

# School of Advanced Study University of London

# Digital Humanities Research, Teaching and Practice in the UK

- Landscape Report

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## **Executive Summary**

### Purpose of the research

The School of Advanced Study, University of London in partnership with the British Academy, the British Library and the Arts and Humanities Research Council commissioned this research in order to:

- Understand the current landscape of Digital Humanities (DH) research, teaching and practice in the UK
- Identify current and future DH support needs
- Explore the potential demand for a DH network or association in the UK and the role that this could play.

The breadth of those aims and objectives has meant that it has not been possible to do justice to all within this initial piece of work. Other initiatives which some of the partners are undertaking will build upon the current project and will, therefore, be able to bring clarity to issues that have not been able to be explored in depth within a project of this size. The current research has, however, been able to develop a 'sketch' of the DH landscape and has highlighted a number of interesting features.

## Methodology

The first phase of the research comprised:

- Desk research that explored and analysed the current digital humanities landscape, primarily within the UK but also with reference to networks and representative bodies outside the UK.
- Depth interviews, by telephone, with senior representatives from the partner organisations.
- Further qualitative, depth interviews with DH stakeholders nationally, including senior academics who specialise in or are significantly involved in

DH, and practitioners who work with DH in their roles in the GLAM sector or in the creative industries.

Phase Two of the research involved an online survey of UK academics, who were involved in DH to varying extents. Comprising both quantitative and open-ended questions, the survey sought to build upon Phase One, by developing a deeper understanding of DH activity within UK academia and by assessing demand for a DH network or association.

## **Key findings**

#### Digital humanities research

Apparent across the research was the sense of a growing DH community in the UK. Within the UK university sector, there are 13 DH research centres and at least two other centres that include activities that relate to DH. A further 13 UK universities have DH research groups or networks, that undertake or seek to stimulate interdisciplinary DH research. There also exist three geographically-based co-ordinating groups or networks: one that is for individuals (in Scotland), and two that are multi-university groups (one in South East England and the other in the South West and Wales).

The most significant UK funder of DH research in recent years has been AHRC: identified by 59% of survey respondents as having provided funding for their DH-focused research in the past three years. One third of the academics within the survey, however, had received DH funding from other research councils over that period. The British Academy had provided funding to 22% of the academics and Leverhulme Trust to almost 16%.

Challenges in obtaining funding for DH research were highlighted in survey responses and within depth interviews with academics: the interdisciplinary nature of DH work being said to create "issues" with regard to meeting funding criteria. Funding for exploratory research was also said, by some, to be difficult to access.

Across the research as a whole, there were comments that DH required stronger advocacy within the UK, particularly in the context of research funding, other support for research (e.g. internally, within universities) and the treatment of DH within the REF.

#### DH teaching

Taught degree programmes in DH are available at four UK universities that have DH centres (King's College London; UCL; Lancaster; and Swansea) and at some institutions that do not have a DH centre (University of Wales, Trinity St David; Glasgow; and York). Not all of those degrees, however, have the term 'Digital Humanities' in their title. All but two are at master's level.

Among the 92 respondents to the survey (all of whom were from institutions known to be active in DH), only 13% stated that their institutions offered UG programmes with DH in the title and 26% that they did so at masters level. A slightly higher proportion (29%) believed that their institution offered doctoral programmes that focused upon DH.

More than a third of the survey respondents, however, reported that their institution offered DH modules as UG or PGT options and 15% stated that there was a compulsory DH module included in one or more degree programmes at master's level.

There was an expectation, among both interviewees and survey respondents, that digital humanities teaching would increase over the next three years, at both UG and PG levels. The nature of those increases varied, but most common were skills building (specific or generic), developing new master's modules and programmes, developing undergraduate modules and integrating DH into existing modules or programmes.

This growth in envisaged activity aligned with the views that several interviewees expressed about a 'normalising' of digital humanities and its simply becoming part of 'how we do things'. From some interviewees, there was also a suggestion that as DH content becomes increasingly common within UG and PG teaching – and as 'digitally native' young people progressed to doctoral training – the need for training to develop some types of DH skills (i.e. to gap fill) was likely to reduce.

#### Digital humanities skills development

Academics highlighted the importance of overall digital literacy for humanities researchers— as digital technologies are becoming central to research methods in many areas of humanities. It was noted that scholars were gradually developing the necessary DH skills but that, among humanities academics as a whole, digital skills were felt to remain relatively underdeveloped.

Beyond the importance of digital literacy, there was little consensus about the specific digital skills that were important to DH academics: a broad range of skills were used, often depending on the nature of individual projects. Areas of skills demand that interviewees highlighted, however, focused mainly upon: basic programming skills; working with software; working in the data environment and working online.

DH skills development among academics was said to take place through a combination of self-teaching, peer learning, workshops or other sessions at institution, centre or faculty level, and via attendance at summer schools or other third party-led events. The Oxford University Summer School was mentioned by several interviewees as an obvious starting point for skills development.

When survey respondents were asked to indicate the types of activity that a DH network should prioritise, skills training emerged as a high priority.

Within the GLAM sector, some digital skills (such as digital imaging and database technologies) were regarded as essential, simply to work in the sector. Beyond these, however, skills requirements tended to be job role-specific. Some growing areas of need, within interviewees' own organisations were: manipulating large amounts of data; "turning intractable information into data"; and artificial intelligence and machine learning. Important areas of understanding were: the standards for interoperable data; the principles of open data; and staying up to data with developments, in order to be able to provide data in the forms that users would require.

#### Collaboration in DH

In interviews, some academics highlighted the benefits of collaborating with GLAM practitioners. The majority of academics surveyed had collaborated with GLAM practitioners in some way within the past three years. This had most commonly taken the form of: collaborative research projects; research networks; and accessing resources.

GLAM sector interviewees tended to highlight numerous ways in which their organisations worked with higher education institutions, ranging from digitising collections to supervising doctoral students and teaching DH skills. Little of the collaborative activity described, however, was strategic in nature and some interviewees commented that their organisations were not yet thinking about digital humanities in a strategic way.

DH collaboration between GLAM and academia was identified as taking place mainly in large, national GLAM sector organisations. Smaller and regional GLAM organisations were thought to have the potential to be more involved, in future.

Both academics and GLAM sector interviewees perceived there to be some barriers to further collaboration, such as: low resource levels within the GLAM sector; cuts to GLAM organisations' funding; licensing of intellectual property; and digital preservation issues.

Among GLAM sector interviewees, there was an acknowledgement that digitisation was proceeding more slowly than they might wish and that the digital data that did exist would need to be 'tidied'. From one interviewee there was also a suggestion that, in order to apply the kinds of digital tools and methods that might deliver the greatest value to research, a national infrastructure was required, to aggregate data.

#### Membership of networks and associations

Approximately half of the survey respondents (51%) stated that they, personally, were a member of a DH network, group or organisation within DH in general and 40% stated that they were a member of such a network within one or more specific, subject disciplines. The range of organisations identified was broad – 43

different organisations. The most frequently mentioned were ADHO, EADH and Text Encoding Initiative (TEI).

Institutional membership of DH networks or groups was slightly less common. One third of respondents (34%) stated that their institution was a member of a network or group within one or more subject disciplines, and 43% that it was a member of a group within DH in general. Within this context, respondents identified a total of twenty-one organisations, of which the most frequently mentioned were centerNet, ADHO and TEI.

A substantial proportion of the participants, therefore, are already benefitting from – and paying for – membership of networks and groups, within DH or their field of study.

Nevertheless, an overwhelming majority of respondents signalled that they would like to have more contact with academics (within and beyond the UK) whose work has a digital humanities focus, and with digital humanities practitioners who work in GLAM organisations.

#### Priorities for a Digital Humanities network in the UK

There was a strong sense, from academics interviewed and surveyed, that a network for the UK DH community would be welcomed. On a seven point scale, rating the **importance of a network being formed**, 34% of survey respondents gave a rating of 7 and 84% gave a rating of 5 or above. When asked to rate their **likelihood of joining** such a network, 84% rated this as likely or very likely.

Academics identified the following activities as the highest priorities for a DH network to pursue:

- Providing opportunities for networking and collaboration within the academic DH community and with GLAM practitioners.
- Skills training
  - o for early career researchers
  - o for DH skills in general
- An advocacy role
- Holding events that focus upon specific areas of digital humanities.

Mentoring, publishing a peer reviewed journal and promoting access to other DHfocused publications were rated as lesser priorities: publishing a journal receiving the lowest priority rating.

The (small number of) interviewees from the GLAM sector suggested that a network would attract members from that sector, but that significant take-up may depend upon attracting those working in smaller, regional organisations. GLAM sector interviewees were interested in networking and collaborating within DH-active personnel within their own sector, as well as with academics.

A small minority of interviewees cautioned that before creating a new network, it was important to define the 'problem' that it was intended to solve. Similarly, some questioned how such a network would differ from and complement the role of existing European organisations.

#### Defining the community that a network would serve

Some important issues to consider in developing a Digital Humanities network for the UK are the current size of the community that engages with digital humanities and, more importantly, the way in which that community will develop over the next decade and beyond.

Currently, there appear to be numerous segments within the DH community, each of which has the potential to contribute to and benefit from a UK DH network:

- Academics whose work is based largely or exclusively around DH
- · Academics who work to a lesser extent with DH
- Early career researchers and doctoral students who could become more involved in DH, if they receive appropriate encouragement, funding and skills training
- Master's degree students with an interest or specialism in DH
- DH or other digital specialists in service departments within academia
- Professional staff in, mostly large, GLAM sector organisations, who engage regularly with academia, in a DH context

 Professional staff in GLAM organisations who undertake some DH-relevant activity but may rarely become involved with academia and/or may not even regard what they do as 'Digital Humanities'.

As that community evolves and grows, implications are likely to arise for the services that a DH network could provide. It is also possible that, in future, a DH network could reach out to, deliver services for, and generate income from a much wider user base than those who might current see a DH network as relevant to themselves and their careers.

When developing a 'best fit' network format and range of member services, therefore, some important starting points are: (i) the potential size and composition of the 'DH community' over the next few years: and (ii) the extent to which the boundaries of the proposed network should be porous.

#### Membership fees

Both interviewees and survey respondents emphasised the need for membership fees to be affordable in order to ensure a broad membership. Three-quarters of survey respondents indicated that they would expect to pay less than £50 per annum and only 13% expected to pay more than £75. A tiered scale of fees was suggested by some, as a means of ensuring affordability for students and early career researchers. DH networks of which the survey respondents were members – and national level networks identified elsewhere in Europe – tended to charge individual membership fees of €30 to €60. Where, however, the services offered went considerably beyond networking, (those organisations that hold conferences and publish academic journals), fees were much higher.

#### **Exploring models for a DH network**

There was consensus that inclusivity is important and membership should be open to both individuals and institutions. The majority of survey respondents (68%) stated that private sector organisations should be admitted as members. Among those who disagreed, however, there were some major concerns about the implications of accepting, as members, organisations such as publishing companies.

Within both the survey responses and interviews, opinion was split as to whether a loose association or a learned society should be the preferred model for a network. The learned society model was felt to deliver strong central representation, with a clear role in influencing and informing policy-making. A loose association, in contrast, was associated with enabling a much broader membership and a greater degree of openness, and therefore to be potentially more attractive to people working at the edges of DH.

An option to consider may be some form of two-tier or hub and spoke organisation, that has a central hub of members – potentially comprising DH centres, funders and major GLAM sector organisations – that can lend weight to advocacy activities and can provide core resource, together with a low-cost, broadly-based network. This form of organisation may be able to meet many of the requirements that the research has identified. Some thought would need to be given, however, to the ways in which such an organisation could best address the skills development needs of DH nationally.

#### 1 Introduction

### 1.1 Purpose and scope of the research

This research has sought to gather evidence, feedback and opinion on:

- The current landscape of Digital Humanities (DH) research, teaching and practice in the UK
- Current and future digital humanities support needs
- The potential demand for a Digital Humanities network/association in the UK, and the role that this could play in the national DH landscape.

The project was commissioned by the School of Advanced Study, University of London, in partnership with the British Academy, the British Library and the Arts and Humanities Research Council, and took place over Spring and Summer 2017.

In commissioning this research, the partner organisations were conscious that the number of digital humanities posts in UK universities appeared to be increasing. It was thought, therefore, that more could potentially be done to support the development of DH within academia, and to encourage and enable greater linking up of DH academics and practitioners.

## 1.2 Research Objectives

The following objectives were developed by Marketwise Strategies and were agreed with the project partners. They were informed by the project brief and by discussions with Professor Jane Winters, at the School of Advanced Study.

#### Digital Humanities in the UK - broadly

 To identify established and emerging digital humanities activity in the UK (research, teaching and practice) among:

- Higher Education Institutions and HE sector organisations (e.g. funding bodies)
- o GLAM organisations.

#### 2. Within the **GLAM sector**, to understand:

- The extent of digital humanities activity
- The types of activity that are occurring
- · Where this activity is happening
  - o key organisations involved
  - o the types of organisations
  - the geographical spread of activity
  - the size of organisations involved (e.g. the extent to which activity is concentrated in larger organisations)
- The job roles that tend to be involved.

#### Digital humanities research

- 3. Within the **HE sector**, to identify:
  - Current and emerging Digital Humanities activity within dedicated research centres
  - Current and emerging activity undertaken across the wider sector
  - The extent to which and how this activity is coordinated or brought together across UK HE, and the key organisations involved in this
  - Digital Humanities research funded by organisations other than the AHRC and British Academy (e.g. Leverhulme Trust)
  - Any explicit connections (e.g. research collaborations) between HEIs and GLAM organisations.

#### Digital humanities teaching

4. To identify formal Digital Humanities teaching, especially within taught postgraduate degree programmes (e.g. master's) and at undergraduate level.

#### Digital humanities training

- 5. To understand the availability and take-up of Skills training for
  - PhD students and academic staff in UK higher education

- Staff within GLAM organisations.
- 6. To clarify:
  - Where training is taking place
  - Which organisations are involved in providing that training?

#### Support needs

- 7. To identify, among relevant audiences in the HE and GLAM sectors, current support needs in Digital Humanities, including exploring:
  - What support would help them to do their jobs more effectively?
  - What sort of training do they need?
  - How are students being introduced to digital research and how could this be improved upon?
  - How do needs differ, across different types of organisation and by job role?
  - · How those needs are currently being addressed
  - What needs are currently unmet.
- 8. To understand **future** support needs among HE and GLAM organisations:
  - To identify specific future requirements, by stakeholder group, and how these differ from current needs
  - To understand the reasons why identified future needs are likely to arise
  - To understand how researchers, teachers and practitioners in HE and in the GLAM sector expect and wish these needs to be met.

#### Network or association - demand, remit and sustainability

- 9. To explore the **level of demand**, among UK HE and GLAM organisations, for a national Digital Humanities network or association.
- 10. To understand what the HE and GLAM sectors would **require from** a national Digital Humanities network/association, such as:
  - Mentoring
  - Skills training
  - Access to publications
  - · Access to professional advice
  - Advocacy on behalf of the discipline

- Types of event.
- 11. To identify the requirements that different types of stakeholder would wish to **prioritise**.
- 12. To understand the **fees** that stakeholders would expect such an organisation to charge.
- 13. To identify, from desk and primary research, **potential revenue streams** available to such a network/association.
- 14. To identify and understand **comparable Digital Humanities networks and associations in other countries**, focusing particularly upon their:
  - Range of activities
  - o Geographical reach
  - o Subject focus, where appropriate
  - o Revenue streams and membership charges
  - Types of membership (e.g. academic; professional)
  - o Key members and connections to similar networks elsewhere.
- 15. To draw together the landscape insights obtained and the 'needs and wants' that have emerged, in order to enable the partners to prepare an overall vision (or series of alternative visions) for the development of a DH network or association.

## 2 Methodology

## 2.1 Approach

The research was delivered in two phases. Phase 1 comprised:

- An inception meeting (on 24<sup>th</sup> March 2017) with Professor Jane Winters, at the School of Advanced Study.
- Desk research that explored and analysed the current digital humanities
   (DH) landscape, primarily within the UK but also with reference to networks and representative bodies internationally.
- Depth interviews, by telephone, with senior representatives from the partner organisations, in order to gather background information and to provide a foundation of understanding that could inform primary research – within UK academia and within the Galleries, Libraries, Archives and Museums (GLAM) sector. Those who kindly gave their time to be interviewed were:
  - Prof. Andrew Prescott (Leadership Fellow Arts and Humanities Research Council)
  - o Prof. Alan Bowman (Fellow British Academy)
  - Vivenne Hurley (Director of Programmes British Academy)
  - Adam Farquhar (Head of Digital Scholarship British Library)
  - Maja Maricevic (Head of Higher Education British Library).
- Further qualitative, depth interviews with DH stakeholders nationally. The sample (see below for further details) comprised:
  - Senior UK academics who specialise in or are significantly involved in DH
  - Practitioners who work with DH, in their roles in the GLAM sector or in the creative industries.

Phase 2 took the form of an online survey of UK academics, who were involved in DH to varying extents. Comprising both quantitative and open-ended questions, the survey sought to deepen the project's understanding of DH activity within UK academia and to assess demand for a DH network or association (see 2.4 below).

#### 2.2 Desk research

#### 2.2.1 Exploring the Digital Humanities landscape in the UK

#### 2.2.1.1 Research and teaching

At the start of the project, the School of Advanced Study had highlighted several important UK Digital Humanities research centres – e.g. Cambridge, Kings College London and University College London. For each centre, therefore, we sought information about:

- The location of the centre within its institution
- Key research activities taking place
- Any evidence of teaching or training of undergraduate or postgraduate students
- Any evidence of additional skills training (e.g. for GLAM practitioners)
- Examples of key research projects.

Additional centres and Digital Humanities networks within institutions were identified via:

- The depth interviews conducted with the project partners and with academics and GLAM practitioners
- The websites of other centres and wider web searching.

Digital Humanities teaching at undergraduate and postgraduate levels was researched via Unistats and Findamasters.com. In each instance, searches were conducted for any course titles that included the term Digital Humanities. A wider internet search was also conducted, to identify any DH-relevant, undergraduate or postgraduate modules that universities were offering.

#### 2.2.1.2 Research funding

Our exploration of funding for DH research focused mainly upon following sources:

- ESRC
- Leverhulme Trust
- Nesta Digital Research Fund for the Arts
- Andrew W. Mellon Foundation
- Humanities in the European Research Area (HERA)
- European Research Council (ERC)
- · Digging into Data.

Projects funded by the AHRC and British Academy – both of which were partners in commissioning the project – were not researched.

Sources used to identify GLAM organisations' involvement in academic research within DH were:

- Websites of national-level organisations (e.g. National Archives; British Film Institute)
- Doctoral Training Partnerships, which provided lists of GLAM organisations that acted as research partners.

## 2.2.2 International networks and organisations

International Digital Humanities networks and organisations were identified through:

- The website of the Alliance of Digital Humanities Organisations (ADHO),
   which provides details of all seven of its partners
- The website of the European Association for Digital Humanities (EADH),
   which lists partner organisations in Europe
- Data obtained from the online survey within the current project, which highlighted a small number of additional networks.

In each case, the details sought were: date when founded; host institution (where appropriate); main research activities; strategic DH-related goals; connections to

other international DH networks; membership types available; and membership fees.

## 2.3 Depth interviews with academics and practitioners

#### 2.3.1 The interviewees

Those interviewed were drawn from a database of senior DH academics and GLAM practitioners, which had been developed by the School of Advanced Study and its partners in the project.

The academics prioritised for interview were selected on the basis of their knowledge of the DH field, whilst interviewees from GLAM organisations were primarily those with a strong national profile in DH.

The final sample was made up of eight academics, four GLAM sector representatives and one representative from a national level digital/creative sector organisation. A list of the academics interviewed is provided at Appendix D of this report. Other interviewees have not been not listed, in order to avoid any risk of their being identified through comments quoted within this and the accompanying report.

At the start of the project, it was intended that 15 depth interviews be conducted. The final sample, however, comprised 12 interviews (involving 13 interviewees) from the above database, plus additional insights from the partner interview conducted with Prof. Andrew Prescott. This adjustment was made since several of the stakeholder interviews were much longer than anticipated and because it was felt that the achieved sample delivered a good level of both breadth and depth of coverage.<sup>1</sup>

#### 2.3.1 Structure of the discussions

Interviews were semi-structured and were based upon qualitative questionnaires that were developed in discussion with the project partners. Different

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<sup>&</sup>lt;sup>1</sup> The average interview length was approximately 54 minutes (the intended length had been 25 to 40 minutes).

questionnaires were developed for academic and GLAM sector interviews (see Appendices A and B). The discussion with the digital/creative industry informant was based loosely around the 'GLAM' questionnaire.

Depth interviews with academics focused upon:

- The development of DH within their own institutions (in the context of research, teaching and doctoral training)
- DH interactions and collaborations with the GLAM sector and the funding that supports this
- Perspectives upon development of DH in the UK more broadly
- Skills and support requirements among academics who work in DH and how these are addressed
- The extent to which there may be a requirement for a DH network for the UK, the form that such a network might take and academics' willingness to pay to be a member of such a network.

Interviews with GLAM practitioners explored:

- The involvement that their organisations have in digital humanities
- The nature and extent of any DH interfaces or collaborations with higher education institutions – and with other GLAM organisations
- Skills and support requirements and how these are addressed
- The extent to which there may be a requirement for a DH network for the UK, the form that such a network might take and academics' willingness to pay to be a member of such a network.

The discussion with a senior digital/creative industry representative was arranged at the suggestion of one of the earlier interviewees and explored (in addition to the proposed DH network/association) interaction and collaboration between UK-based creative businesses, UK universities and the GLAM sector.

#### 2.3.2 Analysis process

Depth interviews with partners and stakeholders were audio-recorded and were transcribed in full prior to analysis. Transcripts from partner interviews and a small number of stakeholder interviews were at first analysed manually, in order to draw out key themes. Those themes then became the basis for an analysis framework

which was developed within NVivo software and was used to analyse the stakeholder interviews as a whole.

## 2.4 Quantitative, online survey

#### 2.4.1 Purpose and approach

The online survey built upon the qualitative and desk research by developing quantitative measures of various 'landscape' factors that had been explored in depth interviews, and by assessing, among UK academics involved in DH:

- The perceived priorities that a DH network should adopt
- The form that such a network should take
- The membership that it should seek to attract
- · Likelihood to join
- Expectations for the level of a membership fee.

Via a series of open-ended questions, the survey also sought to:

- Understand the rationale for some of those priorities and perceptions
- Identify other, relevant networks or associations, of which respondents or their institutions were members.

The questionnaire was piloted among a small number of staff at the School of Advanced Study and was then refined.

Invitations to the survey were sent, by the School of Advanced Study, to a list of UK academics who were known to be active in digital humanities. Recipients were asked to complete the questionnaire and to forward the invitation email to others, within their institution, who were active or had an interest in DH. The survey was open to staff at all levels, including post-doctoral researchers.

In order to maximise the number of responses, two reminder emails were sent: both went to the original database of invitees and included a request that the email be 'passed on' to other relevant staff within the institution.

Following the pilot stage, the survey was open from 18<sup>th</sup> September to 8<sup>th</sup> October 2017, and was incentivised via a free prize draw to win one of two Blackwell Book Gift Cards, each worth £100.

#### 2.4.2 Survey sample

This approach to sampling was designed to ensure that survey participants were academics (or staff in related posts) who were sufficiently 'close' to DH to provide high quality responses.

The survey had targeted a sample size of approximately 100 participants (though this was in order to achieve a reasonably robust sample, rather than representing a particular proportion of a known population). The achieved sample was 92, comprising academics and some staff who work in service departments. A little over half of the sample (51%) considered themselves specialists in DH. A further 46% used digital tools and methods to some extent, but did not consider themselves to be specialists. The remaining 3% engaged with digital humanities only minimally.

The composition of the achieved sample is detailed within Chapter 3, below.

#### 2.4.3 Data analysis

Quantitative data from the online survey was analysed using Snap Professional survey software and Microsoft Excel. Where appropriate, the data was crosstabulated, in order to explore relationships between respondents' views and their job roles, subject disciplines etc. Some of those cross-tabulations are included within the main body of this and the accompanying report, whilst others appear in Appendix G.

Data from open-ended questions was coded manually and was analysed in Microsoft Excel. When developing codes, we were conscious not only of the patterns within the data but also the findings from the earlier, qualitative phase. Responses to open-ended questions have been tabulated (except where this would compromise the confidentiality of an individual respondent) and are presented in full within Appendix F.

#### 2.5 Report structure

This report focuses upon the DH landscape within the UK, and brings together findings from the qualitative and quantitative elements of the project, as well as from desk research.

A second report, titled 'A UK Network for Digital Humanities: Attractiveness and Scope', has been developed separately and mostly draws upon different topics addressed within the qualitative depth interviews and the online survey.

A number of appendices have been included in this report:

- Appendix A: Qualitative Questionnaire for HE Interviews
- Appendix B: Qualitative Questionnaire for GLAM Interviews
- Appendix C: List of Contributors

Other appendices have been provided as separate documents:

- Appendix D: Additional Tables from Desk Research
- Appendix E: Questionnaire for Online Survey
- Appendix F: Responses from Open-Ended Questions
- Appendix G: Cross-Tabulations.

#### 2.5.1 Research specialisms

As context for interpreting responses to other questions, those taking part in the survey were asked to state their research specialisms. From the 67 responses to this question, a wide variety of subjects and topic areas emerged (Table 1).

Almost a quarter (24%: 16 respondents) of research-active respondents reported that one of their specialisms was literature, and the same proportion identified history as a specialism. The next most common specialisms were Digital Humanities (21%) and digital archiving / digitisation (19%).

Table 1: Research specialisms (Q10)

| Area  | Number of respondents | % of respondents |
|---|-----------------------|------------------|
| Literature                                    | 16                    | 24%              |
| History                                       | 16                    | 24%              |
| Digital Humanities                            | 14                    | 21%              |
| Digital archiving & digitisation              | 13                    | 19%              |
| English language & linguistics                | 12                    | 18%              |
| Data techniques                               | 11                    | 16%              |
| Cultural / social                             | 7                     | 10%              |
| Geographical                                  | 7                     | 10%              |
| Education                                     | 5                     | 7%               |
| Art history                                   | 4                     | 6%               |
| Epigraphy/palaeography                        | 4                     | 6%               |
| Archives/curation                             | 3                     | 4%               |
| History of computing/technologies             | 3                     | 4%               |
| Internet                                      | 3                     | 4%               |
| Network analysis/science                      | 3                     | 4%               |
| Science history                               | 3                     | 4%               |
| Architecture                                  | 2                     | 3%               |
| Arts  | 2                     | 3%               |
| Big Data                                      | 2                     | 3%               |
| Computing / software                          | 2                     | 3%               |
| Philosophy                                    | 2                     | 3%               |
| Publishing                                    | 2                     | 3%               |
| Text analysis                                 | 2                     | 3%               |
| Textual scholarship                           | 2                     | 3%               |
| Other (each mentioned by only one respondent) | 14                    | 21%              |

Respondent base: the 70 respondents in the 'academic' group were asked; 67 responded. A full list of responses is provided in Appendix F.

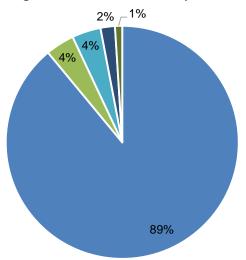
# 3 Online Survey Sample

## 3.1 Employer institutions

The vast majority of survey respondents worked within research intensive universities (89%). The remainder worked in: universities that were not research intensive (4%); small/specialist HEIs (4%); research centres or units that were not part of a university (2%). One respondent stated that they worked in an 'other' type of institution, though they went on to describe this as a type of research intensive university (1%) (Figure 1).

Figure 1: Type of organisation (Q33)

Q33: Which of the following best describes the organisation in which you work?



- A research-intensive university
- A university that is not research intensive
- A small/ specialist higher education institution
- A research centre or unit that is not part of a university
- Other

Respondent base: 92

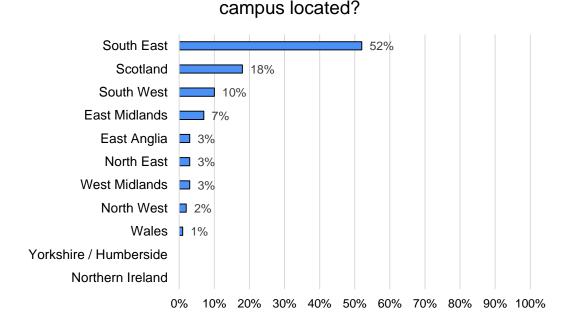
## 3.2 Geographical locations

Figure 2: Location of current post (Q5)

All but two of the 92 respondents to the survey stated that their current employment was based in the UK.

Among the 90 UK-based respondents, the geographical areas most strongly represented were the South of England and Scotland. More than half of UK respondents were located in the South East and a further 10% were in the South West (Figure 2). Almost a fifth worked at Scottish institutions. Only a small number, however, were based in Northern England (3% in the North East, 2% in the North West and none in Yorkshire/Humberside).

Q5: In which part of the UK is your institution or



Respondent base: 90

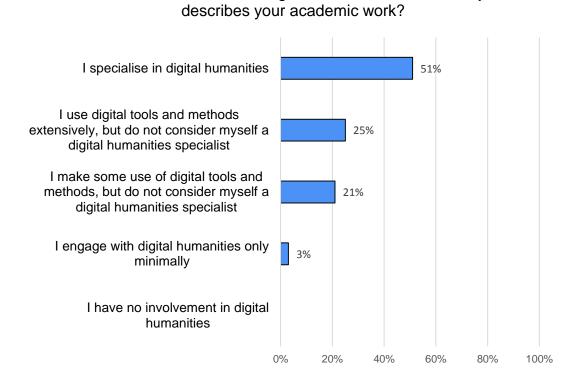
#### 3.3 Job roles

All survey respondents were asked the extent to which they would describe their work as specialising in digital humanities, and could select from five options. Just over half of the sample (51%) considered themselves to be specialists in digital humanities. A further 46% used digital tools and methods to some extent but did

not consider themselves to be specialists. A very small proportion stated that they engaged with digital humanities only minimally. (Figure 3).

Figure 3: Extent to which respondents consider themselves specialists in digital humanities (Q1)

Q1: Which of the following statements most accurately



Respondent base: 92

Respondents were asked to indicate (i.e. select from a list of options), their role within their institution (Figure 4). **Two-thirds (66%) were in the listed 'academic' roles**. More than a quarter (26.1%) were in senior or relatively senior academic positions (Head of Faculty, Head of a School or Department within a Faculty, Professor, Associate Professor or Reader) and a further quarter (25%) were lecturers or senior lecturers. Post-doctoral researchers made up 15.2% of the survey sample.

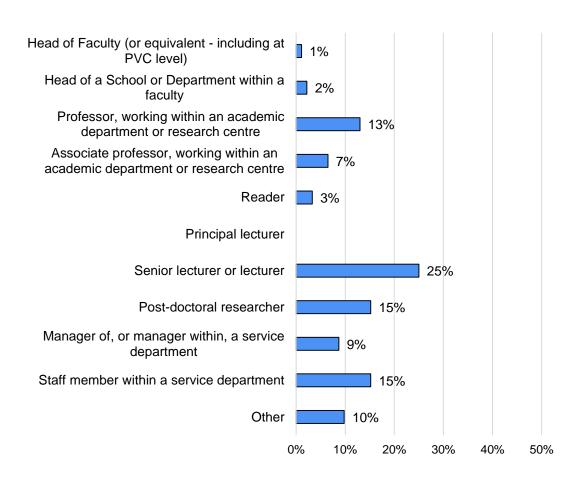
Interestingly, almost a quarter of respondents (24%) managed or worked within a service department or function, such as: Library Services; Information Services; a Technology Enhanced Learning Team; Technical Support; IT Services; or Visual

Resources Centre. Specific roles included managing digital resources and managing a repository.

A further 10% selected 'other' roles. Their descriptions included both teaching positions (contract lecturer, emeritus professor, principal teaching fellow) and other roles (lab director, project manager, analyst and UX developer). These individuals have been included within the 'academic' group when analysing and reporting upon the research, since the questionnaire routing enabled them to respond to questions that targeted academics.

Figure 4: Job Role (Q2)





Respondent base: 92

Almost half of all respondents stated that they had been in their current post for more than four years (Table 2).

Table 2: Length of time in current post (Q3)

| How long have you been in your current post? | Number of respondents |     |
|--|-----------------------|-----|
| Longer than 4 years                          | 41                    | 45% |
| 3 to 4 years                                 | 9                     | 10% |
| 2 to 3 years                                 | 11                    | 12% |
| 1 to 2 years                                 | 18                    | 20% |
| Less than 1 year                             | 13                    | 14% |

Respondent base: 92

A little over three quarters of those in academic roles (76%) worked in an academic department, whilst 19% were based in a cross-faculty centre that focused upon digital humanities (Table 3).

Table 3: Academic department or cross-faculty centre (Q6)

| Within your institution, do you work in:                                      | Number of respondents | Percentage of respondents |
|---|-----------------------|---------------------------|
| An academic department?   | 53                    | 76%                       |
| A cross-faculty centre (or similar) that focuses upon the Digital Humanities? | 13                    | 19%                       |
| Other   | 4                     | 6%                        |

Respondent base: 70

Those who worked in an academic department (53 respondents) were asked to state the subject focus of that department. Most common were departments that focused upon English Literature, English Language and/or Linguistics (Table 4).

Table 4: Subject focus of respondents' academic departments (Q6c)

| Department subject (coded)                    | Number of respondents |
|---|-----------------------|
| English Literature, Language, and Linguistics | 16                    |
| Modern Languages                              | 6                     |
| History                                       | 5                     |
| Classics                                      | 4                     |
| Information Studies                           | 4                     |
| Built Environment                             | 3                     |
| Digital Humanities                            | 3                     |
| Anthropology                                  | 2                     |
| Health/medicine                               | 2                     |
| Other (each from only one respondent)         | 8                     |

Respondent base: 53. Full list of responses is provided in Appendix F.

## 3.4 Responsibilities

In order to understand the extent to which the survey sample represented those with leadership responsibilities for teaching, those in academic roles (70 respondents) were asked to select, from a list, the roles/responsibilities that they currently held. Sixty percent of those in academic roles (42 respondents) stated that they held at least one of these leadership roles.

The most common roles specified were Module Leader (39%), Course Leader (24%) and Programme Director (20%) (Figure 5).

Q7: Which of the following roles/responsibilities do you currently have?

Programme Director

Principal Lecturer or Senior Lecturer with leadership responsibility for a group of courses

Course Leader, with responsibility for a single course/programme

Module Leader

Other academic role with leadership

26%

30%

40%

50%

40%

Figure 5: Roles / responsibilities currently held (Q7)

responsibility for one or more taught

programmes

None of the above

Respondent base: 70

A similar question was posed with regard to teaching (at undergraduate and at masters levels) and training or supervising doctoral students. This, however, was posed to the entire sample, rather than only to those in academic posts, since it was thought that staff in service departments may contribute to teaching.

0%

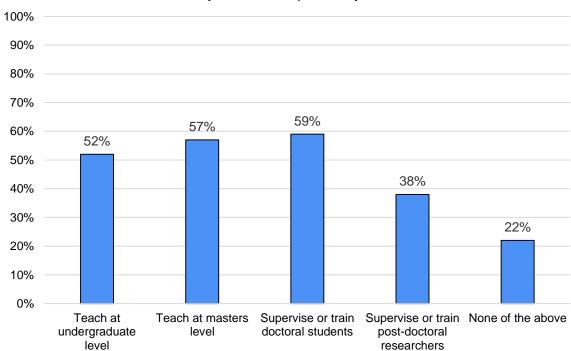
10%

20%

The vast majority of survey respondents (78%: 72 respondents) undertook some form of teaching, doctoral training or supervision. Most common was supervision or training of doctoral students (59%: 54 respondents), followed by teaching at masters level (57%: 52 respondents) and teaching at undergraduate level (52%: 48 respondents) (Figure 6, overleaf). In addition, a substantial proportion of the sample supervised or trained post-doctoral researchers (38%: 35 respondents).

Sixty-four of the 92 respondents indicated that they undertook more than one of these teaching, training or supervising roles. Among those, 31 taught at both undergraduate and masters level <u>and</u> supervised or trained doctoral students.

Figure 6: Teaching responsibilities (Q8)



Q8: Within your current post do you:

Respondent base: 92

Of the 20 respondents who did not teach students or supervise doctoral or postdoctoral researchers, almost half (9) worked within a service department. The remaining 11 were: post-doctoral researchers (6); one professor; one DPhil student; and three who worked in 'other' roles within cross-faculty centres.

## 3.5 Subjects taught

Those involved in teaching were asked to state the subject areas that they taught now and any subjects that they had taught earlier in their career. Those responses have been coded and are presented below (Table 5 and Table 6).

Seventeen respondents currently taught Digital Humanities and the same number taught History. Next most common was Research Methods, followed by English Literature, then English Language & Linguistics. The same group of subjects, with the exception of Research Methods, also appears in Table 6 as those most commonly mentioned as having previously been taught. (As is clear from Tables 5 and 6, however, the close relationships between some of the subject areas mean that care needs to be taken when interpreting this data.)

Table 5: Subject areas currently taught (Q9a)

| Subjects                                       | Number of respondents | % of respondents |
|--|-----------------------|------------------|
| Digital Humanities                             | 17                    | 24%              |
| History  | 17                    | 24%              |
| Research methods                               | 13                    | 18%              |
| Literature (English)                           | 12                    | 17%              |
| English language & Linguistics                 | 11                    | 15%              |
| Digital archiving/digitisation                 | 7                     | 10%              |
| Cultural / social                              | 5                     | 7%               |
| Classics                                       | 4                     | 6%               |
| History of Art                                 | 4                     | 6%               |
| Textual scholarship                            | 4                     | 6%               |
| (Modern) Foreign language & literature         | 3                     | 4%               |
| Publishing                                     | 3                     | 4%               |
| Archaeology                                    | 2                     | 3%               |
| Architectural History                          | 2                     | 3%               |
| GIS/spatial analysis                           | 2                     | 3%               |
| Humanities                                     | 2                     | 3%               |
| Library & Information Studies                  | 2                     | 3%               |
| Other (subjects with only one respondent each) | 15                    | 21%              |

Base: All respondents who teach - 72. Full list of responses is provided in Appendix F.

Table 6: Subject areas taught earlier in career (Q9b)

| Subjects taught                                | Number of respondents | % of respondents |
|--|-----------------------|------------------|
| English language & Linguistics                 | 9                     | 16%              |
| Literature (English)                           | 9                     | 16%              |
| Digital Humanities                             | 8                     | 15%              |
| History  | 7                     | 13%              |
| Internet                                       | 4                     | 7%               |
| Library & Information Studies                  | 3                     | 5%               |
| IT/Computer science                            | 3                     | 5%               |
| Publishing                                     | 3                     | 5%               |
| (Modern) Foreign language & literature         | 2                     | 4%               |
| Digital archiving/digitisation                 | 2                     | 4%               |
| Philosophy                                     | 2                     | 4%               |
| Other (subjects with only one respondent each) | 19                    | 35%              |

Respondent base: All who previously taught different subjects from those currently taught - 55. A full list of responses is provided in Appendix F.

## 3.6 Research specialisms

As context for interpreting responses to other questions, those taking part in the survey were asked to state their research specialisms. From the 67 responses to this question, a wide variety of subjects and topic areas emerged (Table 7). Almost a quarter (24%: 16 respondents) of research-active respondents reported that one of their specialisms was literature, and the same proportion identified history as a specialism. Approximately a fifth of those respondents research Digital Humanities (21%) or digital archiving / digitisation (19%).

Table 7: Research specialisms (Q10)

| Area  | Number of respondents | % of respondents |
|---|-----------------------|------------------|
| Literature                                    | 16                    | 24%              |
| History                                       | 16                    | 24%              |
| Digital Humanities                            | 14                    | 21%              |
| Digital archiving & digitisation              | 13                    | 19%              |
| English language & linguistics                | 12                    | 18%              |
| Data techniques                               | 11                    | 16%              |
| Cultural / social                             | 7                     | 10%              |
| Geographical                                  | 7                     | 10%              |
| Education                                     | 5                     | 7%               |
| Art history                                   | 4                     | 6%               |
| Epigraphy/palaeography                        | 4                     | 6%               |
| Archives/curation                             | 3                     | 4%               |
| History of computing/technologies             | 3                     | 4%               |
| Internet                                      | 3                     | 4%               |
| Network analysis/science                      | 3                     | 4%               |
| Science history                               | 3                     | 4%               |
| Architecture                                  | 2                     | 3%               |
| Arts  | 2                     | 3%               |
| Big Data                                      | 2                     | 3%               |
| Computing / software                          | 2                     | 3%               |
| Philosophy                                    | 2                     | 3%               |
| Publishing                                    | 2                     | 3%               |
| Text analysis                                 | 2                     | 3%               |
| Textual scholarship                           | 2                     | 3%               |
| Other (each mentioned by only one respondent) | 14                    | 21%              |

Respondent base: the 70 respondents in the 'academic' group were asked; 67 responded. A full list of responses is provided in Appendix F.

## 4 The Development and Positioning of DH

## 4.1 Development of the 'discipline'

Academics who were interviewed tended to observe that, within the UK, the volume of digital humanities activity and the number of DH posts in universities were growing. There was nevertheless some uncertainty as to what this meant, in terms of the nature of the work that was taking place, the structures within which DH sat and what the future of DH as a discipline might be.

I think it's clearly building... if you look at the number of chairs in digital humanities and lectureships in digital humanities and in digital history that have been advertised and appointed over the last four years say, it's extraordinary. So there's clearly something happening, but precisely what it involves and what is meant by the digital humanities that are on offer is another question. (Academic 7)

That 'question' was also reflected in the ways in which interviewees described DH and the focus of their own work. Furthermore, for some interviewees, success for DH meant not the growth of centres but integration into "the everyday work of departments", perhaps within the next decade. DH, they argued, was becoming less 'special' and "less something where you have to go to a lab and talk to somebody who'll explain it all to you".

DH was said particularly to have grown, in volume of activity and in acceptance, within text-based disciplines such as History, English Literature and Classics; Music (e.g. digital musicology); and Archaeology. In contrast, less DH activity had been apparent in Philosophy and Theology.

One interviewee described DH as "serious, mainstream stuff" that can "grab headlines" and in which "the funding is as good as any science disciplines, to

conduct the... bigger projects". However there was also one comment that experimental research in DH tended not to be funded.

Whilst DH, therefore, was gradually becoming 'normalised':

There is still a need for these advanced research hubs and Research Centres that will facilitate the experimentation of next generation computing. (Academic 8)

In discussing the growth and evolution of DH in the UK, references were made to the ways in which individual DH centres and posts had been established at particular academic institutions. This included references to several recently advertised DH posts, including at the universities of Newcastle, Edinburgh and Exeter. The advertising of a 'cluster' of three roles at Exeter was highlighted as an example of attempting to grow capacity and therefore develop "something more meaningful".

The development of DH centres within universities was not necessarily, however, seen as likely to drive growth in DH teaching, as one academic observed:

I think a lot of [those centres] have been established to incentivise things like large grant applications, large collaborative grants. I don't think that many of them have teaching in their sights. But I think they have revenue generation in their sights... as kick-starters for grants. (Academic 8)

It was suggested that centres can be vulnerable to cuts in funding and that, among academics, there is:

...still a lot of concern and suspicion that too much investment in DH will not help you in the promotion stakes... [Therefore] the message that many people are picking up is that if you do DH it should be as part of a balanced portfolio of activities rather than something you put all of your effort into. (Academic 3)

In this context, DH researchers were said to be more numerous among junior and senior academics, but perhaps under-represented at lecturer and senior lecturer level. There were also a range of views as to whether a DH 'career track' currently existed and would exist in the medium and long term.

It's still a challenge for early career scholars who feel that they sort of have to badge themselves as one thing or another in order to have a coherent CV... Some employers will really want the digital stuff but others will really want a traditional scholar. And so, I think trying to create a hybrid identity is a bit of a challenge for them. (Academic 5)

In terms of career development, I suspect a lot of them will go into senior administration... when the money runs out... if the digital humanities centre folds, with a few, very rare exceptions of people who generally come from a very computational background... very few of them will continue that kind of digital innovation. (Academic 8)

Publishing in journals was also highlighted as an area in which DH researchers faced particular challenges, since the discipline was relatively immature and its fit with the publishing infrastructure had not yet been clarified:

I think it's difficult to know where to publish your work in Digital Humanities. It can be a challenge... in my discipline, and possibly others, you've got a rather stark choice: do you write your work up in a way that is suitable for DH journals or publications, or do you write it up in a form that's suitable for your own disciplinary area? ...it's just taking a long time for those editorial boards [of major journals] to shift and regenerate. (Academic 3)

Regardless of the pace or nature of Digital Humanities' development as a discipline, interviewees emphasised the importance of networking, even to the extent of stating that "the whole thing [DH] depends on networking". Without greater 'joined-up-ness', argued one academic, there was a risk that efforts were duplicated and resources therefore wasted, particularly in the context of the "cottage industry" model within which DH research tended to take place.

The existence of a DH 'community', however, was debatable, said another interviewee, since DH was increasingly "something that people can opt in and out of". Furthermore, this interviewee argued:

...somebody has done bibliometrics on the Digital Humanities journals and their circulation is really pathetic compared to other mainstream journals. So, if there is a community, it's still very small. (Academic 8)

In the same vein, there was a suggestion that the benefits of 'hanging out with' other scholars who used digital methods and tools had been both liberating and necessary when DH was in its infancy but, as DH had become more pervasive and more accepted, that need might not be so great now and in the future.

Several interviewees commented upon the ways in which DH has developed in the UK, versus in Europe and North America. For example, American Digital Humanities was said to be largely led by the Modern Languages Association and to be influenced by a critical theory approach, in contrast to:

the British Digital Humanities [having] been influenced by approaches to Digital History, computational methodologies and an acknowledgement of the importance of translating... inherited materials into a digital format. [Academic 1]

This had resulted, said one interviewee, in a more practical form of DH in the UK, which was "much more focused on building things and using the tools of analysis to work with the things that people have built".

In Europe, national government- and EU-funded DH centres were said to have been more prevalent and to have brought together "people from all different disciplines". The future and utility of that model, however, were said by one interviewee to be unclear.

### 4.2 DH research centres and networks in the UK

### 4.2.1 Digital Humanities research centres

There are 13 UK research centres that are dedicated specifically to the Digital Humanities, a number of which have been formed very recently (e.g. Exeter; Chester; Lancaster).

Cambridge: Digital Humanities Network<sup>2</sup>

• Sheffield: Digital Humanities Institute

• Sussex: Sussex Humanities Lab

• Chester: Digital Humanities Centre

• Nottingham: Digital Humanities Centre

• Oxford: Digital Humanities @ Oxford

• Swansea: Centre on Digital Arts and Humanities

• Essex: Digital History Centre

• Lancaster: Digital Humanities Hub

• Exeter: Digital Humanities Lab

• Kings College London: Department of Digital Humanities

• University College London: UCL Centre for Digital Humanities

• Kent: Centre for Heritage

Centres have often involved significant strategic investments – e.g. the £3mn investment in Digital Humanities at Sussex and £1.2mn invested by Exeter in its Digital Humanities Lab.

Further information about each Centre is provided at Appendix D.

Whilst most centres focus upon conducting academic research within DH, there are some important differences in emphasis:

• The **Digital Humanities Centre at Nottingham** has a greater emphasis on the provision of technical support for Humanities research.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> Whilst the Cambridge body uses the term "network" in its name, its activities are closer to those of a centre.

<sup>&</sup>lt;sup>3</sup> http://www.nottingham.ac.uk/digital-humanities-centre/resources/how-we-can-help.aspx

- Sheffield's Digital Humanities Institute appears to have greater emphasis than other centres upon working with GLAM practitioner organisations.<sup>4</sup> Over 50% of its research outputs are led by practitioners based outside of higher education (e.g. British Film Institute; British Library; Film Hub North).
  - o In the past one to two years, this institute has shifted its focus from providing technical support to Humanities researchers (similar to Nottingham) toward broader promotion of Digital Humanities research throughout the University's Faculty of Arts.

#### 4.2.2 Other relevant research centres

Two other centres include activities relating to Digital Humanities, but are not specifically dedicated to DH:

- The Culture Lab at Newcastle University, which includes the Centre for Research and Digital Creative Practice and Film Practice.<sup>5</sup>
- Manchester Metropolitan University's Centre for Research in Libraries, Information and Media (CeRLIM), which collaborates with MMUs' wider Digital Innovations Group in areas relating to Digital Humanities (e.g. cultural heritage; corpus linguistics).<sup>6</sup>

#### 4.2.3 Institutional research groups

The research has also identified 13 Digital Humanities research groups or networks within individual higher education institutions (Table 8). All of these are based within Russell Group – or similarly high-ranked – universities (e.g. Edinburgh; Leeds).

- Much of the activity of these groups focuses upon convening research seminars and similar events
- None offers undergraduate or postgraduate teaching in DH

<sup>&</sup>lt;sup>4</sup>https://www.sheffield.ac.uk/faculty/arts-and-humanities/ahfnews/digital-humanities-institute-1.678034

<sup>&</sup>lt;sup>5</sup> http://ncl.ac.uk/culturelab/research/

<sup>6</sup> https://www2.mmu.ac.uk/infocomms/research/cerlim/

- Members are typically academics, postdoctoral and doctoral researchers, and university technical staff (e.g. from libraries).
- All groups are interdisciplinary, across Arts and Humanities, and often include researchers from within Computer Science or other data-driven disciplines.

These groups do not charge a membership fee nor have a formal membership structure.



Table 8: Digital Humanities research groups (UK universities)

| Name of<br>university<br>Edinburgh | Name of<br>research<br>group<br>Digital<br>Humanities<br>Research | School or<br>faculty School of History, Classics and      | URL https://www.ed.ac.uk/histo ry-classics- archaeology/research/res                                  | Nature of activities  To stimulate inter-disciplinary, collaborative research, and widen awareness of individual scholarship in DH.   |
|------------------------------------|---|---|---|---|
|                                    | Group   | Archaeology   | earch-groups/digital-<br>humanities-research-<br>group  | Regular meetings for discussion of DH themes, projects and individual research, and occasional workshops to improve digital skills.   |
| Loughborough                       | DH@lboro  | Interdisciplinary   | http://www.lboro.ac.uk/de<br>partments/aed/staff-<br>research/research-<br>groups/digital-humanities/ | Interdisciplinary research group. Hosts regular forum for discussion and knowledge exchange on all aspects of digital humanities, digital media and digital environments. Bringing together researchers from across the entire School of Arts, English and Drama, as well as from Business and Economics, Computer Science and the Library.                               |
| Leeds                              | Digital<br>Humanities<br>Research<br>Group                        | School of<br>English                                      | https://www.leeds.ac.uk/ar<br>ts/homepage/367/digital<br>humanities                                   | Umbrella unit for those undertaking research in, or that involves, digital corpora, the creation of digital scholarly editions, the exploration of the relationships between computing technologies and culture, the collation of materials in databases and the application of digital technologies to interrogate or frame literary or performance creative strategies. |
| Cardiff                            | Digital Media<br>and Society<br>Research<br>Group                 | School of<br>Journalism,<br>Media and<br>Cultural Studies | https://www.cardiff.ac.uk/r<br>esearch/explore/research-<br>units/digital-media-and-<br>society       | Members of the group have been involved in a diverse set of research projects on digital culture, internet policy, the creative economy, social media and citizen journalism, among others. Funding bodies have included ESRC, the AHRC, NESTA, the Open Society Foundations, and others.   |

| Name of university | Name of research group                             | School or faculty | URL  | Nature of activities   |
|--------------------|--|-------------------|--|--|
| Durham             | Digital<br>Humanities<br>Durham                    | Interdisciplinary | https://www.dur.ac.uk/dh/  | An interdisciplinary research group established in 2016, bringing together a network of people to research the impact and application of technology in the arts, humanities and cultural heritage.   |
| Birmingham         | Digital<br>Humanities<br>Forum                     | Interdisciplinary | https://www.birmingham.a<br>c.uk/research/activity/digit<br>alhumanitiesforum/index.a<br>spx | Allows University of Birmingham staff working in DH to come together to share ideas and identify opportunities for the development of new research activities. Researchers are from across a wide range of Arts and Humanities disciplines.  |
| Glasgow            | Digital<br>Humanities<br>Network                   | College of Arts   | http://www.digital-<br>humanities.glasgow.ac.uk<br>/   | A network hub for all DH research pursued across the College.  |
| Open<br>University | Digital<br>Humanities<br>at the Open<br>University | Interdisciplinary | http://www.open.ac.uk/art<br>s/research/digital-<br>humanities/                              | 10 research projects (including Pelagios, a project that has won significant funding from the Andrew W. Mellon Foundation)   |
| Bristol            | Digital<br>Humanities<br>at Bristol                | Interdisciplinary | http://www.bristol.ac.uk/ar<br>ts/research/digital/  | 5 research projects cited.   |
| Manchester         | Digital<br>Humanities<br>at<br>Manchester          | Interdisciplinary | https://www.digital-<br>humanities.manchester.ac<br>.uk/                                     | Developing digital projects, computational skills training, grant applications and technical review, building collaborations with other researchers and units, and working to upgrade strategic engagement with digital technologies across all stages of the research life cycle. |

| Name of university | Name of research group                         | School or faculty | URL  | Nature of activities   |
|--------------------|--|-------------------|--|--|
| Warwick            | Digital<br>Humanities<br>at Warwick            | Interdisciplinary | https://warwick.ac.uk/fac/a<br>rts/research/digitalhumani<br>ties/                                 | 28 academic research projects, dating back to 2007 – e.g. French Revolutionary Prints as Spectacle (2012) – a project to digitise a collection of contemporary prints from the period of the French revolution.  |
| UEA                | UEA Digital<br>Humanities<br>Incubator         | Interdisciplinary | https://www.uea.ac.uk/art<br>s-humanities/digital-<br>humanities                                   | Partnered with Eastern ARC (a partnership of UEA, Essex and Kent universities, in which Digital Humanities is a major research theme). UEA is also partnered with the CHASE Doctoral Training Partnership, and the AURORA Network of 9 research-intensive European universities. |
| St Andrews         | St Andrews<br>Digital<br>Humanities<br>Network | Interdisciplinary | https://www.st-<br>andrews.ac.uk/library/serv<br>ices/researchsupport/digih<br>um-rescomp/network/ | 40 academic research projects either complete or currently active in Digital Humanities within St Andrews.   |

### 4.2.4 Other UK Digital Humanities networks and groups

A small number of additional network organisations were also identified (Appendix D). Notable among these are:

- The Eastern Academic Research Consortium (Eastern ARC) a research partnership between UEA, and the Universities of Essex and Kent, which has Digital Humanities as one of its three interdisciplinary focal points.
  - Within Digital Humanities the Eastern Arc universities have 'significant expertise' in Big Data and digital heritage, with the University of Essex being home to the UK Data Service.
  - Kent hosts a Digital Humanities Forum, which holds regular meetings of researchers from all three Eastern ARC institutions throughout the year. These meetings focus on the impact of digital technology in the Humanities from all perspectives, including research, pedagogy and enterprise. The Forum also intends to facilitate sharing of best practice, showcase current work, debate live issues, provide learning about cutting edge digital tools, and for the three institutions to plan strategically for the future.<sup>7</sup>
- The Digital Humanities Network of Scotland (DHNS), which provides a
  platform and information hub for all individuals with an interest in Digital
  Humanities research in Scotland e.g. to share information and expertise,
  locate contacts and collaborators, and discuss digital research and
  opportunities.
  - Membership is free and there are approximately 60 members.
- **GW4**, an alliance of the Universities of Bath, Bristol, Cardiff and Exeter that is similar to Eastern ARC.<sup>8</sup> Digital innovation has been identified as an area of collaborative research strength.
  - The GW4 Alliance hosts the AHRC-funded Bridging the Gap project, which encourages much closer collaboration between universities, cultural organisations and local authorities, focusing on research in

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<sup>&</sup>lt;sup>7</sup> https://blogs.kent.ac.uk/digitalhumanities/

<sup>8</sup> http://gw4.ac.uk/

creative economy, heritage, modern languages and environmental humanities.

# 5 Research: Organisations, Projects and Funding

## 5.1 Funded research in Digital Humanities in the UK

### 5.1.1 UK funding

Beyond the work supported by the AHRC and the British Academy, desk research identified only a small amount of UK-funded research in the Digital Humanities:

- The ESRC project, Ways of Being in a Digital Age was a scoping review conducted in 2016 and 2017 to inform potential future ESRC initiatives about how digital technology mediates everyday life
  - The project was funded at a value of £301,720
  - The Principal Investigator was Professor Simeon Yates (University of Liverpool)
  - It involved 17 partner institutions (UK and overseas).<sup>9</sup>
- The major DH project recently funded by the Leverhulme Trust is Geospatial Innovation: A Deep Map of the Lake District. Based at Lancaster University, this three year project (2015-2018) applies exploratory digital methods to the study of historical and literary accounts of the Lake District region between 1700 and 2000.<sup>10</sup> The total value of the award is £230,954.
- In addition, the Digital Research Fund for the Arts (which existed between 2012 and 2015) funded 52 arts and culture organisations to collaborate with tech companies and academic researchers to explore new

<sup>&</sup>lt;sup>9</sup> https://waysofbeingdigital.com/

<sup>10</sup> http://wp.lancs.ac.uk/lakesdeepmap/

ways to reach audiences or generate income.<sup>11</sup> There is, however, no successor programme.

### 5.1.2 International sources of funding for UK-based projects

With the exception of AHRC and British Academy supported work, therefore, the majority of externally-funded DH research in the UK appears to be supported by **non-UK** sources – either directly or as collaborative research in a European context.

The **Andrew W. Mellon Foundation**, is a New York based, private foundation that aspires to promote and strengthen the humanities. It funds Arts and Humanities research internationally. Since 2010 it has funded 108 projects in the UK, both at universities and practitioner organisations (e.g. British Library; the V&A). The Foundation does not fund PhDs. Appendix D lists some examples of funded programmes from the Mellon Foundation, relevant to Digital Humanities, from 2014 or later.

In addition to the Mellon Foundation, two organisations fund European-wide, DH projects:

 Humanities in the European Research Area (HERA) - a network of national humanities research councils and the European Science Foundation (ESF). HERA funding is aimed at well-established scholars.

Currently, HERA is funding a single project relevant to Digital Humanities in the UK: After Empire: Using and not using the past in the crisis of the Carolingian world, c. 900-c. 1050.<sup>12</sup>

http://webarchive.nationalarchives.gov.uk/20161103183702uo\_/http://artsdigitalrnd.org.uk/projects/royal-opera-house/

<sup>&</sup>lt;sup>11</sup> This was a £72mn fund supported by NESTA, the Arts Council and the AHRC. It sought to fund projects that used digital technology to enhance audience reach and/or develop new business models for the arts sector. See

https://arts.st-andrews.ac.uk/after-empire/ This research project – focusing on the 10<sup>th</sup> Century in Europe - will provide a series of online resources (including images and translated texts) for teachers and general readers, alongside more conventional academic research outputs. The project is led by Professor Simon MacLean at St Andrews University, with collaborators in Germany, Austria and Spain.

- The European Research Council (ERC) currently funds nine Digital Humanities projects. These include Charting the Digital: Digital Mapping Practices as New Media Cultures – a Human Geography project based at Warwick University that focuses on understanding the impact of digital mapping as a techno-cultural phenomenon.<sup>13</sup> This project has been awarded in excess of £1mn.
- Digging into Data a scheme created in 2009 by a collaboration of US, Canadian and UK research funders (including Jisc) to address how 'big data' transforms the research landscape for the Humanities and Social Sciences. Since 2011, a growing number of European funders have been involved in the scheme.
  - Digging into Data awards funding for collaborative academic projects – not for PhD or postdoctoral work
  - All of the projects it has funded are international collaborations between academic researchers in different countries.
  - Digging into Data provides no details about the financial value of the research projects that it has funded.

The fourth round of funding in 2016 has supported six DH projects that involve UK universities. These projects are listed in Appendix D.

## 5.2 Sources of funding identified in primary research

#### 5.2.1 Insights from interviews

Organisations identified in interviews as having funded **DH research in universities** were as follows:

- AHRC described as "the main port of call in most cases"
  - The Digital Transformations theme that they had was, I think, very salutary. (Academic 3)
  - I would guess that the majority of funding [for UK DH] is from AHRC.
     [Academic 8]

<sup>&</sup>lt;sup>13</sup> https://www2.warwick.ac.uk/fac/cross\_fac/cim/research/charting-digital/

- ESRC said to have "funded a lot [of DH research] and don't get quite the same attention as AHRC"
- European Union "it's really the EU, the AHRC and ESRC"
- EPSRC (Digital Economy Programme; Co-creation Programme and, historically the Cross-disciplinary Interface Programme)
- Andrew W. Mellon Foundation
  - "the Mellon Foundation's Scholarly Communications programme has been really fantastic in this area. But it's a difficult one to break into". (Academic 3)
  - o "they are really, really good funders of this sort of work because they are loyal funders. So, you can go back to them and say, "We've done this but now we want to do that." (Academic 5)
- Alfred P. Sloan Foundation (USA)
- 'Digging into Data' Challenge described as "wonderful" and as increasing the fund size and number of participating nations at each round
- Jisc major funder a decade ago but now said to have "dried up"
- British Academy (for "small awards" that were person specific)
- Leverhulme Trust mentioned, alongside the British Academy, as "funding lone scholar research... which isn't really what digital humanities is all about"
- The devolved governments in Wales and Scotland
- Universities themselves, via internal funding for DH research projects.
- Arts Council and British Council cited as minor funders of DH.

According to one academic interviewed, digital humanities had:

...benefitted quite substantially from the trend towards larger research projects, larger research grants, which AHRC and other research councils have kind of promoted. (Academic 7)

Andrew W. Mellon Foundation was said to be especially helpful since it could "see the long-term vision [and] buy into this at quite an early stage".

From one interviewee, however, came a concern that where a university did not have in place 'an infrastructure' for digital humanities, dependence upon external

research funding meant that a great deal of time would be spent chasing funding and that currently "the money is drying up".

**GLAM sector interviewees** identified the following organisations and channels as having funded DH activity in which they and their employers had been involved:

- AHRC
- Crowdsourcing for a joint project with a university
- Newton Foundation
- Leverhulme Trust
- Arcadia Foundation
- Heritage Lottery Fund.

### 5.2.2 Findings from the survey

Survey respondents in academic posts (70 respondents) were asked how significant a role (in the past three years) the AHRC, other research councils (e.g. ESRC), the British Academy, Leverhulme Trust and 'Other' providers had played in funding their own research that had a DH focus.

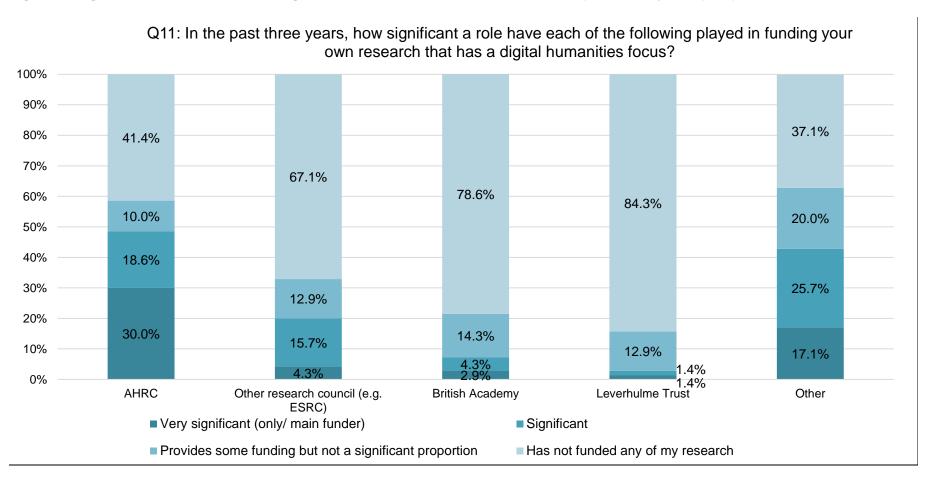
Only the AHRC was identified by a substantial proportion of respondents as a Very significant or their only/main funder (30%) – and was also identified by almost 19% as a Significant funder. A further 10% stated that the AHRC had provided some funding. In total, therefore, almost 59% of respondents in academic roles had received AHRC funding for digital humanities-focused research within the past three years (Figure 7).

Other research councils were identified as Very significant by 4% of respondents and as Significant by 16%. A total of 67% of those in academic roles, however, had received no funding from other research councils, in the past three years, for DH-focused research.

British Academy was reported to have provided funding by 21% of academics in total, although only 7% considered it to be a significant or very significant funder.

Almost 16% percent of those in academic roles stated that they had received DH-related research funding, in the past three years, from the Leverhulme Trust, but only 2.8% identified this as Significant or Very significant.

Figure 7: Significance of different funding sources for DH-focused research in the past three years (Q11)



Respondent base: 70



Sixty-three percent of the 70 respondents in academic roles had received DH-related research funding, in the past three years from 'Other' sources. Forty of those went on to state the funding sources that they had accessed, and identified a wide range of funders (see full list at Appendix F). The sources most commonly mentioned were: internal funding from the academic's own institution; EU / Horizon 2020; the European Research Council; and the Royal Society of Edinburgh (Table 9). Some respondents identified more than one funding source.

Table 9: Other sources of funding identified (Q11f)

| 'Other' sources of funding                            | Number of respondents |
|---|-----------------------|
| Internal funding                                      | 7                     |
| EU/Horizon2020  | 6                     |
| ERC   | 3                     |
| Private donors  | 3                     |
| Royal Society of Edinburgh                            | 3                     |
| Governments of other countries (France, Spain, USA)   | 3                     |
| Andrew W. Mellon Foundation                           | 2                     |
| Carnegie Trust  | 2                     |
| Non-academic companies/charities                      | 2                     |
| Research councils of other countries (Canada, Norway) | 2                     |
| Other (mentioned by only one respondent)              | 20                    |

Respondent base: 40

# 5.3 Accessibility of funding

Respondents were offered an opportunity to comment upon access to – or sources of – funding that was specifically for DH research: 30 of the 92 respondents provided a comment (summarised in Table 10).

Table 10: Comments about funding for digital humanities research (Q12)

| Nature of comme               | ents about Digital Humanities research funding                                      | Number of responses |
|-------------------------------|---|---------------------|
| Challenges of                 |   | 10                  |
| applying for funding for DH   | Challenge of applying for funding for interdisciplinary projects                    | 3                   |
| projects                      | Range of DH topics which receive funding is limited                                 | 3                   |
|                               | Hard to get funding for exploratory/pilot research                                  | 2                   |
|                               | Digital aspect makes DH projects expensive  | 1                   |
|                               | Challenge of getting cutting-edge research funded                                   | 1                   |
| Availability of /             |   | 9                   |
| Access to DH funding          | Little DH-specific funding available  | 3                   |
| luliulig                      | Amount of funding available is reducing   | 2                   |
|                               | Good access to DH funding   | 1                   |
|                               | No worse than in other fields   | 1                   |
|                               | Found it hard to access funding   | 1                   |
|                               | Increasing competition for DH funding   | 1                   |
| Funders'                      |   | 7                   |
| understanding / assessment of | Funders' assessment of DH projects - limited understanding of DH                    | 2                   |
| DH                            | Funders' assessment of DH - don't perceive it to be a separate discipline           | 1                   |
|                               | Funders' assessment of DH projects - guidance needed in how to successfully apply   | 1                   |
|                               | Funders' assessment of DH projects - hard to get proposals assessed                 | 1                   |
|                               | Funders' assessment of DH projects - lack of transparency                           | 1                   |
|                               | Funders' understanding of DH has improved   | 1                   |
| Funding needs                 |   | 7                   |
|                               | There is a need for funding/support to develop sustainable resources/infrastructure | 6                   |
|                               | More funding needed for individual research and skills development                  | 1                   |
| Alternative                   |   | 4                   |
| sources of                    | Importance of internal funding  | 3                   |
| funding                       | Funding accessed from alternative sources (media sector, exhibitions)               | 1                   |
| Other (mentioned              | by only one respondent)   | 3                   |

Respondent base: 30. Full responses are provided in Appendix F.

The most commonly occurring theme was that applying for funding for DH research can be particularly challenging, more so than for more traditional fields, due to its nature.

Making the case for interdisciplinarity often causes issues with reviews of funding applications - those reading them often sit in only one of the related disciplines, and - as a result - can fail to see the 'whole' project. (Reader)

There continues to be a paucity of research funding that offers consideration of bids via a truly interdisciplinary mechanism. In other words, it is very hard to get bids for funding for multi/interdisciplinary work fairly assessed. (Post-doctoral researcher)

Other aspects of digital humanities research which respondents saw as presenting barriers to accessing funding were that:

- The range of topics which tend to receive funding is limited;
- It is difficult to obtain funding for exploratory or pilot research to test ideas before making larger applications;
- The digital aspect of projects can make them prohibitively expensive.

There are very few "bootstrapping" grants that can allow people to do pilot projects and suss out how to do larger grant applications in due course. (Head of a school or department within a faculty)

Seven respondents commented that the success of funding applications was influenced by *funders' understanding or assessment of digital humanities*. Most of those comments interpreted this as restricting their chances of obtaining research funding. The funders, it was suggested, may have insufficient understanding of DH as a discipline, and are not transparent in their assessment of applications.

It is not clear how research which is DH-led is viewed/assessed by funders under the main funding streams, e.g. AHRC main research standard route. (Senior lecturer or lecturer)

I believe there is a need for a broader base of technical reviewers for the AHRC - and specific training for technical reviews of DH research projects. (Post-doctoral researcher)

One respondent suggested that these perceptions could partly be addressed by research councils providing additional guidance on how to access funding for digital humanities research.

More guidance is needed for us on how to access and be successful in applying for this kind of funding (e.g. AHRC), whilst allowing us to be cutting edge and not re-invent the wheel / fall into formulaic approaches already done on other projects. (Senior lecturer or lecturer)

One of the comments about *funders' assessment of digital humanities projects,* highlighted that funders understanding of DH, and subsequently their assessment of bids, had recently improved.

My impression is that the research councils have now woken up to the importance of digital humanities research and are better equipped to assess applications in this area. (Senior lecturer or lecturer)

A significant issue emerging from these comments was a lack of sustainability of digital humanities resources. Respondents considered it important that there be investment in developing sustainable infrastructure and resources, so that work undertaken could last beyond the funded period.

There is no provision for continuation of "finished" projects, which effectively terminates projects just when they start to be able to collect real data....

The result is often that all the funding is terminated just when the knowledge that would allow the data collection is accumulated. This way you end up with proof-of-concept corpora, or document collections that remain unfinished. Funding bodies tend to not fund such "completion"-type projects. (Post-doctoral researcher)

There is still a lack of understanding about the challenges posed by the digital medium, especially with respect to the long term sustainability of digital resources for research. While follow-on schemes might not be the solution, a pot of funding should be devoted to support hosting and maintenance, including the update of infrastructure... (Other job role)

## 5.4 Digital Humanities and the REF

In a small number of interviews there were suggestions that there has been insufficient advocacy regarding the treatment of digital humanities within the REF, and a similar issue was highlighted with regard to the TEF. The lack of a national body for DH, it was suggested, places its researchers at a disadvantage. Where queries had arisen in the REF they were said to have been dealt with at international level, but not always effectively.

Interviewees highlighted, for example:

- Early career researchers' concerns about experimental research formats and their acceptability within the REF
- A tension between developing high quality REF outputs, producing high quality teaching and, alongside those, accommodating the fact that some DH activity is closer to professional services than to teaching and research
- Difficulties in getting digital outputs peer reviewed
- Practical considerations, such as whether a research output developed in digital form would be accessible, several years hence, when it was required to be submitted.

I think getting digital outputs peer-reviewed is very difficult and is not working... I think this is an area that the [DH] community really needs to focus on. And... with the next REF guidelines coming out quite soon, there is an opportunity to do something and to start making some collaborative recommendations to HEFCE or to Research Councils. (Academic 8)

## 6 Digital Humanities Teaching and Training

## 6.1 Defining and meeting DH skills requirements

The research set out to explore a range of skills-related issues, including:

- Demand for skills development among DH academics
- Perceived requirements for DH teaching at undergraduate and postgraduate level – and the extent to which these were being met
- The training available to doctoral students and early career researchers.

From interviews with academics, there emerged a wide variety of skills development and training priorities: for themselves, their colleagues and their students.

Interviewees highlighted in particular the **importance of overall digital literacy** and the ability to understand what can and cannot be done with digital material and digital resources. There were also some suggestions that among humanities academics as a whole, digital skills remained relatively underdeveloped.

I don't think people have basic editorial competencies let alone ones that would relate more to sophisticated digital editions. (Academic 3)

People in arts and humanities really, almost by definition, don't have that training, given the nature of the education system in this country. (Academic 7)

I think there is still a perception in the humanities that anything more innovative than just putting stuff online or doing number crunching, is not something they're taught in school, it's not something they have the ability to do. (Academic 8)

The 'basic ability to count and cross-tabulate and generate overviews of data' were identified as "clearly necessary" skills. Several academics, however, discussed the extent to which it was necessary – or appropriate – for researchers in universities to learn quite specialist, computing skills.

One academic indicated that coding was an essential skill for DH academics, but perhaps felt "quite foreign to humanities scholars a lot of the time." Some other interviewees, however, felt that DH research could be undertaken without knowing a great deal about coding. One interviewee, for example, argued that DH scholars do not need to undertake higher level technical work within a project and can delegate this to technology partners or to specialist colleagues. Nevertheless, there was a suggestion that relying upon technology partners is becoming less common.

I think we're starting to see a bit less of that and a bit more [of] humanities scholars training themselves up. (Academic 5)

Various institutional models to access or develop technical skills were outlined, from in-house experts who "go from project to project, bringing certain skills", to skills development workshops, for example in 'software carpentry'.

From some interviewees, there were suggestions that early career researchers might, in future, have less need for digital skills-building, since they would be 'digital natives'. The overall perception, however, was that – currently – there was demand for training to address needs such as:

- The basics of programming and of working with software;
- Working in the data environment; and
- Working online.

Specific skills that interviewees suggested as useful for DH research were:

- Different types of conceptual modelling mapping and edition-making
- Linguistic analysis
- Textual analysis
- Editing
- Image categorisation
- Crowdsourcing

Good data management; information extraction (from existing sources).

Software packages mentioned were: SPSS; Mathematica; TEI; XML; and Python.

What emerged from all of the academic interviewees was that training needs, whether basic or advanced, varied depending upon the research that was being conducted. There was a suggestion that this leads to ad-hoc approaches to skills development, in order to meet the requirements and timescales of individual research projects.

I mean it really does depend on the type of project with which one is involved. You can't say that there are a set of skills that would apply across the range of Digital Humanities. (Academic 2)

Unless I need to programme in R, what's the point in me learning to programme in R? (Academic 6)

People tend to know what they want to do if they're just coming for ad-hoc training, I think. When you build it into a programme of training, that's a slightly different thing, isn't it? (Academic 5)

# 6.2 Skills development - approaches and support

### 6.2.1 Peer-to-peer learning and self-teaching

Several interviewees noted that academics often learned DH skills and learned about DH developments largely from colleagues, or were self-taught.

An awful lot of it is still very word of mouth, very informal...I think a lot of it is learning through doing. (Academic 8)

I think a lot of it will be colleagues. I think a lot of it is talking to colleagues, seeing what's presented at annual conferences in their field, what is new and exciting. (Academic 5)

One interviewee who mentioned peer-to-peer learning said that this was not always an adequate route to skills development, since there may not be sufficient fit between the skills that different colleagues required. A further concern was that

"[you] don't get a lot of people requesting certain kinds of DH training", therefore some skills that could have an impact upon research were simply not being developed. This was in line with a concern raised by a partner:

It's like when people don't know what they don't know, then when you ask them what they need to know, they don't tell you the right things.

#### 6.2.2 Formal courses

In interviews, academics mentioned a range of training that takes place through libraries, DH Centres and summer schools. The **Oxford Digital Humanities Summer School** offers training to anyone with an interest in the Digital Humanities, including academics at all career stages, students, project managers, and people who work in IT, libraries, and cultural heritage. Lancaster University also offers a Summer School in Corpus Linguistics and other Digital research methods, for postgraduate students and academic researchers.

Several interviewees highlighted the 'Oxford Summer School', as an obvious place to begin to address DH training needs. Having begun as the Text and Coding Summer School, this was said to have grown to become "a real broad brush training in Digital Humanities", attracting participants from across the UK and internationally, including block bookings from some universities. It was said also to "reach out to people who are not necessarily working in the field of Digital Humanities but just want to find out what it's all about". One informant noted that the most popular course within the Summer School was 'Introduction to Digital Humanities', which always sold out and attracted the largest cohort; suggesting that "a lot of people just want an introduction".

Nevertheless, there was a suggestion that, beyond summer schools, there are no obvious training resources available to new 'initiates'.

Some academics said that they 'pieced together' training from a variety of sources; one suggesting that for practical skills, such as coding, they turned to a network that they had established within Computer Science. The same interviewee

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https://digital.humanities.ox.ac.uk/dhoxss/

mentioned the Data Innovation Research Institute at Cardiff, which whilst looking to reach out to the Arts and Humanities, was predominantly "Science-based". Other references to skills development opportunities included training at the Institute of Historical Research, and a GIS course available at Lancaster University.

### 6.2.3 Face-to-face versus online learning

Face to face, rather than online, learning tended to be very much preferred for DH skills development. One academic commented that online learning may exist, "but nobody really uses that". Some reasons given were that learning was more productive when it was interactive and discussion-based, because often the need is for a specific solution, rather than 'generic training'.

I feel pretty strongly about the benefits of face-to-face learning because I think very often academics have very particular research questions they need to answer, and generic solutions aren't very helpful. (Academic 7)

I think it's quite a difficult thing to offer in [an online] format...You need to be in the room with people in order to overcome some of that hesitancy around gaining these skills. (Academic 5)

Two of the academic interviewees were more positive about online learning for DH skills, noting that it did not seem to be offered at the moment, but was a 'really interesting question.' An example given was of a colleague who had successfully self-trained using an online course (titled 'Programming Historian'):

She's now working at a level with those tools that would shame most cultural geographers. (Academic 1)

## 6.3 DH teaching at undergraduate and master's levels

Four universities that have DH Centres (see 4.2 above) currently offer **taught degree programmes** in Digital Humanities:

- King's College London which offers seven DH degree programmes (six postgraduate and one undergraduate)<sup>15</sup>
- UCL's MA/MSc Digital Humanities<sup>16</sup>
- The Digital History Pathway MA at Lancaster which expects to expand
   Digital pathways across its Humanities MA programmes in the near future<sup>17</sup>
- Swansea offers an MA by Research in Digital Humanities, through its Centre on Digital Arts and Humanities<sup>18</sup>

Among other universities that have DH centres:

- **Chester** intends to offer an MRes programme in Digital Humanities in the future, though no launch date has been announced.<sup>19</sup>
- The University of Sheffield's Information School offers an MSc Digital Library Management programme that includes several modules relevant to Digital Humanities (e.g. Digital Humanities: Textual Analysis).<sup>20</sup>

**Digital skills training** is a key element of all of the current programmes listed above. At **UCL**, for example, all students in semester 2 study the following:

- Programming and Scripting (using JavaScript to introduce fundamental principles of procedural computer programming and scripting languages).
- Server Programming and Structured Data (an introduction to issues, techniques, technologies and underlying principles associated with creating and maintaining Web servers and database-driven websites).
- **XML** (overview of XML, including mark-up techniques, processing with XSLT, and demonstrating the use of XML in publishing).

management-msc

These are Digital Humanities MA; Digital Humanities Research MPhil; Big Data in Culture and Society MA; Digital Curation MA; Digital Media and Asset Management MA; Digital Culture and Society MA; Digital Culture BA. <a href="https://www.kcl.ac.uk/study/Search-results.aspx?q=Digital%20Humanities&level=CourseUndergrad,CoursePostgrad,CourseResearch&mode=&online">https://www.kcl.ac.uk/study/Search-results.aspx?q=Digital%20Humanities&level=CourseUndergrad,CoursePostgrad,CourseResearch&mode=&online</a>

<sup>16</sup> http://www.ucl.ac.uk/dh/courses/mamsc

<sup>17</sup> http://www.lancaster.ac.uk/history/postgraduate/masters/digital-history-pathway/

<sup>&</sup>lt;sup>18</sup>http://www.swansea.ac.uk/postgraduate/research/arts-and-humanities/ma-by-research-in-digital-humanities/

<sup>19</sup> https://dhchester.org/

nttps://dncnester.org/

https://www.sheffield.ac.uk/postgraduate/taught/courses/sscience/is/electronic-digital-library-

- **Digital Resources in the Humanities** (introducing issues involved in the design, creation, management and use of digital resources).
- **Internet Technologies** (website structuring and design, and issues involved in generating, evaluating and delivering online content effectively).

Three additional degree programmes were identified, at institutions that do not have a DH Centre:

- BA (Hons) Heritage Studies with Digital Humanities offered by the University of Wales Trinity St. David.<sup>21</sup>
- MA Digital Information and Media Studies at the University of Glasgow.<sup>22</sup>
- MSc Digital Heritage at the University of York, introduced in 2010.<sup>23</sup>

Within the desk research, two DH centres in UK universities were identified as offering optional DH modules to undergraduates or postgraduates:

- Swansea, which offers two 10-credit modules that teach programming skills in Python (TB1: MLD140) and HTML and CSS (TB2: MLD141). No previous experience of coding is required. These modules are open to all UG students in Year 1 or 2.<sup>24</sup>
- Exeter's Digital Humanities Lab, opened in summer 2017, which incorporates DH teaching into both undergraduate and postgraduate programmes in the Humanities.<sup>25</sup>

Beyond these programmes, web-searching using Unistats and Google, located a small number of other universities that offered DH-related modules, usually as options, within UG and PG programmes (Table 11). This should, however, be

http://www.uwtsd.ac.uk/ba-heritage-studies-digital-humanities/ This programme is intended to allow students to enhance knowledge of digital technologies and software by applying these to various aspects of the Heritage sector (e.g. museums, archives, management or tourism).

https://www.gla.ac.uk/undergraduate/degrees/digitalmedia/

<sup>&</sup>lt;sup>23</sup>https://www.york.ac.uk/archaeology/postgraduate-study/taught-postgrads/masters-courses/msc-digital-heritage/ This course provides training for professionals who wish to work in digital archiving, visualisation, and museums and heritage sector interpretation, curation and education. Includes creating databases and using CAD and VR for heritage.

<sup>&</sup>lt;sup>24</sup> http://codah.swansea.ac.uk/?page\_id=291

<sup>&</sup>lt;sup>25</sup> https://humanities.exeter.ac.uk/research/digital/

regarded as a **sample**, rather than as representing an exhaustive review of DH-relevant undergraduate and postgraduate programmes.

In some instances, the offering of DH-relevant modules appeared to be dependent upon individual academics' research interests:

• E.g. The **University of Southampton** previously offered an undergraduate module to all Humanities students titled 'Digital Humanities: Critical Thinking in the Information Age'. However, its leader, Professor Graeme Earl, has since taken up a position at King's College London, and this module is no longer offered by Southampton.

Table 11: UG and PG modules relevant to Digital Humanities

| University  | Department  | Course/ module name   | Course title(s)   | Course/module leader      |
|-------------|---|---|---|---------------------------|
| Aberystwyth | Department of<br>Theatre, Film<br>and Television<br>Studies               | UG Module: Digital<br>Culture   | BA Film and<br>Television Studies                         | Dr Glen Creeber           |
| Aberystwyth | Department of<br>Information<br>Studies                                   | UG Module:<br>Developing<br>Information Literacy in<br>a Digital World                            | BSc Information<br>and Library<br>Studies                 | Professor Allen<br>Foster |
| Birmingham  | School of<br>English,<br>Drama and<br>American and<br>Canadian<br>Studies | UG Module: Imagining<br>the Digital: Fictions<br>and Theories of Digital<br>Culture               | BA (Hons)<br>English                                      | Dr Zara Dinnen            |
| Glasgow     | School of<br>Culture and<br>Creative Arts                                 | PGT Module: Critical<br>Theories of Digital<br>Media  | Film and<br>Television Studies<br>MA                      | Unspecified               |
| Hull        | Unspecified   | PGT Module: Modern<br>Arts and Humanities:<br>Interdisciplinary<br>Research in the Digital<br>Age | Offered across<br>several<br>Humanities PGT<br>programmes | Unspecified               |
| Leeds       | School of<br>English  | UG Module: Beyond<br>the Book: An<br>Introduction to the<br>Digital Humanities                    | BA English<br>Language and<br>Literature                  | Dr James Mussell          |
| London Met  | School of<br>Computing<br>and Digital<br>Media                            | UG Module: Digital<br>Humanities  | Unclear   | Unspecified               |
| Newcastle   | School of Arts<br>and Cultures  | UG Module: Digital<br>Cultural<br>Communication and<br>the Cultural Sector                        | Unclear   | Dr Areti Galani           |
| Newcastle   | School of<br>English<br>Literature,<br>Language and<br>Linguistics        | PGT Module:<br>Manuscript, Print,<br>Digital  | English Literature<br>MA                                  | Dr Ruth Connolly          |
| Warwick     | School for<br>Cross-faculty<br>Studies                                    | UG Module: Research<br>Methods I: Arts and<br>Humanities (multiple<br>programmes)                 | BA (Hons) Liberal<br>Arts                                 | Dr Kirsten Harris         |

Within depth interviews, academics explained the extent to which their institutions incorporated Digital Humanities subjects and skills into UG and PG programmes. None of those institutions currently offered a master's degree titled Digital Humanities, though one was developing such a programme. Another institution offered a master's in Digital Media, which had strongly DH-focused content. Beyond these examples, DH tended to be offered to students as an optional component of their degrees, mainly at master's level (Table 12).

Table 12: Teaching at UG and PG Level

| Interviewee | Teaching of DH at Undergraduate and/or Postgraduate levels  |
|-------------|---|
| AC1         | Offers a Master's in Digital Media. Undergraduates studying History or Art History have 22 mandatory lecture workshops that include exposure to the major tools and methodologies of DH (e.g. text analysis, visual analysis, geospatial tools).  |
|             | In year 2 undergraduate there is deeper engagement with digital tools and, in at least one Year 3 course, there is some encouragement to use DH tools within the coursework and dissertation.   |
| AC2         | Small staff team. No DH-specific programmes or modules but do integrate DH into teaching more generally.  |
|             | A master's module in Project management and Advanced Research, for example, involves students creating their own digital resources.   |
|             | At Undergraduate level, some module assessments have a digital component.   |
| AC3         | DH activity is very dispersed, therefore whilst it is likely to be taught or introduced within PG and UG programmes, this is not formalised. It is, however, prominent in some programmes, (e.g. postgraduate students in Sociology are offered a DH training course and this is open to other students). |
|             | There is an ambition to find ways of embedding "some quite sophisticated DH elements" within UG and PG teaching, by drawing upon training that is provided for staff and postdoctoral researchers. A proposed course in Digital Musicology is under consideration.  |
|             |   |
| AC5         | Offers Humanities PG students a Digital Humanities pathway, intended to provide basic skills that students may wish to use in their own research. This introduces DH, its background and core components and is followed by short workshops in specific skills,   |

| Interviewee | Teaching of DH at Undergraduate and/or Postgraduate levels   |
|-------------|--|
|             | such as crowdsourcing, TVI and linked data and data management.  |
|             | A Digital Humanities master's programme is in development. Work is also taking place to expand the training that is available at PG level, and embed it into core PG training. |
| AC6         | DH is taught within Master's programme in Information Studies.   |
|             | No digital courses taught at undergraduate level, but an expectation that this will develop.   |
| AC7         | Research Skills for Historians is offered as an optional module) within MA programmes in History and is open to students from across and beyond the faulty.                    |
|             | Making available modules and topics in DH – to students from master's courses and on doctoral programmes – was said to be successful and "there is clear demand for that".     |
| AC8         | "Cuts across" PGT programmes in Information Management and Preservation, and Museum Studies. Also undergraduate programmes in Digital Media and Information Studies.           |
|             | The institution has incorporated digital tools and methods in its UG and PG teaching for many years – seen as embedded into humanities teaching and research.                  |

In some institutions, traditional ways of teaching were said to slow the introduction of new subjects to the formal curriculum, especially at undergraduate level. This had not, however, prevented DH from being offered – successfully – in an extracurricular context.

It's very hard to modernise [in this institution]. You have to have a very, very good reason for changing courses, particularly in the Humanities... But there are lots of ad-hoc... extra-curricular opportunities to get interested in Digital Humanities. (Academic 5)

## 6.4 Evidence from the survey

Survey respondents were asked whether, as far as they were aware, their institution offers undergraduate (UG) or masters (PGT) degree programmes that

have digital humanities in the title, and whether it offers doctoral programmes that focus upon digital humanities (Table 13). Only 13% indicated that their institution offered UG programmes and 26% that it offered PGT programmes that had digital humanities in the title. Slightly more respondents (29%) stated that their institutions offered doctoral programmes that focus upon digital humanities.

In each instance, more than 20% of respondents stated that they did not know whether their institution offered such courses.

Table 13: Digital Humanities degree programmes offered, by institution (Q16)

| Type of programme  | Yes | No  | Don't<br>Know |
|--|-----|-----|---------------|
| Undergraduate degrees that have Digital Humanities in the course title | 13% | 66% | 21%           |
| Masters degrees that have Digital Humanities in the course title       | 26% | 51% | 23%           |
| Doctoral programmes that focus upon digital humanities                 | 29% | 46% | 25%           |

Respondent base: 92

Digital Humanities did appear, however, to be quite commonly offered as an optional module, both at UG and PGT levels: 37% of respondents stating that, as far as they were aware, their institution offered this at UG and 38% that it did so at PGT level. There was also some evidence of respondents' institutions offering compulsory modules in Digital Humanities (identified by 4% of respondents at UG and 15% at PGT level). Interestingly, approximately one third of respondents did not know whether their institution offered DH modules (UG or PG, and optional or compulsory.)

Table 14: Availability of DH modules in UG and PGT courses (Q17)

| Type of module                             | Yes | No  | Don't<br>Know |
|--|-----|-----|---------------|
| A compulsory module at masters level       | 15% | 52% | 33%           |
| An optional module at masters level        | 38% | 26% | 36%           |
| A compulsory module at undergraduate level | 4%  | 64% | 32%           |
| An optional module at undergraduate level  | 37% | 32% | 32%           |

Respondent base: 92

Respondents were also asked whether (as far as they were aware) digital humanities was included as a compulsory or optional course within any postgraduate research training programmes within their institution: a little over half of respondents (53%) believed that it was available as an option and 9% stated that it was a compulsory element.

More than a quarter, however, did not know whether optional or compulsory digital humanities courses were included in postgraduate research training within their institution.

Table 15: Digital humanities in PG research training programmes (Q13)

| DH in PG research training | Yes | No  | Don't<br>Know |
|----------------------------|-----|-----|---------------|
| A compulsory course        | 9%  | 62% | 29%           |
| An optional course         | 53% | 21% | 26%           |

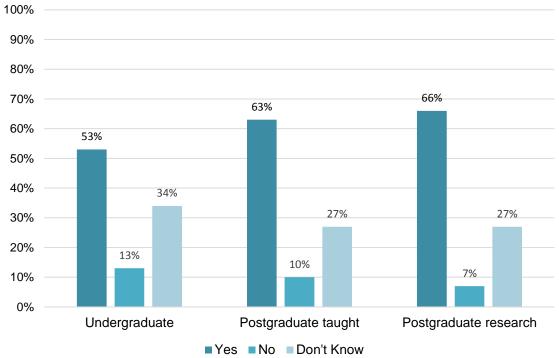
Respondent base: 92

# 6.5 Anticipated changes in teaching of Digital Humanities

Among survey respondents, there was a widespread expectation that, within their institutions, the number of hours of digital humanities teaching would increase over the next three years (Figure 8), particularly within postgraduate taught and research programmes.

Figure 8: Expectation to increase digital humanities teaching (Q18)

Q18: Do you expect the number of hours of digital humanities teaching to increase over the next three years?



Respondent base: 70

Respondents were asked to describe the form that they expected those increases to take: responses have been coded and are summarised in Table 16, overleaf.

Table 16: Nature of expected increase in teaching (Q19)

| Theme                           | Comments  | Number of comments |
|---------------------------------|---|--------------------|
| DH methods and                  |   | 23                 |
| skills                          | Specific skills / topics                              | 12                 |
|                                 | Training in DH methods - general                      | 6                  |
|                                 | Training in DH methods - PG                           | 2                  |
|                                 | Training in DH methods - PhD level                    | 2                  |
|                                 | Intention to develop DH skills certificate            | 1                  |
| Develop new DH-                 |   | 22                 |
| specific modules and programmes | Aspiration to create a DH Master's programme          | 6                  |
| programme:                      | Develop new DH specific module(s) (level unspecified) | 7                  |
|                                 | Develop new DH specific UG module(s)                  | 5                  |
|                                 | DH focussed PhDs                                      | 1                  |
|                                 | Online DH course                                      | 1                  |
|                                 | Pathway in DH   | 2                  |
| DH integrated into              |   | 9                  |
| existing courses                | DH integrated into existing modules                   | 4                  |
|                                 | DH integrated into existing PG programmes             | 2                  |
|                                 | DH integrated into existing UG programmes             | 3                  |
| Other comments                  |   | 13                 |
|                                 | Increased use of digital/online resources             | 4                  |
|                                 | Expect increased demand from students for DH content  | 3                  |
|                                 | Expect to have more DH staff                          | 3                  |
|                                 | General increase in DH teaching                       | 2                  |
|                                 | Interdisciplinary initiatives                         | 1                  |

Respondent base: 38. Full responses are provided in Appendix F.

The largest proportion of responses related to respondents' **institutions intending to introduce or expand their teaching of DH methods and skills**, which was mentioned by 23 respondents. Of those, 12 specified certain skills issues or topics that their institution planned to address, including text encoding, digital editing and semantic web. One reported an intention to develop a DH skills certificate.

Probably around text encoding, digital archiving, mainly across Masterslevel courses, with optional components at first, and then digital methods compulsory for certain doctoral programmes. (Senior lecturer or lecturer)

Digital editing training; for some to be offered (Senior lecturer or lecturer)

I would hope we could introduce a PGR certificate in DH skills (optional) for first-years. (Professor, working within an academic department or research centre)

There was also an emphasis upon training students in digital humanities methods more broadly. This was across all levels, but postgraduate and doctoral level were mentioned in particular.

At postgraduate level there will be an increase in training in specific methods... At undergraduate level, we will further integrate the digital methods into the main programmes. (Senior lecturer or lecturer)

A similarly large proportion of responses (22) related to plans to **develop new DH-specific modules or programmes**. Of those, 12 respondents anticipated new DH modules being developed; five of whom specified these as being UG modules.

A new optional UG module in Digital Humanities will be offered in the A&H faculty if we have the staff resources to cover it ('Other' job role)

Wider availability of optional DH modules at all levels (Post-doctoral researcher)

Six respondents stated that their institutions were planning to **create a DH master's programme**, though this varied between an aspiration and something that was in development.

New MA in Digital Humanities. (Senior lecturer or lecturer)

Potentially, a master's degree. (Professor, working within an academic department or research centre)

There is a serious move to create a Digital Humanities master's programme. (Associate professor, working within an academic department or research centre)

Nine respondents referred to plans to incorporate more DH content into existing modules and programmes, at all levels, within their institutions.

There are lots of attempts to integrate DH and quantitative analysis into various undergrad programmes, through to doctoral, but these are slow moving efforts. (Post-doctoral researcher)

I expect us to start embedding DH topics within existing programmes and modules in the short term, with an eye on developing specific modules in the future. (Post-doctoral researcher)

I don't see a substantial increase of new courses or modules, as we don't have the personnel at present, but I hope that DH will become better integrated and more prominent in existing courses, at least in my department. (Senior lecturer or lecturer)

# 7 Digital Humanities within the GLAM Sector

## 7.1 Positioning and focus of activity

Within the GLAM organisations researched in interviews, there was some variation in the extent to which potentially relevant activity and potentially relevant job roles were termed 'digital humanities'. Commonly, in large GLAM organisations, there tended to be a handful of staff (or full time equivalents) whose roles had a specifically DH focus. In other organisations, DH activity might be undertaken within various roles or teams.

One GLAM sector interviewee noted that, across the organisation, as many as 50 staff might be in roles that involved DH more tangentially, but that "they don't think of it as Digital Humanities at all". Within that group of 50, one large team was described as seeing its focus as 'digital' but was only now beginning to understand that "they're starting to touch on Digital Humanities... use humanities data [from the collection] to power their work". Other groups within the organisation were said to be using spatial mapping, applying big data techniques or "doing various imaging projects".

Within another of the GLAM organisations researched, it was clear that activity which might be termed digital humanities took place within different teams and that no single staff member had an overview of this. In one area of the organisation, a digital collections management system was in place and was about to be enhanced. There was also an ambition to make available more detailed information externally, in the form of open, linked data. A different part of the organisation, however, was active within DH research, including as a partner in EU-funded projects. At a whole organisation level, there was an ambition to "collaborate more by making data as freely available as we can so that people can do things with it".

In two of the GLAM organisations that took part in interviews, roles that had a DH focus were part of or expected to become part of collections/curatorial teams. In one instance, there was a suggestion that a role could have been moved into the IT department, but this had been recognised as inappropriate.

...he sits within the Collections department at the moment, and that's very much a Digital Humanities programme ... the Curatorial side, I think that's where we really need to be so [that] we actually work with the collection information that we store.

Within GLAM sector interviews there were suggestions that whilst some large organisations in the sector were active in developing DH projects and areas of activity, this should not be taken to mean that they had a clear 'digital' strategy.

...[this organisation] is still not really sure what [Digital Humanities] means in terms of a discipline, or what they should be doing.

#### Evidence cited included that:

- Current organisation structures kept apart and did not co-ordinate disparate, DH-relevant activities
- The prevailing view within those organisations was that DH could be supported wholly or largely via research grants.

I don't have a budget at all assigned [from central funds]. All the money that I get has to come from research funding grants. Everything else I do has been completely free for the [organisation].

According to one interviewee, only the British Library was "thinking about Digital Humanities on a larger scale", including via its Digital Curatorial programme. Consequently, it was suggested, DH skills development and the continuation of some DH-focused curatorial roles within the sector could be quite vulnerable if external funding were to be reduced.

For two other interviewees, however, the term 'digital' had accumulated so many different meanings that:

It's meaningless... there's a conflation... between tools, mechanisms, platforms, technologies that enable us to do things and the things themselves [therefore] the notion of digital humanities doesn't strike me as meaning very much.

DH is a funny thing; I don't think it really actually exists. I think it's more a discipline that's defining itself but doesn't really need to. In the end, it's just going to become Humanities again; it's just that digital is the tool that we use alongside it.

## 7.2 National-level organisations and projects

#### 7.2.1 Overview

Within desk research, the DH-focused activity uncovered largely involved major national-level organisations (UK, Scottish and Welsh). Often this involved Collaborative Doctoral Partnerships, in which PhD researchers are co-supervised by a GLAM organisation. Much less activity with identified at regional level.

Please note that this analysis does not include organisations that are partners of the SAS in commissioning the current research (e.g. British Library).

#### 7.2.2 National Archives

**The National Archives** is the national sector body for UK archives. Funded by central government, it has collaborated extensively with the academic community, including within a number of AHRC-funded research projects in Digital Humanities.<sup>26</sup>

- TNA is part of the Thames Consortium FTP the Consortium is awarded funding for three Collaborative Digital Partnerships per year.
- A mapping exercise conducted in June 2016 resulted in a list of over 30 digital research projects, either currently underway or recently completed.
   These included:

<sup>&</sup>lt;sup>26</sup> http://www.nationalarchives.gov.uk/documents/academic-engagement-strategy(1).pdf

- Two 'Big Data' projects funded by the AHRC (Traces through Time and Big Data for Law)
- Various PhD studentships co-supervised by staff (e.g. in dataset visualisation, email management and digital sensitivity tools).<sup>27</sup>

#### Other activities include:

- Organisation of workshops for the Digital Humanities e.g. in 2017,
   TNA organised a joint workshop with the History Lab of Columbia
   University, New York concerning digital access to historic Cabinet papers.
- Seminars for academics and external practitioners to present work to TNA staff (every month).
- The National Archives Digital Research Roadmap (June 2017): The TNA
  is working with the wider archiving sector to consider digitisation of
  archives, and to develop practical solutions.

The TNA is also seeking to reinvigorate involvement with the academic community through its **Academic Engagement and Digital Roadmap**.<sup>28</sup>

The TNA's own **Digital Roadmap** aims to achieve four improvements in the organisation's digital research capability:

- To develop staff skills
- Creating an environment for digital experimentation
- Embedding research methods into digital work
- Promoting The National Archives' digital research.

#### 7.2.3 British Museum

The British Museum hosts six new research students a year, to study for a PhD at a UK University through the AHRC.<sup>29</sup> These projects cover a wide range of topics, both within but also beyond Digital Humanities.

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|---------|-----|-------|--|

http://www.nationalarchives.gov.uk/documents/digital-research-roadmap.pdf

<sup>&</sup>lt;sup>28</sup> http://www.nationalarchives.gov.uk/documents/academic-engagement-and-research-roadmap.pdf

<sup>&</sup>lt;sup>29</sup> https://www.britishmuseum.org/research/research\_projects/collaborative\_doctoral\_awards.aspx

- The British Museum currently hosts Enlightenment Architectures, a three-year research project in collaboration with University College London that uses an interdisciplinary combination of curatorial, traditional humanities and Digital Humanities research to examine Sir Hans Sloane's catalogues.<sup>30</sup>
- It co-organises academic workshops e.g. the Digital Heritage 'Big' Data Hacking and Visualisation in May 2017, in association with the UCL Institute of Archaeology.<sup>31</sup>

The Museum also offers skills training:

- A digital preservation course for museum practitioners, funded by the Heritage Lottery Fund.<sup>32</sup>
- An International Training Programme for practitioners from developing countries that lack access to high-quality digital equipment (e.g. training in the use of high-definition digital cameras).<sup>33</sup>

Current digital activities of its own include 3D imaging of a growing proportion of its collection.<sup>34</sup>

#### 7.2.4 V&A

The V&A is a member of six AHRC Doctoral Training Partnerships and Centres for Doctoral Training.<sup>35</sup> It is also home to the **Victoria and Albert Research Institute (VARI)** – a five-year programme of projects and partnerships that is supported by funding from the Andrew W. Mellon Foundation, and which is intended to improve scholarly and public access to artefacts and objects. Current projects with a DH emphasis include:

 Content / Data / Object - a project focused on the development of descriptive forms appropriate for digital collections - to inform access to,

This project has received a £332,000 Research Project Grant from the Leverhulme Trust. See <a href="https://www.britishmuseum.org/pdf/Announcement Sloane Project BM UCL Leverhulme.pdf">https://www.britishmuseum.org/pdf/Announcement Sloane Project BM UCL Leverhulme.pdf</a>

http://www.ucl.ac.uk/archaeology/calendar/articles/2016-17-events/digital-heritage-workshop

<sup>32</sup> https://www.britishmuseum.org/docs/HLF%20funding.docx

<sup>33</sup> http://www.britishmuseum.org/about\_us/skills-sharing/international\_training.aspx

<sup>&</sup>lt;sup>34</sup> E.g. https://www.artec3d.com/news/british-museum-captures-its-assyrian-relief-collection-3d

<sup>35</sup> http://www.vam.ac.uk/content/articles/r/research-department/

- and interpretation of, digital artefacts.<sup>36</sup> As of November 2017, this project was advertising for two Early Career Fellowships.
- Deciphering Dickens research to develop an online archive and interactive platform for Charles Dickens' manuscripts.<sup>37</sup>

## 7.2.5 National Gallery

The National Gallery's partnership with the AHRC-funded London Arts and Humanities Partnership involves students interested in working in three areas: conservation of holdings; use of the gallery's collections; and researching audiences through digital media.

 In October 2014, the Gallery appointed a PhD student to research the implications of new digital 2.5D and 3D technology fields for cultural heritage organisations.<sup>38</sup>

#### 7.2.6 British Film Institute

The **British Film Institute**'s BFI Filmography project includes datasets for every British film produced since 1911 (launched September 2017).

The BFI is seeking partnerships with academic DH researchers.<sup>39</sup>

#### 7.2.7 Scotland

GLAM practitioner activity in Scotland related to DH includes:

 National Galleries of Scotland was involved in research support to Professor Murray Pittock on the DH project "Edinburgh's Enlightenment 1680-1750". The digital aspect of the project consisted of an interactive

<sup>&</sup>lt;sup>36</sup> https://www.vam.ac.uk/info/content-data-object

<sup>37</sup> https://www.vam.ac.uk/info/deciphering-dickens

<sup>&</sup>lt;sup>38</sup>http://www.nationalgallery.org.uk/paintings/research/partnerships-with-higher-education-institutions/25d-and-3d-image-capture-and-print-in-the-cultural-heritage-field

<sup>&</sup>lt;sup>39</sup> http://www.bfi.org.uk/archive-collections/bfi-filmography-project-overview

- map showing associations, places, institutions and events in Edinburgh during this period.<sup>40</sup>
- National Museums Scotland (NMS): The Museum Digital Strategy makes reference to NMS working with universities to ensure that its understanding of the Digital Humanities is up-to-date (i.e. NMS calling upon the expertise of university staff and seeking support rather than offering it).<sup>41</sup>

#### **7.2.8 Wales**

In Wales:

- The National Library of Wales' Research Programme in Digital Collections (known as NLW Research) was established in 2011 to address and to develop an evidence base for the use, value and impact of the digital collections of NLW.<sup>42</sup>
  - NLW has also worked collaboratively with PhD students on placements, including the following in Digital Humanities:
    - Dr Andrew Cusworth Towards a Digital Land of Song: a digital approach to the archival record of Welsh traditional music, its performance, and its reception
    - Dr Gareth Lloyd Roderick Kyffin Williams Online: presenting and interpreting art in a digital context<sup>43</sup>
- In 2017, the National Museum of Wales advertised a collaborative PhD studentship focusing on Film/Screen Media and Heritage/Museum Studies and will involve a range of audio-visual media regarding the National Roman Legion Museum.<sup>44</sup>
  - The thesis will comprise a 40,000-word dissertation and a series of screenworks for a range of platforms and/or live events (projection, mobile phone, VR headset, installation).

<sup>40</sup> https://www.gla.ac.uk/schools/critical/research/researchcentresandnetworks/robertburnsstudies/edinburghenlightenment/

<sup>41</sup> https://www.nms.ac.uk/media/1153592/collections-research-strategy-2016.pdf

<sup>42</sup> https://www.llgc.org.uk/en/collections/activities/research/

<sup>43</sup> https://www.llgc.org.uk/en/collections/activities/research/phd-projects/

<sup>44</sup> https://www.sww-ahdtp.ac.uk/sww-dtp-collaborative-doctoral-awards-cdas/

 Archives Wales is currently digitising a significant proportion of its material, but this does not appear to involve the academic community.<sup>45</sup>

## 7.3 Regional level activities

DH activity at regional level is primarily among organisations that are partners of the various AHRC Doctoral Training Centres. Examples from the **North West** and **North East of England** are:

- The Tate Liverpool Research Centre hosts five new Collaborative Doctoral Award students every year. These CDAs are advertised on an annual basis. This research informs Tate Liverpool's programme of research and includes a range of seminars, workshops and symposia.<sup>46</sup>
  - Tate also awards the IK Prize, presented annually for an idea that uses digital technology to innovate the way that visitors discover, explore and enjoy British art in the Tate collection.<sup>47</sup>
- FACT a media arts centre, based in Liverpool, which has previously hosted two PhD students in DH – both in collaboration with University of Liverpool.<sup>48</sup>
  - Aneta Krzemien Barkley New media in a digital age: the role of new media in art, culture and society at the turn of the 21st century: case study.
  - Jane Clayton –The transformation of art, culture and society: a critical study of the evolution of the Foundation of Art and Creative Technology, Media Art and Liverpool, 1985-2010.

We have uncovered fewer North East England examples of GLAM sector work relevant to Digital Humanities. One significant example identified, however, is:

<sup>45</sup> https://archives.wales/2016/02/22/welsh-archives-benefit-partnership-funding/

<sup>46</sup> http://www.tate.org.uk/research/research-centres/curatorial-practice-museology

<sup>&</sup>lt;sup>47</sup> http://www.tate.org.uk/about-us/projects/ik-prize

<sup>48</sup> http://www.fact.co.uk/projects/phd-studentships.aspx

Seven Stories, which co-sponsors research fellowships in Children's
Literature, and was – as of October 2017 – advertising for a doctoral
partnership that focused upon how advances in digital technology could be
tailored toward children and young people.<sup>49</sup>

## 7.4 DH skills requirements

Some digital skills such as digital imaging and database technologies were seen as fundamental to work within the sector, rather than as DH-specific. Beyond those skills, however, digital skills requirements depended very much upon individual job roles.

New skills and technology requirements identified by GLAM sector interviewees, in the context of their own organisations, were:

- "Get[ting] our data in shape", that is, turning "intractable information" into data
- Manipulating large amounts of data and therefore be able to programme, rather than simply rely upon Microsoft Excel
- Artificial intelligence and machine learning, since these could save substantial amounts of staff time.

Some important capabilities were said to include:

- Understanding the standards for interoperable data
- A basic understanding of the principles of open data and of the sector ontology (CIDOC CRM);
- Keeping up with "the kinds of things that people are doing" and what one might need to do with one's own data in order to support that.

The Art UK (previously 'Your Paintings') project – which makes available online art from the UK's public collections – was cited as an example of digital skills and tools having a transformational impact within GLAM. The ability, therefore, to begin to

<sup>&</sup>lt;sup>49</sup> http://www.northernbridge.ac.uk/media/sites/teaching/northernbridge/Seven%20Stories%20Partner ship%20Award.pdf

apply digital techniques "such as semantic reasoning, or aggregation, or visualisation, or data mining across that kind of data set, or coins in coin collections... would be wonderful."

It's going to be far easier if you can get good, rich, linked open data from one endpoint that covers all UK museum and gallery collections than if you're having to query two dozen SPARQL endpoints just to pull stuff together.

Currently, however, there were challenges to be overcome, such as:

(a) digitisation (b) tidying where there is digital data; and (c) a national infrastructure for aggregating it....

## 7.5 DH skills development – sources and approaches

One GLAM sector interviewee observed that in academia there was a tradition of peer group seminars and lectures, but GLAM sector organisations tended not to share knowledge in this way. Consequently, it took longer for new sets of skills to be built, across the organisation.

In common with academia, however, there was a tendency toward self-teaching; since skills development tended to be in the context of solving specific and immediate problems, which might not coincide with a course being available.

...to some extent, it's either cracking open something like OpenRefine and going on the forums and seeing how far you get with it.... you're usually faced with a problem and you need to crack it there and then.

I've never had any training in DH work in [this sector]. I've taught myself completely. Most of my colleagues who have shown any interest in what I'm doing, I've trained them the way that I think things should be done.

I think curators are starting to realise that with a little bit of programming knowledge they can do quite a lot of stuff for their research. And they're going, "How do I do this?"

Where external training and development was used, this tended to be provided from within the sector or by universities. The main examples of higher education offering training for GLAM practitioners were:

- The Oxford Digital Humanities Summer School, which is open to cultural heritage and library practitioners.
- UCL, which offers modules from its MA/MSc Digital Humanities degree as stand-alone short courses for Library and Information professionals – including with CILIP accreditation.

Within the GLAM sector, DH training was said to be available from:

- The British Museum, which had won support from the Heritage Lottery Fund to run a digital preservation course, intended for museum practitioners.
  - The same organisation had run an International Training Programme, which included teaching overseas curatorial fellows, digital methods and was involved in other, UK government-funded teaching, to inform digital preservation of artefacts in a specific overseas territory.
- The Museums Computer Group Network.
- Museum Development Officers, across the UK,

Specific skills for which training tended to be sourced externally included GIS for 3D modelling. According to one interviewee, however, more new recruits to the sector now arrive with "a basic grasp" of skills such as "how to do 3D models, how to manipulate data, how to build a website or a social media presence". There was also evidence, in another organisation, that some of the digital skills requirement would be met via **recruitment, rather than staff development**. An example was the orienting of some newly created posts to "data scientists, computer scientists".

In at least two of the GLAM organisations that took part in interviews, digital skills development might shortly be built into **internal training programmes**. One

organisation was also exploring the potential to allow external access to the digital skills programmes that would offer to its staff:

- Internally those programmes would equip staff with the skills that they
  needed in a changing environment, whilst externally they would enable
  academics to access and interrogate the organisation's collections in
  different ways and would be open to other organisations within the same
  area of GLAM activity.
- Programme development was likely to be in partnership with Jisc, whilst content was expected to span theoretical and technical subjects.

# 8 DH Collaboration – GLAM Sector Perspectives

## 8.1 Linking and collaborating with academia

#### 8.1.1 Nature of collaborations

GLAM sector interviewees identified a range of activities in which they collaborated, or had recently collaborated, with academics and their institutions. These included:

- Digitising collections
- Developing digital exhibitions
- Jointly supervising doctoral students
- DH skills teaching.

In one GLAM organisation, an interviewee reported ongoing involvement with universities in contexts from scanning of items from the collection, to (occasional) joint supervision of doctoral students (three universities were mentioned in this context). More involvement in UK doctoral training was anticipated, as academics became more aware of the resources that the organisation had to offer. The organisation also contributed to some digital skills/methods teaching within HE programmes internationally.

Whilst that organisation interacted extensively with academic researchers, much of its engagement with academia was nevertheless said to be transactional, or even invisible, rather than collaborative:

If [academics] can get access to the data and they know what they're doing, they scrape the data and they play with it. And then we find out later when they publish it.

Another large organisation, in which there was frequent interaction with academics, was said to be in the process of formalising objectives and strategies for engaging with universities on DH projects.

There was much less of a sense, however, that smaller, or regional GLAM organisations were likely to be working on DH projects with academic researchers. When discussed in interviews, this was thought mainly to be ad hoc and likely to be stimulated by local interests or connections. One interviewee suggested a need for greater collaboration between local or regional organisations, in their area of activity, and DH scholars. The immediate suggestion was to arrange networking meetings at a local level, so that scholars could meet practitioners and could "think about joint research questions and developing projects".

Currently, "low resource levels" were said to impede any shift toward the sector working in a more equal way with academics, but this did not mean that there was no interest in opening up collections to new and innovative explorations. Research Councils were identified as potentially being able to play a role, alongside GLAM sector lead bodies, in providing networking opportunities. A complication, however, according to one interviewee, was that DH work was considered cross-disciplinary and as "sit(ting) between research councils much of the time".

#### 8.1.2 Making connections

Some interaction between GLAM organisations and academics had come about through conferences but also, increasingly, by interacting on Twitter and social media networks. An organisation in which those channels had already led to several working relationships (and at least one long lasting collaboration) intended to use Skype and Google Hangouts as a way of "talking to scholars about what they want to do and [where] relationships can be built up".

#### 8.1.3 Creative industries and collaboration

Whilst creative industries - such as film and computer games - draw upon a large range of skills that are derived from the humanities (for example in storytelling, narrative construction, illustration or animation), their interactions with universities were said mainly to be with departments such as computer science rather than the

humanities. It was argued, however, that opportunities for broader – multidisciplinary – engagement might be generated by the growth of virtual reality, augmented reality and immersive technologies, which required a greater understanding of storytelling and narrative development.

In the main, however, the potential for collaboration between digital/creative industries and academia was said to remain "quite blurry" and the benefits to commercial participants were not always clear. Within past explorations of this (e.g. work by AHRC that explored relationships between academic departments and the commercial world):

The trouble was that most of it came down to [academics] wanting to have a relationship in order to further their research interests, and a small amount of consultancy, and then some recruitment and not much beyond that.

#### 8.2 Barriers to collaboration

#### 8.2.1 Overview

From some GLAM sector interviewees, there was sense that the culture in that sector was not "really geared up to working with the DH world yet". In this context, one GLAM informant struggled to identify any exemplars for the sector and HE working together, beyond Queen's University, Belfast working with American consortia.

Some important practical barriers to more collaboration with academic researchers were:

- Licensing (i.e. intellectual property rights where an organisation generated revenue from its images or where other restrictions were in place).
  - For example, where GLAM sector data was available via a creative commons licence, academics were said to have invested time in accessing the data, then found that they could not publish it in their research.

 Digital preservation issues (e.g. where most of the collection catalogues were analogue).

Those issues are explored below.

### 8.2.2 Licensing issues

Licencing was mentioned as a major issue by interviewees from two GLAM organisations: one noting that the PSI Directive was a particular barrier to working with academics since it meant that if information was made available to their research without charge, then it would need to be available to everyone else on the same basis. In another organisation, a memorandum of understanding with an overseas university included agreement that the copyright of any digital outputs would be shared.

Collaboration between academics and commercial organisations, in the context of DH, was said to involve some tension, friction "and a fair degree of controversy", as increasing use of 'academic' exceptions – that enabled materials to be used or reused were seen to encroach upon commercial opportunities. This was identified as probably inhibiting certain areas of research.

Intellectual property rights and licensing fees also arose in discussion with the senior informant from the digital/creative industry, particularly with regard to an "academic presumption" about the ways in which content could be used or re-used. Within this context, the tendency for copyright reform to extend exemptions for academic research was said to tend to encroach upon commercial opportunities. The lack of a shared environment in which to discuss such issues meant that even-handed debate about this tended not to take place, and large businesses tended not to be interested in negotiation. When there were discussions, this was often part of negotiating a specific contract rather than in a wider context.

It was also suggested that there exists "an ambivalence in libraries, museums and archives about commercial exploitation" and that this was exacerbated by "a lack of clear public policy". Consequently, it was difficult for curators to know "where to draw that line" and this created difficulties when negotiating usage terms.

There is just this fundamental sense of, "What is the purpose of these organisations and how does commercial exploitation sit alongside that public interest purpose?" And it's not clear, and it's never been made very explicit.

### 8.2.3 Digital preservation

Digital preservation issues were emphasised as a barrier by an interviewee in an organisation where most of the collection catalogues were analogue and often written in multiple hands. The latter point meant that automatic handwriting recognition was almost impossible to employ. Issues of this type were said to be common among longer-established GLAM organisations:

...the longer the organisation has been around, the more problems there are with the collection information and documentation, because it's been created in unhelpful formats. And then anything that has been digital has probably been clutched through three or four different systems by the time it gets to you.

Consequently, there was a suggestion that many such organisations took the stance that:

Yeah, we'd love to [reach out more] but we've got to get data in a form where it's actually sufficiently consistent and reliable to be useful.' And that is a huge problem.

#### 8.2.4 Other barriers

From one GLAM organisation, there was a suggestion that much more interaction with academics could take place remotely, but that some colleagues were not yet used to working in that way. Since cost was a substantial barrier to travelling to conferences, however, in order to grow relationships and increase collaboration, "remote tools" needed to be explored.

There was a reference, in one interview, to needing to create a common language, for example when bringing together scientists and historians, within multidisciplinary DH projects.

Collaboration could also be made more difficulty by the fact that only a very small proportion of a GLAM organisation's collection would be on display, and access to other items, therefore, might involve delays of many months.

To address some of those difficulties, it was suggested, would require a high profile campaign by academics, since it was difficult to bring about such changes via internal pressure alone.

### 8.2.5 Increasing collaboration

Often, it was suggested, GLAM organisations did not explore the potential for universities to help address their DH challenges, because it was felt that academics would see these as not "research level" problems.

Among the GLAM organisations researched in interviews, one was seeking to enhance the role that it tended to play in joint work with academia: moving away from mainly enabling access to its collections and to advice, and toward becoming an equal partner or taking a lead. Currently that organisation did interact extensively with academia, including through doctoral training centres. Staff were conscious, however, that those interactions:

[Needed to] relate back to our business priorities.... So, we're looking to partner on things that are going to help us solve the big questions that we face... being much more actively involved in the research itself, designing research questions that speak to our needs... But it's a cultural shift that will take time to come to fruition.

Within this context, the 'big questions' were said to be around:

- Digital preservation, and discoverability of and access to collections
- The use and re-use of data.

A further consideration was that the GLAM organisation would be quite precise about the quality of the outputs that it required, rather than being willing to accept a 'proof of concept' output.

We'll be saying, "It has to come out like this. It has to be structured like this." So, how attractive that actually is, I don't know. Whether it's something that's actually more undergraduate/master's dissertation level, I don't know. [It's] difficult to know how attractive our problems are to academia.

Within some GLAM interviews, there were suggestions that, at the most senior levels, the organisation may not fully understand the potential of DH research, nor what was required to supporting this. Consequently, even where individuals within organisations were interested in furthering collaboration, it was not always possible to pursue this institutionally. One GLAM interviewee noted, for example, that their organisation's priorities were currently "elsewhere". In that organisation, an opportunity to work with a university to develop a MOOC had not "gained much traction internally", because the senior staff member involved did not "see the point of us doing that sort of thing".

Organisations identified by interviewees as especially effective in 'reaching out' to DH researchers and others (e.g. digital artists) or as being particularly proactive included the V&A and National Archives.

In more than one discussion on this topic, there were comments that DH interactions with academics were perhaps too London-centric or were largely confined to the South of England. Whilst, for smaller GLAM organisations, it was suggested, it was difficult to move beyond simply being a provider of resources to DH projects, there was nevertheless scope for more engagement. Moreover, interaction with academics, it was suggested, would be likely to stimulate GLAM organisations to allocate more resource to DH activity.

# 9 DH Collaboration – Perspectives from Academics

### 9.1 Extent of collaboration with GLAM sector

Survey respondents in academic roles were asked how many of their research projects, within the past three years, had involved working with, or alongside, practitioners in galleries, libraries, archives or museums. A substantial majority (almost 79%) of respondents reported having worked with GLAM practitioners on research projects at least once in the past three years; suggesting that collaboration between academics and GLAM practitioners was relatively common (Table 17).

Table 17: Involvement with GLAM practitioners in past three years (Q14)

| How many of your research projects have involved working with, or alongside, GLAM practitioners? | Count of respondents | Percentage of respondents |
|--|----------------------|---------------------------|
| None   | 15                   | 21%                       |
| One  | 17                   | 24%                       |
| Two  | 15                   | 21%                       |
| Three  | 9                    | 13%                       |
| More than three.   | 14                   | 20%                       |

Respondent base: 70

Notably, working with or alongside GLAM practitioners was most evident amongst survey respondents who considered themselves to be digital humanities specialists (Table 18).

Table 18: Number of GLAM collaborations, by extent of DH specialism (Q1)

|   | <b>GLAM Collaborations</b> |               |               |  |
|---|----------------------------|---------------|---------------|--|
| Extent of digital humanities specialism   | None                       | One or<br>Two | Three or more |  |
| I specialise in digital humanities  | 2                          | 16            | 17            |  |
| I use digital tools and methods extensively, but<br>do not consider myself a digital humanities<br>specialist | 5                          | 10            | 4             |  |
| I make some use of digital tools and methods, but do not consider myself a digital humanities specialist      | 6                          | 6             | 2             |  |
| I engage with digital humanities only minimally   | 2                          | 0             | 0             |  |

Respondent base: 70

## 9.2 Forms of collaboration

Respondents who had worked with or alongside GLAM practitioners within the past three years were asked to indicate (select from a list) the form(s) that this involvement had taken. Fifty-five respondents who had collaborated with GLAM practitioners answered this question. Among those: 43 (78%) had worked on a collaborative research project; 25 (45%) had had contact mainly or exclusively to access resources (such as a digital archive); 25 (45%) had had contact in the context of a digital network; and 8 (15%) in order to facilitate one or more PhDs (Figure 9).

practitioners? (Q15) 50 43 45 40 35 30 25 25 25 20 15 8 8 10 5 n A collaborative Contact mainly or To facilitate one A research Other

or more

collaborative

**PhDs** 

network

Q15: What was the nature of that involvement with GLAM

Figure 9: Nature of involvement with GLAM practitioners (Q15)

Respondent base: all who reported having collaborated with GLAM practitioners at least once in response to Q14: 55

# 9.3 Experiences, benefits and barriers

exclusively to

access resources

for research

research project

Within interviews, one academic suggested that, together, cuts to funding and the advent of open-access provision had "finished off a lot of creativity in [research] libraries": as those libraries had had to "become the go-to place for open-access and data management and repository of data across the UK", this had reduced their capacity to undertake "anything more interesting". The same interviewee argued that the library service 'ethos' was "at odds with the kind of innovation and experimentation" needed in digital humanities".

The limitations posed by incomplete digitised collections were also highlighted as a barrier to some collaborations, in that academics saw the currently available (often incomplete) digitised resources as only a starting point – and often would prefer to undertake projects of their own, involving collections that may not yet be accessible.

The National Archives, however, was described as having been very active in seeking out collaborative partnerships – and as having, in effect, needed to do this in order to address the interesting, scholarly 'problems' that it faced. The British Library was also said to have been "incredibly positive and proactive" about working with researchers and being experimental.

The Bentham Project, at UCL, was singled out by one interviewee as an excellent example of collaboration between scholars of all kinds. A further observation was that, when academics work with library science or archive professionals, a transfer of knowledge takes place simply due to the academic being exposed to "an archival or library science / information science pattern of thinking... the taxonomies of knowledge, the influence of inherited archival structures". The same interviewee remarked that, within one project undertaken with a GLAM institution, it had been necessary to:

...learn a whole new language of both representation and engagement.

And it was a shock. (Academic 1)

Collaborating and developing project ideas with some of the major GLAM sector institutions, it was suggested, was rather easier if an academic was based in London (and therefore could 'go for a coffee' with the key contacts), than would be the case for a junior academic, perhaps in the North of England. Even for academics who did have good contacts, however, the short timescales for some funding applications were sometimes incompatible with the time that institutions required to agree to develop a collaborative bid.

# 10 Membership of DH Networks and Groups

#### 10.1 International networks and associations in DH

#### 10.1.1 Introduction

Outside of the UK, the research identified 25 relevant Digital Humanities networks and associations. These were a mixture of:

- Global and regional umbrella organisations, bringing together Digital Humanities researchers across a wide geographical area
- National and other small-scale networks, with a formal board structure and conferencing activity, and which often tended to be members of the above, larger regional or global organisations
- Less formal academic associations
- (A very small number of) practitioner associations and networks.

### 10.1.2 The major global organisations

The two major **global** Digital Humanities associations are **CenterNet** and the **Association of Digital Humanities Organisations (ADHO)**.

- CenterNet, is a global network of Digital Humanities centres and was founded in 2007. As of November 2017, CenterNet had 194 member organisations, the majority from Europe and North America.
  - Its key aim is to facilitate networking among DH centres internationally – to share projects, tools and staff – and to educate the broader academic community about the value of Digital Humanities.

- Membership costs between \$80-400 per organisation (depending upon the size of each centre) – but is free of charge for centres in developing countries.<sup>50</sup>
- Alliance of Digital Humanities Organizations (ADHO), an umbrella organisation for other national and regional Digital Humanities organisations. Its main activities are:
  - o Organising an annual international Digital Humanities conference
  - Awarding prizes for outstanding Digital Humanities research work (five per annum)
  - o Publishing the journal *Digital Scholarship in the Humanities*.

Members pay a subscription to their own national or regional association, a portion of which is used to sustain ADHO.

In addition, there are two **Francophone** associations for the global Digital Humanities community:

- Humanistica, established in 2014, for those working in DH in French.<sup>51</sup> It is a member of ADHO.<sup>52</sup> Individuals pay €30 for membership alone, or €133 if subscribing to the ADHO journal Digital Scholarship in the Humanities.
- The Francophone Digital Humanities centre, based at Duke University in the US, facilitates collaboration between Francophone DH scholars. This is a very small and loose association, with no subscription charges or membership fees.<sup>53</sup> It is not a member of ADHO.

## 10.1.3 Other important global networks

Two other important global DH networks (lying outside of the orbit of ADHO) are:

<sup>&</sup>lt;sup>50</sup> https://dhcenternet.org/centers

<sup>&</sup>lt;sup>51</sup> http://www.humanisti.ca/

<sup>52</sup> http://www.humanisti.ca/membres/

http://www.francophonedh.com/ Previous collaborators have included scholars based at the University of Haiti, Archivo di Stato (Italy), Cinematheque Francaise (University of Paris), the Stockholm Royal Library (Sweden) and the French Embassy in the United States.

• Text Encoding Initiative (TEI): an international consortium, founded to

develop and disseminate guidelines for the encoding of texts into a format

suitable for use by individuals, institutions and projects. It offers face-to-face

training events, including as part of the Oxford University Digital Humanities

Summer School, and hosts a range of Special Interest Groups.

Institutional membership costs between \$250 and \$5,000 per year,

depending on the number of members within an institution (\$250 for 5

individuals, \$2,500 for up to 50 members).54 There are currently 51

institutional members, including some GLAM organisations (e.g. National

Library of the Czech Republic). Individual membership is also available, for

a fee of \$50 per year.

Digital Classicist - an informal online international community for

individuals and institutions interested in the application of digital humanities

to Classics. The online discussion board indicates that members are

globally-spread.<sup>55</sup> There is no membership charge.

10.1.4 Europe: academic networks

10.1.4.1 EADH

The main European umbrella organisation for DH is the European Association

for the Digital Humanities (EADH). This organisation aims to support the

formation of DH interest groups in Europe.

Individual membership of EADH is via subscription to the ADHO journal

Digital Scholarship in the Humanities. Costs range from £15-89. Lower

cost subscriptions are available for early career or independent scholars but

omit the journal.

It has an Executive Committee of 9 members, elected for three-year terms.

54 http://www.tei-c.org/index.xml

55 http://www.digitalclassicist.org/

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EADH has three Associate organisations whose individual members automatically obtain the status of full EADH members, with conference discounts and voting rights. These Associate organisations are:

- AIUCD (Italian Association for Digital Humanities and Digital Culture)
- DHD (Digital Humanities in Germany)
- DHN (Digital Humanities in the Nordic Countries).<sup>56</sup>

#### 10.1.4.2 National-level associations

There are eight national-level Digital Humanities associations in Europe, most of which were formed from 2010 onwards. All are either Associate or Partner organisations of EADH (Table 19). Their formats and remits are similar, as follows:

- No formal host institution
- A subject reach spanning the Humanities, rather than a focus upon specific disciplines (except in the case of Slavic DH, which focuses on Slavic and East European studies)
- An academic focus, with no evidence of active involvement by significant numbers of practitioners
- The organisation by each network of an annual conference and journal; in some cases, workshop and summer school training events relating to the Digital Humanities
- A board structure and formal membership application process
- A strategic goal of facilitating networking and interdisciplinary research across the Digital Humanities, and raising the profile of Digital Humanities in their respective countries
- Individual, rather than institutional membership
- Paid membership often with tiered options (e.g. with or without subscription to an academic journal)

Membership fees for these organisations are typically around €50 per year. There is no national-level organisation in France; this role is played by the more internationally-leaning Francophone DH organisation.

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<sup>&</sup>lt;sup>56</sup> https://eadh.org/about



**Table 19: Digital Humanities networks in Europe** 

| Name  | Founded | URL                                       | Research, teaching and practice supported by the network  | Strategic DH-related goals   | Cost of membership and other revenue streams                            | Membership<br>type   |
|---|---------|---|---|--|---|--|
| Digital<br>Humanities in<br>the Nordic<br>Countries | 2015    | http://dig-<br>hum-nord.eu/               | Holds an annual conference to support DH research; showcases DH projects on its website; intends to host workshops and summer schools for researchers and students                      | Strengthen research, education and communication in the DH, among Nordic countries. Raise awareness of the significance of DH.                                       | €40 (€25 for students).<br>Membership is free for<br>EADH/ADHO members. | Individual<br>membership for<br>academics  |
| Russian<br>Digital<br>Humanities<br>Network         | 2016    | http://dhrussi<br>a.ru/                   | Teaching DH and digital pedagogies are among its key activities   | Strengthen partner relations in DH, support collaborative DH research and teaching in Russia and internationally, and organise DH events in Russia.                  | No membership information provided and no indication of revenue stream  | No information provided  |
| DH Benelux  | Unclear | http://www.d<br>hbenelux.org              | Annual conference   | No information   | No information  | No information   |
| Czech DH<br>Initiative                              | 2016    | http://czdhi.ff.<br>cuni.cz/en/ab<br>out/ | As a very young organisation, this is still in development - the Initiative aims to promote digital scholarship in the Czech Republic and recruit supporters of the Czech DH Initiative | To foster inclusive understanding of the discipline and recognize plurality of data types, research topics, and methods, as well as diversity among DH practitioners | No information  | Individual<br>academics<br>(currently has 41<br>members spread<br>across 15<br>institutes) |

| Name Italian Association for Digital Humanities and Digital Culture | Founded 2011 | URL http://www.ai ucd.it/                                  | Research, teaching and practice supported by the network Annual conference           | Strategic DH-related goals  (a) Promoting scientific and training activities; (b) improving the visibility and knowledge of interdisciplinary ideas and projects; (c) promoting the integration of human and informal professional skills of all concerned; (d) establishing and consolidating links with other European and international DH organisations. | Cost of membership and other revenue streams  Ordinary staff member: €50 Institutional membership - €150  Reduced staff member (for students and young lowincome stabilized scholars): €30 | Membership<br>type<br>Individual<br>academics; 2<br>organisational<br>members |
|---|--------------|--|--|--|--|---|
| Humanidades<br>Digitales<br>Hispaniacas                             | 2011         | http://www.h<br>umanidadesd<br>igitales.org/in<br>icio.htm | (Information available only in Spanish)  | (Information available only in Spanish)  | €60 (full membership)<br>€30 (reduced membership)  | Individual<br>membership only   |
| Digital<br>Humanities in<br>Germany                                 | 2013         | https://dig-<br>hum.de/                                    | Annual conference;<br>academic journal (Digital<br>Scholarship in the<br>Humanities) | A forum and formal representation of interests for all those involved in research and teaching in DH in the German-speaking world. 300 members.  | Existing EADH members can join for free. €124 for full membership plus subscription to Digital Scholarship in the Humanities journal €80 for membership without subscription.              | Individual<br>membership only   |

| Name      | Founded   | URL                            | Research, teaching and practice supported by the network       | Strategic DH-related goals  | Cost of membership and other revenue streams  | Membership<br>type     |
|-----------|---|--------------------------------|--|---|---|------------------------|
| Slavic DH | Unspecifi<br>ed (but<br>appears<br>to be<br>recent) | https://www.s<br>lavic-dh.org/ | Website contains introductory guides to the DH and DH syllabi. | Supports teaching, scholarship, curation and preservation of digitally-rendered work in Slavic/Eastern European Studies. Connect humanists with social scientists who use similar methods/approaches. | No membership option, only a (free) mailing list. No indication it receives any income. | No details<br>provided |



# 10.1.5 Europe: practitioner networks

## 10.1.5.1 Europeana Foundation

The most significant **GLAM practitioner** organisation in Europe is the **Europeana Foundation**, established by the European Commission to promote good practice in digital cultural heritage. Its **Europeana Network Association** (ENA) currently has 1,700 members across Europe, with a steering committee that includes representatives from national-level organisations (e.g. the National Library of Greece).<sup>57</sup>

- The ENA is open to anyone in Europe working in digital heritage and does not charge a membership fee.<sup>58</sup>
- Current members include some US-based institutions (e.g. University of Chicago; Smithsonian Institution Archives).
- Whilst including some academic members, ENA does not have any formal links with any academic DH networks.

ENA organises a number of **Task Forces** to solve issues and challenges that face the digital heritage sector.<sup>59</sup>

#### 10.1.5.2 DARIAH

The Digital Research Infrastructure for the Arts and Humanities (DARIAH) is a pan-European network that supports those working with computational methods in the arts and humanities. The network organises workshops and summer schools and has a number of working groups that focus on different aspects of digital research (e.g. the development of standards for digital preservation).<sup>60</sup>

 DARIAH has individuals and institutions in 17 member countries, and in other co-operating, non-member countries. The UK is not a member

<sup>&</sup>lt;sup>57</sup> https://pro.europeana.eu/our-mission/who-we-are

https://pro.europeana.eu/network-association/sign-up

<sup>&</sup>lt;sup>59</sup> Current Task Forces include: The Impact Assessment Taskforce (which is developing a European impact assessment toolkit for the cultural heritage sector to assess and manage its impact); Advanced Documentation of 3D digital assets (developing standard guidelines/formats, intended for the creation of 3D representations of objects); Resource Citation/Object Identity Standardization (which is developing metadata standards, procedures and technical mechanisms for scholarly citation of Europeana resources).

<sup>60</sup> https://www.dariah.eu/

country but 21 UK institutions are co-operating partners in some projects – this includes universities such as UCL, Essex and Oxford, and a range of GLAM organisations (e.g. the National Gallery; British Museum; Foundation for Science and Technology).

- It offers a series of training courses throughout the year and summer schools – online and face-to-face
- The DARIAH website provides no information about membership fees.

#### 10.1.6 North America

There are seven relevant networks or associations for Digital Humanities in North America (Appendix D) – one in Canada and the remainder in the US.

The national-level academic networks are:

- The Association for Computers and the Humanities (US)
- The Canadian Society for Digital Humanities (Canada).

These organisations undertake similar activities to their European counterparts (e.g. organising annual conferences for DH academics and researchers; providing a basis for DH researchers to network and collaborate, and to share ideas).

Membership fees for these two organisations are:

- ACH US\$153 individually but a joint membership of ACH and ADHO costs \$181; \$91 for students and for senior citizens.<sup>61</sup>
- The Canadian Society for Digital Humanities provides no details about membership fees.

Membership of both organisations is for individual academics/researchers, rather than for institutions.

In addition, the American Studies Association Digital Humanities
 Caucus brings together ASA members who are involved in DH projects.
 Members develop conference sessions and events related to DH within
 American Studies, addressing issues of digital pedagogy and research. The
 Caucus offers the Garfinkel Prize in Digital Humanities.

<sup>&</sup>lt;sup>61</sup>https://www.historians.org/about-aha-and-membership/affiliated-societies/association-for-computers-and-the-humanities

- Cost of membership for the ASA ranges from \$20-170, depending upon household income – there is no additional cost to become part of the DH Caucus.
- The Big Ten Academic Alliance Universities (Digital Humanities) organises conferences/summits and fringe events at conferences that are run by other DH groups.<sup>62</sup> This is part of the Big Ten Academic Alliance of 14 research-intensive institutions in the US.<sup>63</sup> Members must be based at one of these institutions.

In addition, there are two notable North American DH networks for practitioners.

- Digital Library Federation a group of organisations involved in building digital libraries, and which collaborates on digital library assessment, digital pedagogy and project management.<sup>64</sup> Membership is for institutions and fees are from \$3,100 upwards. It currently has 158 members, mostly a mix of university and public libraries.
- HASTAC a free-to-access community of over 13,000 academics and technologists, with a strong focus on pedagogy for Digital Humanities.
   Members also include individuals working in galleries and museums.
  - Within HASTAC, the Triangle Digital Humanities Network is a free to access loose association that has no membership fee.<sup>65</sup>

#### 10.1.7 Rest of the world

Relevant networks from other parts of the world include the following national-level academic associations:

- Japanese Association for the Digital Humanities
- Australasian Association for Digital Humanities

.

<sup>62</sup> https://www.btaa.org/projects/digital-humanities

<sup>63</sup> https://www.btaa.org/about/member-universities

<sup>64</sup> https://www.dialib.org/

<sup>65</sup> https://www.hastac.org/groups/triangle-digital-humanities-network

Membership fees for these are similar to those elsewhere in the world – e.g. membership of the Australian Association is AUS\$50 a year, including a journal subscription.

There are also some relevant academic DH associations in Latin America.<sup>66</sup>

# 10.2 Individual memberships – survey respondents

Respondents were asked whether they were an individual member of any network, group or community (either UK-based or international, and external to their own institution) which seeks to: (i) further digital humanities research and/or teaching; or (ii) to support digital humanities researchers.

Approximately half of respondents (51%) stated that they were a member of such a network within DH in general and 40% stated that they were a member of such a network within one or more specific, subject disciplines (Table 20).

Table 20: Personal membership of a DH network, group or community (Q21)

| Personal membership of DH network, group or community | Yes | No  |
|---|-----|-----|
| Within one or more specific subject disciplines?      | 40% | 60% |
| Within digital humanities in general?                 | 51% | 49% |

Respondent base: 92

Respondent base. 92

Those who answered Yes to either part of the above question were asked to state the names of the networks, groups or communities of which they were a member. The 49 respondents to this question cited a total of 87 memberships. Nine national or international organisations were mentioned by more than one respondent: most frequently mentioned were the international digital humanities networks **ADHO and EADH** (see Table 21).

Some of the 'memberships' listed, however were of groups or networks within respondents' own institutions, or related to conferences or informal groups.

<sup>&</sup>lt;sup>66</sup> For example, Asociación Uruguaya of Humanidades Digitales; Asociación Argentina de Humanidades Digitales – see <a href="https://www.aacademica.org/aahd.congreso">https://www.aacademica.org/aahd.congreso</a>

Those organisations named by only one respondent are listed at Appendix F. They include:

- Country-specific organisations such as the Japanese Association for Digital Humanities and the Canadian Society for Digital Humanities
- Specialism-specific organisations, such as the Association for Literary and Linguistic Computing and the European Society for Textual Scholarship.

Table 21: Organisations of which respondents are individual members (Q21c)

| Organisations   | Number of respondents |
|---|-----------------------|
| Alliance of Digital Humanities Organizations (ADHO)                             | 14                    |
| European Association for Digital Humanities (EADH)                              | 11                    |
| Text Encoding Initiative (TEI)  | 6                     |
| Internal institution DH group/network   | 5                     |
| DH conferences  | 4                     |
| Digital Research Infrastructure for the Arts and Humanities (DARIAH)            | 3                     |
| The Association for Computers and the Humanities (ACH)                          | 3                     |
| Digital Humanities Network of Scotland  | 2                     |
| Editing Aphra Behn in the Digital Age (E-ABIDA)                                 | 2                     |
| European Research Infrastructure for Language Resources and Technology (CLARIN) | 2                     |
| Europeana Network   | 2                     |
| Informal group membership/contacts  | 2                     |
| Other (each identified by only one respondent)                                  | 31                    |

Respondent base: 49.

# 10.3 Institutional memberships – survey respondents

Respondents were asked whether their institution/department was currently a member of a network, group or community that seeks to further digital humanities research and/or teaching, or to support digital humanities researchers. A little over one third of respondents (34%) stated that their institution was a member of a group within one or more subject disciplines, and 43% that it was a member of a group within DH in general (Table 22).

Table 22: DH networks/groups of which respondents' organisations are members (Q22a)

| Respondents                                      | Yes | No  |
|--|-----|-----|
| Within one or more specific subject disciplines? | 34% | 66% |
| Within digital humanities in general?            | 43% | 57% |

Respondent base: 92

Within this context, respondents identified a total of twenty-one organisations, of which the most frequently mentioned was centerNet, an international network of digital humanities centres (Table 23).<sup>67</sup>

Table 23: DH networks, group or communities, of which respondents' organisations are members (Q22c)

| Organisations  | Number of respondents |
|--|-----------------------|
| centerNET  | 9                     |
| Alliance of Digital Humanities Organizations (ADHO)                  | 6                     |
| Text Encoding Initiative (TEI)                                       | 4                     |
| Internal institution DH group/network                                | 3                     |
| Digital Research Infrastructure for the Arts and Humanities (DARIAH) | 3                     |
| Eastern ARC  | 3                     |
| iSchools   | 2                     |
| Other (each identified by only one respondent)                       | 14                    |

Respondent base: 32. Full list of responses is provided in Appendix 6.

### 10.4 Other contact with networks

In addition to their formal memberships, survey respondents were asked whether they had any other contact with organisations that act to coordinate digital humanities activity. Fifty respondents identified one or more organisations (Table 24). The most frequent responses related to **informal groups** and to groups or networks that were internal to their employer institutions. Two respondents also mentioned having informal contacts in other countries, with whom they co-ordinate digital humanities activity.

-

<sup>67</sup> https://dhcenternet.org/

Table 24: Other contact with organisations/groups that act to co-ordinate DH activity (Q23)

| Organisation/group/network   | Count of respondents |
|--|----------------------|
| Informal group membership  | 8                    |
| Internal institution group/network                                   | 7                    |
| DH conferences   | 5                    |
| Alliance of Digital Humanities Organizations (ADHO)                  | 4                    |
| DH mailing lists   | 4                    |
| European Association for Digital Humanities (EADH)                   | 4                    |
| Oxford DH summer school  | 3                    |
| Digital Research Infrastructure for the Arts and Humanities (DARIAH) | 2                    |
| Digital Humanities in Deutschprachigen Raum (DHd)                    | 2                    |
| Institute of Historical Research (IHR)                               | 2                    |
| Regional DH network(s)   | 2                    |
| Text Encoding Initiative (TEI)                                       | 2                    |
| Other (each organisation mentioned by only one respondent)           | 12                   |

Respondent base: 50. Full list of responses is provided in Appendix F.

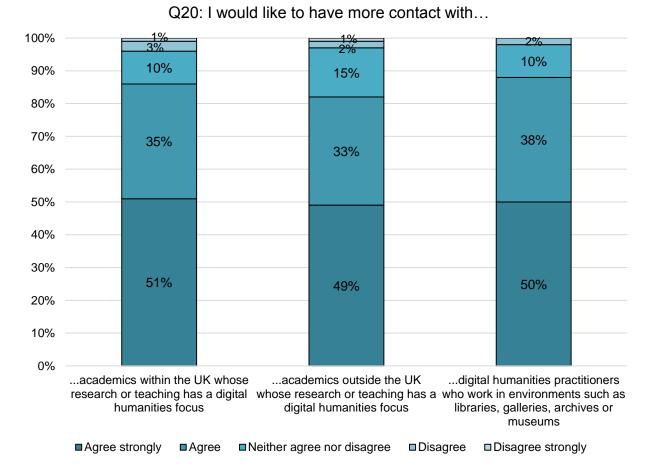
Respondents were also asked to list other academic and professional bodies of which they were members – and went on to list a wide variety of organisations. In total, 107 organisations were mentioned, by 59 respondents.

The most common fields were history (e.g. Royal Historical Society), various regional studies (e.g. British Association for South Asian Studies), and education professional bodies (e.g. Higher Education Academy). A full list of the organisations identified is included at Appendix F.

When asked whether they would like to have more contact with DH academics and practitioners, the majority of respondents agreed or agreed strongly. With regard to each of the three categories (DH academics in the UK, DH academics outside the UK and DH practitioners working in GLAM), approximately half of respondents agreed strongly that they would like more contact (Figure 10).

A small minority disagreed or strongly disagreed that they would like more contact with DH academics (4% for UK academics and 3% for academics outside the UK). Just 2% disagreed that they would like more contact with DH practitioners within GLAM environments.

Figure 10: Extent to which respondents would like to have more contact with DH academics and practitioners



Respondent base: 92

# 11 Conclusions

## 11.1 Context for conclusions

This research set out to review the digital humanities 'landscape' within the UK, in order to enable the commissioning partner organisations to begin to address a variety of aims and objectives that each had for DH. The breadth of those aims and objectives has meant that it has not been possible to do justice to all within this initial piece of work. We are conscious, however, that other initiatives which some of the partners are undertaking will build upon the current project and will therefore be able to bring clarity to issues that have not been able to be explored in depth within a project of this size.

The current research has, however, been able to develop a 'sketch' of the DH landscape and has highlighted a number of interesting features. These are summarised below.

# 11.2 Digital Humanities research

Across the UK university sector, there are 13 Digital Humanities research centres. A further 13 UK universities have DH networks or groups, that undertake or seek to stimulate interdisciplinary DH research. There also exist three co-ordinating groups or networks at regional level.

The most significant funder of DH research in the UK is the AHRC: almost 59% of academics within the online survey reporting that they had received AHRC funding for their DH research within the past three years. For 30% of respondents, AHRC had been their only or main funder. One third of the academics within the survey, however, had received DH funding from other research councils over that period. The British Academy had provided funding to 22% of the academics and Leverhulme Trust to almost 16%. No single, external

funding source other than AHRC was rated as a 'Very significant (only/main funder)' by more than 5% of the academics within the survey. Within both interviews and the survey, references were also made to funding from international sources.

Challenges in obtaining funding for DH research were highlighted in survey responses and within depth interviews with academics: the interdisciplinary nature of DH work being said to create "issues" with regard to funding criteria. Funding for exploratory research was also said, by some, to be difficult to access.

Across the research as a whole, there were comments that **DH required stronger** advocacy within the **UK**, particularly in the context of research funding, other support for research (e.g. within universities) and the treatment of DH within the REF.

# 11.3 DH Teaching

Taught degree programmes in DH are available at four UK universities that have DH centres (King's College London; UCL; Lancaster; and Swansea) and at some institutions that do not have a DH centre (University of Wales, Trinity St David; Glasgow; and York). Not all of those degrees, however, have the term 'Digital Humanities' in their title. With the exception of Trinity St David and King's College London, all are at master's level.

More common, however, are **optional DH modules**, intended for undergraduate or master's students in a specific field of the humanities but often open also to a wider range of students. Desk research identified DH modules at Swansea and at Exeter.

In interviews, there was evidence of a variety of ways in which DH is being incorporated into degree programmes or offered to students more widely. Approaches ranged from mandatory lectures and workshops, to inclusion in module assessments. There were also instances of more general 'embedding' of DH into a range of programmes – and of intentions to do this.

Among the 92 respondents to the survey (which was inevitably to some extent a 'biased' sample, as respondents were from institutions known to be active in DH),

only 13% stated that their institutions offered UG programmes with DH in the title and 26% that they did so at masters level. A slightly higher proportion (29%) believed that their institution offered doctoral programmes that focused upon DH.

More than a third of the survey respondents reported that their institution offered DH modules as UG or PGT options and 15% stated that there was a compulsory DH module included in one or more degree programmes at master's level.

Within doctoral training, the reported incidence of DH courses was higher than at master's level: 53% of survey respondents stating that this was an option and 9% that it was compulsory.

Among both interviewees and respondents to the survey, there was an expectation that digital humanities teaching would increase over the next few years. Roughly two thirds of survey respondents envisaged an increase at PGR and PGT levels over the next three years, and slightly more than half expected this at UG level. The nature of those increases varied, but most common were skills building (specific or generic), developing new master's modules and programmes, developing undergraduate modules, and integrating DH into existing modules or programmes. There were also some references to growing the number of staff who taught DH.

Within a few of the comments made by survey respondents, there was a sense that staffing and other constraints were slowing the pace with which DH teaching was able to be increased and that some respondents were having to take small steps, in the hope of greater gains in the longer term.

This growth in envisaged activity aligned with the views that several interviewees expressed about a 'normalising' of digital humanities and its simply becoming part of 'how we do things'. From some interviewees, there was also a suggestion that as DH content became increasingly common within UG and PG teaching – and as 'digitally native' young people progressed to doctoral training – the need for training to develop some types of DH skills (i.e. to gap fill) was likely to reduce.

# 11.4 Skills development in digital humanities

The DH academics interviewed within the project noted that scholars working within the humanities were gradually developing DH skills – and perhaps relying less upon partner organisations to carry out basic technical work – but that, historically, the education paths that produced humanities specialists had tended not to develop the digital skills that their disciplines would increasingly require. **DH capabilities, therefore, were felt to remain underdeveloped among humanities scholars as a whole,** at a time when digital technologies would become central to research methods in many areas of humanities.

There was little consensus among interviewees when discussing the types of digital skills that were important – coding in particular tending to be an area of difference. Often, however, these views simply reflected the nature of the DH research that took place within particular subject disciplines.

A common theme, nevertheless, was that those working within DH often did not know what they did not know. Consequently, there was a feeling that many opportunities were probably being missed, because scholars were unaware of materials, tools and techniques that could transform some aspects of their research.

DH skills development among academics tended to take place through a combination of self-teaching, peer learning, workshops or other sessions at institution, centre or faculty level, and via attendance at summer schools or other third party-led events. Reasons identified for self-teaching and peer learning were that these were established approaches within academia and that skills development needs may not coincide with the availability of summer school or other skills-building sessions.

The areas of demand that interviewees highlighted, however, focused mainly upon basic programming skills, working with software, working in the data environment and working online.

Notably, when survey respondents indicated the types of activity that a DH network for the UK should prioritise, skills training for early career DH researchers and DH skills training in general emerged among the highest priorities. (Eighty

percent rating skills training for early career DH researchers at 7, 8, 9 or 10, on a scale of 1 to 10, and 79% giving a priority rating of 7, 8, 9 or 10 to DH skills training in general.)

Several interviewees very much preferred face-to-face rather than online learning to build digital skills: partly because of the nature of the skills being built and partly because there was a need to be able to explore specific issues (i.e. go beyond a generic learning package). An already lengthy questionnaire unfortunately prevented this topic from being incorporated into the online survey. There may be merit, however, in further exploring this issue among the DH community as a whole, since we are conscious that those interviewed within the qualitative research were senior academics and practitioners, and may not be typical of the DH community in general.

Within the GLAM sector, beyond digital imaging and database technologies, digital skills requirements tended to be job role specific. As in academia, self-teaching was common, together with attending summer schools and short courses. Some DH training was also available from the British Museum, the Museums Computer Group and from Museum Development Officers working at a local level.

# 11.5 Working together - collaboration in DH

Within the online survey, more than half of the 70 respondents in 'academic' roles stated that two or more of their research projects in the last three years had involved working with or alongside GLAM practitioners. Only 21% had not worked with/alongside GLAM practitioners during that time. Digital Humanities 'specialists' demonstrated the greatest propensity to have worked in that way. The most common forms of involvement had been: collaborative research projects; research networks; and mainly or exclusively to access resources.

In interviews, some academics highlighted the benefits of collaborating with GLAM practitioners, but there were also references to **perceived barriers and limitations** arising from factors such as: cuts to GLAM organisations' funding; decision making timescales; and incomplete digital collections.

GLAM sector interviewees tended to highlight numerous ways in which their organisations worked with higher education institutions, ranging from digitising collections to supervising doctoral students and teaching DH skills. Little of the collaborative activity discussed, however, was strategic in nature and **some interviewees commented that their organisations were not yet thinking about digital humanities in a strategic way.** In one interview, resource constraints were mentioned as limiting the sector's ability to work in more equal way with academics – i.e. to move significantly beyond facilitating access to resources, supervising PhDs etc.

One of the GLAM sector organisations interviewed, however, was in the process of formalising its approach to engaging with universities on DH projects and would therefore have clearer objectives for this in future.

There was very limited evidence of smaller and regional GLAM organisations working with academia. Whilst organisations of that type were not approached for interview, some national-level interviewees had a remit to work with or support regional and local organisations within their own sector, and therefore were able to comment upon DH activity more widely.

Interestingly, when GLAM organisations and academics had collaborated, those links had been forged not only at conferences but also – increasingly – via interactions on Twitter and other social media platforms. There was also an intention, from one GLAM organisation, to use Skype and Google Hangouts to build conversations with academics.

# Appendix A: Qualitative Questionnaire for HE Interviews

#### **Questionnaire for Interviews with Academics**

| Interviewee name      |          |
|-----------------------|----------|
| Job title             |          |
| Organisation          |          |
| Tel. No               |          |
| Email address         |          |
| Interviewed by        |          |
| Date                  |          |
| Permission to list as | Yes / No |
|                       |          |
| contributor?          |          |
| HEI Interview number  |          |
| Transcribed by        |          |

### <u>Introduction</u>

The School of Advanced Study, working in partnership with the British Academy, the British Library and the Arts and Humanities Research Council has commissioned Marketwise Strategies:

- to explore digital humanities research, teaching and practice in the UK;
- to identify current and future digital humanities support needs;
- and to explore demand for a national digital humanities network or association.

We are therefore carrying out research that spans digital humanities activity within UK universities and within galleries, libraries archives and museums. The current phase of research involves interviews with a small number of senior staff in each of those sectors.

The research is being carried out within the Market Research Society Code of Conduct. This means that nothing that you say to me will be reported back as having come from you or from your institution. Instead, all information will be reported back collectively and will not be traceable to particular individuals or universities.

On that basis, are you happy for me to audio record our conversation, to ensure that we have a complete record for analysis?

Before we begin the interview proper, are there any questions that you would like to ask me?

# **SECTION A: BACKGROUND**

I would like to begin by asking a little about your role at [NAME OF INSTITUTION] and about your academic career.

- 1. Would you please confirm for me **your job role or title** at [NAME OF INSTITUTION].
- 2. And could you briefly outline what that role involves?

## Probe for:

- Areas of responsibility with specific reference to:
  - Digital Humanities
  - Wider Humanities role
    - If appropriate, probe which of these they see as their main role.
- Where does that role sit, within the university?
- 3. Could you tell me a little bit about your academic background, and how you came to work in the Digital Humanities? *(obj. 1)*

### **SECTION B: DEVELOPMENT OF DIGITAL HUMANITIES**

4. What can you tell me about the **development of digital humanities within** your own institution?

#### Probe:

- a. Research?
- b. Teaching UG and PGT?
- 5. In what ways, if at all, is Digital Humanities taught formally within Master's programmes (obj. 4)
  - o To what extent is there any teaching of this at undergraduate level?
  - o How is that changing, if at all?
- 6. I am keen also to understand how you see the **development of digital humanities within UK universities in general.** What can you tell me about that...?

#### Probe:

- Emergence of, and development of, major research centres
- Emergence of 'stand-alone' academic posts in Digital Humanities outside of established research centres
- How is the development of digital humanities playing out, across different academic disciplines?
- 7. How has Digital Humanities impacted on your own field of study? (ACADEMICS ONLY) (obj. 1, 3, 4)
  - a. Research undertaken
  - b. Teaching

# **SECTION C: ISSUES IN DIGITAL HUMANITIES**

- 8. Thinking about scholars working in digital humanities, what sorts of issues do they tend to face?
  - In developing their careers?
  - At institution level?
  - In their day to day scholarly activities?
  - In getting their research effectively peer reviews and published (obj. 1, 3)
- 9. How does research in the Digital Humanities tend to be funded?

**a.** Probe sources other than AHRC and British Academy

# SECTION D: PRACTITIONERS AND ACADEMICS – INTERFACES & LINKAGES

- 10. In your experience, to what extent do universities or academics tend to work in collaboration with, or link with, practitioners such as staff in Galleries, Libraries, Archives and Museums when carrying out research in Digital Humanities? (obj. 3).
  - How strong do you feel the links between Digital Humanities researchers and that sorts of institutions tend to be?
  - Is there any need to strengthen or improve the linkages that tend to exist? Why?
  - How might that potentially come about?
- 11. And do there tend to be any links with regard to skills development? (explore)

If not covered in responses to the questions above:

- 12. To what extent do academics who work in digital humanities:
  - access digital resources that reside in UK galleries, libraries, archives and museums?
  - interface or actively collaborate with practitioners who work in UK galleries, libraries, archives and museums?

(accept answer specific to own institution or role, if necessary)

# SECTION E - SKILLS AND TRAINING NEEDS IN DIGITAL HUMANITIES

13. Thinking about those within your own institution who work in or engage with Digital Humanities, what kinds of skills have they needed to develop in order to do that?

Probe:

a. PhD students

- b. Postdoctoral researchers
- c. Full-time academics

### 14. How do they tend to acquire those skills? (obj. 5 and 6)

- From their own institution?
- Externally (e.g. commercial providers; MOOCs and online providers)?
- Which providers used?
  - Who uses them (PhD students; postdoctoral researchers; academic staff)?
  - o Which specific services? What do they offer?
  - O What do you think of that/them?
- Explore the pros and cons of face-to-face vs online learning for skills development in this area.
- 15. Are there any areas or types of skill where Digital Humanities researchers find it difficult to obtain suitable training and development?
- 16. What additional skills, if any, will Digital Humanities researchers <u>need</u> to acquire in the next few years? (obj. 5 and 6)

Probe, e.g. statistical skills; working with large and multi-format digitised data-sets; etc.

### SECTION F: SUPPORT REQUIREMENTS

- 17. Thinking beyond skills, are there any other ways in which academic work in Digital Humanities could or should be better supported? (*obj.* 7)
  - What types of support and why?
  - Who could/should/would provide this?

#### Areas to probe:

- Implications arising from the REF e.g. digital submissions
- Introduction of the TEF
- Support for collaboration and multi-disciplinary activity in the Digital Humanities

International collaboration and support

# SECTION G: DEVELOPING AN ORGANISATION OR NETWORK FOR DIGITAL HUMANITIES

(obj. 9-14)

One of the purposes of the current research is to understand whether there would be any value in developing some sort of network or organisation for digital humanities in the UK.

### 18. What would be your thoughts about that?

Why do you say that?

# 19. If an organisation of that type were to be developed, what remit should it ideally have?

#### Probe:

- Advocacy
- o Training/skills
- Conferences and events
- o Publications
- Support for academic research and researchers
- o Other

# 20. To what extent is there value in having a cross-disciplinary organisation for the Digital Humanities?

o vs interest groups embedded within subject disciplines?

### 21. What type of organisation should it be:

- o A learned society?
- o A loose network?
  - Why do you say that?

# 22. What other associations or networks <u>already exist</u> in the Digital Humanities?

 What other Humanities organisations/associations/networks should it seek to establish a relationship with?

- a. Which ones?
- b. Why/why not?
- c. (Probe for views about what type of relationship this should be)

# 23. What type(s) of membership should it offer?

- Institutional membership
- o Individual membership
  - Why do you say that?

## 24. What type(s) of organisation should be eligible to join?

- a. Probe both academic and professional/GLAM organisations –
   especially perceptions of involvement of the latter
- b. What types of organisation should not be in it?
  - i. Why do you say that?

# 25. What should it charge for membership, if anything?

- o Why/why not?
- o How much?
- 26. What would an organisation of that type need to do or to achieve in order to add value to the Digital Humanities?
- 27. Is there anything else, beyond what we have discussed, that you feel that an organisation of that type ought to provide to Digital Humanities researchers?
  - a. Why do you say that?

# **SECTION E: CLOSE**

Thank you for taking part in this research

- Permission to re-contact
- Permission to list as contributor

# Appendix B: Qualitative Questionnaire for GLAM Interviews

# **Questionnaire for Interviews with GLAM organisations**

|                       | ·        |
|-----------------------|----------|
| Interviewee name      |          |
| Job title             |          |
| Organisation          |          |
| Tel. No               |          |
| Email address         |          |
| Interviewed by        |          |
| Date                  |          |
| Permission to list as | Yes / No |
|                       |          |
| contributor?          |          |
| GLAM Interview number |          |
| Transcribed by        |          |

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The research is being carried out within the Market Research Society Code of Conduct. This means that nothing that you say to me will be reported back as having come from you or from your organisation. Instead, all information will be reported back collectively and will not be traceable to particular individuals or organisations.

On that basis, are you happy for me to audio record our conversation, to ensure that we have a complete record for analysis?

Before we begin the interview proper, are there any questions that you would like to ask me?

## **SECTION A: BACKGROUND**

I would like to begin by asking a little about your role at [NAME OF ORGANISATION].

- Would you please confirm for me your job role or title at [NAME OF ORGANISATION]?
- 2. And could you briefly outline what that role involves?

#### Probe for:

- Areas of responsibility with specific reference to:
  - Support for academic research
  - Wider role in the organisation
    - If appropriate, probe which of these they see as their main role.
- Where does that role sit, within the organisation?
- 3. How many people in the organisation have a role that could broadly be classified as 'digital humanities' or 'digital scholarship'?
  - a. What do they do?
  - b. Do they exist in one team, or are they dispersed around the organisation?

# SECTION B: ORGANISATION'S INVOLVEMENT IN DIGITAL HUMANITIES

4. Can you talk me through the ways in which your organisation works with academic researchers in Digital Humanities?

Probe – for specific examples in each case:

- a. Access to digital resources, such as archives
- b. Co-supervision of PhD students
- c. Skills training
- d. Probe for any other ways in which they support DH research
- e. Who, within the organisation, is involved in offering that support?
  - i. Probe for numbers of staff and job roles.
- 5. What are the organisation's objectives when it works with academia in Digital Humanities projects or initiatives?
  - a. Why those objectives?
- 6. Which universities have you supported?
  - a. In what sorts of academic disciplines?
  - b. On what kinds of projects?
- 7. When you work with academic researchers, how does that tend to come about?
  - a. How is that support funded?
    - ii. What involvement, if any, do you have with any Research Council funded initiatives?
    - iii. Are there any other sources of funding for the support that you offer?
  - Explore connections between [name of organisation] and other
     GLAM organisations with regard to supporting Digital Humanities –
     and the specific role of each.
- 8. *If not covered in previous responses*: To what extent is your work with academics about:

- Letting them access digital resources?
- Co-creation of digital resources?
- Active collaboration in academic research (ask to specify)?
- 9. What <u>issues</u> does working with academic researchers in Digital Humanities pose for the organisation?

Probe for details

- 10. How much interaction is there between Digital Humanities researchers and your organisation?
  - How does that interaction happen?
  - Why does it happen?
  - Could/should there be more of it?
  - How might that potentially come about?

# SECTION C: PRACTITIONERS AND ACADEMICS – INTERFACES & LINKAGES (SECTOR-WIDE)

11. How much interaction is there between Digital Humanities researchers and the wider UK Galleries/Libraries/Archives/Museums sector?

#### Probe:

- What types of activity are you aware of?
  - Probe for details and for any examples
- Which organisations are involved?
- Explore:
  - Geographical spread of activity i.e. London vs outside London – ask for examples
  - Size of organisations involved?
- What is driving that?
- 12. Thinking about that interaction between Digital Humanities and the wider UK Galleries/Libraries/Archives/Museums area:
  - How does it happen?
  - Why does it happen?
  - · Could/should there be more of it?

- How might that potentially come about?
- 13. *If not covered in previous responses*, Where, within that landscape, does [name of organisation] sit?

# SECTION D: SKILLS AND TRAINING NEEDS IN DIGITAL HUMANITIES

- 14. How does training in skills relevant to the Digital Humanities/Digital Scholarship tend to happen in your sector?
  - a. How much of an issue is it?
  - b. How does the sector upskill in this area?
  - c. For what are those skills required?
- 15. What skills has [name of organisation] had to develop in order to offer support for academic researchers in Digital Humanities/Digital Scholarship?
  - a. If appropriate, Thinking about those within your own organisation who work in or engage with Digital Humanities, what kinds of skills have they needed to develop in order to do that?
    - i. Probe for details what skills have been developed by different job roles?
- 16. How did you (and those staff) acquire those skills? (obj. 5 and 6)
  - From your own organisation?
  - Externally (e.g. commercial providers; MOOCs and online providers)?
  - Which providers used?
    - o Who uses them?
    - o Which specific services? What do they offer?
    - O What do you think of that/them?
  - Explore the pros and cons of face-to-face vs online learning for skills development in this area.

- 17. What skills, if any, is the organisation likely to need in the future when offering support for Digital Humanities researchers?
  - b. How are you expecting to develop those?
    - iv. Probe for details what skills will be required by different job roles?
- 18. Does [name of organisation] <u>offer</u> any skills training to academic researchers working in Digital Humanities?

If yes, ask for details

- What is offered?
  - How did that offer come about?
- How is it delivered?
  - i. Online / blended / face-to-face
  - ii. Formal training courses/packages versus bespoke learning ask for examples
- · Who sources it?
- How often is it sourced?

If yes:

19. How has that training been received?

### SECTION E: SUPPORT REQUIREMENTS

- 20. To what extent does digital humanities activity in organisations –like your own receive enough support (from whatever source) e.g. from:
  - Within the organisation?
  - Outside e.g. by Research Councils or by universities?

Who do you think should support that work?

- 21. Are there any ways that you think your organisation's work in Digital Humanities could or should be better supported? (*obj.* 7)
  - What types of support and why?
  - Who could/should/would provide this?

### Areas to probe:

Training

- Support for collaboration with academic researchers
- What types of support and why?

# SECTION F: DEVELOPING AN ORGANISATION OR NETWORK FOR DIGITAL HUMANITIES

(obj. 9-14)

# 22. What organisations, if any, help to co- Digital Humanities activities and development across Galleries/Libraries/Archives/Museums?

If yes:

- Explore names specifically probing for associations that admit GLAM organisations as members???
- What role(s) does that/those organisation(s) play?
  - Ask to specify types of activity

#### Probe:

- Relationships between organisations
- Relationships between national and regional level
- Relationships between GLAM organisation and:
  - Research Councils or other funders
  - o Universities

# 23. Is there anything else that you can tell me about that/those organisation(s)?

# Probe:

- Remit
- Type of activity
- Types of relationship fostered
- 24. How 'joined-up' would you say that relationships between Galleries/Libraries/Archives/Museums and HE are with regard to Digital Humanities?

One of the purposes of the current research is to understand whether there would be any value in developing some sort of network or organisation for digital humanities in the UK.

## 25. What would be your thoughts about that?

- What value or benefit might that give to organisations such as yours?
  - a. Why do you say that?
  - b. Is there a need for an organisation of that type?
    - i. Why / why not?

# 26. If an organisation of that type were to be developed, what remit should it ideally have?

#### Probe:

- Advocacy
- o Training/skills
- Conferences and events
- Publications
- Support for academic research and researchers
- o Other

### 27. What type of organisation should it be:

- A professional association?
- o A loose network?
  - Why do you say that?

# 28. Are there any other organisations that you think this type of organisation should be seeking to establish a relationship with?

- a. Which ones?
- b. Why/why not?
- c. (Probe for views about what type of relationship this should be)

# 29. What type(s) of membership should it offer?

- o Institutional membership
- Individual membership
  - Why do you say that?

# 30. What type(s) of organisation should be eligible to join?

- a. Probe particularly the potential value to GLAM organisations
- b. What types of organisation should <u>not</u> be in it? *among GLAM* organisations, probe the role of size, national/local remit and types of activity
  - i. Why do you say that?
- 31. What should it charge for membership, if anything?
  - o Why/why not?
  - o How much?
- 32. What would an organisation of that type need to do or to achieve in order to add value to the Digital Humanities?
- 33. Is there anything else, beyond what we have discussed, that you feel that an organisation of that type could usefully provide to organisations such as yours?
  - a. Why do you say that?

# **SECTION G: CLOSE**

Thank you for taking part in this research

- Permission to re-contact
- Permission to list as contributor

# **Appendix C: List of Contributors**

Within Phase 1 of the project, In addition to representatives of partner organisations (listed within section 2 above), the following academics and practitioners were interviewed.

Table 25: List of contributors (academics)

| Name of<br>Organisation | Name                    | Job Role  |
|-------------------------|-------------------------|---|
| Cardiff University      | Prof. Julia<br>Thomas   | Professor of English Literature   |
| UCL                     | Prof. Melissa<br>Terras | Director of the Centre for Digital<br>Humanities & Professor of Digital<br>Humanities             |
| University of Cambridge | Prof. John Rink         | Professor of Musical Performance<br>Studies   |
| University of Glasgow   | Prof. Lorna<br>Hughes   | Professor of Digital Humanities   |
| University of Oxford    | Prof. David de<br>Roure | Director of the Oxford e-Research<br>Centre & Professor of e-Research                             |
| University of Oxford    | Dr Kathryn<br>Eccles    | Research Fellow at the Oxford Internet Institute  |
| University of Sheffield | Prof. Bob<br>Shoemaker  | Professor of 18 <sup>th</sup> Century British<br>History & Director of Research and<br>Innovation |
| University of<br>Sussex | Prof. Tim<br>Hitchcock  | Co-Director of the Sussex<br>Humanities Lab & Professor of<br>Digital History                     |

One interviewee from among the partner organisations, Prof. Andrew Prescott, representing the Arts and Humanities Research Council, was also able to offer broader perspectives. Insights from that interview, therefore, have been analysed alongside the sample of academics listed above.

The four national-level GLAM interviewees and one senior digital/creative industry informant have not been listed, in order to protect their anonymity.