

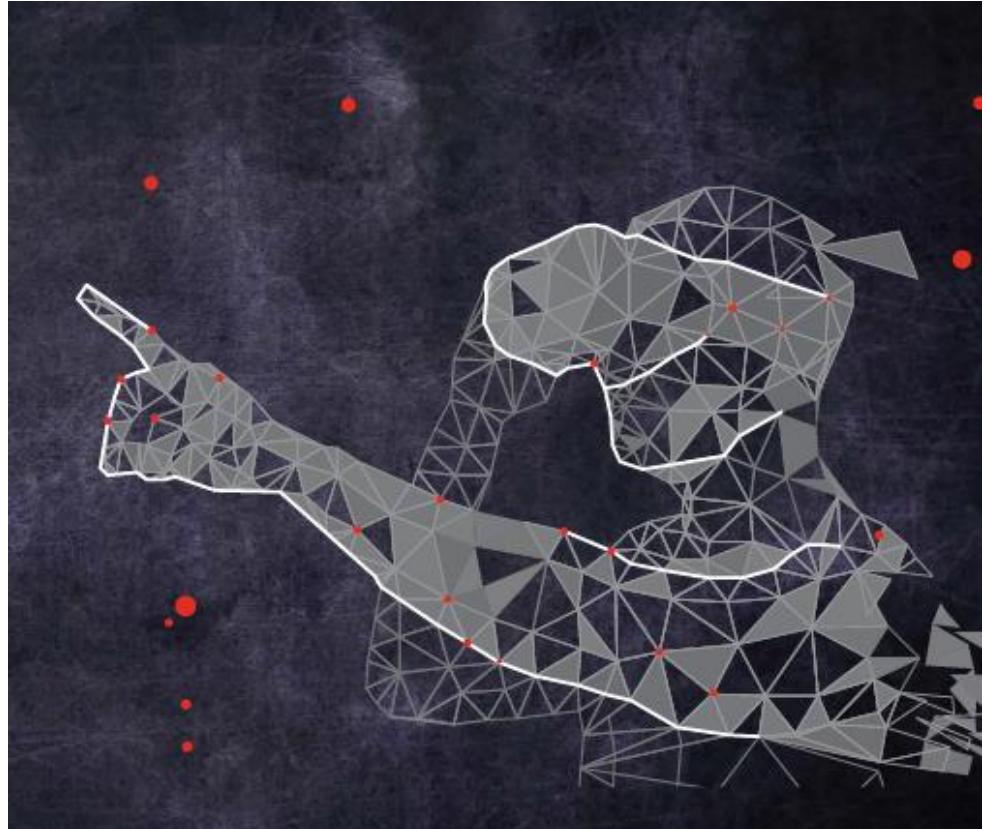
Knowledge Hotspots:

Digital Scholarship Centres

Andrew Harrison

*Professor of Practice
University of Wales
Trinity Saint David*

*Director, Spaces That Work Ltd
aharrisonuk@hotmail.com*



Changing nature of scholarship

- Changing technologies
- Changes to researcher expectations
 - Contact any time, anywhere
 - Store, personalise, manipulate, repurpose, share
- New research methods
 - Multi-authoring
 - Cross disciplinary research
 - Collaborative PhDs
 - Cross border research
 - Multiple formats and multimedia outputs
 - Importance of ephemera as well as formal documents
- Proliferation of digital information
 - Large scale digitisation
 - Born digital information
- Blurring of boundaries between academic and business worlds



The learning landscape

SPECIALIZED LEARNING SPACES

Tailored to specific functions or teaching modalities

Limited setting types: formal teaching, generally enclosed

Access:
Embedded, departmental

Tend to be:

- owned within departments, subject specific
- involve specialized equipment
- require higher levels of performance specification
- often higher security concerns

GENERIC LEARNING SPACES

Range of classroom types

Range of setting types: formal teaching, open and enclosed

Access:
In general circulation zones, access by schedule

Tend to be:

- generic teaching settings
- often limited in flexibility by furnishings
- used when scheduled

INFORMAL LEARNING SPACES

Broad definition of learning space

Wide range of setting types: informal and formal, social, open and enclosed

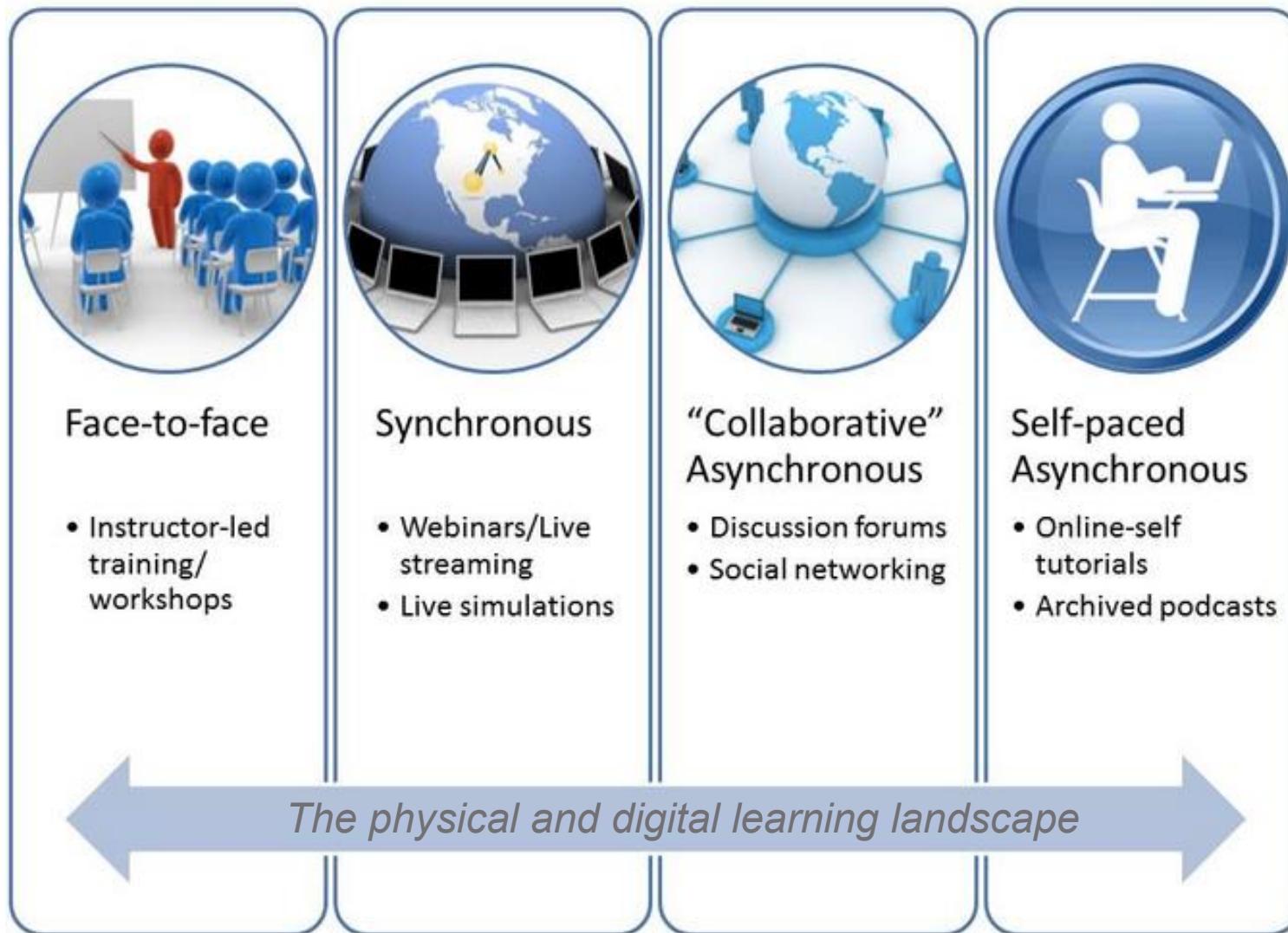
Access:
Public, visible, distributed, inclusive

Tend to:

- encompass richer range of settings
- allow choice
- be loose fit, unscheduled
- work as a network of spaces rather than singular settings
- have food!

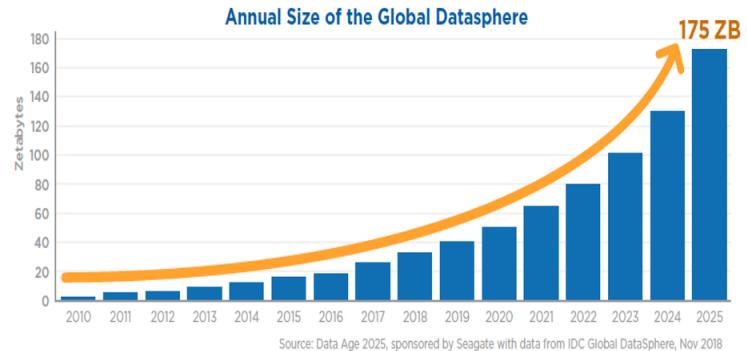
Source: DEGW, 2002

Synchronous and asynchronous learning



Proliferation of digital information

- By 2025 the amount of digital data generated each year is projected to reach 175 zettabytes (ZBs)
 - up from 33 ZB in 2018
- A zettabyte = one trillion Gigabytes
- *By 2020, it's estimated that 1.7MB of data will be created every second for every person on earth* (Domo.com)
- How do we help students to navigate this digital world?
- What sort of learning experience should we provide that embraces the digital proliferation : blend of technology & space?
- How will researchers be able to harness this data to solve real world problems?



Digital Scholarship and Data Science

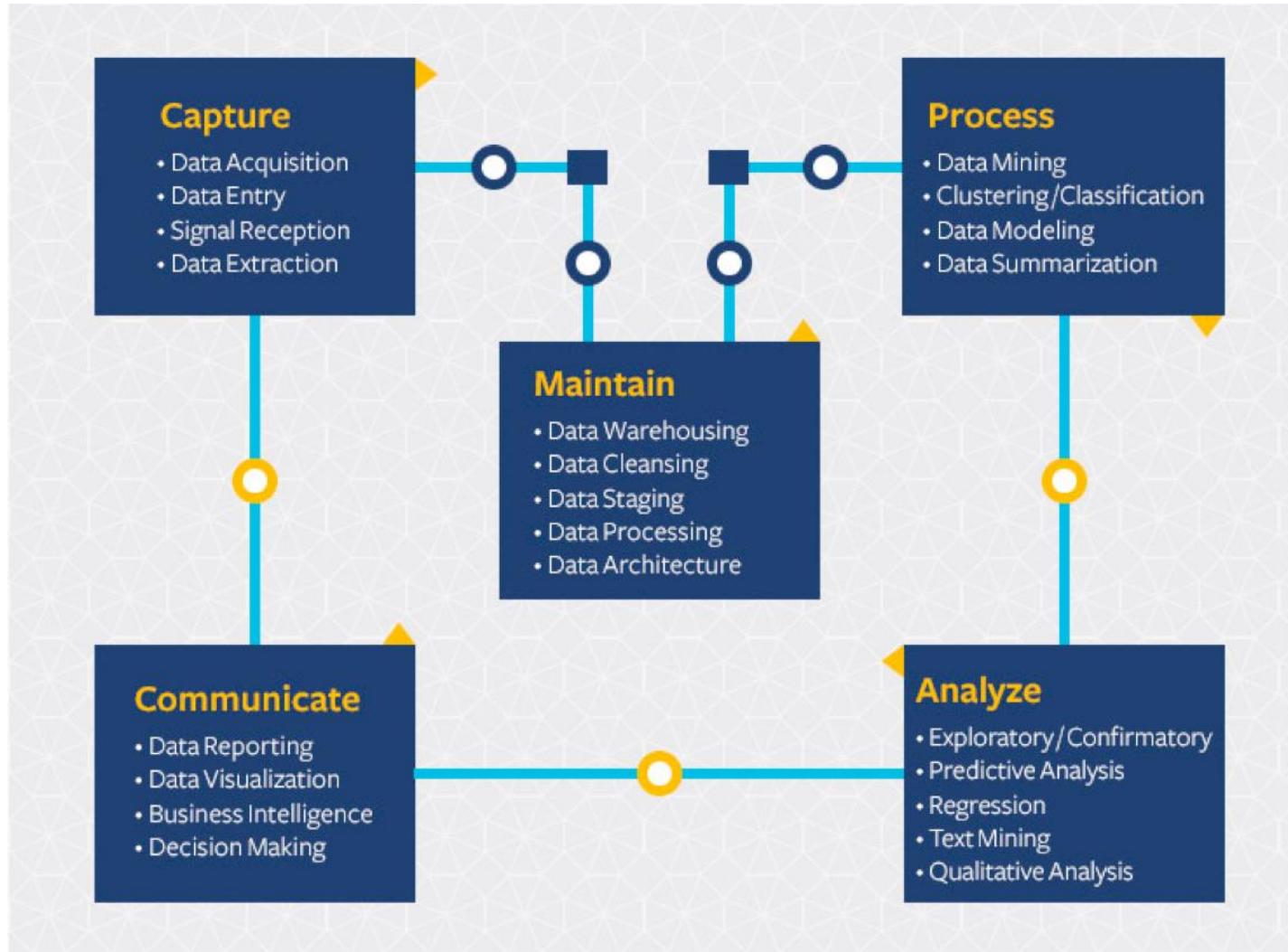
- ***“the use of digital evidence and methods, digital authoring, digital publishing, digital curation and preservation and digital use and re-use of scholarship”***

Rumsey 2011

- Digital tools and data sets and methods increase access to material and generate new possibilities for interactive use and re-use by researchers and students
- New forms of hybrid and multi-modal scholarship
- Digital Humanities also exploring social and cultural issues of digital transformation



Data Science Life cycle



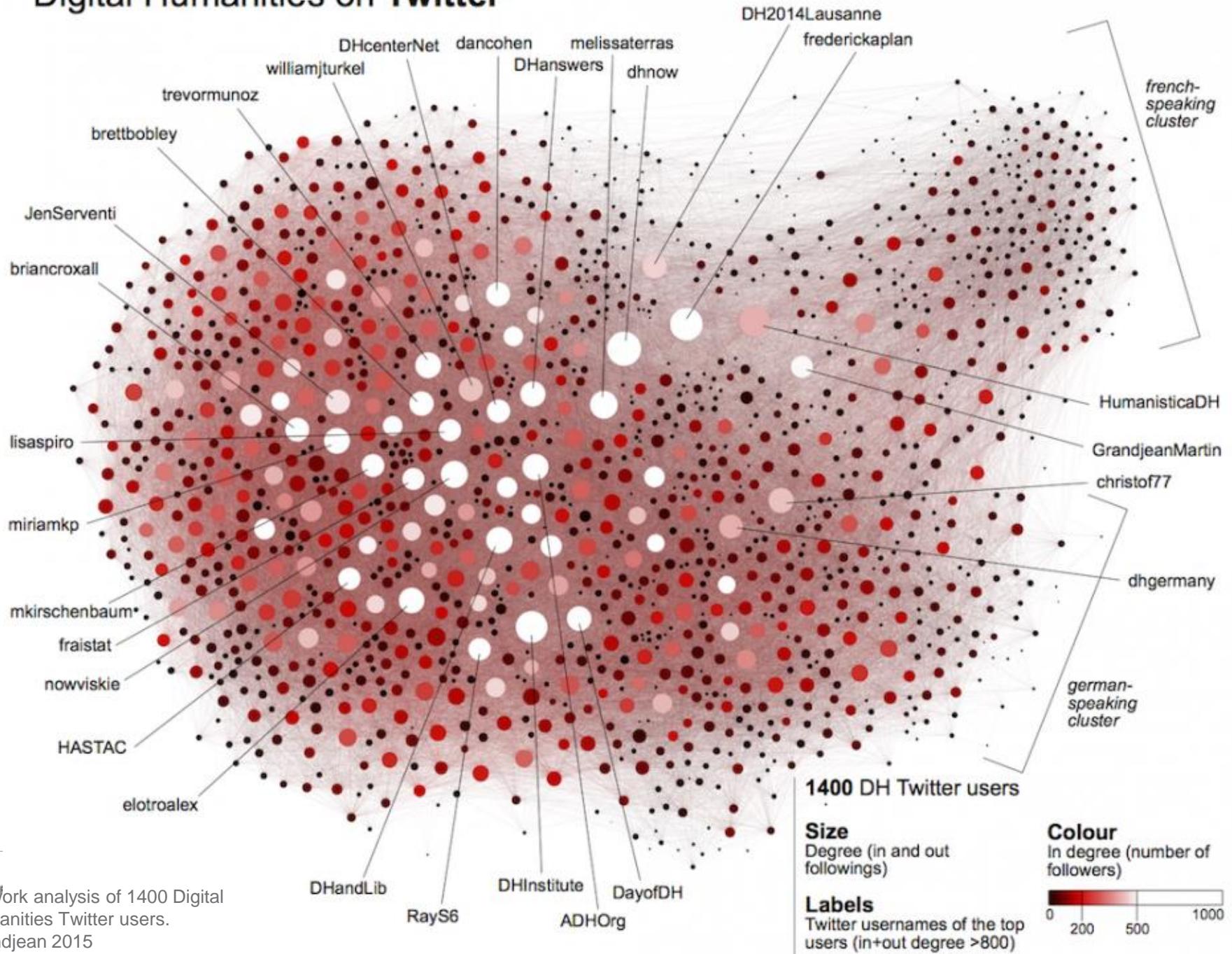
Source: Berkeley University 2019

Impact of digital scholarship on learning and teaching

- Access to vast repositories of knowledge disrupts traditional classroom practices
- Opportunity to include different resources in the teaching, to use different pedagogic approaches and to reach different audiences
- *Student as consumer of information as well as producer of information*
- Teaching **digital fluency** – ability to leverage digital tools and platforms to communicate critically, design creatively, make informed decisions and solve problems



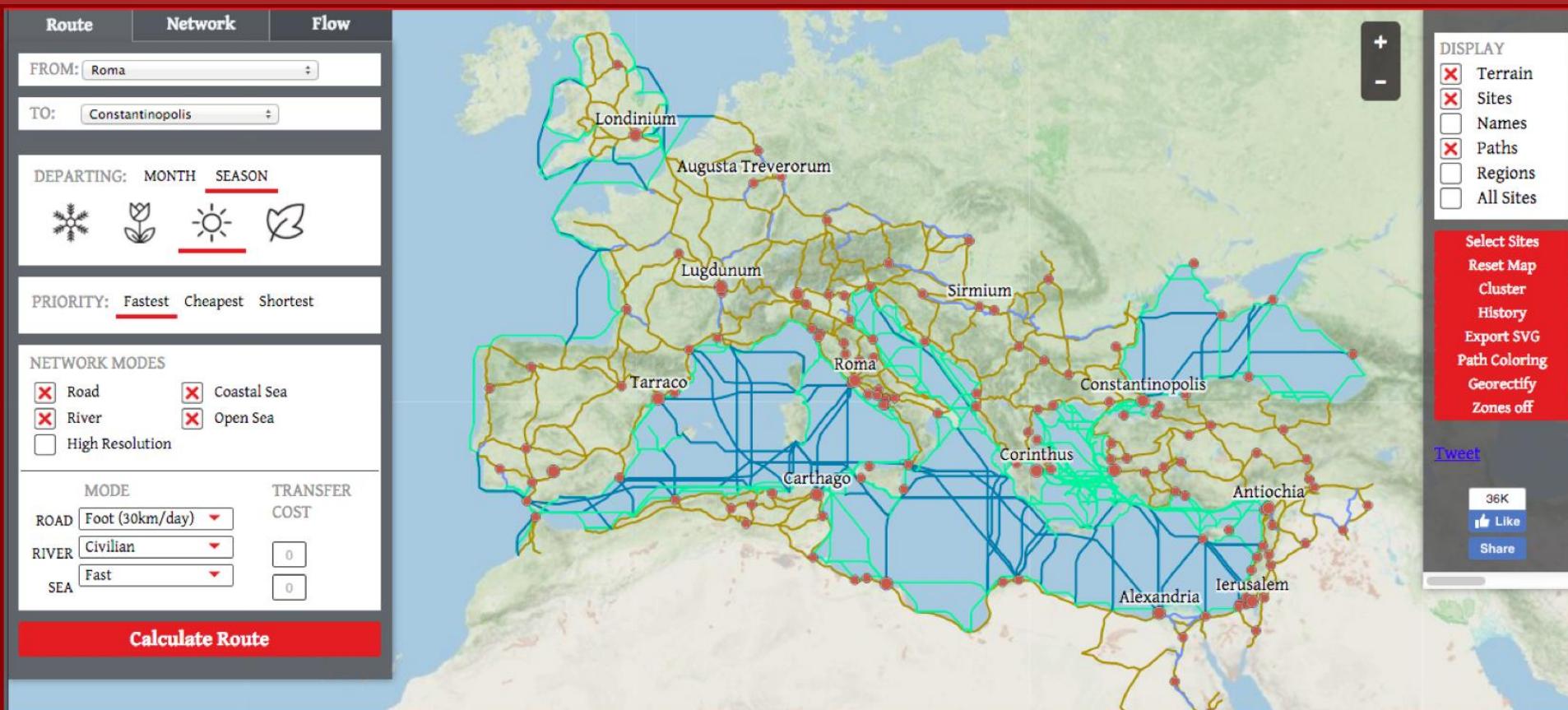
Digital Humanities on Twitter



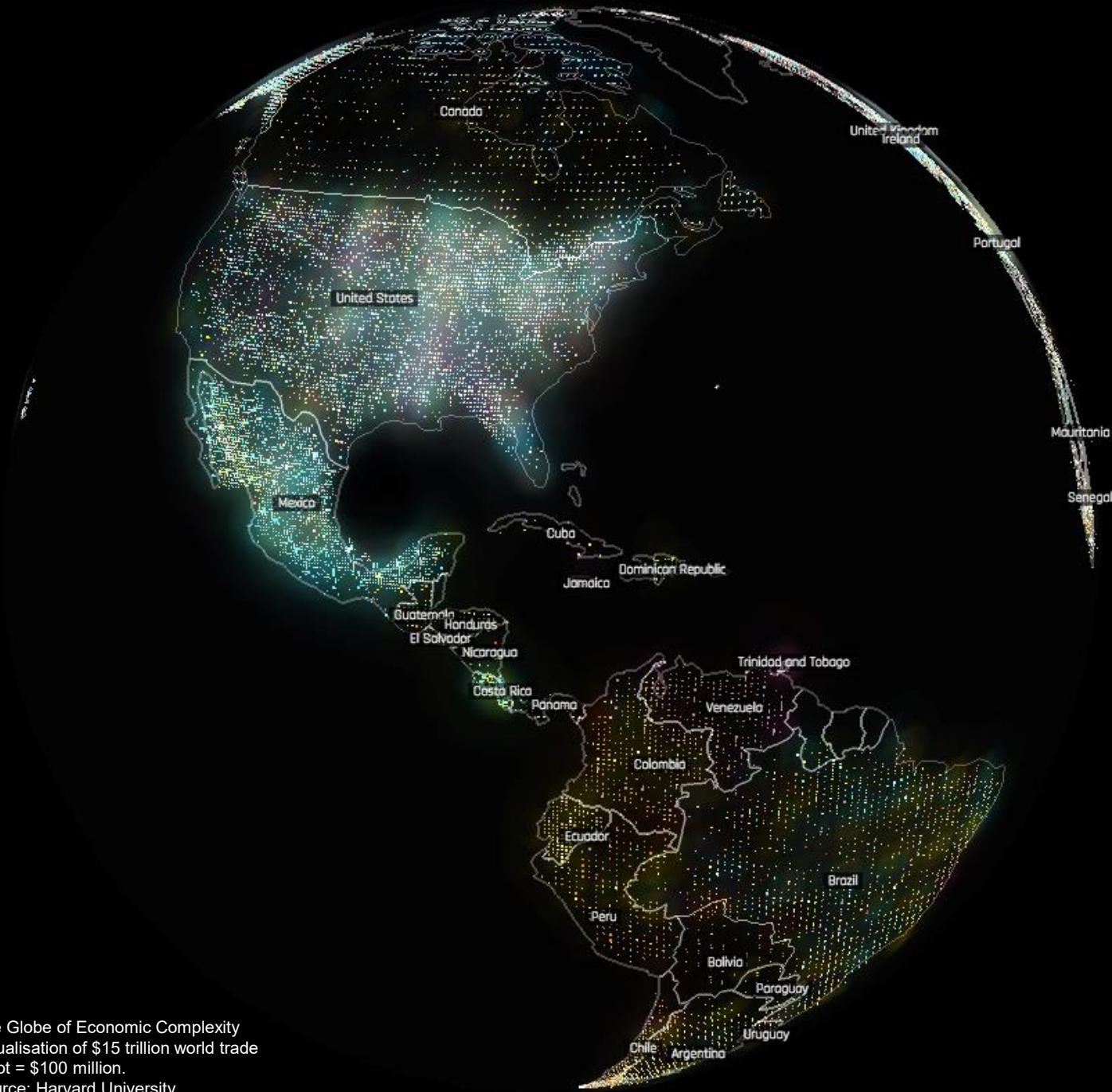
Network analysis of 1400 Digital Humanities Twitter users.
Grandjean 2015

ORBIS:

The Stanford Geospatial Network Model of the Roman World



Source: Orbis.stanford.edu





Project Mosul: Assyrian lion 3D photogrammetry
reconstruction based on crowdsourced photographs

Digital Scholarship Centres

- Bringing support together to ensure best use
- Place for exploration of digital technologies for students and staff
- Provide mechanism g expensive technologies and for growing areas of research and expertise
- Benefits of creating a single DS unit/ Centre includes: increased profile on campus, ability to attract donor funding, consolidation of skills, longer term sustainability of Centre
- Also is a clear signal of support for cross disciplinary scholarship, place for collaboration and ideas exchange



Digital Scholarship Center, University of Oregon, USA

Typical Digital Scholarship Centre elements

- Service desk and consultation area
- Staff workspace
- Collaborative work space for staff and students
- Production or lab space
- Large screens for project use and presentations
- Seminar/ classroom spaces
- Exhibition areas
- Lounge space for ad-hoc interaction
- Makerspace/ Hackspace for experimentation/ production/ coding workshops
- Media production studios – digitisation, 3D scanning, video editing, ‘mashing-up’
- Visualisation studios



Lyons New Media Centre, McMaster University, Canada

مكتبة قطر الوطنية

أهم
الأحداث!

ليرة القرزق عدو

٦٢ يوم على

Chemistry

"If all the elements are arranged in the order of their atomic weights, a periodic repetition of properties is obtained."

Dimitry Mendeleev





Media Production Studio, Sawyer Library, Williams College,
Williamstown, MA, USA



Patrick Ma Digital Scholarship Lab, Brown University, USA: use of the video wall by archeologists



The Sidney E. Frank Digital Studio , Brown University, USA.



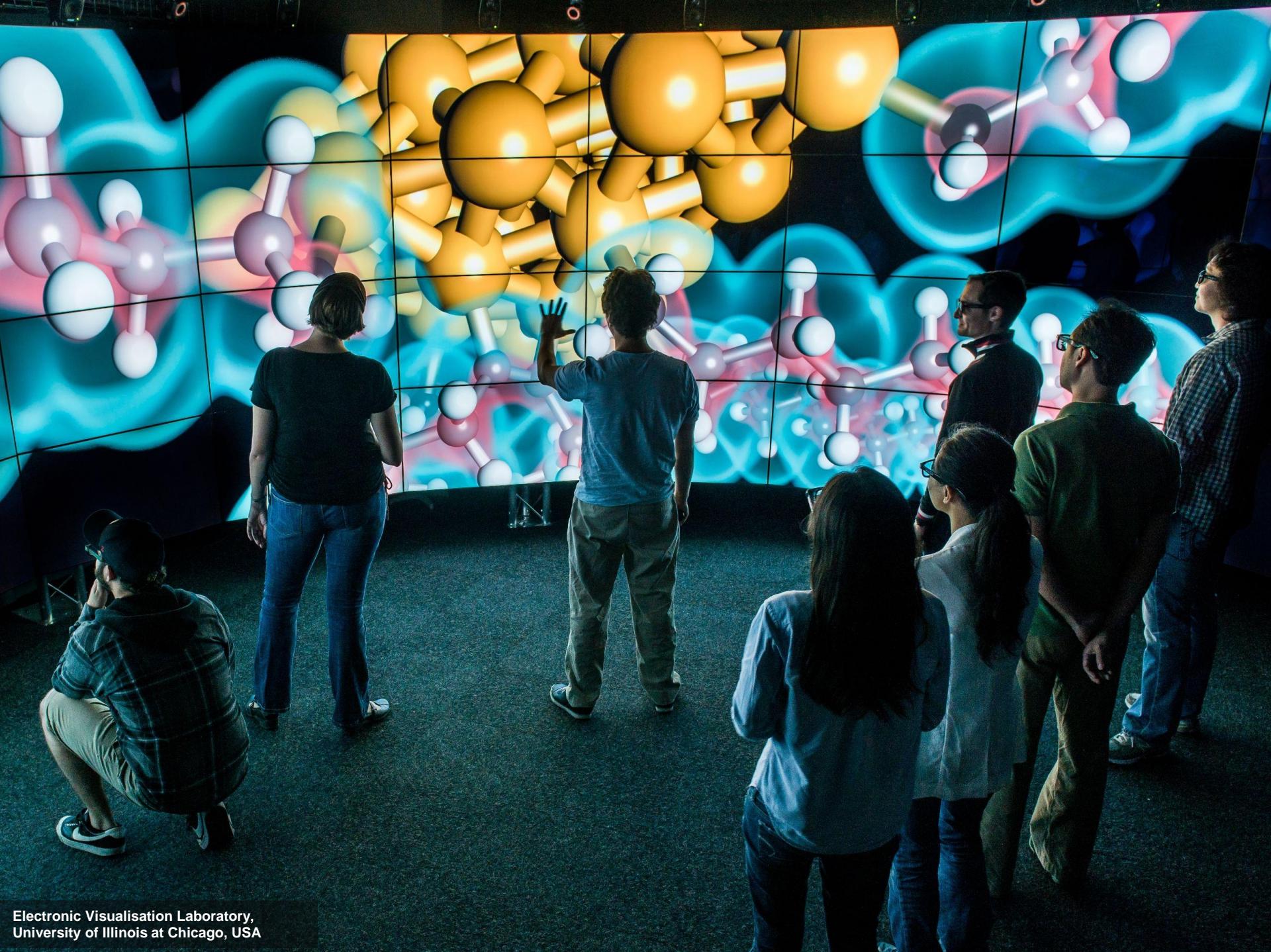
The Sidney E. Frank Digital Studio , Brown University, USA.



Commons Visualisation Wall, James B. Hunt Library,
North Carolina State University , USA

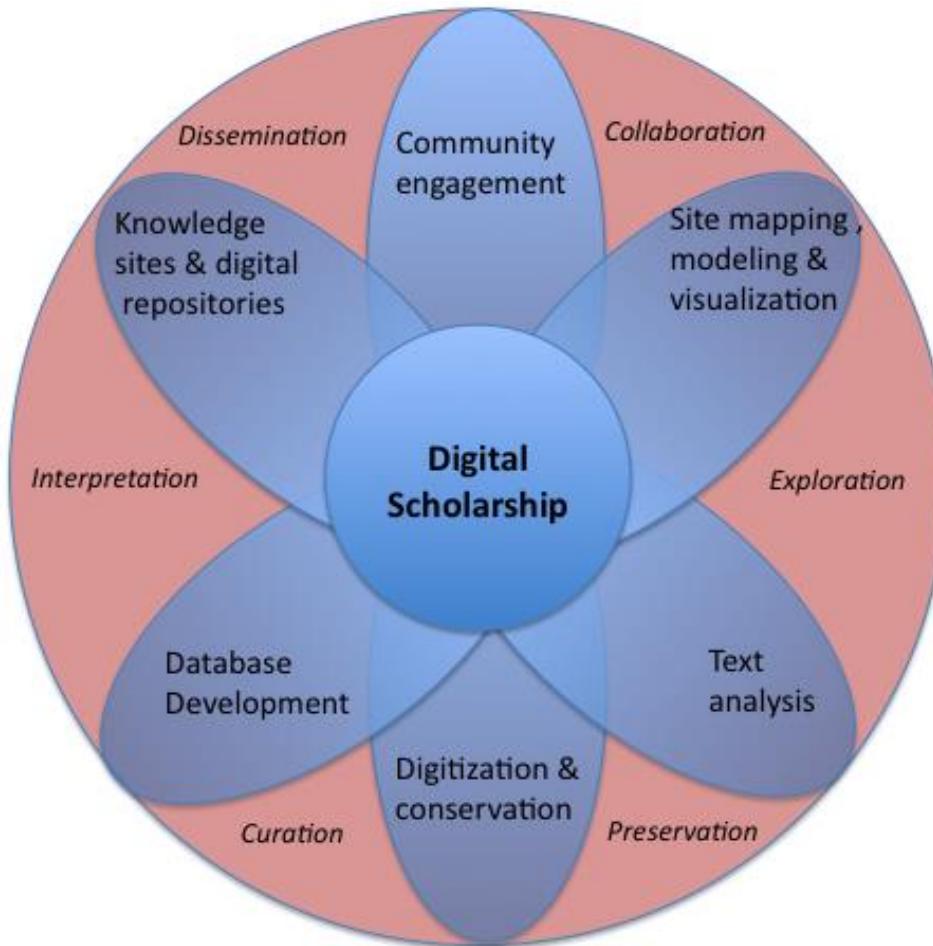


Teaching and visualization classroom,
James B. Hunt Library, North Carolina State University , USA



Electronic Visualisation Laboratory,
University of Illinois at Chicago, USA

Knowledge hotspots: spaces for digital scholarship



Source: Harrison (2019)

Digital Scholarship Centres are likely to be a 10 to 20 year phenomenon

Digital Scholarship will become pervasive and will be “just how we do things!”