

Digital humanities
research & infrastructures
in a time of
pandemic, diversity and media
consolidation

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2021eko azaroaren 26an
*Euskararentzako CLARIAH-EUS hizkuntza-teknologia
humanitateetan eta zientzia sozialetan garatzeko
azpiegitura diseinatzen jardunaldia*

European Commission

HORIZON
The EU Research & Innovation Magazine

Home Views Topics Videos About

CORONAVIRUS OUTBREAK ICT

Covid-19 hastened the digital shift with consequences for the 'data divide', wellbeing

21 June 2021
by Caleb Davies

Republish

“The Covid-19 pandemic has put rocket boosters under the transition to a digital society.”

<https://ec.europa.eu/research-and-innovation/en/horizon-magazine/covid-19-hastened-digital-shift-consequences-data-divide-wellbeing>



- The move to digital methods has resulted in greater flexibility and creativity
- “The digital divide has become more complex”
- Important issues around the ethics and care of research online

<https://blogs.lse.ac.uk/impactofsocialsciences/2020/10/26/how-the-pandemic-has-transformed-research-methods-and-ethics-3-lessons-from-33-rapid-responses/>

The changing relationship of humanities to data/digital media



Learning and pedagogy



Global knowledge flows



Identity construction



The changing relationship to digital scholarship

Digital Humanities as bridge

- Community building and discussion around new models for digital scholarship

The screenshot shows the homepage of the Humanities Commons website. At the top left is the logo with 'HC' in a circle and 'HUMANITIES COMMONS' next to it. A search bar is on the top right with 'Register' and 'Log In' buttons. A left sidebar contains navigation links: News Feed, Members, Groups, Sites, CORE Repository, Help & Support, HC Organizations, About, Roadmap, and Team Blog. The main content area features the 'HUMANITIES COMMONS' logo, a welcome message, and a 'Commons Highlights' section with a photo of Dr. Kendra Leonard. A right sidebar lists actions like 'Update your profile', 'Join a group', 'Create a site', 'Share & preserve your work', 'Discover OA scholarship', 'See what's new', and 'Get help'. Further down the right sidebar are sections for 'Help the Commons Grow' (with a 'Donate to HC' button) and 'Here to Share Your Work?' (with a 'Go to CORE' button). At the bottom right, it says 'Tweets by @humcommons'.

<https://hcommons.org/>

Digital Humanities as bridge

- Digital advocacy

4Humanities
Advocating for the Humanities

[Home](#) [About](#) [Mission](#) [Who We Are](#) [Donate to 4Humanities](#)

About — *4Humanities* is an advocacy initiative for the humanities focused on placing the value of the humanities before the public. We draw in particular on the expertise of the international digital humanities community. Digital methods now play a key role in showing why the humanities must be part of any vision of a future society. [Advocacy viewpoints](#), [projects](#), and [research](#) by *4Humanities* and its [local chapters](#) use today's means to shout out for the humanities. ([More on our mission...](#))

4Humanities Advocacy Projects

- "Shout Out For the Humanities" Contest
- Humanities, Plain & Simple Initiative
- Backpack Mini-Documentaries
- Humanities Infographics
- Arts & Humanities in 21st C. Workplace
- Humanities Showcase

4Humanities Research Projects

- WhatEvery1Says Project
- What U.S. Politicians Say About Humanities
- U.S. Patents Related to the Humanities

4Humanities Local Chapters

- Auburn · CSUN · DHMakerBus · McGill · NYG · UCLA · UCSB · *Form a chapter at your institution!*

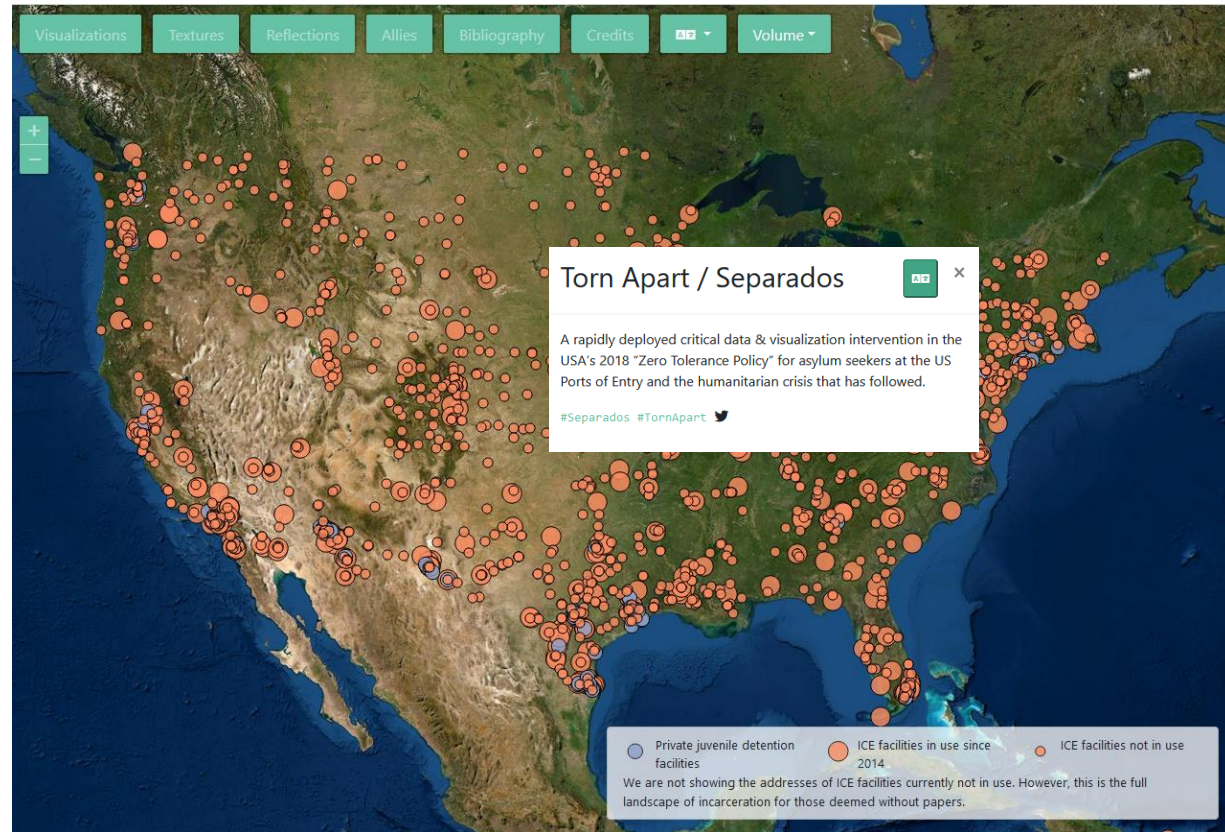
Voices for the Humanities

- Advocacy Statements & Campaigns
- The Changing Humanities
- Student Voices

<https://4humanities.org/>

Digital Humanities as bridge

■ Digital activism



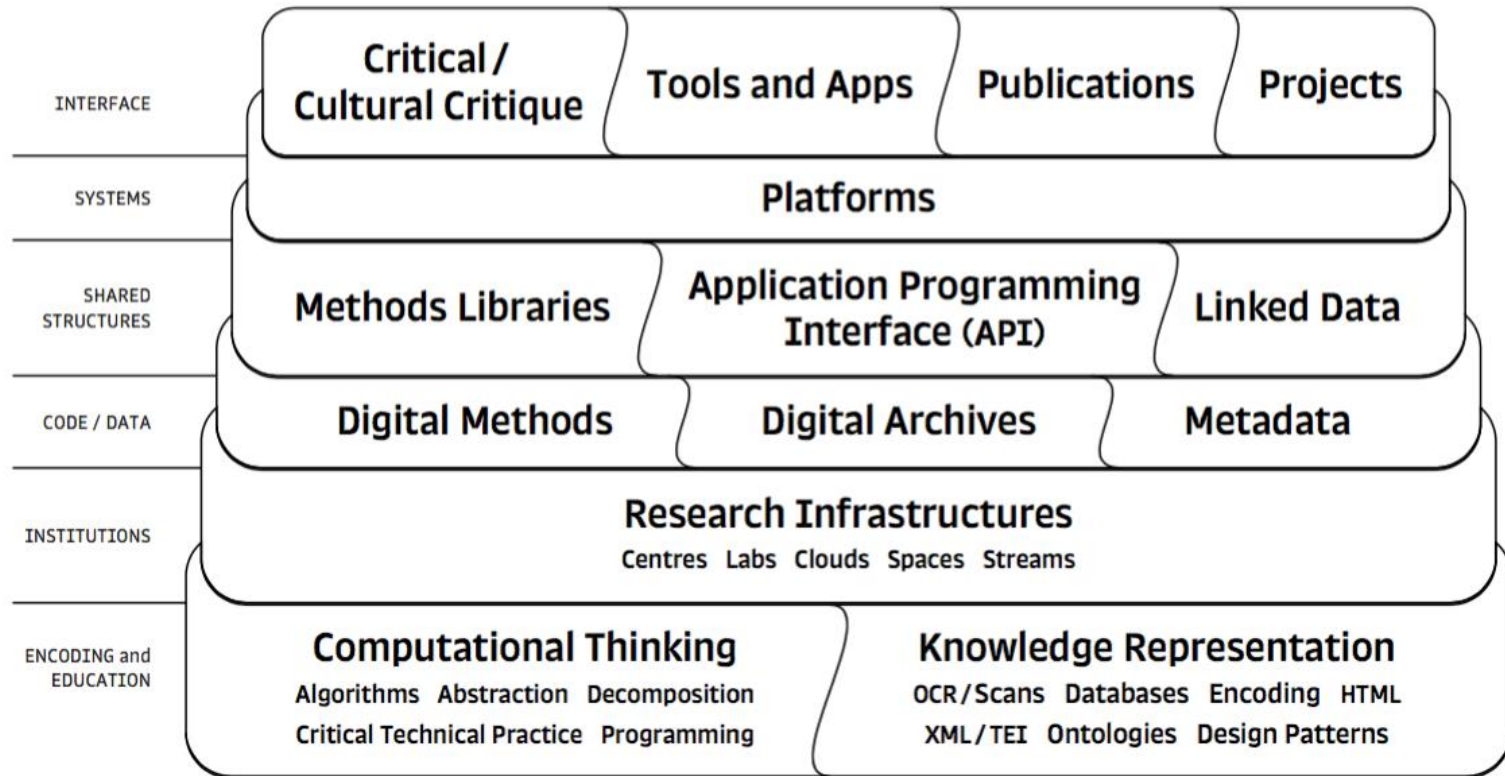
<https://xpmethod.columbia.edu/torn-apart/volume/1/>

Digital methods and infrastructure for the humanities

- How can humanities researchers can acquire the digital literacies they need?
- How can they learn to identify, learn and apply critically digital methods to their research?
- How can the humanities contribute to the design of the digital systems they need?



The Digital Humanities Stack



Berry, David M.; Fagerjord (2017). *Digital Humanities: Knowledge and Critique in a Digital Age*.

Research Infrastructures: Communities, not just technologies



“digital ecosystems are an emerging new concept of infrastructures that recognises the need for a flexible combination of humans, machines, content and things to work together on a common task”

“In this definition, digital ecosystems are derived from communities rather than technologies. As open systems, digital research ecosystems will rely on communities and community involvement in a scenario where anyone can participate.”

Sheila Anderson & Tobias Blanke 2012. Taking the Long View: From e-Science Humanities to Humanities. Digital Ecosystems.

Top photos by [Bruno Kelzer](#) and [Fré Sonneveld](#) on [Unsplash](#)
Bottom photo from UK Ireland DH Network at <https://dhnetwork.org/>

DH RIs: design criteria

[DH = Digital Humanities, RI = Research Infrastructure]

Conceptual parameters

Design Criteria for HUMLab in Sweden:

- Translucence – “see what is going on”
- Flexibility
- Memory and context
- Multiplexity
 - “simultaneous engagement with many types of materials, ideas and perspectives through the screens, interaction technology, sensor technology and audio”
 - “includes a variety of technologies, systems and software”
- Non-linearity and messiness
- Engagement
- Adaptability and co-evolution

Svensson 2011 *From Optical Fiber To Conceptual Cyberinfrastructure* Digital Humanities Quarterly

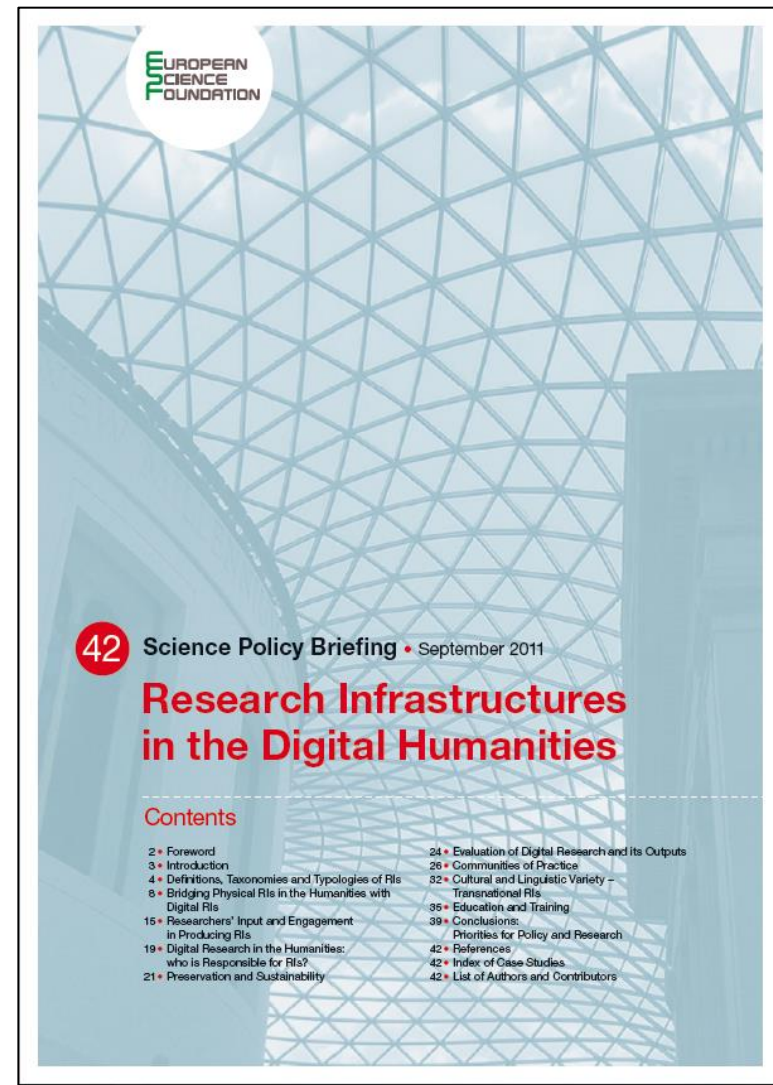


DH RIs: design criteria

Practical parameters

- Long-term preservation and persistent identifiers
- Sharing of data, tools and services
- Active collection and development of new data and tools
- Applicable Business and sustainability models

European Science Foundation report 2011



http://www.esf.org/fileadmin/user_upload/esf/RI_DigitalHumanities_B42_2011.pdf

How can we protect humanities research and publications from digital commodification?

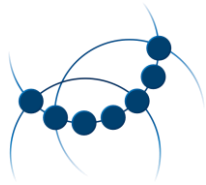


How can humanities researchers (of any level of digital competence) access and effectively use digital research tools?

CLARIN

“a digital infrastructure offering data, tools and services to support research based on language resources”

CLARIN



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

DARIAH

“The pan-European infrastructure for arts & humanities scholars”



<https://www.dariah.eu/>

How can humanities researchers (of any level of digital competence) access and effectively use digital research tools?

- Develop a digital agenda designed for and by humanities researchers
- Connect communities and to support digital literacies
- Foster reuse and integration of digital methods, tools and data within a licensed framework with training in their use
- Strengthen meaningful humanities engagement with the European Open Science Cloud
- Ensure mechanisms of reliability, transparency and quality review
- Give the humanities protagonism and visibility in the ethical and policy issues which our engagement with digital brings

DARIAH

“The pan-European infrastructure for arts & humanities scholars”



<https://www.dariah.eu/>

How can humanities researchers (of any level of digital competence) access and effectively use digital research tools?

- Information about digital humanities methods and tools
- Curated open access blog posts, papers, publications, videos, podcasts ...
- A variety of methods from text annotation to data visualization, and from sentiment analysis to deep learning language models
- Transdisciplinary collaborations through a light-touch community workflow which draws on multilingual content
- Fosters critical and theoretical engagement with digital tools and methods

Open Methods

The screenshot shows the homepage of the OpenMethods website. At the top, it features the logos for 'Humanities at Scale' and 'DARIAH-EU'. The main heading is 'OPENMETHODS' in large, bold, black letters, with the subtitle 'HIGHLIGHTING DIGITAL HUMANITIES METHODS AND TOOLS' underneath. A navigation bar includes links for 'HOME', 'ABOUT', 'WHO WE ARE', 'JOIN US', 'SUBMIT A CONTENT', 'RSS FEEDS', and 'LOG IN'. Below the navigation bar, there are several content blocks. On the left, there is a search bar with the text 'Search ...' and a red search button. In the center, there is a featured article titled 'BERT for Humanists: a deep learning language model meets DH' by Marinella Testori, dated November 9, 2021. To the right of this article is a search bar and a section titled 'INTERESTED IN BLOGGING ABOUT YOUR RESEARCH? THE DIGITAL HUMANITIES TOOLS AND METHODS BLOG IS FOR YOU!' with the 'hypotheses' logo. At the bottom right, there is a section titled 'IN COOPERATION WITH' with the 'DARIAH-EU' logo.

<https://openmethods.dariah.eu/>

Taxonomy of Digital Research Activities in the Humanities, TADIRAH

- 1 Capture
 - conversion
 - data recognition
 - discovering
 - gathering
 - imaging
 - recording
 - transcription
- 2 Creation
 - designing
 - programming
 - web development
 - writing
- 3 Enrichment
 - annotating
 - cleanup
 - editing
- 4 Analysis
 - content analysis
 - network analysis
 - relational analysis
 - spatial analysis
 - structural analysis
 - stylistic analysis
 - visualization
- 5 Interpretation
 - contextualizing
 - modeling
 - theorizing
- 6 Storage
 - archiving
 - identifying
 - organizing
 - preservation
- 7 Dissemination
 - collaboration
 - commenting
 - communicating
 - crowdsourcing
 - publishing
 - sharing



What role does critical thinking have in relation to Digital Research Infrastructures and methods?

- “infrastructure” ... “has much of the same scale, complexity, and general cultural impact as the idea of “culture” itself”
- the digital humanities are “uniquely placed to interpret and critique culture at the level of infrastructure”
- Critical Infrastructure studies collective: research connecting thinking about infrastructures and society across numerous fields including science and technology studies, design, ethnography, feminist theory, critical race and ethnicity studies and the creative arts



<https://liu.english.ucsb.edu/what-infrastructure-means-to-me-kings-college/>



<https://cistudies.org/>

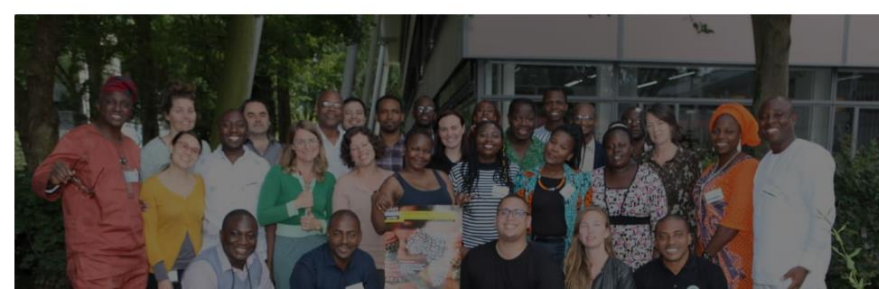
How global/multilingual is our digital research, really?

- Urszula Pawlicka Deger 2020:
 - “How does the global distribution and dimensions of infrastructure contribute to the shaping of global representation of the field?”



[Home](#) [Community](#) [Blog](#) [DH Africa map](#) [Announcements](#) [Resources & past events](#)

Welcome!



GLOBAL OUTLOOK::DIGITAL HUMANITIES



**Minimal
Computing**



a working group of GO::DH

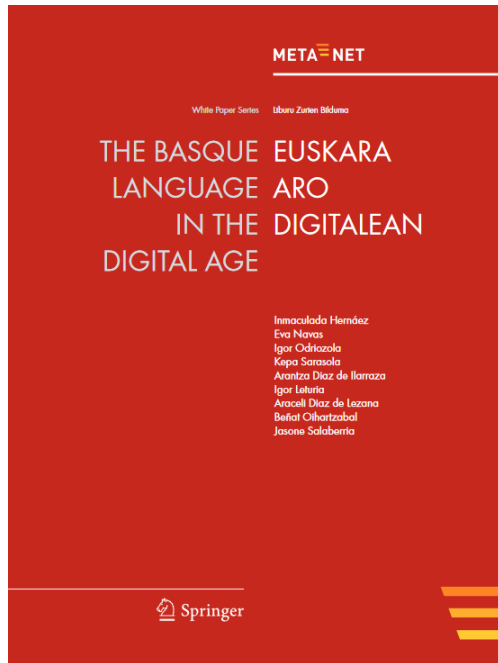
MULTILINGUALISM IN DIGITAL SPACES



How might a DH volume on multilingualism in digital spaces look?

- case studies by language or language family,
- landscape studies of the underlying digital infrastructure which shapes our communication practices,
- evaluation of the 'multilingual readiness' of DH tools,
- best practices for multilingual DH platform design,
- analysis of DH multilingual data dynamics or competitions to design linguistically inclusive solutions to language challenges.

META.NET MONITORING DIGITAL LINGUISTIC DIVERSITY IN 2012



Language technologies:

- Machine Translation
- Speech Processing
- Text Analysis
- Speech & Text Resources

Speech and Text Resources

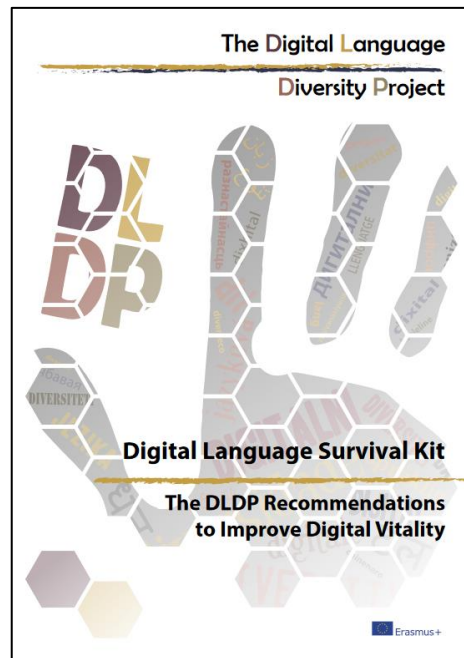
Excellent support	Good support	Moderate support	Fragmentary support	Weak/no support
	<ul style="list-style-type: none"> • English 	<ul style="list-style-type: none"> • Czech • Dutch • French • German • Hungarian • Italian • Polish • Spanish • Swedish 	<ul style="list-style-type: none"> • Basque • Bulgarian • Catalan • Croatian • Danish • Estonian • Finnish • Galician • Greek • Norwegian (Bokmål, Nynorsk) • Portuguese • Romanian • Serbian • Slovak • Slovene 	<ul style="list-style-type: none"> • Icelandic • Irish • Latvian • Lithuanian • Maltese • Welsh

Cross-language comparison <http://www.meta-net.eu/whitepapers/key-results-and-cross-language-comparison>

<http://www.meta-net.eu/>



DIGITAL LINGUISTIC DIVERSITY FRAMEWORKS

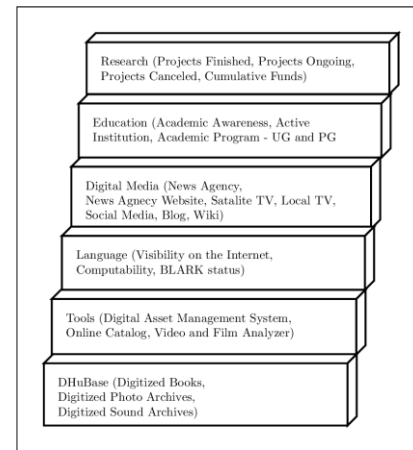


<http://www.dldp.eu/en>

- *Digital Capacity* (Digital Literacy; Character Encoding, Input and Output Methods; Availability of Language Resources);
- *Digital Presence and Use* (Use for E-Communication; Use on Social Media; Availability of Internet Media; Wikipedia) and;
- *Digital Performance* (Availability of Internet Services; Localised Social Network; Localised Software: Operating Systems and Basic Software; Machine Translation Services; Dedicated Internet Top-Level Domain).

Digital Humanities Readiness Assessment Framework: DHuRAF

Hossein Hassani, Emir Turajlic, Kemal Taljanovic



<https://arxiv.org/abs/1902.06532>

DECOLONISING INTERNET'S LANGUAGES

What came up? Themes and Key Questions

Orality

What are the other forms of communicating a language? What are the other ways of disseminating a language?

Can we think or imagine an oral Wikipedia, storytelling, having a platform for voices and video?

How do we consider affective registers, for e.g. Black Twitter, which has a unique language via gifs, emojis etc? How does Unicode take that into consideration, as a way a community talks and speaks about themselves?

How can we connect oral language speakers to the digital world? Both recording their own materials and accessing knowledge when they don't know keywords etc.?

How can we document oral languages?

Archives

Can we connect local archives to institutions?

How do we make archive a tool for healing and doing something useful?

Do we translate our archives?

Can we use the political power of archives?

How do we make a community archive self sustainable?

How do we tag items in archives? For e.g., do I allow for people to search for slurs or do I label it as violence? Do we censor the history or reopen up old history?

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Themes and Key Questions What came up?

Localization, Local Content, Accessibility

Does online but non-open-web communication count? For e.g., is it enough to have rich and diverse Facebook or YouTube in your local language?

How can we index (as opposed to archive) local content in meaningful ways to accurately represent the size usage of language?

Can we localize open source content management platforms?

How do we create multilingual content that is accessible for people with disabilities?

How do you get from 300 Wikipedias (and only 100 really active) to 3000?

Epistemics, Frames, Ethics, Practices

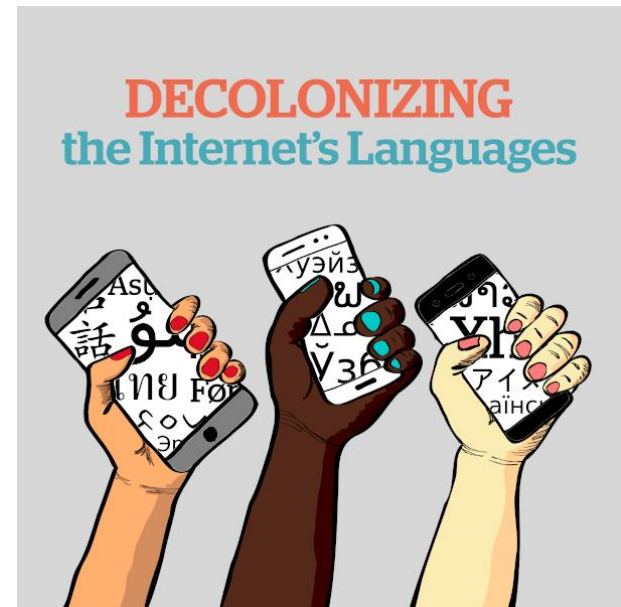
How can we translate from dominant languages into marginalized languages without imposing foreign knowledge?

How are we framing the idea of decolonization? Looking at intersectionality and embodied and feminist and queer terminology used in the room; is the way we frame the problem itself problematic?

Can we problematize our preoccupation with measurement and content as a means of pursuing justice for indigenous languages?

Can we problematize the way we are speaking about language as content?

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<https://whoseknowledge.org/initiatives/decolonizing-the-internet/> and
 Summary report <https://whoseknowledge.org/wp-content/uploads/2020/02/DTIL-Report.pdf>

ADHO DH2019 Workshop "Towards Multilingualism In Digital Humanities: Achievements, Failures And Good Practices In DH Projects With Non-latin Scripts"

Date & Time

8th July 2019, 9:00 - 18:00

Workshop organizers:

Martin Lee; martin.lee@fu-berlin.de

Dr. Cosima Wagner; cosima.wagner@fu-berlin.de

Freie Universität Berlin

University Library/Campus Library (Germany)

- [ADHO DH2019 Workshop "Towards Multilingualism In Digital Humanities: Achievements, Failures And Good Practices In DH Projects With Non-latin Scripts"](#)
- [Exposé](#)
- [Workshop Format](#)
- [Notes](#)
- [Works cited](#)
- [Workshop timetable and abstracts](#)
 - 09:00 - 09:15 Introduction to the workshop
 - 09:15 - 12:05 NLS & DH: discussing workflows
 - 09:15 - 09:40: „Ancient Egyptian Hieratic Script – Aspects of Digital Paleography for a NLS“
 - 09:40 - 10:05: "Arabic Script in Digital Humanities Research Software Engineering"
 - 10:05 - 10:30 "SHINE: A Novel API Standard & Data Model to Facilitate the Granular

<https://hackmd.io/@omhCJrc6T06AFuwMfCrsqw/ry0yFF1oE?type=view>

The workshop addressed challenges in a whole range of areas, including

- multilingual data curation,
- Optical Character Recognition (OCR),
- digital research ecosystem design,
- data/text mining,
- and machine translation.

MULTILINGUAL DH

<https://multilingualdh.org/>

DH 2019 Workshop Multilingual Digital Humanities Resources
EO **EN** DE IT ZH KO CA

MULTILINGUAL DH

Resources for doing digital humanities in many languages

LANGUAGE MATTERS

Multilingual DH is a loosely-organized international network of scholars using digital humanities tools and methods on languages other than English. We work in many environments, including academia, libraries, museums, and beyond, but share the goal of raising the visibility of scholarship in and about many languages.

DH scholarship is frequently criticised as being “English-centric” and therefore culturally and technologically biased. This bias takes many forms, from the lack of awareness of DH scholarship from non-Anglophone countries, to the lack of robust tools for working with non-Latin scripts.

This website, and its associated [GitHub organization](#) and [mailing list](#), provides space to share their achievements, failures, resources, and good practices for working with multi-lingual and multi-script data. To participate, please [join the conversation on the mailing list](#)!

We'll be looking for feedback soon on a SIG (Special Interest Group) proposal to [ADHO](#), and a working group proposal to [DARIAH](#).

Digital Mediations

Digital Mediations Events

Mapping Multilingualism and Digital Culture

OWRI Postdoctoral Training and Network Day

Digital Modern Languages Tutorial Writing Sprint

Digital Mediations at the Language Memories Conference

Disrupting Digital Monolingualism

Digital Mediations Research

Digital Mediations

Disrupting Digital Monolingualism

Home

Aims

Programme




Participate

Videos

Reports

Theme Groups

Contact

Welcome to the section for the *Disrupting Digital Monolingualism* workshop, a one-and-a-half day event which was held **online** on June 16th and 17th 2020. The workshop was hosted by the  Language Acts & Worldmaking project with the support of the  Cross-Language Dynamics: Reshaping Community project, both projects funded by the AHRC as part of its  Open World Research Initiative.

Due to the COVID-19 health crisis we re-factored the workshop as a virtual event with a series of synchronous/live and asynchronous/pre-recorded interventions, using a combination of audiovisual and text-based tools. The workshop included a combination of lightning talks, demos, posters, panels and a mini-workshop, and we encouraged participation on social channels. We believed this still represented an excellent opportunity to collectively make a mutually enriching and inspiring contribution to discussions about digital multilingualism!

Here you can:

- The workshop was hosted by the Language Acts & Worldmaking project
 - with the support of the Cross-Language Dynamics: Reshaping Community project,
 - both projects funded by the AHRC as part of its Open World Research Initiative.
- Led by Paul Spence and Renata Brandao, in collaboration with Naomi Wells

Workshop shape:

1. **Showcase existing initiatives**
2. **Collectively propose new models and solutions**

DISRUPTING DIGITAL MONLINGUALISM

The screenshot shows the website for the 'Disrupting Digital Monolingualism' workshop. At the top, the title is in blue. Below it is a navigation menu with links for Home, Aims, Programme, Participate, Videos, Reports, Theme Groups, and Contact. The main text welcomes visitors to the section for the workshop, which was held online on June 16th and 17th, 2020. It mentions that the workshop was hosted by the 'Language Acts & Worldmaking' project with the support of the 'Cross-Language Dynamics: Reshaping Community' project, both funded by the AHRC as part of its 'Open World Research Initiative'. The text explains that due to the COVID-19 health crisis, the workshop was re-factored as a virtual event with a series of synchronous/live and asynchronous/pre-recorded interventions, using a combination of audiovisual and text-based tools. It lists activities like lightning talks, demos, posters, panels, and a mini-workshop, and encourages participation on social channels. Below the text, there is a section titled 'Here you can:' with a bulleted list of links: 'Read about our Aims', 'See our workshop Programme', 'See Videos from the workshop', 'Check our Reports', and 'Read about the Theme Groups which have continued work on topics which emerged at the workshop'. At the bottom, there are logos for 'language acts and worldmaking', 'Cross-Language Dynamics OWRI', and 'Arts & Humanities Research Council'.

1. LINGUISTIC AND GEOCULTURAL DIVERSITY IN DIGITAL KNOWLEDGE INFRASTRUCTURES

How do digital knowledge infrastructures embed multilingual or language-focused practice in social and technical terms? How might digital infrastructures reinforce or redistribute linguistic and cultural influence or authority?

2. WORKING WITH MULTILINGUAL METHODS AND DATA

How well do digital methods and data practices currently model multilingual dynamics, and what new forms of digital, linguistic and cultural criticism are needed to interpret digital methods or data-driven approaches to languages and multilingualism?

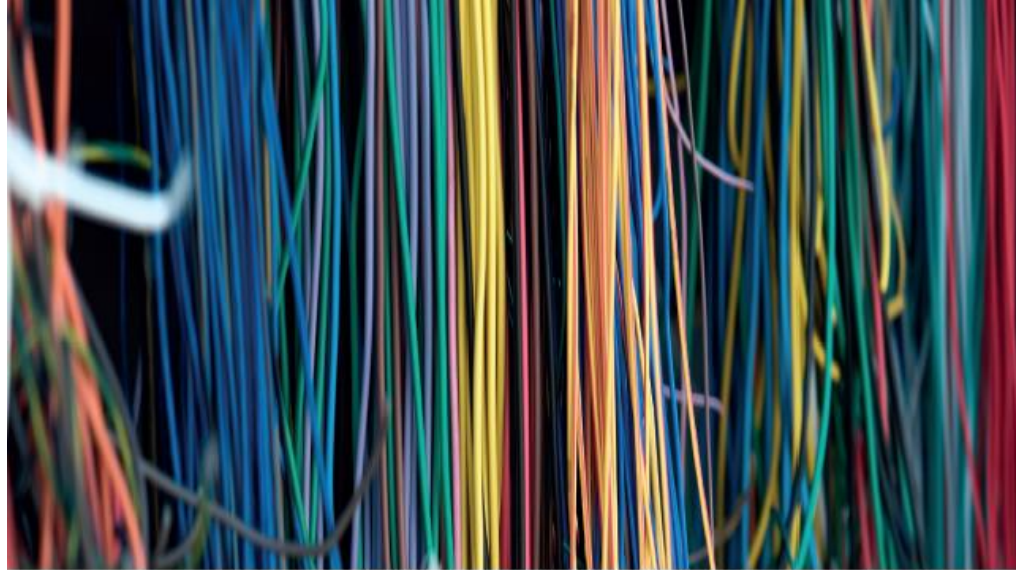
3. TRANSCULTURAL AND TRANSLINGUAL APPROACHES TO DIGITAL STUDY

How can we effectively study intercultural, plurilingual or transborder perspectives using digital tools? What is the role of digital practitioners (in research or industry) and language experts (such as translators, linguists and modern language researchers) in studying these interactions?

4. ARTIFICIAL INTELLIGENCE, MACHINE LEARNING AND NATURAL LANGUAGE PROCESSING IN LANGUAGE WORLDS

What challenges do AI, machine learning and NLP pose for language research fields and professions? What opportunities and limitations does AI enact on the dynamics of linguistic diversity or intercultural communication?

<https://languageacts.org/digital-mediations/event/disrupting-digital-monolingualism/>



DISRUPTING DIGITAL MONOLINGUALISM

A report on multilingualism
in digital theory and practice



Open World
Research Initiative

OWRI



Arts & Humanities
Research Council

Cross-Language
Dynamics

OWRI

language
acts and
worldmaking

Thanks:

Arantxa Iriarte

Mikel Iruskieta & workshop organisers

Naomi Wells, James Smithies, Urszula Pawlicka

Deger

Renata Brandao and other colleagues on the

Language Acts & Worldmaking project

<https://languageacts.org/>

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