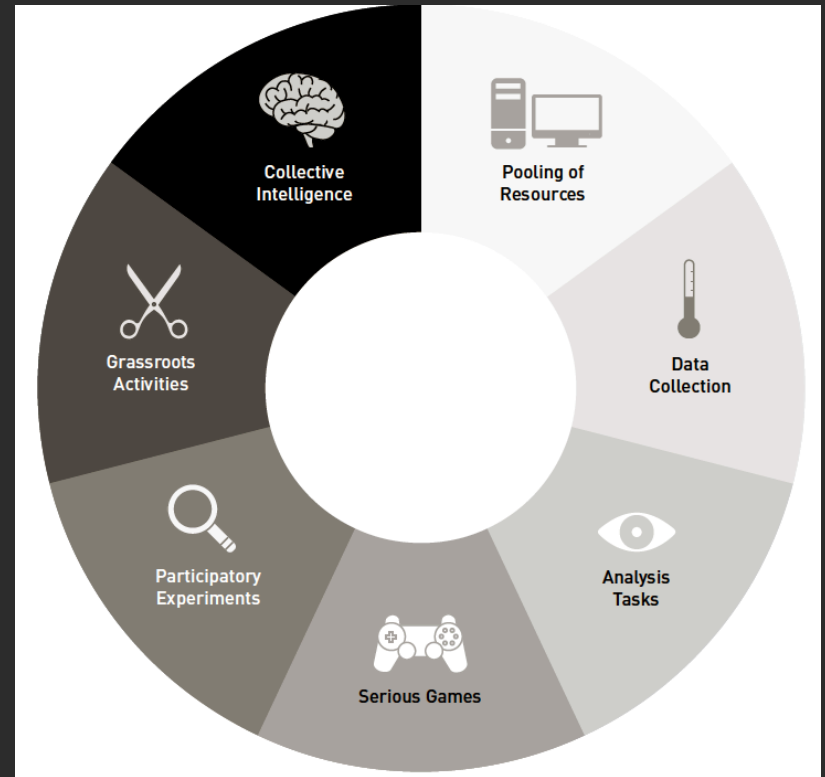
Citizen Science and the Digital Transformation

- “Digital Transformation” (Web 2.0, new technologies, new philosophy of sharing) provides huge potential for Citizen Science
- many successful Citizen Science projects take place in the digital world (VREs)
- digital solutions mobilize individual and collective engagement for co-creation
- new forms of scientific communication play a huge role

Models of Citizen Engagement in Science



Source: [Bonn et al. 2016, p. 17.](#)



Source: [Serrano Sanz et al. 2014, p. 9.](#)

Citizen Science examples from eHumanities and eHeritage



Heinrich Schliemann,
the German pioneer of archeology who discovered Troy,
was a businessman, he never studied archeology

Pictures:

[https://en.wikipedia.org/wiki/Heinrich_Schliemann#/media/File:Heinrich_Schliemann_\(HeidICON_28763\)_cropped.jpg](https://en.wikipedia.org/wiki/Heinrich_Schliemann#/media/File:Heinrich_Schliemann_(HeidICON_28763)_cropped.jpg) CC BY-SA 4.0,

https://en.wikipedia.org/wiki/Heinrich_Schliemann#/media/File:MaskeAgamemnon.JPG CC BY-SA 3.0

Letters of 1916

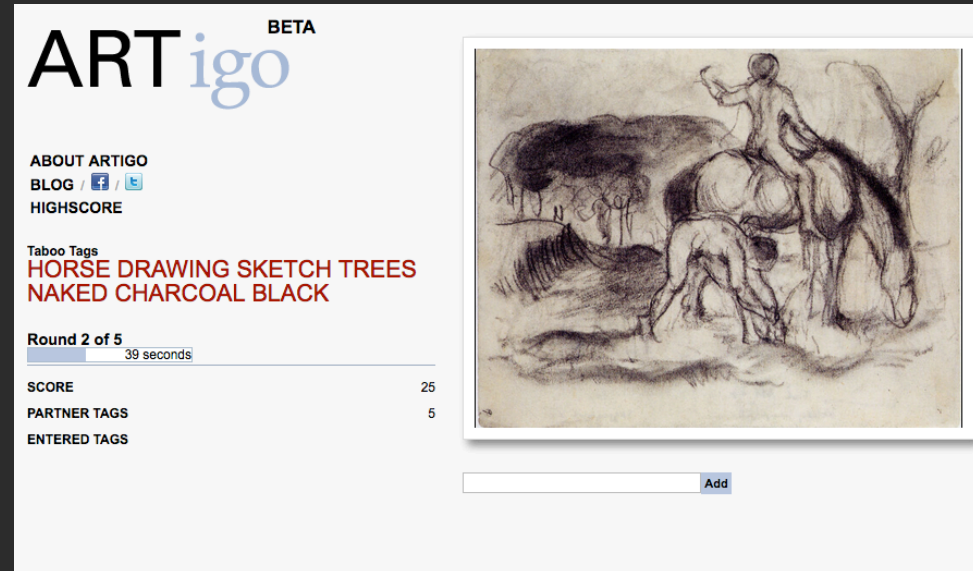
- aim: create a crowd-sourced digital collection of letters written around the Easter Rising (Ireland)
- participants transcribe (edit and tag) letters and also add letters to the collection
- huge public engagement factor, educational aspects
- **data collection, analysis**



Screenshot of: <http://letters1916.maynoothuniversity.ie/>

ARTigo: Informatics and (digital) art history

- aim: develop a semantic search engine for digitised works of art
- several games to promote art recognition: citizen scientists describe the content of artwork with keywords > collect a wide range of keywords in order to enhance search functionality and answer complex research questions
- **gamification** (serious games)



Screenshot of: <http://www.artigo.org/tabooTaggingGame.html;jsessionid=AC62C9A64E97191E89CA1F07AAF56B28.www2>

Citizen Science @ Libraries

- as part of regional studies e.g. contribution to regional bibliographies, adding to Wikipedia articles, transcription of digitised materials on Wikisource
- get general access to tools and general research support
- georeferencing of maps ([Virtuelles Kartenforum 2.0](#)), SLUB Dresden
- contributions to collective research of history (German Example: [History of Cycling](#))

Potentials and Challenges of Citizen Science

Potentials

- opening of the scientific process and greater research diversity: create scientific knowledge outside institutionalized science with “unusual suspects”
- develop new research questions and topics: societal relevance (real problems, concrete answers) and broader public engagement/understanding
- wider dissemination of research results to the public (science communication)
- Create large data sets & solve work intensive tasks

Challenges

- lack of resources (time, money, spaces, infrastructure)
- lack of fair sharing and compensation models for crowdwork
- data protection / Intellectual Property Right (IPR)

Always keep in mind the two perspectives:

- **Researchers** ask themselves: What do I gain by working with volunteers?
- **Volunteers** ask themselves: What do I gain by working with scientists?

Citizen Science and Research Infrastructures



<https://twitter.com/OPERASEU/status/976769535922630662>

Poll: What can Research Infrastructures do for
Citizen Science?

Take Home Messages

- check if data and tools that you could use are already available
- start with a pilot to test your approach and then go big
- think and develop your research with Open Science in mind from the start (Open Data, Open Access, documentation)
- Citizen Science projects have a high potential to prove the value of the humanities to the society: Get creative and don't be afraid
- For a Citizen Science project you need to think everything through from the beginning: Citizen Science is not an afterthought
- acknowledge need for upskilling of researchers and citizen scientists (new scientific methods, new topics, e.g. legal aspects, data quality)
- digital citizen science projects need to ensure that applications are suited to the project and that data collection and data use conform to data protection laws (but do not reinvent the wheel)

Collaborate! Get technical expertise/support from experts/RIs!

Bibliography & Reading suggestions #citizenscience:

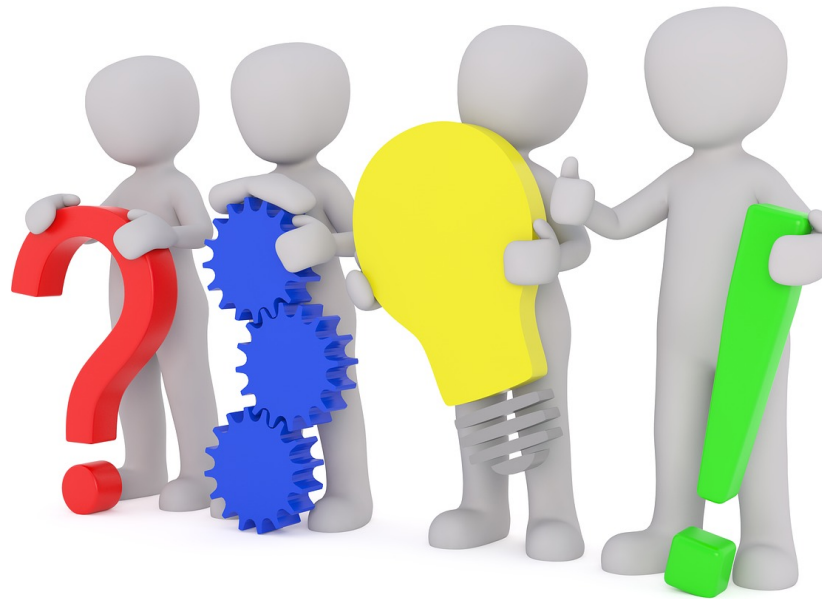
- [Bonn et al. *Green Paper Citizen Science Strategy 2020 for Germany*. Berlin, 2016.](#)
- [Ten Principles of Citizen Science from the European Citizen Science Association](#), 2015
- [Open Innovation, Open Science, Open to the World - A vision for Europe, European Commission Directorate-General for Research & Innovation, 2016](#)
- [Open Innovation Strategy for Austria, BMWFW, Vienna, 2016](#)
- [Pettibone and Vohland, *Citizen Science for all: A Guide for Citizen Science Practitioners*, 2016](#)
- Schreibman 2018, Lecture “From Archives to Activism: Why Public Engagement is Essential for the Future of the Humanities” ([Slides](#))
- Heigl, Florian, Dörler, Daniel, Bartar, Pamela, Brodschneider, Robert, Cieslinski, Marika, Ernst, Marlene, ... Ziegler, David. (2018, February 1). Qualitätskriterien für Citizen Science Projekte auf Österreich forscht (Version 1.0). Zenodo. <http://doi.org/10.5281/zenodo.1161922>
- [Bowser and Shanley, *New Visions in Citizen Science*, 2013](#), chapter Citizen Archivists.
- [Serrano Sanz et al. *White Paper on Citizen Science for Europe*. Societize Consortium, 2014](#)

Some Citizen Science Networks & Associations

- www.buergerschaffenwissen.de (Germany)
- www.citizen-science.at (Austria)
- www.science-et-cite.ch/de/citizen-science (Switzerland)
- www.citizenscienceassociation.org (U.S.)
- <https://ecsa.citizen-science.net> (Europe)
- <https://www.citizenscience.org.au/who-we-are/> (Australia)
- <https://www.facebook.com/CitSciAsia> (Asia)
- <http://citizenscience.org/> (global)
- <http://citsci.org> (Colorado State University)



Questions & Answers



(Picture CC0 <https://pixabay.com/photo-2999583/>)

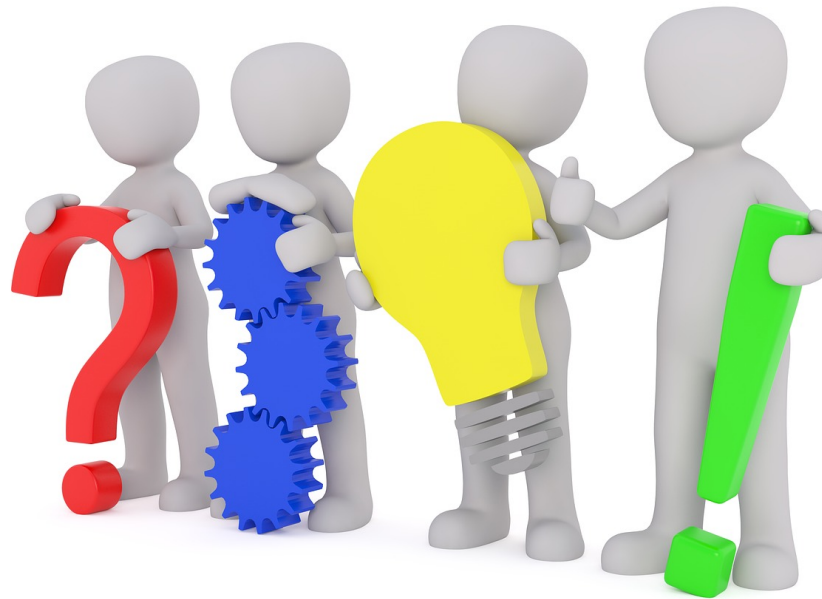


Announcements

- **New PARTHENOS Training Suite module around Developing research Questions** is being developed by PARTHENOS (led by Darja)
- Have a look at the PARTHENOS YouTube Channel: all videos so far produced by PARTHENOS and PARTHENOS Training
- **PARTHENOS Webinar Workshop** at the European Summer University in Digital Humanities 2018 (ESU), Leipzig (apply until 1st of May 2018, scholarships available):
[How Research Infrastructures empower eHumanities and eHeritage Research\(ers\)](#)



Questions & Answers



(Picture CC0 <https://pixabay.com/photo-2999583/>)



Thank you for joining us!



- ✓ Please help us improving the PARTHENOS Webinar Series and fill out the short Feedback Survey that we'll sent you in a follow-up e-mail.

(Picture: CCO <https://pixabay.com/photo-1889007/>)



PARTHENOS eHumanities and eHeritage Webinar Series



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