

# **Digitisation practices and pedagogy: Bridging the gap between academia and industry**

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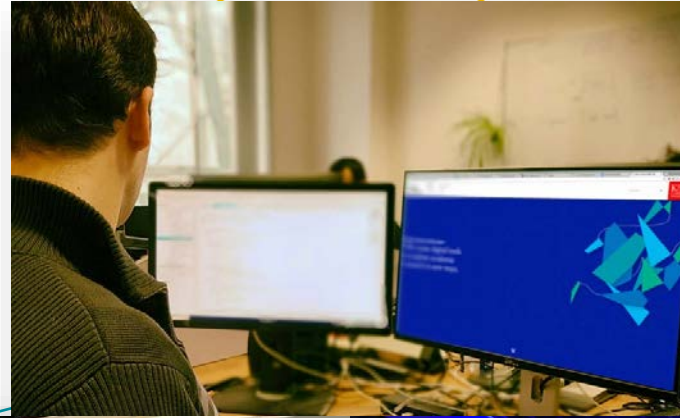
# Introduction

- *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 ...



# Introduction

- 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

# Overview

- *Argument: digitisation lab beyond service space*
  - Teaching digitisation
  - Digitisation research
  - Challenges and ways forward



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



V&A digitisation project

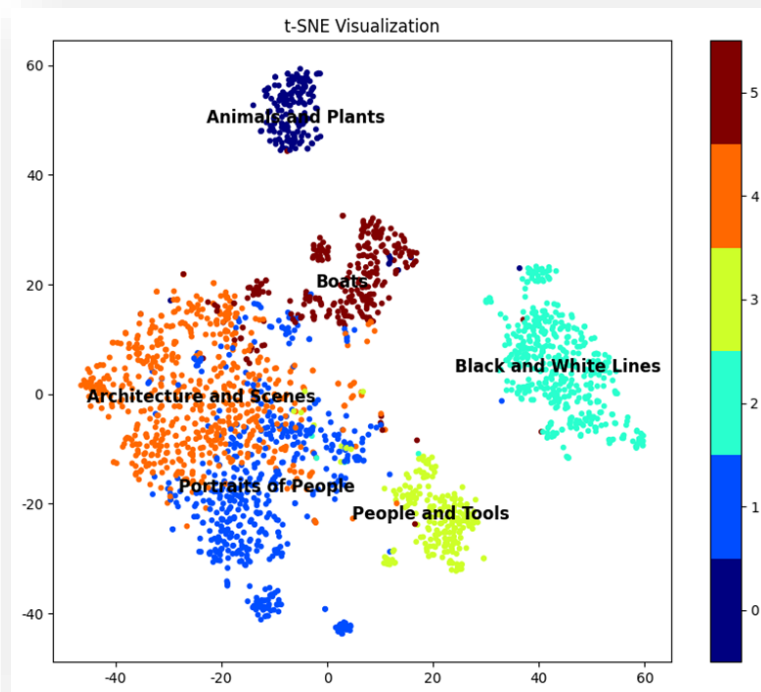


V&A CEW collection



NHM digitisation project

# Teaching digitisation – fill in the research gap

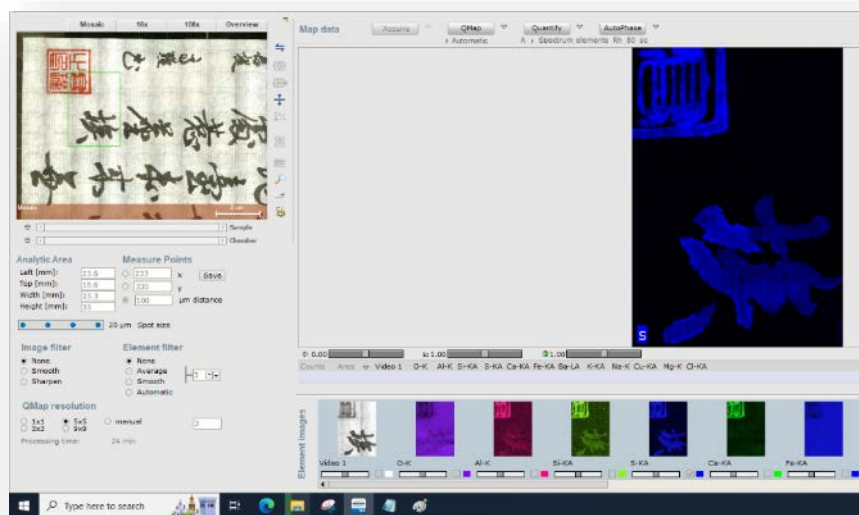


The similar paintings example from the V&A's Chinese Export Watercolours, acquired 1871-1990

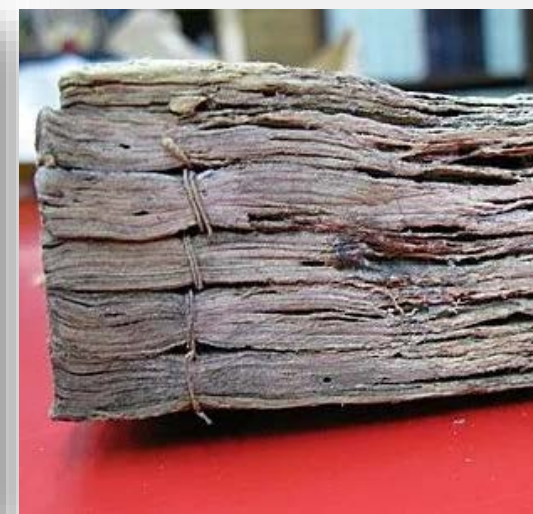


# Digitisation research

- 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



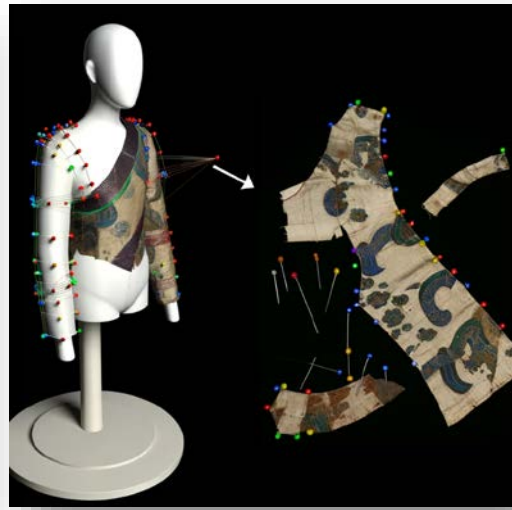
Question: 'Book bricks'

# Digitisation research

- 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 from 8-9<sup>th</sup> 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

- 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: Bethany Johnstone, DH teaching team, ARM teaching team, other UCL collaborators, and most importantly, all students!

# Thank you!

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