Library & Digital Humanities: New Vision | New Role | New Services 图书馆与数字人文: 新视野 新角色 新服务

聂华 NIE HUA 北京大学图书馆 PKU **2018 PRRLA Annual Meeting** @ Berkely, 2018.09.17



目录 Agenda

- -1 数字人文是什么? Digital Humanities?
- -2 数字人文在中国 DH in CHINA
- -3 图书馆的新视野 What can Library do?
- -4 图书馆的新实践与新服务 DH in Peking University

"我们需要更多的焊工和更少的哲学家" "学好数理化,走遍天下都不怕"

Humanities crisis?

- 2013.6 American Academy of Arts & Sciences: The Heart of the Matter: The Humanities and Social Sciences for a vibrant, competitive, and secure nation
- 2013.11.8 New York Times: As Interests Fades In Humanities, Colleges Worry
- 2017 Harvard Report: The Teaching of the Arts and Humanities at Harvard College: Mapping the Future
- **General Observation:**
- (1) 人数直线下降 (全美7.06%)
- (2) 就业困难引起流失
- 师生比例失调 (3)
- (4) 不断关停专业和课程的趋势....

"We need more welders and fewer philosophers"

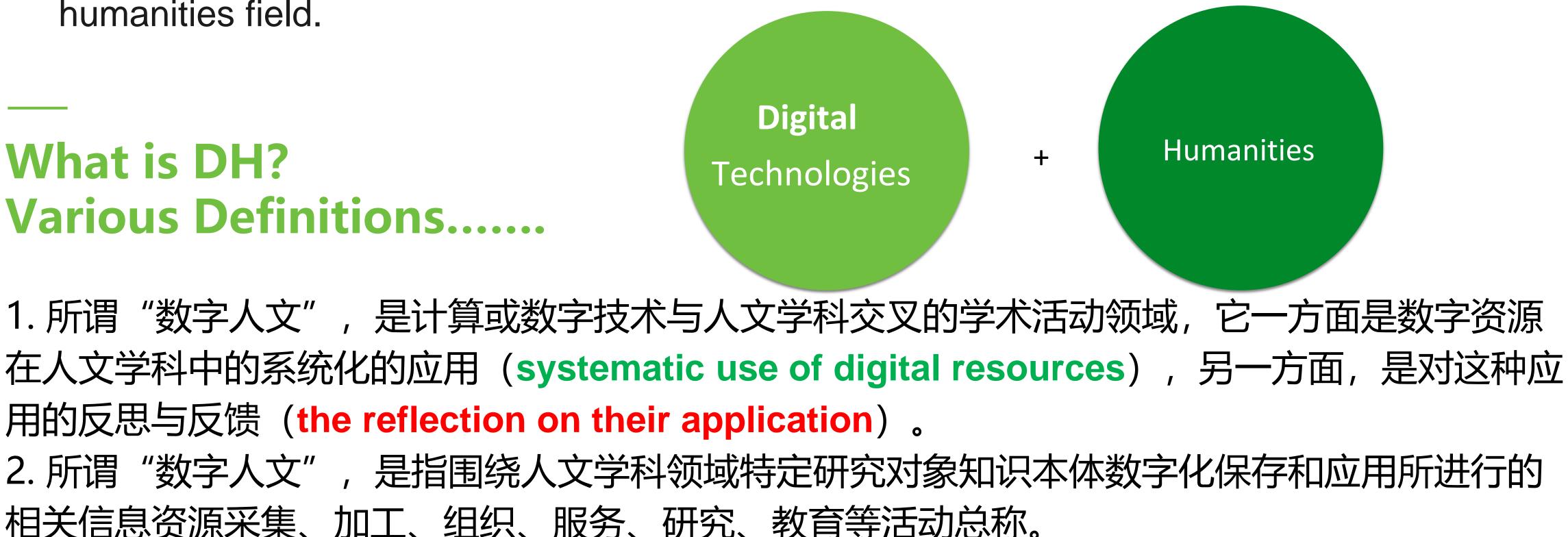
The Teaching of the Arts and Humanities at Harvard College: Mapping the Future



- 1. It is an area of scholarly activity at the intersection of computing or digital technologies and the disciplines of the humanities, it includes the systematic use of digital resources in the **humanities**, as well as the reflection on their application. **OR**
- 2. It refers to generally related information resources collection, processing, organization, service, research, education and other activities carried out around the digital preservation and application of the knowledge subject of specific research objects in the humanities field.

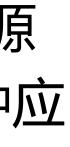


用的反思与反馈(the reflection on their application)。 相关信息资源采集、加工、组织、服务、研究、教育等活动总称。



Reference : Wikipedia







What can DH do? **General expectations....**

academic problem,

"Humanities Computing" "Digitized Humanities"

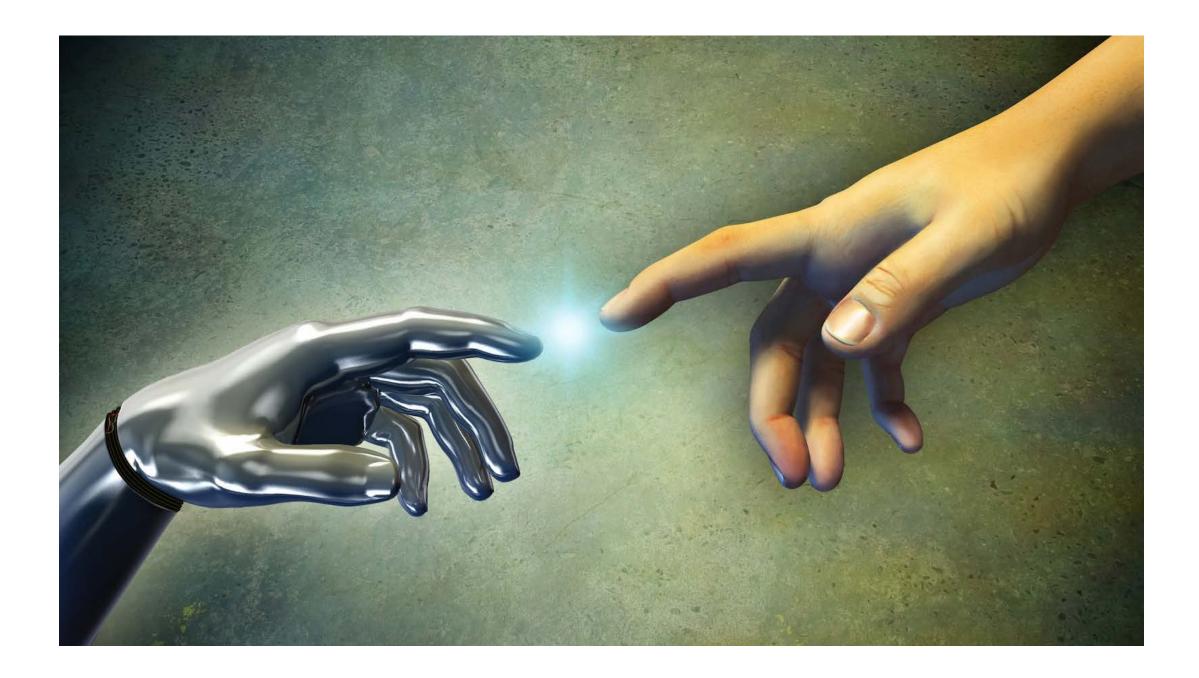
- "Humanities Computing" "eHumanities"
- "Digital Humanities" "digital humanitist"
- use new technology to facilitate new academic discoveries; attract scholars from different disciplines and interdisciplinary fields to the topics of common concern and the same



伊利诺伊州立大学香槟分校 约翰·昂斯沃斯 (John Unsworth)

What DH will bring to us? 一些共识: 数字人文可以带来什么?

- unknown to the scholars, and focus on high-level research
- **标注 (annotating)**: 句读、标引、注解、注释、笔记等活动
- texts in a matter of seconds, saving scholars time.
- social sciences into the humanities.
- 呈现 (representing) :



• 探索 (discovering) : Quickly locate the required resources; prompt to locate resources that are already

• 比较 (comparing) : Digital technology introduces the alignment and labeling of hundreds of millions of

• 取样 (sampling) : A large sample quantitative study that actually introduces quantitative research in the

阐释 (illustrating) : 既可让众说纷纭的问题快速达成共识,也可以让已经有共识的重新进入研讨阶段。





200+ DH Centers by 2018.05 @ CenterNet <u>http://dhcenternet.org/centers</u>

Over **90%** located in North Academic and Europe **3%** from Asia



An internati digital huma

centerNet

humanities

collaborativ

allied fields

cyberinfrast

new publica

individual D

sharing and

expertise. T

and Resou

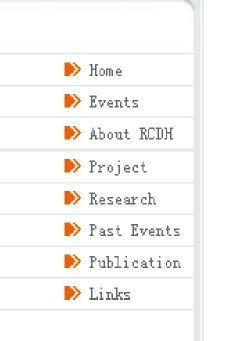
Centers, cei

isolated DH

broader s

Humanities.





數位人文研究中心 Research Center for Digital Humanities



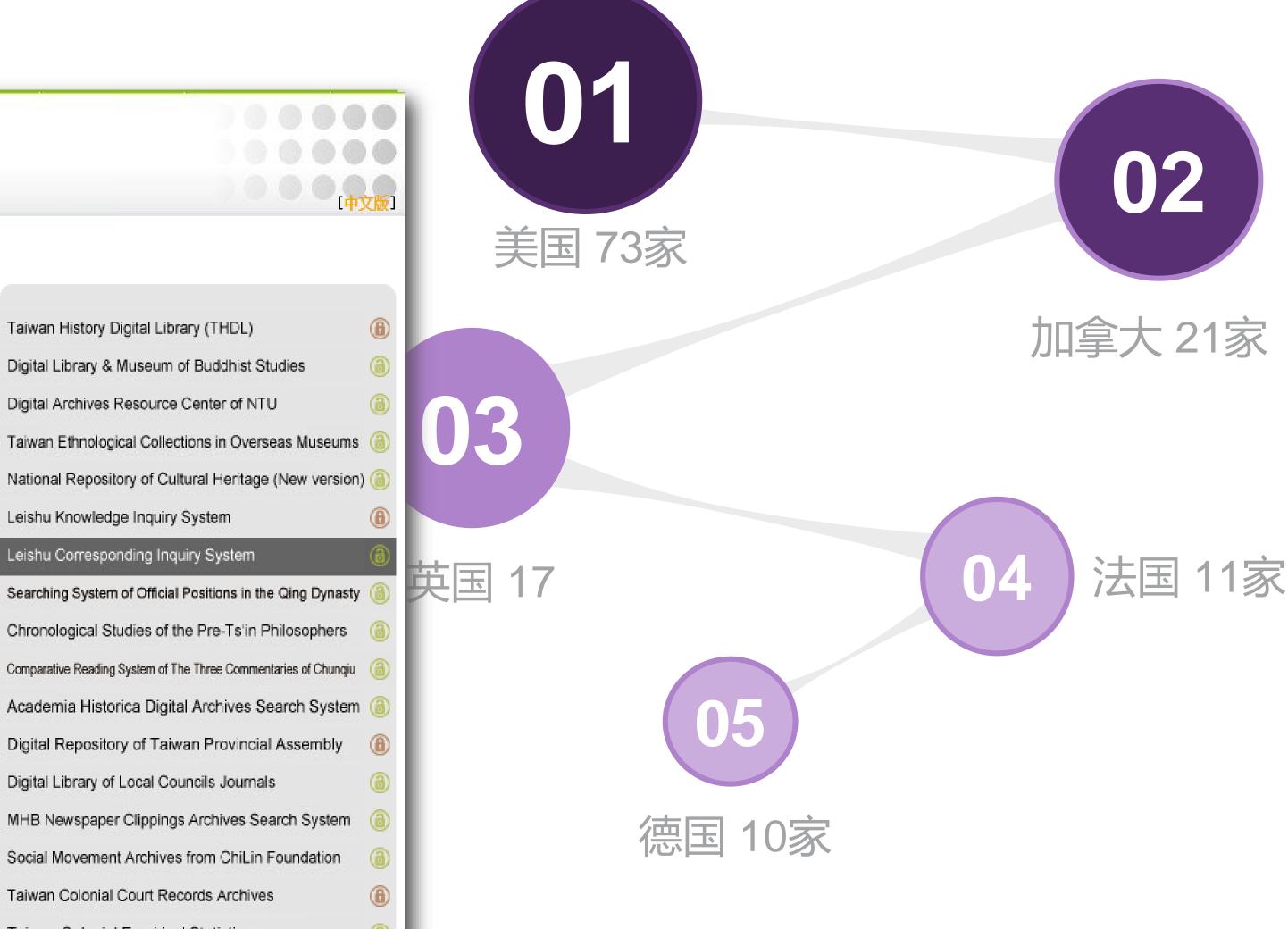
Leishu Corresponding Inquiry System

📵 Open Access

This system currently presents the "Yiwen Leiju Collection" and the "Taipin Yulan Collection." "Yiwen Leiju," completed in 624 A.D. with Ouyang Xun as lead editor, consists of roughly 1 million words. "Taipin Yulan," completed at the hands of lead editor Li Fang in 984 A.D., 25 years after the establishment of the Song Dynasty, is comprised of over 4,000,000 words. "Yiwen Leiju" and "Taipin Yulan" are both massive in volume though different in scale. However, both were commissioned by the imperial court at the beginning of the respective regimes and compiled thorough in completion, so they would provide the best examples for understanding Leishu as a genre and the information they Taiwan History Digital Library (THDL) Digital Archives Resource Center of NTU Leishu Knowledge Inquiry System Leishu Corresponding Inquiry System Digital Library of Local Councils Journals Taiwan Colonial Court Records Archives Taiwan Colonial Empirical Statistics

Read more

read more







DH Institutes or Teams in China 数字人文机构 / 团队建设

- Wuhan University DH Center @2011 **Department of Publishing Science**
- Peking University DH Group in @2016 **Peking University Library**
- Nanjing U. DH Center @2017.09 **School of History/Computer Science School of Arts**
- Many others.....



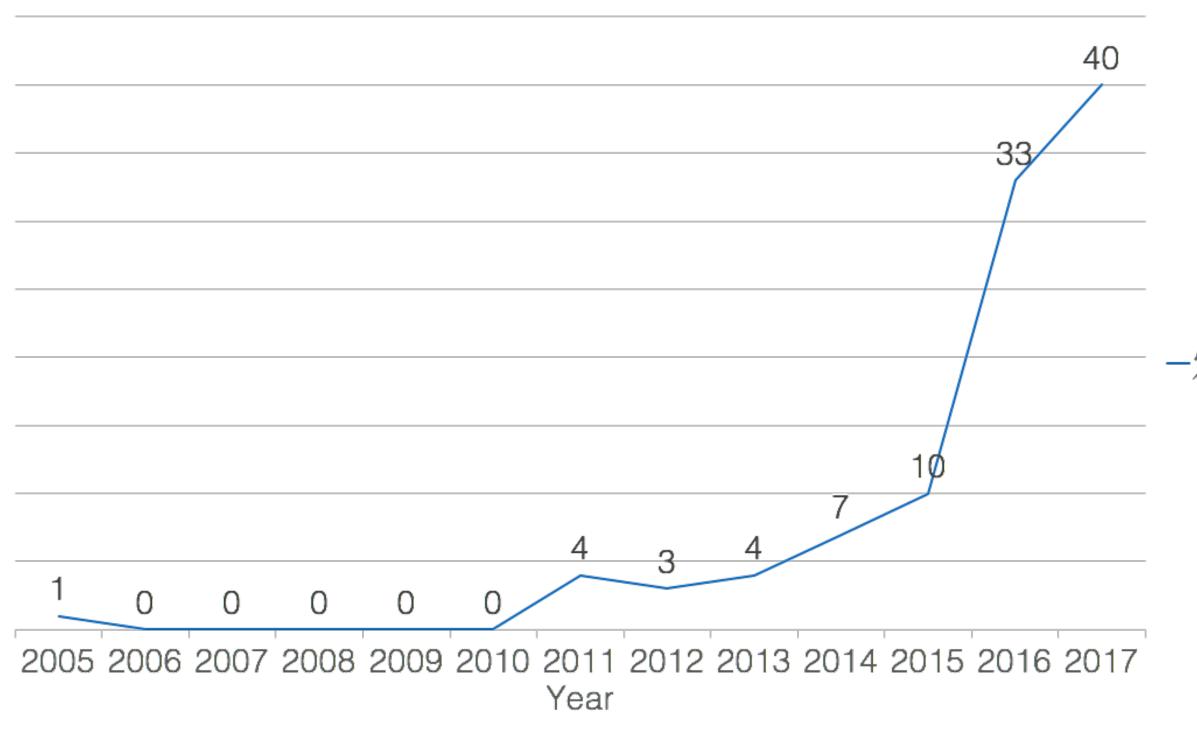




40 **DH in CHINA Just Started** 35 中国大陆数字人文研究起步 30 25 abe 20 20 15 10 Funded Projects: 5 2008: From 0 to 12 2017: reach 37 2018, back to 0.....

45

发表篇数



The trend of academic papers in Chinese published from 2005 – 2017 inflection point is the year 2015

CNKI: "数字人文"、"人文计算" in Title



Questions to ask and discuss continually with various stakeholders: How can the library serve the core missions of the Digital Humanities? What is you expectation and recommendation to the university libraries?

包弼德

Library and DH 图书馆与数字人文

Dialog with Peter Bol

@Institute of Advanced Humanities, PKU

Library, as a key DH stakeholder.



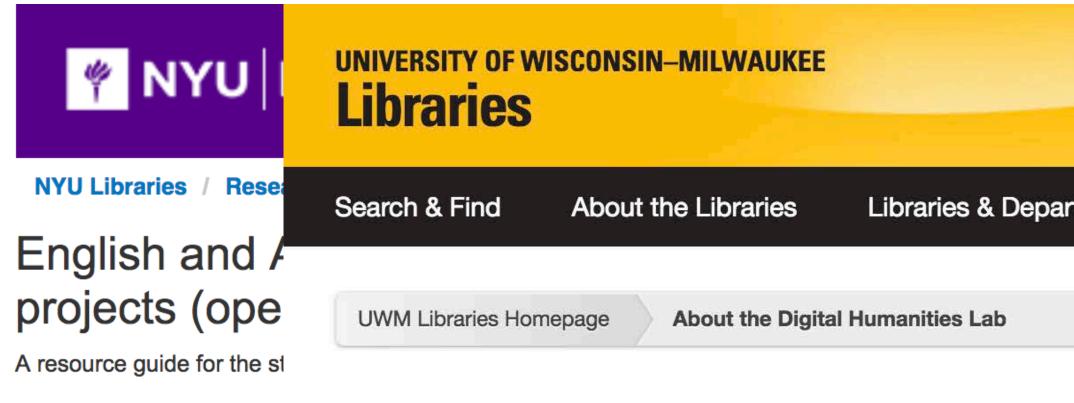
What should and can Library do?

- 1. popularizing relevant resources and tools via DH thematic information services
- 2. Advocate + Participate in DH cyberinfrastructure Development
- 3. Serve as a bridge for interdisciplinary cooperation
- 4. Acting as an incubator for digital humanities projects





1. DH thematic information services



About the Digital Humanities L



Home

Dictionari

Peopl

[cdh

About



搜集数字人文项目、工具,并结合人文 研究和教学需求进行信息的分类汇总、 翻译推介,深度加工和靶向推送。

	POWERFUL IDEAS	PROVEN RES	UTS	UNIVERSITY of WISC		
artments	Forms & Services	Giving	Help	Q		
						Search
ab					phies	
H	UMAN CULTIVATI			LAB. CONNECT	ES	Go



2. Advocate + participate Digital Humanities **Cyber Infrastructure Development**

- 数字化-》数字化图像-》文本内容-》数据 digitization -> image ->text -> data 元数据-》关联数据-》开放数据 **Metadata - Linked data - Open data**
- HathiTrust Research Center: from digital resources accumulation to research and practice of digital humanities projects
- CADAL in China: 370万页, 数字化资源 $\langle i \rangle I = 1$ $\langle i \rangle I = 1$ -数据化-智慧化





高諸 家子 Chinese Text Project

Welcome

[About the site]

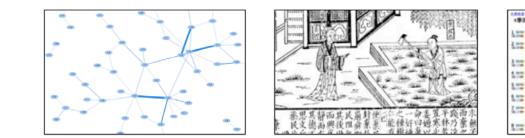
Font test pa

Help us

re-Qin and Han

Welcome to the Chinese Text Project homepage. The Chinese Text Project is an online open-access digital library that makes pre-modern Chinese texts available to readers and researchers all around the world. The site attempts to make use of the digital medium to explore new ways of interacting with these texts that are not possible in print. With over thir nousand titles and more than five billion characters, the Chinese Text Project is also the largest database of pre-modern Chinese texts in exist

You may wish to read more about the project, view the pre-Qin and Han, post-Han or Wiki tables of contents, or consult the instructions, FAQ, or list of tools. If you're looking for particular Chinese text, you can search for texts by title across the main textual sections of the site



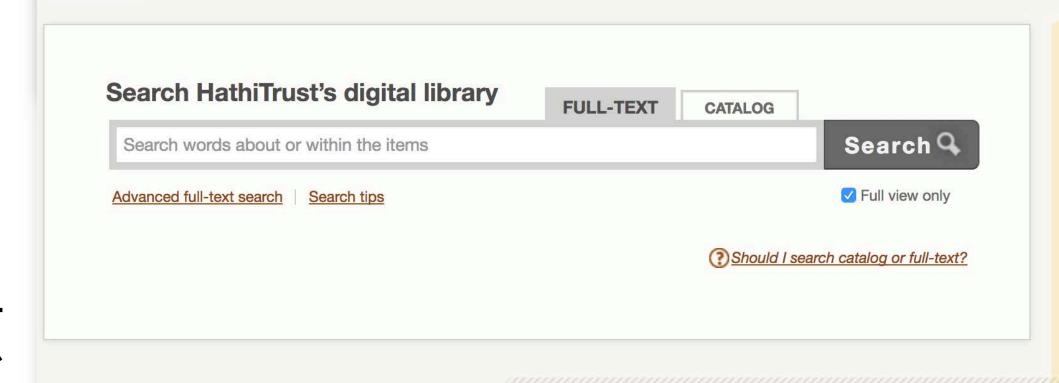
191
-
-
Industry Do
In Intelligence of the
The Resident Local
Personal Barlins.
To Bran of the T
In the of these a
there for he for
a decade a los
Includes: Name 20
San Disulting: A. P.S.
Auto Tax. The Art. of
The Acceleration of Co.

This site is provided as an open appreciated.

Latest additions

HATHI

igital Library



HathiTrust is a partnership of academic & research institutions, offering a collection of millions of titles digitized from libraries around the world.

WHAT CAN YOU DO WITH HATHITRUST?







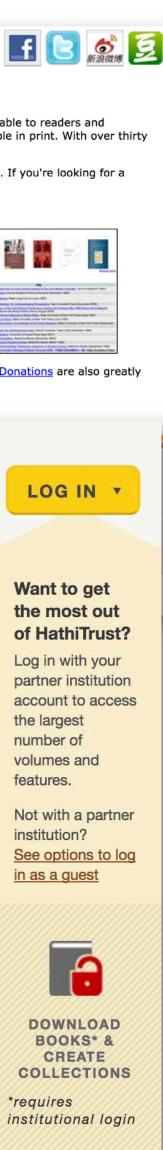
READ BOOKS ON THE GO

=

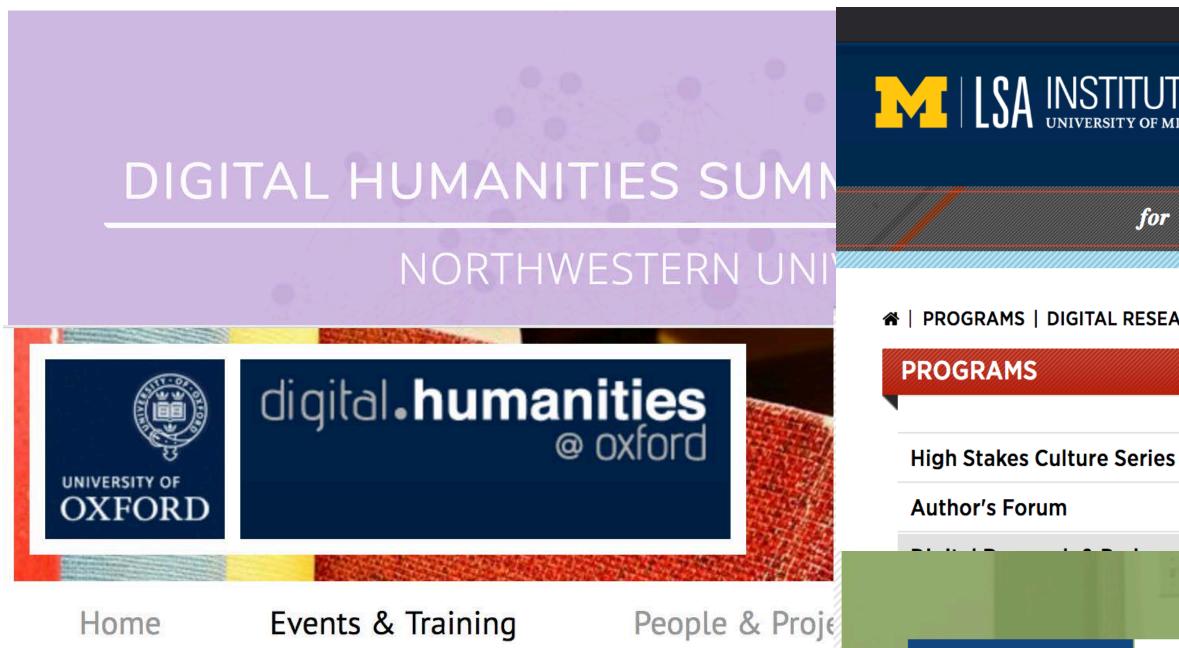
Take the library's books anywhere with our mobile website.

COLLECTIONS Explore usercreated featured collections.

ONLINE Read millions of titles online - like this one!



3- Workshop...Training...Networking... bridge for interdisciplinary cooperation



Home > Events & Training > Training > Digital Humanities at Oxford Summe

Digital Humanities at Oxford Summer Sch

The annual Digital Humanities at Oxford Summer School offers training to a including academics at all career stages, students, project managers, and pe Delegates follow one of our parallel workshop throughout the week, supple Please see the previous years listed on the right-hand side for examples. Be in an Oxford college on a first-come-first-served basis. Delegates can also jc

Fellowships Society of Scholars

NEWS + E

<u> </u>	Ondergraduate Students	Graduat	e otudents	Faculty	Com	inteninty		
for	Undergraduate Students	Graduat	e Students	Faculty	Comr	nunity		
	Year of Archives	& Futures	Programs	News and Ev	vents	Gallery	People	A
UNIVERSITY OF MICH	FOR THE HUMANITIE	:5			(Search		
		-0						
	U-I	M // LSA //	/ Departments a	nd Units // Majo	ors and Min	ors // Sup	port LSA //	LSA

PROGRAMS | DIGITAL RESEARCH & PEDAGOGY | **2018 DIGITAL HUMANITIES SUMMER INSTITUTE**

2018 Digital Humanities Summer Institute

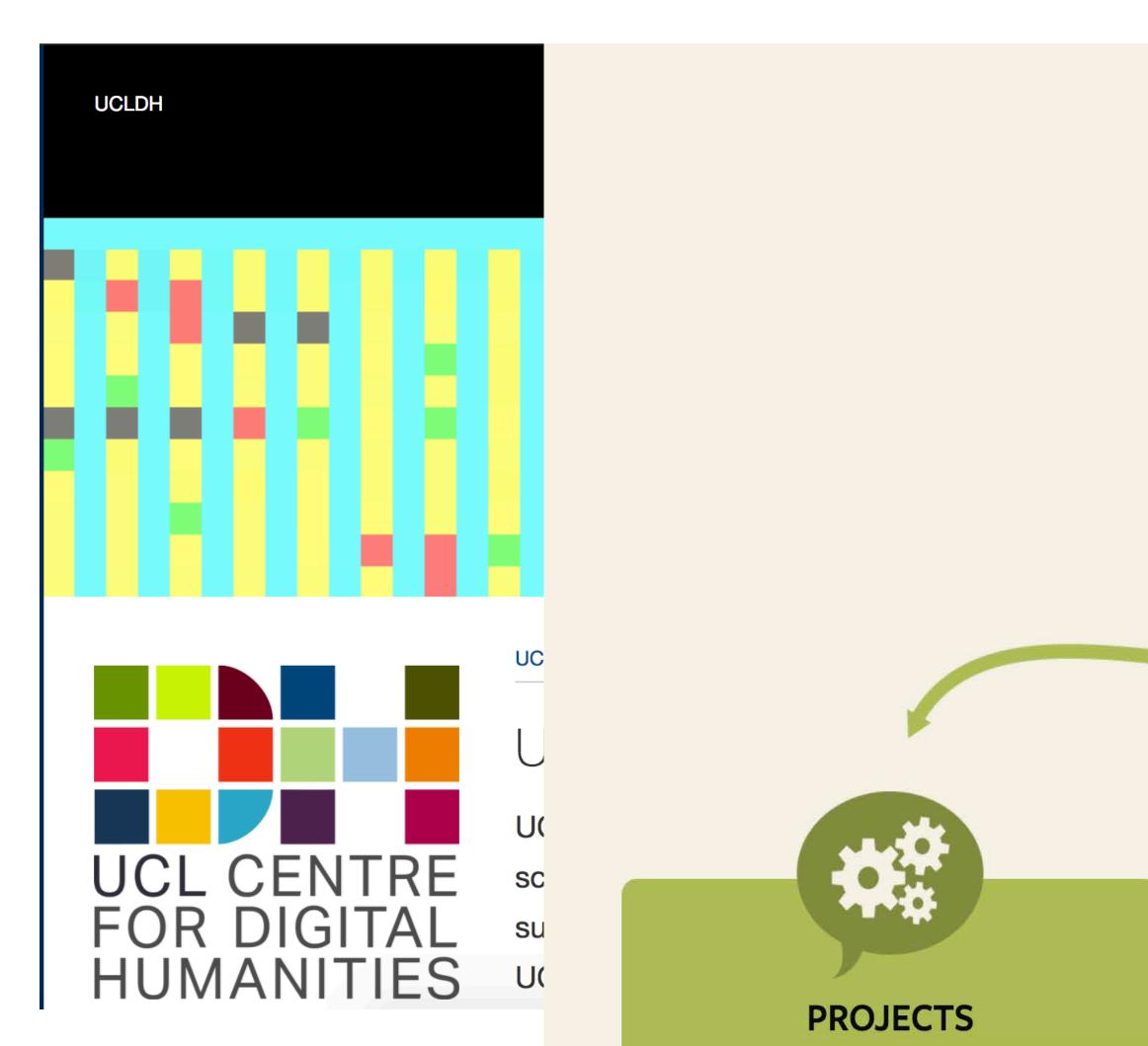
Now accepting applications from graduate students for grants to attend the Digital Humanities Summer Institute (DHSI) in Victoria, BC, Canada. The deadline for applications is October 6, 2017 at 5 pm.

VENTS	PROGRAMS	DIGITAL HUMANITIES	PUBLIC SCHOLARSHIP	APPLY FOR SUPPORT	ABOU	
1.1.4	Home > Program	s > Fellowships > Digital Humanities	Summer Fellowships			
	Digital H	Humanities Sum	mer			
	Fellows	hips				
	-	nities Summer Fellowships sup ects that use digital technolog				
		s and/or explore the historical implications of digital cultures				





4. DH项目孵化器 As an incubator for DH projects





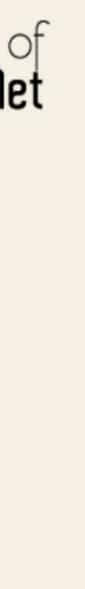
A collaboration hub.

E

COLLABORATORS

an initiative of **centerNet**

JOURNAL



1. DH Scholarly Communication Platform 建构"数字人文"国际学术交流平台

2016: 跨界与融合: 全球视野下的数字人文 The 1st PKU DH Forum: **Crossing Boundaries & Engaging Communities: Digital Humanities in A Global Perspective**

- **1. Digital Humanities Concept and Practice**
- 2. Linguistics and text processing, knowledge exploration
- 3. Historiography and deep excavation of large-scale historical materials
- 4. Art and data visualization



Top Ten Hotspots of Chinese Humanities and Academics in 2016 文化周刊 10.新工具还是新范式? "大数据"走上人文研究的前台 2 日本、第六人工学术研究所需要量、用品有支生用研究所、为其他高量人工学术要编数量量 #二個型書。並用書 通知人交界水園院的業業用量者。並且自定沒有人交界水路於局面局決定者。(2) (1)会出有600年後書希臘2個2個多月團了,10%年累中國人工学术十大各位,19出资金。

In 2016, several academic conferences such as **Peking University Digital Humanities Forum** focusing on various topics of DH and showed that technologies helps to solve the long-term and long-span historical problems and corrects the "fragmentation" tendency; while the open nature, crowd sourcing and other characteristics can promote the large-scale interdisciplinary collaboration of humanities research."

2016年度中国人文学术十大热点

他用云宫般在宫康远离。

"读问题,在果实成生生性中的变化出、数个化 计算机存在 计算机存在 化分子子 化化合金 化合金 BELLARS, DESCRIPTION OF A STREET

电压的复数形式机能定

・市場中国主義は人生を中た国際事業ない。 CONTRACTOR DATES 小餐業店"工具業業用業業務"製業表示研究 建筑教育公司的教育教育教育中的研究。 20 医骨骨间的 医骨子的 医鼻子的 化化合金 かなからわたったかな きだかいなかりゃ 小时关课课,上来是中国大场选出为现代定. 医多斯二氏病 法保护的法 化化物合物化物 第年時間期時間時間期期時に最大期間時間。 >>国人信用市化量用用量量法指量的主人量 2.5. 建築業になるためになるまで開発する際。

建筑的建筑建筑建筑建筑

#2+111++2++12===12+## こうとうちまたい たいのにありかき いたい ·教育的自己会会建築法的基礎器の運動者 seaching of and the second 电流电路电影器的第三字 医生产的 化化化合金化 A second star in the second star in

DARRENGAR MEADATINGS なったらままたま、ちっとうちったとなった 经济委托 电电子网络电路电路电路电路 法。 产生的人物 由于中国的主人生中心 新闻经常。 10.11的电路线,人工和金融合金的电路运行, THE R. P. LEWIS CO., LANSING, MICH.

林田縣島, 空田田谷社 由地電用品 医偏离中间的现在 计图图电路路 与此地理,此"影响"为教徒 一、警察并且这些事情的问题:"你们 ##日田田田, 日本学習で、出来たら 一方十二副子解的表示的工作的 CALL AND AND ADDRESS OF ADDRESS 医静脉脉搏 法承担工作一定法规语 医马克氏氏病 化酸盐化物酸酸盐化物盐酸盐

电正常器电影影响和分子电子传输动动动 立法的产品的现在分词 计下语分析 医胆道的复数形式 计算机算机

1.(用用用用干量的代表)

2.1. 建设建筑合成工作运行建筑、建築的运行优化设计 したなる ひとがたまえるおうがたちがあかかったのかん 建立的 法不知道的财产的现在分词 医胆道氏系统细胞 建分散 ※由了法書书写中語書代書語書は、法会考望言語言書を描 國際,使用的局部總法,並且就是是關係,這些了這些要求,這些的 医弗伦氏试验 化化物物 医结合体的 化过分加强 化胆酸盐 医白白 法法律某些法法公司的保留性法法律保留证书 的复数经济性和公司的开始通知法公司的法法法律 法推荐的 ALC: NOT THE R. P. LEWIS

建基因过度等用重量出来等表定,公司中方学家会大量 电影影影影像影像影响 医子宫外的 医马克曼德氏氏 化化 · 正会学, 由然不能了于描述的影响会和社会生活法, 其某法人, 建立生态支援一方案等效问题,通常设备专家的建筑集美的 · 化二氯化盐、氯化化乙基化物 由非国际生活者--化温温和能源的

化氨基丙基基 计外部数据操作器中的第三 中非严重者注意成为课,更成为会社会属于将文化事件,通 · 杨秋秋· 花玉田, 花果花*, 田市区玉田市住地市市- 村村, 北下 · 通信中央上集会会出了数、2010通信用印度了合规的工作路。 建于法国与人口共同成为法律法国的法共和国"公共考试"的 医骨髓 计算行系统系统管理系统合体系统公司法 法联合法律师 合于水产果实和由工作规定, 接帶 经营用公司公司 电子上

おおとおおとうのちた、システムの日本の会会にしませた 第年後後,人業期間代表法律において、事業等年の会ど業長であい。 医普尔斯氏学 人名德 网络人名英格尔尔姓氏法法法法语 化化物理试验检测试 人名德国布拉尔姓氏法法拉尔姓氏法法法住所名称 医静脉间隙 人名英格兰姓氏 化乙酰乙酸 医子宫的 化合金合金 化合金合金 医长宫治海绵炎 经可指承入工具委任人推销委任约遵守有限法 法法,你们在原来的新兴的方法也可能是他们正在不能的人,个法的 [3] 我,你就是我来自我来说我,你了你你们们不知道你说。"他来 ALC: U.S. B.

13 I 3

2017: 互动与共生: 数字人文与史学研究 The 2nd PKU DH Forum-Interaction & Coexistence: **Digital humanities and Historical Research**



270+ attendees scholas from all over the

1. 数字史学与量化史学 2. 数字工具与史学研究 3. 史学与历史文献数字整理 4. 史学研究数字环境与网络基础设施





2018: 孵化与实践: 需求驱动下的数字人文项目 The 3rd PKU DH Forum-Incubation and Application: How digital humanities projects Cater to Academic Needs

cooperation in

- 1. School of Philosophy
- 2. Institute of humanities and social sciences
- 3. School of Information Managment
- 4. School of History
- 5 CRDR China Groun



 Digital Humanities teaching and research
 Practice and Reflection on DH Project Globally
 Digital human technology, tools and infrastructure construction
 Digitalization and representing of humanities literature and materials



●●●●●中国移动	Ŷ	上午11:50		🕇 ∦ 75% 🔲 י	●●●●○中国移动	Ŷ	上午11:51		┦ ∦ 75% □ ₽	●●●●○中国移动	Ŷ	上午11:50
く返回	群	ƙ成员(5 0	0)		く返回	君	ば 成 员 (50)	0)		く返回		群成员(50
朱 夫子	聂华	刘素清	北京大…	杨楠楠	黄 志敏…	月栖梧	派 玲	周从吾	王 军	azure	qiqi	北大…
地灵	议 丹	前 通	张丽静	至 近	张力元	包永辉	夏 王宁…	社会学	家海超	边茜+	蒋薇	************************************
赵发珍…	派 咪的	赵 飞	永 雨勝	武 政(P	挖土d	蔡金英	马 拯	尚闻—	天边一叶	別立谦	医医医	E E
顾烨青…	() 闫伟光	張寧	李MT	赵小龙	李斌南	刘实	苏芃	派 清华大	家	张鑫 敏	北大曾	北科大…
HXF	安 乔儿	张弘扬	王晶晶	室 平~	于凡St	洪一梅	irene	¥ 肖奕 –	广西大	日晨	采 姬芳…	任小玫
记忆时光	道远云来	送 爾	設雪	王媛	三 一帆	周义刚	()) 张弛宜	陈琦	关 正清芬	邱源媛	Matt	非凡
舒健	张磊	马悦图	汤元宋	高树伟	* 突 き 秋 文秋在线	拥抱你	陈晨	劉昭麟	爱如生	王玮	南开大	
				N.		T			Times and			

DHers Social Network: PKU WeChat Group 数字人文国际社交网学者网络

800+ scholars, Researchers, Librarians, Archivers, And other stakeholders of DH from all over the world



















1 🕴 75% 🗔

TA







●●●●○中国移动 令

钱国富...

派 高瑾-...

く返回









古联-...







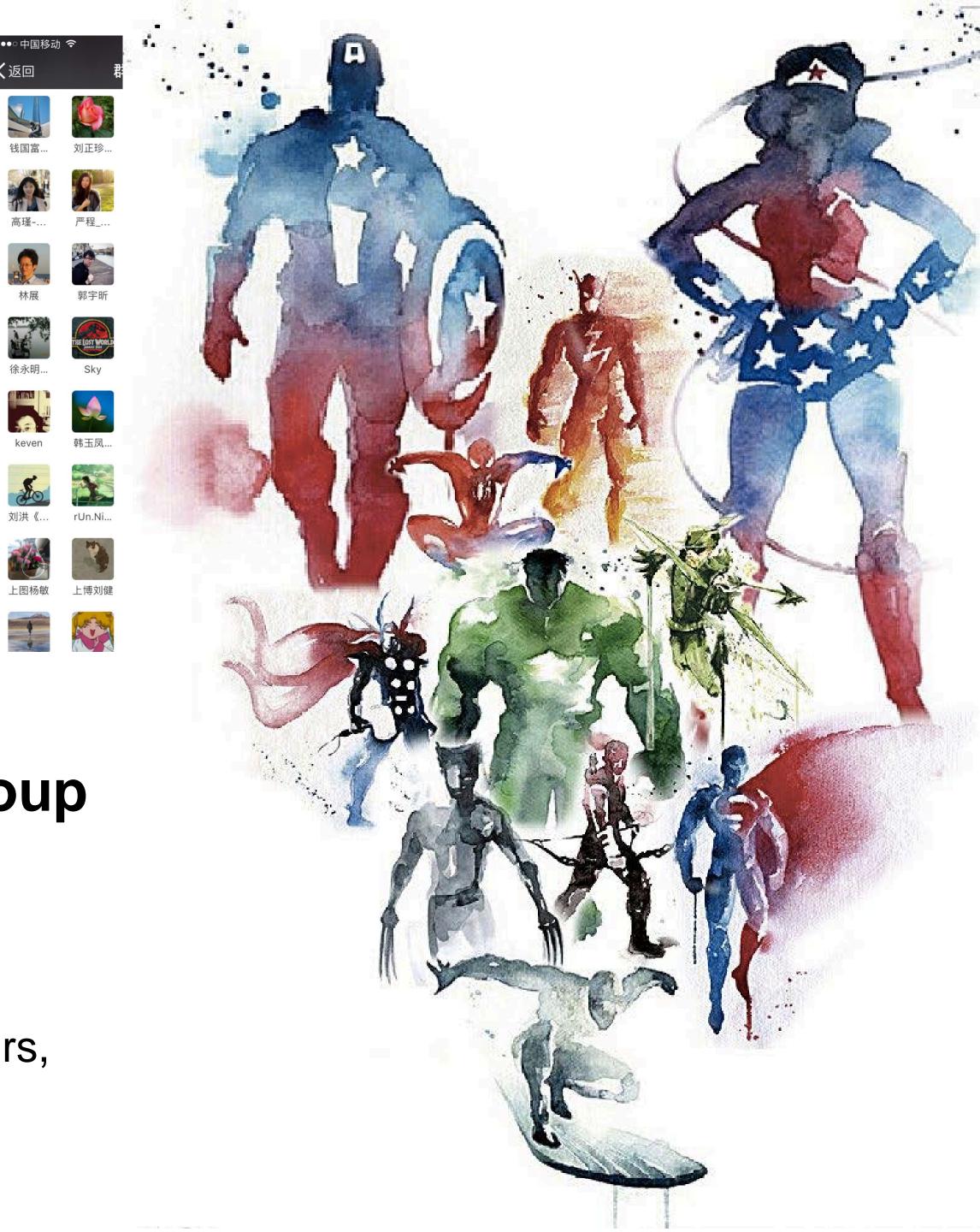












DH Social Media

Linguistic and Cultural Hegemony in the **Digital Humanities**

UCL Centre for Digital Humanities

Simon Mahony@ **UCL Center for DH**



- WeChat groups
- Facebook
- YouKu



DH social media China

- 数字人文1群|DH Group1, - 500 members - 数字人文2群|DH Group2, - 310 members – DH Global - 18 members

- 數位人文研究 (Digital Humanities) - 280 members

- Search: Digital Humanities, 数字人文 (not variants)

History Bytes: Perspectives on the future of DH **Ben Alexander**



Education **Research Center** the future of DH

3. Dhers' Academic Lectures 数字人文学者专场学术讲座

- 1.Susan Schreibman, Maynooth Uni., Digital Humanities: New Methods, New Publics, New Responsibilities; 2.Peter K. Bol, Harvard, Digital Humanities in Higher
- 3.J. Stephen Downie, UIUC, Digital humanities using both closed and open data: Use cases from the HathiTrust
- 4.Simon Mahony, UCL, DH in UCL
- 5.BenAlexander, Harvard, History Bytes: Perspectives on
- 6.黄一农, Taiwan Tsinghua U., e考据与文史研究的新机遇







GIS空间分析 **Social Network Analysis GIS** Analysis

Workshop & Curriculums

- 1. Research skills and methods of DH
- 2. Social Network Analysis
- **3. Text Processing**
- 4. GIS Analysis
- 5. Global DH Projects and Trends

社会网络研究

Text Processing 文本处理与分析

Faculty, Librarians and Students, In and out of the university

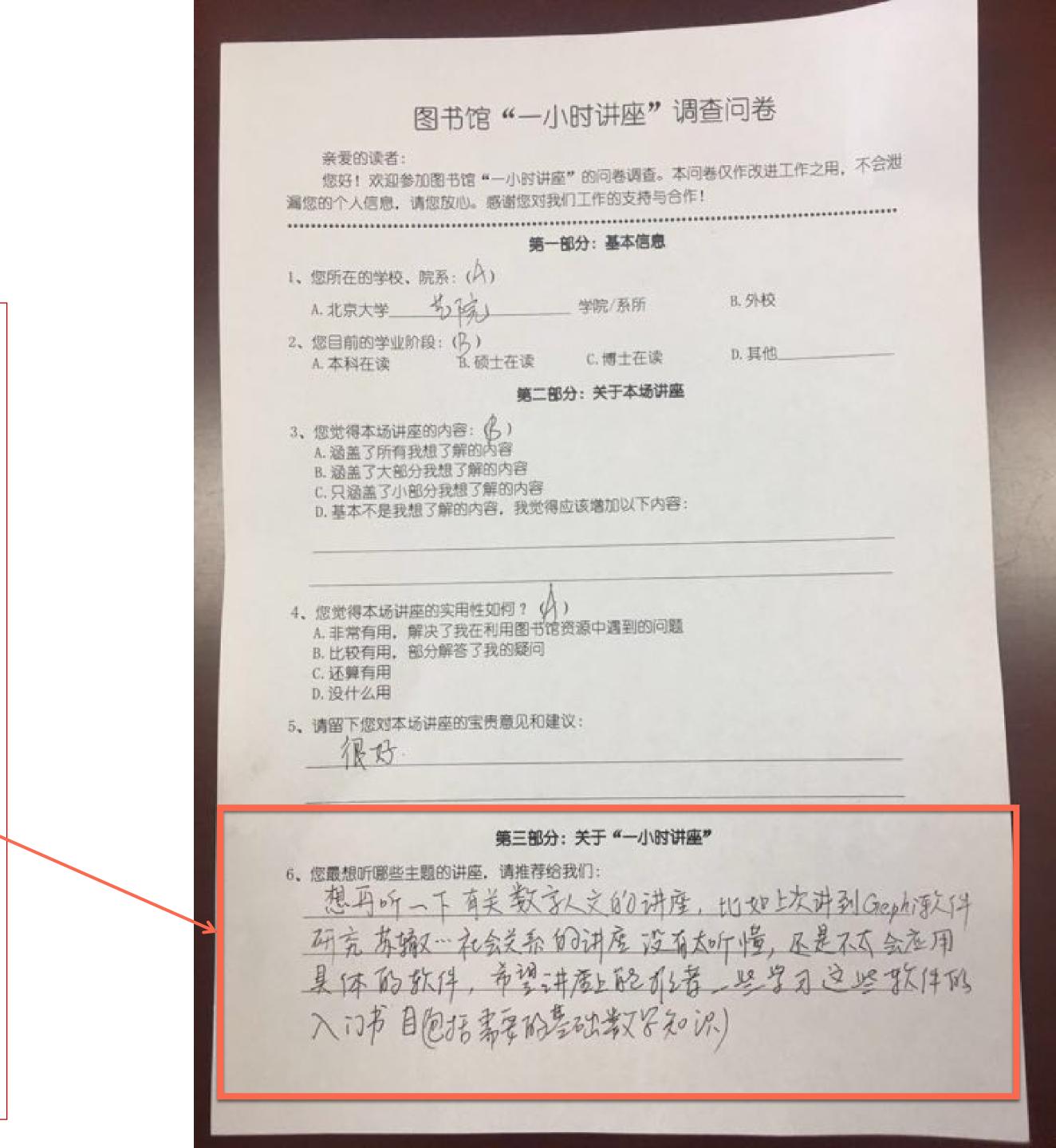
Disciplines: Humanities, Information Management, Environment, Arts, etc.



Workshop Feedback 数字人文工作坊反馈

if there was chance to attend the DH lectures again, such as the one on social relations Study of historical figures using Gephi Software. I still did't got it and I still don't know how to use the specific software. It would be great if could recommend introductory books on learning these software and basic mathematics & statistics skill needed.

A Ph. D @ School of Arts



PKU Digital Humanities Guidelines

Columns :

- Conceptions about DH
- DH information from all over the world
- DH news and information in PKU
- SNA Special Topics
- DH Tools
 - Chinese Segmentation Tools
 - Google Earth Geo Space Analysis
- DH Experiences from DHers
- DH Projects incubator



(第1期 创刊)

圭	编:	朱	强	聂	华	
执行主	É编:	朱本	\$军			
编	委:	崔涟	媛	罗明	朝程	
		王5	贤	朱	玲	
		邹洀	明	栾伯	軯	
		钟	迪	徐清	铂	
		张	宁	孙	超	
		张刀	珈	刘	丹	
顾	间:	徐ナ]恒			
联系把	设稿:	bjzl	ıu@	pku	.edu.c	m
		010	-62	7535	03	
印	刷:	北方	(大	学数	字加工	中心

目录

卷	* 首	
	发刊词	1
對	这字人文概念	
	跨界与融合:全球视野下的数字人文	
	——首届北京大学"数字人文论坛"会议综述	2
各	国数字人文动态	
	中国数字人文概况	8
	澳大利亚数字人文概况	11
	爱尔兰数字人文概况	13
	欧盟数字人文协会概况	14
	牛津大学数字人文概况	17
	哈佛大学数字人文动态	19
北	大数字人文动态	
	北大DH项目	21
	学术会议	21
	学术交流	22
	DH课程与工作坊	23
本	期专题	
	人文学者如何对历史人物社会关系网络进行分析	24
對	这字人文工具	
	中文文本分词工具NLPIR	30
	地理空间可视化分析工具Google Earth	32
D	H心得体会	
	利用数字工具破译汉砖铭文	34
D	H项目孵化器	
	图书馆"民国北大人"项目寻求合作	36
D	H项目孵化器 "北京大学数字加工中心"寻找对接项目	37
系	列活动	
	北京大学图书馆2017年"数字人文"系列活动	40

Special Collections

Yenc

(1922

- 2000: PKU Scholars 2001: PKU Thesis and Dissertations • 2001: PKU Lectures Online 2003: Ancient Rare Materials Database Chine • 2004: Beijing Historical Geography Database 2007: University Digitization Center 2010: Dissertations of Yenching University 2011: Pre-1949 Periodicals and Newspapers





- Grouping: according to specialized collections or subjects

2014 PRDLA Annual Conference, Macau University **Open Up Hidden Special Collections:** Survey Response Summary and Observation

• Open or not open? A willingness of open but still keep closed.....

 Collaboration or stay alone: A willingness of collaboration but lack of actions. more collaboration between various stakeholders and more creative production and business models, not to say industries and libraries, libraries with libraries, consortiums with consortiums, etc.

• Discovery: a COMMON platform for searching vs. a PRIVATE one

Observation and perspectives

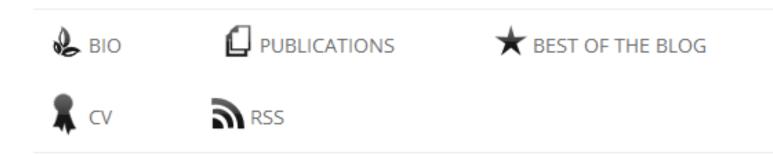
What next? 数字人文的制度化 **Institutionalizing Digital Scholarship** or Anything Else New in a Large Organization

3 critical elements of institutionalization Everyone prefers to talk about *innovation*, rather than institutionalization, but the former can only have a long-term impact if the latter occurs. What at first seems like a dreary administrative matter is actually at the heart of real and lasting change.





Dan Cohen



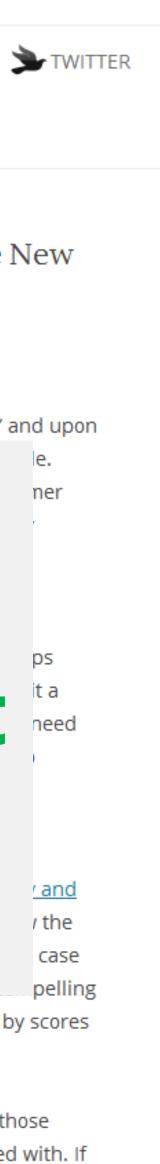
Institutionalizing Digital Scholarship (or Anything Else New in a Large Organization)

November 29, 2017

I recently gave a talk at Brown University on "Institutionalizing Digital Scholarship," and upon

vision of its founder and the careful pursuit of opportunities related to that vision by scores of people over many years.

If you wish to digest the entire subject, please watch my full presentation. But for those short on time, here are the three critical elements of institutionalization I concluded with. If all three of these challenging processes occur, you will know that you have successfully and fully integrated something new into an organization.



What should and can Library do?

4. Acting as an incubator for digital humanities projects



Institutionalizing in library & in University Fostering Research-oriented DH Projects DH Cyber infrastructure Development

10110010000

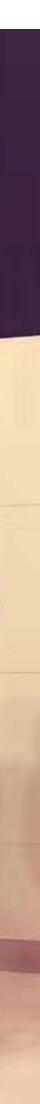
Openness, Collaboration



PKU Library Digital Humanities Dream Team 北京大学图书馆数字人文团队

●●●●●中国移动	?	上午11:25	◀ 券 63% 💷•					
く返回	く 返回 聊天信息(17)							
朱 夫子	xian	罗鹏程	夏 华	haiyuan				
地灵	邹	梁伟平	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	張寧				
小超	彩 师	前 刻丹	新新新的 新新新	lsx				
My favourita La good 建 good 舞小熊	吴爱芝							
群聊名称		北大图	图书馆数字》	人文小组 >				
群二维码				$\frac{10.26}{50.05}$ >				
群公告 有时间的筒	子们下来参	\$会吧		>				





My Question to You All: How can the library serve the core missions of the Digital Humanities? What is you expectation and recommendation to the university libraries?

TE DE IN MI HEALT



谢谢! Thank you!

-

1.4

35

ant^a

. ...

1

e.

2

100

24

100

-

1994

-

10

16

200

-

1.1

100

-

and a