



BELGRADE 50th Annual Conference
ONLINE
23 -25 JUNE



A black microphone on a stand is positioned diagonally across the left side of the image. A large, thin white circle is superimposed over the scene, framing the microphone and the text below it. The background is a dark blue gradient.

Keynote Speech 'Digital Libraries: The Next Frontier'

June 23, 2021 | 09:30-10:30 CEST

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Session Ground Rules



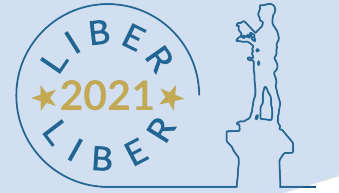
- **This session is recorded.** We'll share the recording and slides afterwards.
- **Questions for the speaker?** Type them in the Attendee Chat on the right side of the screen. The chair will address these at the end of the session.
- **Technical issues.** Check your settings and your internet connection. No luck? Try to re-join by closing your browser tab and re-opening the link provided.

Thank you for your attention and enjoy the session!

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Keynote Speech 23 June



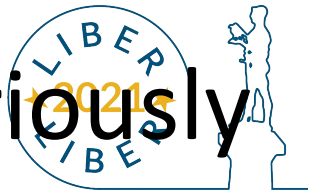
'Digital Libraries: The Next Frontier' Toma Tasovac (@ttasovac)

Director of the Belgrade Center for Digital Humanities, Director of the Digital Research Infrastructure for the Arts and Humanities (DARIAH-EU)

This session will be chaired by Julien ROCHE, LIBER Vice-President



Disclaimer 1: Titles of conference talks are notoriously unreliable



- (Plural) “Digital Libraries” but singular “Next Frontier”?



Digital Library?



- a service
- an architecture
- a set of information resources, databases of text, numbers, graphics, sound, video, etc.
- a set of tools and capabilities to locate, retrieve and utilize the information resources available

(Borgman 1999)



Disclaimer 2: We are all prisoners of our own disciplines



- My prison is textual
- I will focus on the status and scope of electronic texts in digital libraries
- I will not speak about audio-visual heritage despite its importance



So, in effect, this talk will be about...



- Digital libraries as a set of tools and capabilities to locate, retrieve and utilize textual resources
- Even more concretely, I will focus on:
 - What does it mean to utilize textual resources from the disciplinary perspective of Digital Humanities?

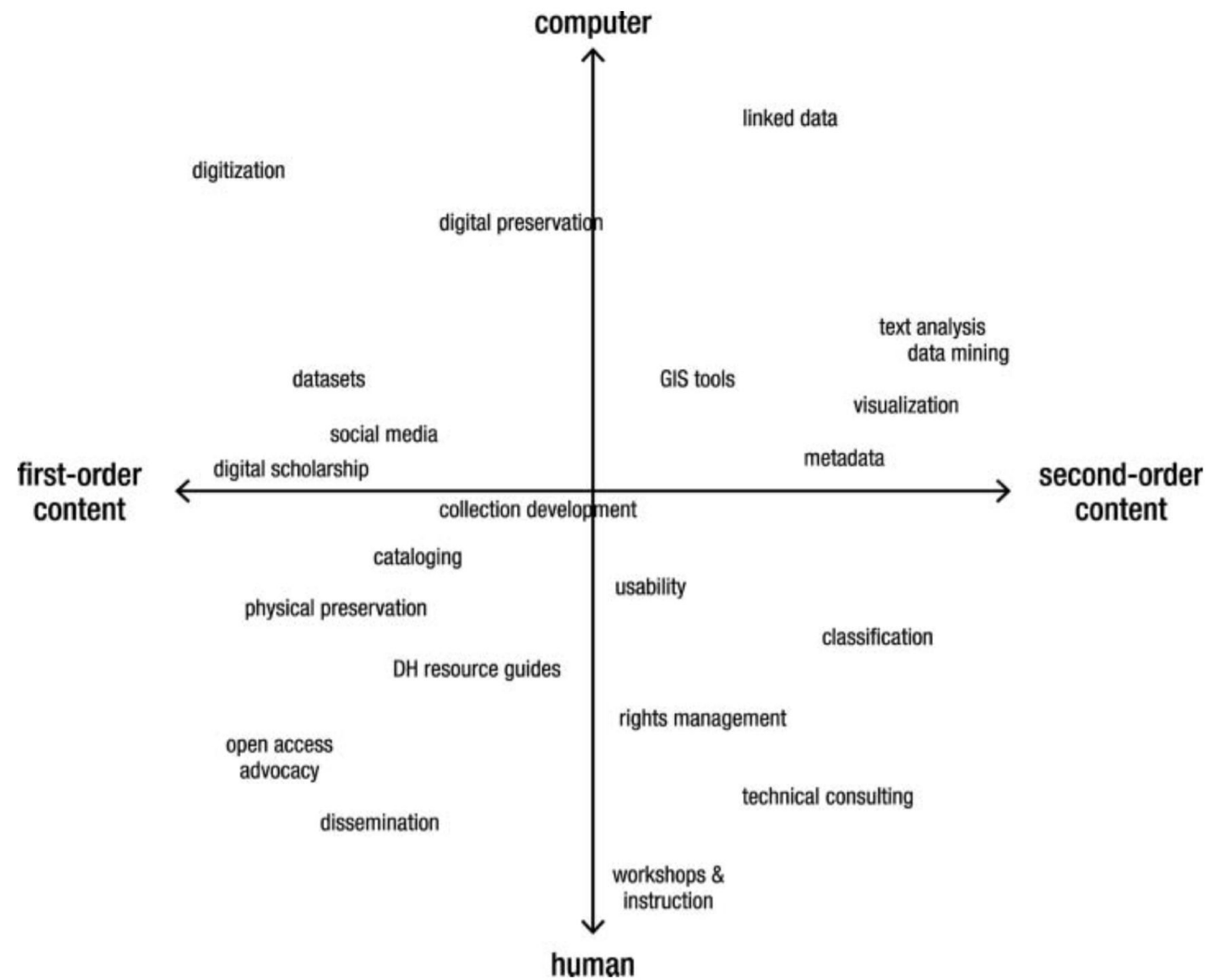


Why Digital Humanities?



- Digital Humanities and Digital Libraries have similar challenges
- Infrastructural turn
 - interoperability
 - communication
 - integration





(Sua 2013)



What's missing?

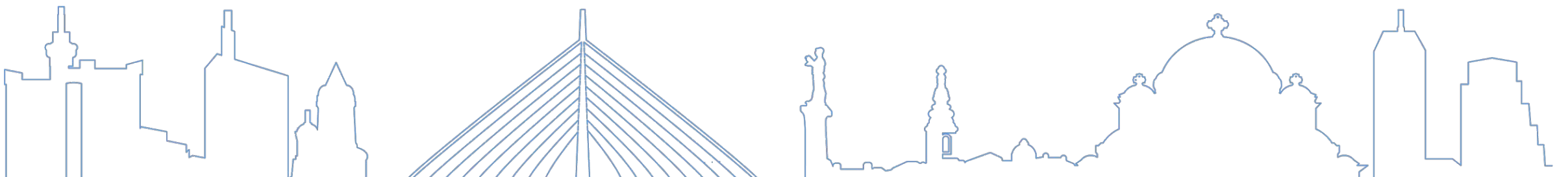


- The axis of utilization
 - Who reads texts in the digital library and how?



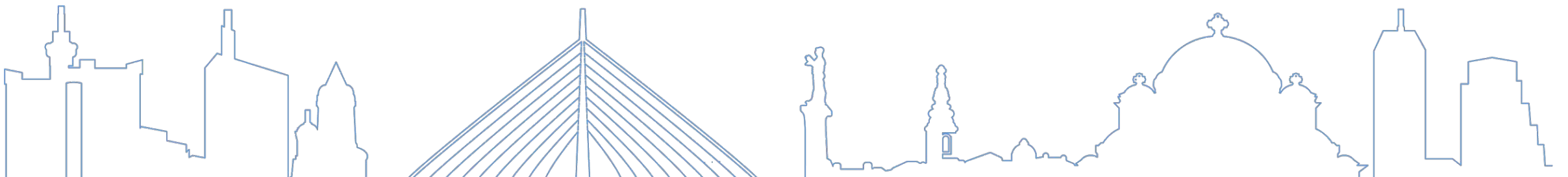


Digital libraries do not yet take full advantage of electronic textuality





Digital libraries should stop treating text as an atavistic relic of the print culture



Material artifact vs. digital surrogate?



- The value of a material artifact is in itself
- The value of a digital surrogate is in what you can *do* with it b



What do people do when they do DH?



- textual editing (digital editions, digital collections)
- data modeling and creation of structured data
- distant reading (as opposed to close reading)
 - statistical methods and processing
 - data mining
 - Stylometry
 - Visualization
 - network analysis
 - geospatial methods
- tools and services, incl. research infrastructures



Back to “utilization”: who reads the text?



- human-readable
- machine-readable
 - unstructured data
 - structured data



TEI XML as the object of desire



- **teiHeader**
- **Facsimile**
- **Text**
 - front
 - body
 - back

```
<?xml-model href="http://www.tei-c.org/release/xml/tei/custom/schema/relaxng/tei_all.rng"
  type="application/xml" schematypens="http://purl.oclc.org/dsdl/schematron"?>
<TEI xmlns="http://www.tei-c.org/ns/1.0">
  <teiHeader>
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      <titleStmt>
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        <p>Publication Information</p>
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      <p>Some text here.</p>
    </body>
    <back></back>
  </text>
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Scholarly primitives



- discovering
- annotating
- comparing
- referring
- sampling
- illustrating
- representing

(Unsworth 2012)



Texts in digital libraries



- formats and delivery methods
- text/paratext boundaries
- computability
- metrics and traces of use



Texts in digital libraries



- should be machine-readable (preferably as structured data), not only machine-deliverable (as images)
- should be a kind of service as opposed to fixed object
- an interactive method as opposed to a static element



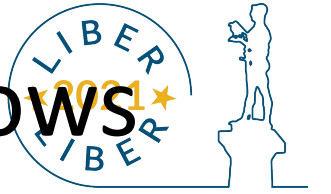
Text as a service



- metadata + full text access
 - GUI
 - Download
 - APIs



Digital scholarly methods in digital library workflows



- Developing tools and services for different types of scholarly primitives in modular, dynamic, research-driven digital collections



In an ideal, DH-friendly world, digital libraries will



- provide access to machine-readable texts as structured data
- develop well-documented APIs for both metadata and full-text access
- provide access, when copyright allows it, to data dumps for both content and metadata
- offer layers of automatic and semi-automatic structural, linguistic and semantic annotations with support for crowdsourced corrections
- integrate dictionaries and other type of reference services to be queried directly from the text in GUIs



Data enrichment workflows



- Digital library → scholars → digital library



Von der Gottheit,
und den
Dingen, welche den Gottes-
dienst angehen.

☩ Бжествѣ, и вѣщѣхъ, ꙗже Бжѣа
слѣжбы касаютса.

Gott, Готтх.	Бѣа, Бѣа.
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ди Готтхайтх.	Бѣа Оцхъ,
Gott der Vater,	Бѣа Отцхъ.
Готтх дѣрх Фатѣрх.	Бѣа Онь,
Gott der Sohn.	Бѣа Сынхъ.
Готтх дѣрх Сонхъ.	Бѣа Дхъ стый.
Gott der heilige Geist,	Бѣа Дхъ сватын.
Готтх дѣрх хайлиге	
Ганстх.	Оуба Трца, сватба
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ТИГКАЙТХ.



Data enrichment workflows



- Digital library → scholars → digital library



Down with the atavistic concepts of texts!



- The printing press revolutionized access to knowledge
 - Mass production and dissemination of texts
 - The library adopted rituals of using knowledge and a model of text as final and unchangeable
- Digitization changed many things in the library but not the model of text
 - A static object is an unfinished potential, a wanna-be book on the imaginary shelf of a digital library
- Digital scholarly work around texts happens elsewhere, not in the library
 - Journal articles and scholarly monographs are not the only scholarly outputs



Fluid is the new black!



- Texts as layered, versioned objects
 - Libraries could follow a fantastic model: that of version-control systems used by open-source development communities
- If texts can be versioned, so can metadata
- Cultural heritage should not only be preserved, it should be kept alive
- Persistent identifiers are not enough, we also need tools for fine-grained citability
- Digital libraries can play a key role in the reproducibility of digital scholarship around cultural heritage



If all this has felt too abstract...



- (later in the year) Sally Chambers and Toma Tasovac eds. Digital Humanities: An Introduction for Librarians (Facet Publishing, ISBN: 9781783301294) <https://bit.ly/dh4librarians>



If all this has felt too abstract...



- Mahey, M., Al-Abdulla, A., Ames, S., Bray, P., Candela, G., Chambers, S., Derven, C., Dobрева-McPherson, M., Gasser, K., Karner, S., Kokegei, K., Laursen, D., Potter, A., Straube, A., Wagner, S-C. and Wilms, L. with forewords by: Al-Emadi, T. A., Broady-Preston, J., Landry, P. and Papaioannou, G. (2019) Open a GLAM Lab. Digital Cultural Heritage Innovation Labs, Book Sprint, Doha, Qatar, 23-27 September 2019. <https://glamlabs.pubpub.org>



If all this has felt too abstract...



- Collections as Data: Always Already Computational and Collections as Data: Part to Whole, <https://collectionsasdata.github.io>



If all this has felt too abstract...



- **DARIAH: Digital Research Infrastructure for Arts and Humanities**
 - Toma Tasovac, Sally Chambers, Erzsébet Tóth-Czifra. Cultural Heritage Data from a Humanities Research Perspective: A DARIAH Position Paper. 2020. https://bit.ly/dariah_ch_data





Many thanks for bearing with me!





Q&A

Thank you for participating!

