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What is Digital Humanities?

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Szegedi Tudományegyetem Cím: 6720 Szeged, Dugonics tér 13. www.u-szeged.hu www.szechenyi2020.hu 1 Digital turn: new research methods in the humanities course

What is Digital Humanities?

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AIM:

The goal of this teaching material is to provide a better understanding of the concept of digital humanities from various viewpoints of distinguished scholars in the field, identify the characteristic features of digital humanities research, and offer examples for digital humanities projects and software.

KEYWORDS: digital humanities, definitions, projects

REQUIRED TIME: 60 minutes



Warning up exercises.

Visit the What is Digital Humanities? website and refresh the page for a new definition. Visit and follow DH defined on Twitter.

What are your favourite definitions? Why did you choose these ones?

PROBLEMS OF DEFINING DIGITAL HUMANITIES

The definition of digital humanities (and its predecessor humanities computing) has been debated for decades. There is no scholarly consensus about the definition of this concept. The **debated** issues include(d) the following problems:

- What is common in the various applications and practices of digital humanities?
- What criteria do we need to qualify a project as a digital humanities one?
- Is digital humanities unified enough to be considered as a disciplinary field?
- If so, what are the boundaries of digital humanities as a discipline?
- What are its own set of standards and subfields?
- Is digital humanities mainly concerned with the application of computational methods in the humanities?
- Does digital humanities signify a new (computational and algorithmic) thinking in the humanities?
- Does digital humanities represent a new paradigm shift in the humanities?
- Like all current scientific research, are the humanities already digital?

Let's see some definitions of digital humanities that address these problems.

- "At its simplest, DH is the utilization of computers and computational tools for the exploration, analysis, and production of humanistic knowledge." (Jennifer Guilian)
- "A broad array of practices that seek to understand if/how digital technologies allow us to ask new questions of or think in new ways about our objects of study" (Jacqueline Wernimont)
- "The intersection between Arts & Humanities disciplines and technology. A space
 where new tools are used and developed, and where new ways of looking at and
 performing researching become possible. Most of all, it is fun. Fun because it is
 challenging, each day, every day." (David Beavan)
- "[t]he application of computational methods to humanities research or to cultural heritage; or of humanities research methods to digital phenomena." (Claire Warwick)
- "A term of tactical convenience." (Matthew Kirschenbaum)
- "DH is an umbrella term that, depending on who you are talking to, covers a huge territory: everything from applied text analysis and corpus stylistics to the more esoteric and theoretical realms of video game criticism." (Matthew Jockers)
- "What sets Digital Humanities apart, for me, is its genuine interdisciplinarity, its permanent emergence, and its open communication." (Christof Schöch)
- "Digital Humanities is more than a methodology." (James O'Sullivan)
- "DH is what critical theory is or was—an opportunity to ask new questions, try new methods, engage in new conversations." (ssenier)
- "Digital humanities attempts to bring humanistic inquiry and the artefacts of human experience into useful dialogue with digital technology. It is, at once, a practical and a philosophical endeavour: a matter of building and of theorizing the built. Practitioners are as likely to be adept at Java as they are post-structuralism; as drawn to the iPhone as they are to Moby Dick; as committed to a kind of optimistic futurism as they are deeply sceptical of a posthuman condition. Digital humanities is also one of most exciting fields in the humanities today, with a burgeoning community of enthusiasts ranging from undergraduate students to senior scholars." (Stephen Ramsay)
- "Our principal task may no longer be to define or defend digital humanities to sceptical outsiders, but instead to translate the subtleties of our research to others within the expanded field—a project that can help DH matter beyond itself." (Matthew K. Gold and Lauren F. Klein)

Watch the following short video films about the different definitions of digital humanities by distinguished researchers in the field and do the exercises below.

My Digital Humanities 1.

Listen to the different understanding of digital humanities and identify who articulated the following statements by finding the pairs. By clicking on the names of the scholars, you can see in what digital humanities projects they have been involved.

A. Laura Mandell	1. Digital humanities is a whole ecosystem. Digital methods	
A. <u>Ladra Warrach</u>	, ,	
	change the type of questions that we can ask and how we	
	express our knowledge.	
B. Claire Clivaz	2. Digital humanities started as being the application of	
	computing to humanities research and pedagogical problems.	
	As regards the shift from humanities computing to digital	
	humanities, more and more humanities theoretical frameworks	
	<u> </u>	
	and perspectives are applied to computing. The dialectic and	
	dialogue between the traditions of computing and humanities	
	are crucial.	
C. Geoffrey Rockwell	3. Digital humanities is a set of tools that has helped to define	
	the field and the field has helped to shape some of the tools.	
D. Bryan Carter	4. Digital humanities is about bringing digital humanities	
	methodologies to bear on humanities data and humanities	
	methods of thinking. How can we further enact those methods?	
	What can we add to our methodological toolkit?	
E. Bill Endres	5. In 20 years' time humanities will be entirely digitized.	

My Digital Humanities 2.

Before you listen to <u>Toma Tosovac</u>'s views about digital humanities, it is important to clarify two terms occurring in his presentation.

Close reading: "The distinctive procedure of a New Critic is explication, or close reading: the detailed analysis of the complex interrelations and ambiguities (multiple meanings) of the verbal and figurative components within a work" (Abrams 1999, 181). Close reading is a mode of literary analysis which pays special attention to the specific details, complexities and nuances of a passage or text.

Distant reading: "allows you to focus on units that are much smaller or much larger than the text: devices, themes, tropes – or genres and systems" (Moretti 2013, 48-49). This "focus on units" works through "a process of deliberate reduction and abstraction:" "you reduce the text to a few elements, and abstract them from the narrative flow" (Moretti 2000, 57; Moretti 2005, 1, 53). Distant reading is a data-driven literary research which, by using quantitative methods, aims to unveil and analyse repeated patterns, hidden connections, trends, cycles and parallels in large quantity of texts ("the great unread").

Fill in the gaps after listening to Tosovac's presentation.

Many practices	in digital humanities are related to (1	.) and (2)	
Processing a lar	rge amount of texts and removing the	em out of their contexts tur	ns everything
into	(3). By doing so, there is a dan	ger of loosing the depth a	and shades of
meaning of par	ticular words. DH runs the risk of bec	coming the grand (4)	of
the traditional	humanities. Digital humanities enable	es us to engage us with ou	ır digitised (5)
	in new ways and new forms. T	he goal is to give us (6) $_{}$	and
(7)	_ to engage study, transform, criticiz	ze and even play with our	own cultural
heritage. One	of the challenges is concerned with	h how to bridge the gap	between (8)
and ((9) reading.		

My digital humanities 3.

A. Elena Pierazzo	1. Digital humanities is an intersection between science, technology and humanities. Creativity and collaboration are at the core of DH research.
B. James Cummings	2. Using digital techniques in a such a way that they teach you something new that you would not have found when you were using analogue methods.
C. Patricia Murrieta-Flores	3. Digital humanities is humanistic enquiry advanced through computational means.
D. Kenneth M. Price	4. Digital humanities is the way of doing research with computers in a way you could not do it without a computer. To explore our cultural heritage in ways that you could not do before. Digital humanities is empowering the scholar in doing things that you cannot do without the digital.
E. Eli Bleeker	5. DH is the application of digital technologies and methodologies to the study of the humanities. It brings together information that is completely disparate so that we can study it together. Levelling of scholarship is an important aspect of digital humanities.

My digital humanities 4.

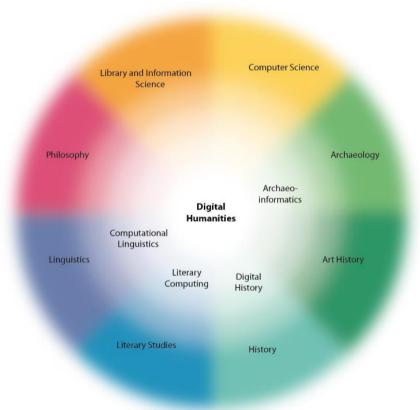
A. Roderick Coover	1. Digital humanities is concerned with using digital		
	technologies to ask new questions, in new ways, through new		
	methodologies in new practices.		
B. Angel D. Nieves	2. Digital humanities is humanities disciplines with digital tools.		
	The tools we use provoke and produce the thoughts we have		
	in relation to our discipline. It is a conversation between		
	humanities disciplines.		
C. Marjorie Burghart	3. Digital humanities is to bridge art, research and social issues.		
D. <u>Kathryn Sutherland</u>	4. Digital humanities is the application of quantitative methods		
	to pre-existing problems identified in humanities disciplines.		
	The substance of the questions digital humanities offers us		
	new methods of answering will remain disciplinary. Digital		
	humanities is a meeting of disciplines rather than a discipline		
	itself.		
E. Paul Eggert	5. Digital humanities means to further and go beyond		
	humanities research. Probably in few years we will not think		
	DH as something separate from the humanities. We'll just		
	hopefully use digital methods in the humanities.		

My digital humanities no. 5.

A. Matthew Vincent	1. DH is the application of computational techniques to	
	cultural heritage. DH is a miracle as it combines two different	
	worlds. The implications range from the practical (e. g.	
	creation of digital editions and libraries) to theoretical ones (e.	
	g. what are humanities?, what is the relationship between	
	humanities and other sciences).	
B. Frederico Meschini	2. DH is a methodological laboratory. It is a trading zone where	
	people in the humanities and computer sciences exchange	
	knowledge and try to find new methodologies and techniques	
	in research. It also creates spin-off in the form of new	
	methodologies, techniques and methods.	
C. Joris van Zundert	3. The components of DH include networks, publications, and	
	conferences that help us to find collaborators. They have	
	similar concerns and difficulties.	
D. Graeme Earl	4. DH is the future of humanities disciplines. We apply new	
	technologies in research that opens up entirely new lines of	
	investigation and prepares us to do things in many different	
	areas.	

2 INTERDISCIPLINARY DH RESEARCH

The following chart shows the interdisciplinary nature of digital humanities. In DH projects researchers of different disciplines work together and co-write the publications resulting from their collaboration. DH researchers value collegiality, collaboration, creativity, openness, transparency and reproducibility. In these projects researchers work jointly to integrate information, data, texts, techniques, methods, perspectives and theories. The methodological focus of DH research fosters honest debates on practical issues. Recent years saw the emergence of digital source criticism and critical code studies that contribute a lot to more informed scholarship in digital humanities.



Patrick Sahle, "DH studieren! Auf dem Weg zu einem Kern- und Referenzcurriculum" DARIAH-DE Working Papers No. 1 (2013), 6.

3 EXAMPLES FOR DH PROJECTS.

To illustrate the nature and scope of digital humanities research, in this section I would like to offer some examples for digital humanities projects and some related software (with introductory tutorials).

Text Encoding Initiative

Its purpose is to produce guidelines for the creation and management in digital form of all types of data created and used by researchers of the humanities.

Projects: <u>Text Creation Partnership</u> (Early English & American books), <u>Women Writers</u>
<u>Project</u> (Early modern women writers), <u>ELTeC</u> (multilingual European Literary Text Collection)

Tutorial for beginners: Text encoding and the TEI

Text analysis

Projects: <u>Projects of the Stanford Literary Lab</u>, <u>Projects of Yale DHLab</u>, <u>Ted Underwood's introduction</u>

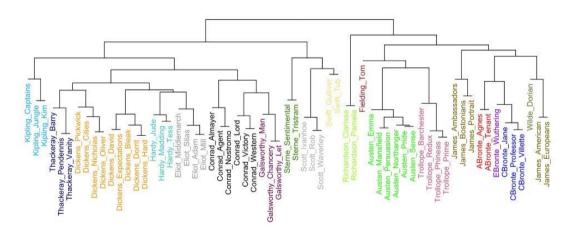
Software: TAPOR, Voyant, Lexos, AntConc, Text analysis with Python

• Stylometry and authorship attribution

Stylometry uses quantitative methods to analyze style, for example, to determine authorship.

Projects and case studies: The Federalist Papers, Shakespeare's authorship, Authorship of The Cuckoo's Calling, the authorship of Wuthering Heights

Software: JGAAP, Stylo



Cluster Analysis of 66 English novels from Jane Austen to Joseph Conrad: produced using 'stylo'.

Text resue

Text resuse algorithms detect words, sentences and paragraphs that have been reused across texts.

Projects: 18th-century French authors, <u>Text reuse detection in Finish newspapers and</u> journals, 1771-1917

Software: <u>Tracer</u>, <u>Text-pair</u>, <u>Text reuse with BLAST</u>, <u>text reuse with R</u>

• Electronic scholarly editions

Projects: <u>William Blake Archive</u>, <u>Canterbury Tales Project</u>, <u>Jonathan Swift Archive</u>, Romantic Circles, Oxford Scholarly Editions Online

(Social) Network analysis

Projects: People of Medieval Scotland, 1093-1371, Mapping the Republic of Letters, Reconstructing Intellectual Networks: From the ESTC's bibliographic metadata to historical material

Software: Palladio, Gephi, NetworkX, Tools for Temporal Social Network Analysis, Neo4j



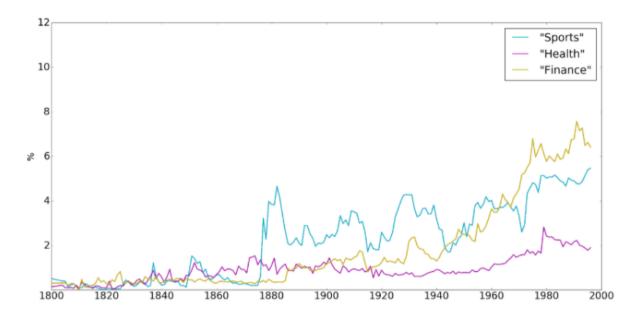
Source: http://republicofletters.stanford.edu/casestudies/voltaire.html

• Topic modeling

Topic modeling enables us to find hidden semantic information about selected corpora. Statistical methods are used to discover the themes that are embedded in the texts and to reveal the connections of these themes and their changes over time.

Projects: <u>Topic Modeling Genre</u>: <u>An Exploration of French Classical and Enlightenment Drama</u>, <u>On Poetic Topic Modeling</u>: <u>Extracting Themes and Motifs From a Corpus of Spanish Poetry</u>, <u>Media Monitoring of the Past</u> (Topic Modeling of Swiss Newspapers)

Software: TopicsExplorer, MALLET, Topic Models with R, Gensim (Python)



The rate of apparition of the three topics related to sports, health and finance in Swiss newspapers Source: http://veniceatlas.epfl.ch/topic-modeling-on-200-years-of-swiss-newspapers-final-report/

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FURTHER READING

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As for the exercises, you can find the answers at this link

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