LIBRARIES IN THE AGE OF DIGITAL INFRASTRUCTURES (AND OTHER CATASTROPHES)

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καταστροφή = reversal, overturning, sudden disaster, death
MORBID FASCINATION

- death of the author
- death of the book
- death of the humanities
But the catastrophe was always already there...
This is what the printing presses do: they corrupt susceptible hearts. Yet the [...] silly asses do not see this, and brutes rejoice in the fraudulent title of teachers, exalting themselves with a song like this [...] "O good citizen, rejoice: your city is well stuffed with books. For a small sum men turn themselves into doctors in three years. Let thanks be rendered to the printers!" Any uncultured person without Latin bawls these things.

— Filippo de Strata, Polemic Against Printing (c. 1473)
Technology is *not* and has never been the *other* of the humanities.
DIGITAL HUMANITIES

The ultimate revenge of global capitalism on traditional humanities?
TEXT AS DATA?

- there is nothing outside of text (Derrida, 1997: 158)
- text vs. context
- paratext: “a fringe of the printed text which in reality controls one’s whole reading of the text.” (Genette, 1997: 2)
DIGITAL HUMANITIES

A computational framework for decontextualizing the humanities?
COMPUTERS & CAPITALISM

of america

THEY'RE GR-R-RREAT!
MATERIAL ARTIFACT VS. DIGITAL SURROGATE

What can you *do* with it?
DH: RECONTEXTUALIZING THE HUMANITIES

- provide access (texts, tools, methods)
- discover patterns & generate new knowledge
- *supplement* close with distant reading
DH wasn't born yesterday: institutionalizing a community of practice

- Computers and the Humanities (1966)
- The Association for Literary and Linguistic Computing (London-based, 1973)
- Association for Computers and the Humanities (US-based, 1987)
- Literary and Linguistic Computing (1986)
- Alliance of Digital Humanities Organizations (ADHO, 2005)
- Master’s and PhD programs
TEI: de facto standard for textual encoding
WHAT DO PEOPLE DO WHEN THEY DO DH?

- textual editing (digital editions, digital collections)
- data modeling and creation of structured data (XML)
- 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 (CLARIN, DARIAH)
the traditional humanities focuses on a "minimal fraction of the literary field...[a] canon of two hundred novels, for instance, sounds very large for nineteenth-century Britain (and is much larger than the current one), but is still less than one per cent of the novels that were actually published: twenty thousand, thirty, more, no one really knows—and close reading won’t help here, a novel a day every day of the year would take a century or so... And it's not even a matter of time, but of method: a field this large cannot be understood by stitching together separate bits of knowledge about individual cases, because it isn't a sum of individual cases: it's a collective system, that should be grasped as such, as a whole"

(Moretti 2007: 3-4).
DH CHALLENGES

- interoperability
- communication
- integration
  - aggregation
  - federation
DH / LIBRARY CHALLENGES

- interoperability
- communication
- integration
  - aggregation
  - federation
DH / LIBRARY / INFRASTRURAL CHALLENGES

- interoperability
- communication
- integration
  - aggregation
  - federation
SCHOLARLY PRIMITIVES

• discovering
• annotating
• comparing
• referring
• sampling
• illustrating
• representing

Unsworth (2000)
TEXTS IN DIGITAL LIBRARIES?

- formats and delivery methods
- text/paratext boundaries
- computability, metrics and traces of use
TEXTS IN DIGITAL LIBRARIES

• must be machine-computable, not only machine-deliverable
• should be a kind of service as opposed to fixed object
• an interactive method as opposed to a static element
TEXT AS SERVICE

- metadata
- full text search
- retrieving identifiable fragments of texts
- persistent identifiers
TEXTS: OBJECTS → MODELS → SERVICES

- research infrastructures (cf. DARIAH / CLARIN)
- Open Annotation Collaboration (OAC) and the Web Annotation Working Group
- Canonical Text Services (CTS)
DH API LANDSCAPE

- HathiTrust
- DPLA
- Europeana
- IIIF
- Open Siddur API
- Folger Digital Texts API
- correspSearch API
- Old Bailey API
- European Holocaust Research Infrastructure API
- Manuscripts Online API
AT BCDH:

Raskovnik: Dictionary Platform
(http://raskovnik.org)
Izdanak: Digital Editions (in development)
Raskovnik API

INTRODUCTION

Raskovnik is an API that allows consumers to do the context-based search on TEI dictionaries, which can be either directly through searching their own paths or searching for specific lemmas. It also allows various other functionalities to view results in different forms as per the user.

Allowed HTTPs requests:

GET: Get a resource or list of resources

Description Of Usual Server Responses:

- 200: OK - the request was successful.
- 204: No Content - the request was successful but there is no representation to return (i.e. the response is empty).
- 400: Bad Request - the request could not be understood or was missing required parameters.
- 401: Unauthorized - authentication failed or user doesn’t have permissions for requested operation.
- 403: Forbidden - access denied.
- 404: Not Found - resource was not found.
<table>
<thead>
<tr>
<th>Прикази:</th>
<th>списак речи</th>
<th>целокупне одреднице</th>
<th>УКУПНО:</th>
<th>171</th>
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</thead>
</table>

| азр  | беоговица | врзан | еспањ |
| ајлазујем | Бежањ | гревољ | ешёк |
| алим | благујем | грчав | забављам (се) |
| апање | брёвам | дрт | „...чо стар и изнемогао...“ |
| аспра | булутина | „нечувавај брдо“ (посл.) (Вране) |
| атљ | булча | „...друго чунтово...“ (Владичин Хан) |
| багламе | везирљик | дрт | „зарипујем“ |
| башка | вражилац | ексик | загр |
| башчаванција | вржем |
Бока Которска
geографска област

прикажи: ◼️ список речи ◼️ целокупне одреднице

укупно: 673

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ак  батун  блеска  брёме
Амат  бахорити  блъснати  брълча
ацал  бахорица  боботати  брълица
бабовић  бедрен بيраг  богаташ  брхан
бабушка  берба  богорадник  брочути
Српски рјечник

баcма, f. оне ријечи скупа што баjалица или баjac г. Zauberspruch, carmen.
баcма* f. 1. gedruckte Leinwand, linteum pictum. 2. pyxidis ad pulverem nitratum [cf. везма].

Речник косовско-метохиског дијалекта

баcма, е ж. циц. У В. 2. У В. 2 баcма ж. 1) без оного др њега наведено. У РЈА. 2. бàсма ж. 1).
TEXT → MODEL → API → SERVICE → INFRASTRUCTURE
ANCHORING 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 WORLD, DH-FRIENDLY LIBRARIES WOULD

• provide access to machine-readable and machine computable texts
• develop well-documented APIs for both metadata and full-text access
• offer layers of automatic and semi-automatic structural, linguistic and semantic annotations with support for crowdsourced corrections
• integrate dictionary and other type of reference services to be queried directly from the text
DATA ENRICHMENT WORKFLOWS

Digital library → Scholars → Digital library
Von der Gottheit, und den Dingen, welche den Gottesdienst angehen.

Господь, и вещи, иже Божьи.

Gott, Господа, Die Gottheit, Божество, Всевышний, Бог, Бог. 
Die Gottheit. Божество, Божество, Бог, Бог. 
Gott der Vater, Бог Отца, Бог Отец. 
Gott der Vater. Бог Отца, Бог Отец. 
Gott der Sohn, Бог Сына, Бог Сын. 
Gott der Sohn. Бог Сына, Бог Сын. 
Gott der heilige Geist, Бог Святого Духа, Бог Святой Дух. 
Gott der heilige Geist. Бог Святого Духа, Бог Святой Дух. 
Die heilige Dreifaltigkeit, Троица, Троица, Троица. 
Die heilige Dreifaltigkeit. Троица, Троица, Троица.

Господь, и вещи, иже Божьи.

Singen, ше
1ф вен, 1 бин, 1 бинт ангели.

4 ••• •••• ••••
GO КХССТВНГ, и КЕЦИХ, гache КкГ/l СЛЕЖЕВ КАСАУТСА.

лю, рОТТУ Brù, ©
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ТИГКАИТХ.
DATA ENRICHMENT WORKFLOWS

Digital library → Scholars → Digital library
καταστροφή = reversal, overturning, sudden disaster, death
καταστροφή = 1. reversal, overturning, sudden disaster, death. 2. turning point (in tragedy), unravelling, denouement.
DIGITAL LIBRARY AS INFRASTRUCTURE
LIBRARIES AND DH

• recontextualizing the humanities
• providing small and big data (+ tools and methods)
• enabling close and distant reading
• developing data enrichment workflows
Thank you for bearing with me!