

Digital Practice and Pedagogy at UCLDH: Reflections on Collaboration across Boundaries

Dr Jin Gao, Prof Simon Mahony

UCL Department of Information Studies
UCL Centre for Digital Humanities







Overview

- UCL and MA/MSc in Digital Humanities
- UCL Digitisation Suite/Imaging Lab
- Digitisation teaching
- Digitisation research
- Argument: digitisation/imaging lab beyond service space



The UCL Digitisation/Imaging Suite



Teaching Digital Humanities at UCL

- 1. PhD in Digital Humanities, BSc in Information Society
- 2. MA/MSc in Digital Humanities (1-year full-time)
- 3. Core modules:
 - Introduction to Programming and Scripting
 - Digital Industry: Culture and Innovation
 - Digital Humanities Research Methods
 - Internet Technologies
 - Global Digital Humanities
- 4. Skills taught: data visualisation, network analysis, programming, machine learning, GenAI, digitisation, social media critique



Teaching Digital Humanities at UCL

- We're currently conducting a career destination survey for graduates from UK/Ireland DH programmes and trainings (more to follow at the end of 2025)
- 15 institutions across UK-Ireland: UCL, King's, SAS, Sheffield, Glasgow, Cambridge, Durham, Lancaster, Leeds, UEA, Canterbury Christ Church University, Exeter, Newcastle, York, University College Cork, University of Galway
- What does 'digital humanities' mean for your career?





Introduction to Digitisation



UCL Digitisation class – digitising the Bentham catalogue



UCL Digitisation class students doing placements at the V&A Museum



Digitisation/Imaging Lab

- What role can a humanities lab play in transforming traditional academic practices?
- "DH labs are unique in their ability to combine traditional humanities research with digital tools and methodologies" (Pawlicka-Deger and Thomson, 2023)
- Important bridge connecting the academic with the industrial, beyond service space





Types of humanities labs

- Computer based KDL
- Makerspace UCL DH
- Visual presentation –
 Wuhan University
- more ...





Question

- UCL Digitisation Suite a Lab in the Humanities Faculty
 - First university digitisation lab in the UK
- Question:

What role can it play in transforming academia and bridging the industry?



The UCL Digitisation Suite



Teaching digitisation

- Across programmes: MA/MSc in DH, MA in ARM, MA in LIS, BSC
- Hands-on practical of 2D and 3D objects and critical discussions
- Closely working with UCL library and museum, and beyond



Digitisation class practices



Digitisation students at the V&A



Digitisation students at the British Library



Teaching digitisation

- Challenge one how do we deliver a good teaching?
- Boyer's model (1990): discovery, integration, application and teaching
- Student placements V&A and NHM
- **Key component:** the design of workflow and standard for 4000+ paintings



V&A digitisation project



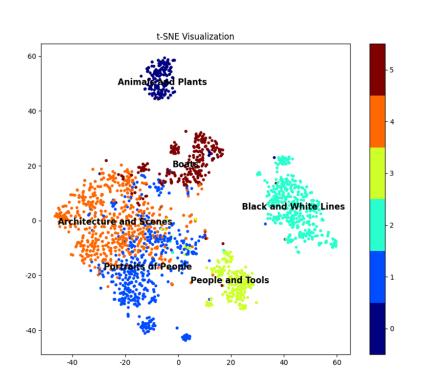
V&A CEW collection

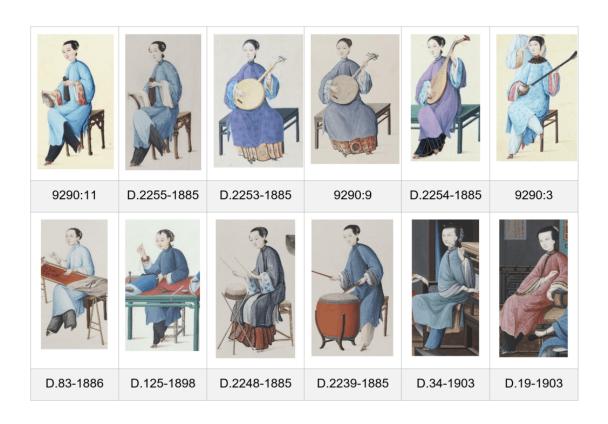


NHM digitisation project



Teaching digitisation – fill in the research gap



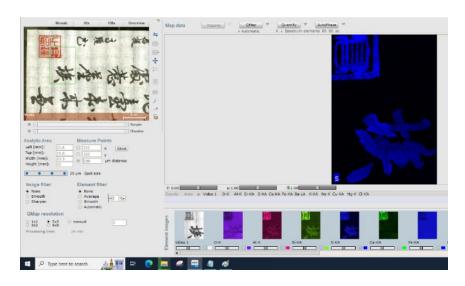


The similar paintings example from the V&A's Chinese Export Watercolours, acquired 1871-1990

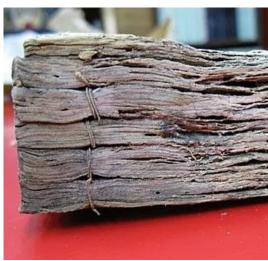


Digitisation research 1

- Challenge two: how do we bridge? match the solution with the question
- Case study 1: X-ray imaging on Chinese calligraphy
- Test using modern Chinese calligraphy, detect elements, test with multi-layers







Solution: X-ray on Chinese calligraphy

Question: 'Book bricks'



Digitisation research 2

- Case study 2: Textile fragments from V&A Stein Dunhuang collection
- Match image processing and 3D modelling with the fragments
- The Stein Dunhuang textile fragments, 2-9th Century









Solution: Photogrammetry in clothing

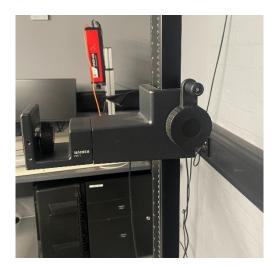
Question: Textile fragments from V&A Stein collection



Lab maintenance

- Challenge three: how do we manage the lab sustainably?
 - Technical: technologies evolve quickly, data preservation
 - Financial: teaching, research grant, consultancy
 - Maintenance: lab manager recruitment, collaboration across teams
 - Organisational: strategic planning,
 curriculum and research development
 - Environmental: energy consumption,
 e-waste management
- Bridging the gap and shaping the future of digitisation





Broken lens and copy stand in the suite



Credits and acknowledgement

- Melissa Terras, the founder of UCL Digitisation module and lab
- V&A colleagues: Hongxing Zhang, Sau Fong Chan, CIT team, Asia Department colleagues, VARI colleagues
- NHM colleagues: Andrea Hart, Jon Nicholls, Rebecca Keddie
- Adam Gibson (2024), Digitisation Suite Report 2023-2024
- Simon Mahony (2024), Non-invasive and Non-destructive Computational Imaging of Ancient Texts, Dunhuang 2024
- UCL colleagues: Ryan Wang, Xiangchao Meng, Bethany Johnstone, DH teaching team, ARM teaching team, other UCL collaborators, and most importantly, all students!



Thank you!

Dr Jin Gao <jin.gao@ucl.ac.uk>
Prof Simon Mahony <s.mahony@ucl.ac.uk>

UCL Department of Information Studies
UCL Centre for Digital Humanities