



THE UNIVERSITY *of* EDINBURGH
Centre for Data, Culture & Society



CDCS **ANNUAL** **REPORT**

2020–2021



2020-2021

IT'S BEEN QUITE A YEAR.



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HELLO!

WELCOME TO THE SECOND ANNUAL REPORT FROM THE EDINBURGH CENTRE FOR DATA, CULTURE & SOCIETY (CDCS), DRAWING TOGETHER THE RANGE OF ACTIVITIES WE'VE BEEN UP TO DURING THE LAST YEAR SINCE MAY 2020.

It should come as no surprise that the whole year was dominated by the Covid-19 pandemic and multiple lockdowns causing great distress and disruption across the world. CDCS was no exception, and we had to adapt to completely new and endlessly changing circumstances. We are pleased to say that CDCS has coped with the challenges remarkably well, and as you read through this report, you will see numerous examples of this.

The pandemic has highlighted the importance of digital, and the Centre's activities have never been so necessary, or crucial, as they are now. Despite the challenging times we have successfully continued with building and supporting a community of data-led researchers across the College of Arts, Humanities, and Social Sciences (CAHSS) at the University of Edinburgh, providing training and support for digital research methods and projects, investing in digital infrastructures that support our work, and facilitating inter-disciplinary networks and clusters. The move to a completely virtual mode of operation opened new possibilities and expanded our audience beyond Edinburgh and the UK, with many new international participants in our seminars, and visitors to our website.

The scope of work detailed in this report becomes even more impressive given a relatively small team behind this initiative, and we'd like to specifically thank our Centre Manager, Dr Lisa Otty, for her outstanding coordination, dedication and efficiency.

Our special thanks to Dr Lucia Michielin, Digital Skills Training Manager, our Centre Administrator, Cathy Naughton and our Administrative Assistant Róisín O'Brien for all of their contributions during this demanding year. Thanks are also due to the CAHSS Digital Innovation Team for their help in maintaining our online presence, to our colleagues at the University of Edinburgh Library and Information Services, to the School representatives on the Core Team, members of the Stakeholders Forum and many other contributors. Your support in progressing towards our common goals is truly invaluable.

This report indeed is a testament to the collective effort in delivering our mission of advancing data-led and applied digital research across the Arts, Humanities and Social Sciences. We look forward to new horizons and new milestones on our continuing journey in supporting digital aspects of research in this area.

PROFESSOR MELISSA TERRAS
Director

DR GALINA ANDREEVA
Acting/Interim Director

CDCS PEOPLE



MELISSA TERRAS
CENTRE DIRECTOR
Professor of Digital Cultural Heritage



GALINA ANDREEVA
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LISA OTTY
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LEAD ACADEMICS



ARIANNA ANDREANGELI
CDCS Stakeholder Forum Chair



BEATRICE ALEX
Edinburgh Futures Institute



DIEGO BATTISON
School of Economics



MORGAN CURRIE
School of Social and Political Science



PHIL SHEAIL
Moray House School of Education and Sport



MICHAEL FULLER
School of Divinity



BEVERLEY HOOD
Edinburgh College of Art



LACHLAN URQUHART
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ROBIN HILL
School of Informatics



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VICTORIA EVANS

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School of Social and Political Science

LUCY HAVENS

School of Informatics

JUSTIN HO

School of Social and Political Science

ASAD KHAN

Edinburgh College of Art

WENLONG LI

Edinburgh Law School

YI LI

School of Literatures, Languages and Cultures

ANDREW MCLEAN

School of History, Classics and Archaeology

NICK MOLS

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MATJAZ VIDMAR

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Università degli Studi della Toscana

DAVID BEAVAN

Alan Turing Institute

ADAM CRYMBLE

University College London

2020–2021

DATA

OUR YEAR IN NUMBERS



While this last year has presented many challenges, it has also been a period of remarkable growth for the Centre. Our seminar audience more than doubled from last year with attendees joining us from around the world. The number of visitors to our website has also doubled and the percentage of returning visitors has grown. Our stakeholder forum has increased in size, as has our email list, and our Twitter following has grown by almost 60%. We've been able to support 20 projects, up from 8 in our first year, including some developed in response to the pandemic. Finally, we have offered 15 new training courses on top of last year's programme, with take up remaining at pre-Covid levels.

760.

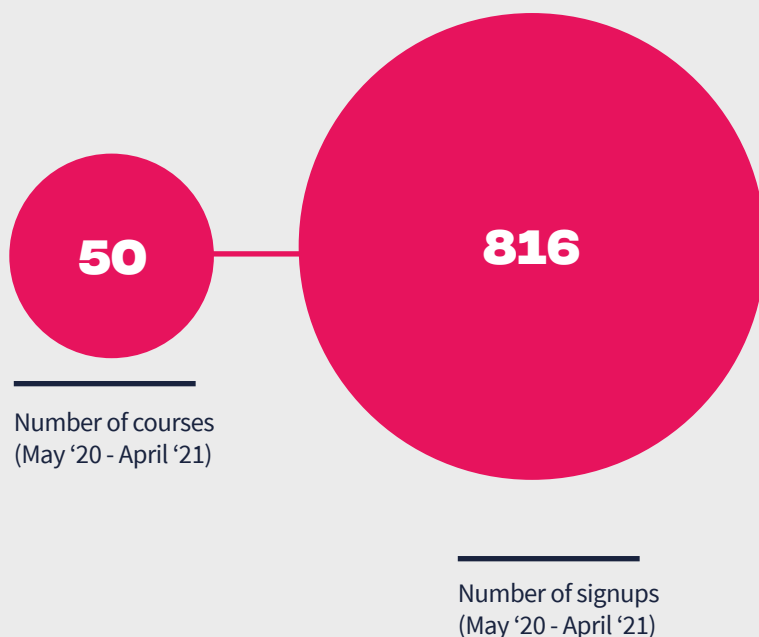
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A



TRAINING



NETWORK

3

RESEARCH AFFILIATES

19

PHD AFFILIATES

12

**SCHOOLS
REPRESENTED IN OUR
CORE TEAM**

29

**MEMBERS OF OUR
STAKEHOLDER FORUM**

994

EMAIL SUBSCRIBERS

SUPPORT

1

1 AHRC grant worth over 800K to a project developed from a pilot we supported

£800K

3

training bursaries totalling £1640 awarded since May 2019

£ £ £

4

articles in the pipeline sharing findings of projects we supported



20

projects sponsored



SEMINARS

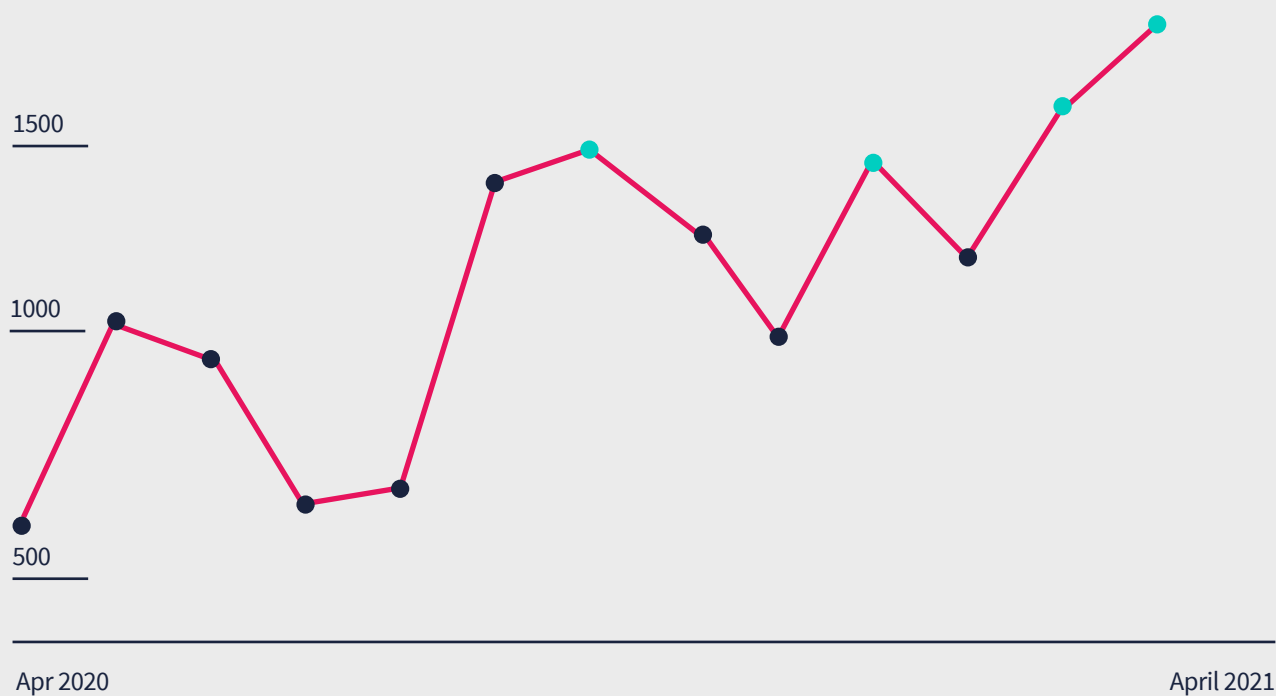
23

Number of seminars (May '20 - April '21)

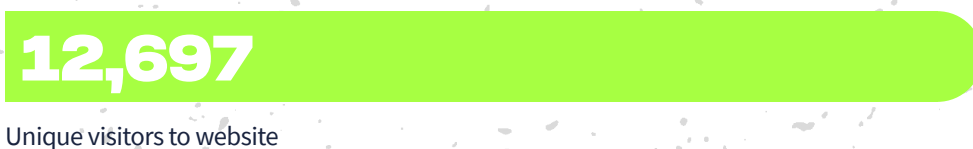
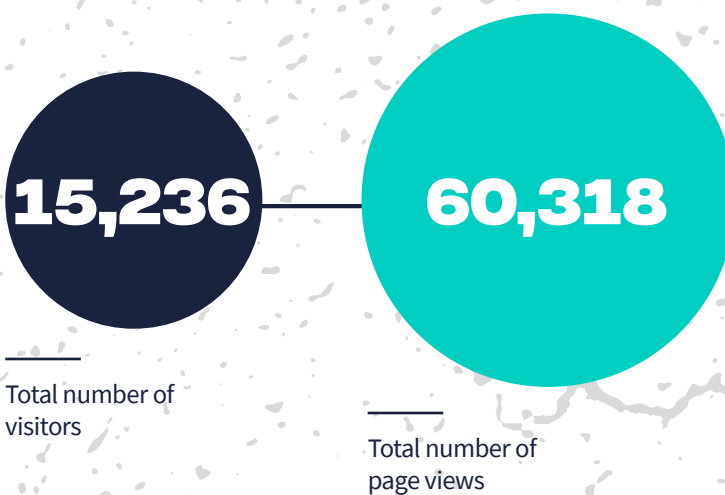
1376

Number of registrations (May '20 - April '21)

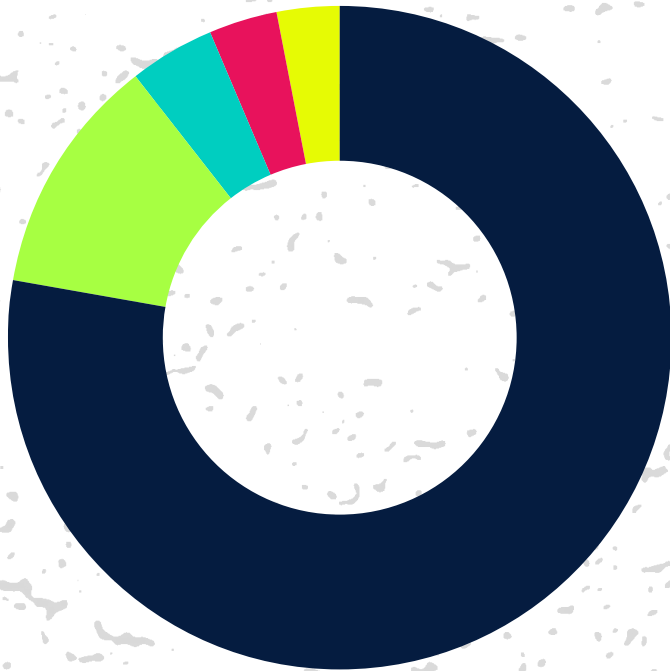
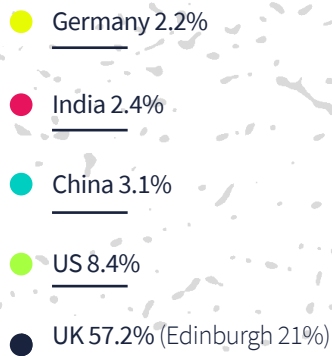
WEBSITE



VISITORS



AUDIENCE



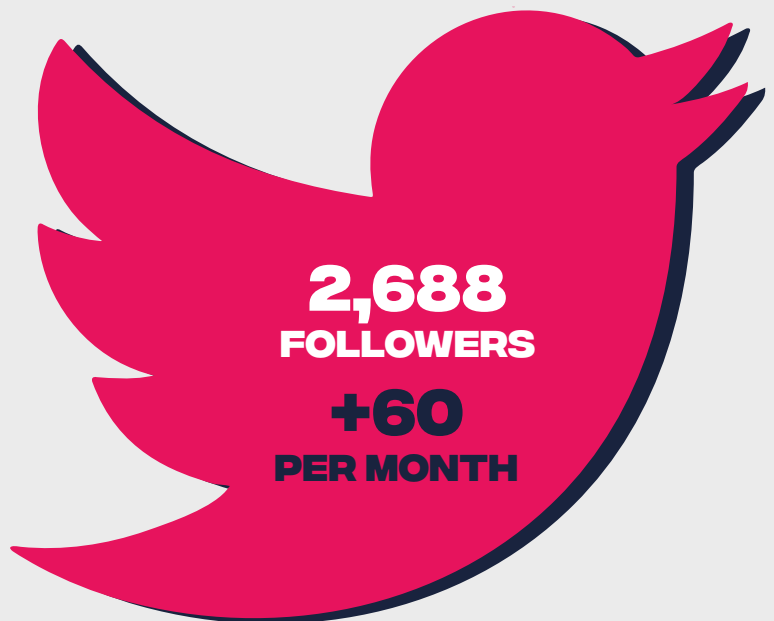
Breakdown of the top five geographic locations of our web audience

SOCIALS

1,300
PROFILE VIEWS
PER MONTH

+70K
IMPRESSIONS
PER MONTH

1.16%
ENGAGEMENT
RATE





RESEARCH

OUR RAISON D'ÊTRE.



CDCS clusters bring together networks of researchers with shared interests from across the Schools to explore potential collaborations, develop interdisciplinary projects and consolidate expertise in specific areas. Last year we reported on our first two clusters, Media & Communications and Fintech & Financial Services. This year, our report focuses on our increasingly active Digital Cultural Heritage and Digital Social Science clusters. However, we are also delighted to report that this year we have launched two further clusters: Tourism, Technology & Data, and Digital Global Development, which are both off to a flying start.



DIGITAL CULTURAL HERITAGE

Leads: Dr. Jen Ross and Dr. Philippa Sheail

Our cluster aims to connect and amplify the important work being done in the interdisciplinary field of Digital Cultural Heritage. We have members at all career stages working across seven areas of expertise that highlight the richness of this field of study.

Since our launch in 2019, we've hosted meetings and seminars, developed our public profile through the website, and facilitated networking and discussion opportunities for cluster members. Over the last academic year, we've welcomed nine new members, including four PhD students. This year also saw the development and launch of a new Critical Archives Reading Group led by Dr. Niamh Moore.

Cluster members are currently involved with or are leading research projects funded by the AHRC, including two current projects that are part of the Towards a National Collection Programme, Leverhulme Trust, RSE and Una Europa.

Other activity aligned with the cluster includes the development of close research links with seven other European universities as part of our membership of Una Europa as cultural heritage self-steering group. Of the five Edinburgh members of this group, four are associated with the cluster. Una Europa is developing an ambitious joint PhD programme in cultural heritage and digital cultural heritage is one of the four key themes underpinning its work.

As a cluster our networks extend well beyond the university and we work closely with colleagues in the cultural heritage sector in Edinburgh, the UK, and internationally.

Over the coming months, we'll continue to look for opportunities to add value to the research and engagement activity of members through networking, collaborative activities and skills training through CDCS.

RESEARCH EXPERTISE

**COPYRIGHT
INTELLECTUAL PROPERTY
ACCESS
DIGITAL DOCUMENTATION
DIGITAL ENGAGEMENT, LEARNING
AND PARTICIPATION
GEOSPATIAL DATA AND HERITAGE
TOURISM AND HERITAGE
WORKING WITH DIGITAL ARCHIVES
AND COLLECTIONS**

EVENTS

DAVID LIVINGSTONE'S MISSIONARY TRAVELS MANUSCRIPT

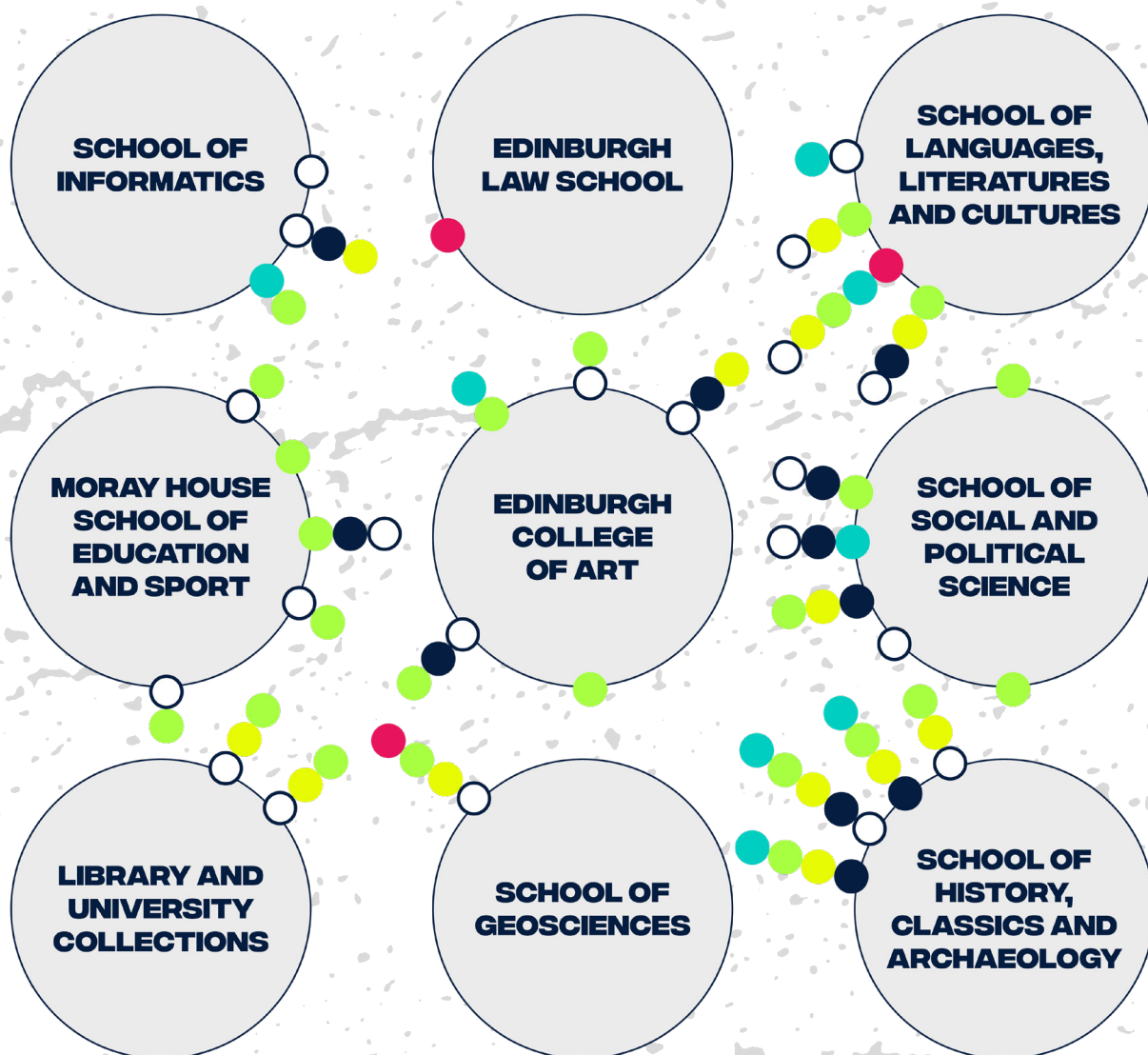
Dr Justin Livingstone (Queen's University Belfast) delivered a paper on Livingstone's Missionary Travels Manuscript (1857): A Critical Edition, addressing the project's encoding principles, the practice of digital editing, and the value of digital remediation for a "materialist" approach to the expeditionary record.

WORKSHOPS – GIF IT A GO: MAKING ART MOVE

In these workshops, participants had the opportunity to learn and develop their GIF making skills. Workshops were organised as part of cluster member Eleanor Capaldi's PhD research project, exploring the online lives of digitised artworks in a Collaborative Doctoral Partnership between the University of Edinburgh and National Galleries Scotland.

BIANNUAL MEMBERS' MEETING

Members of the Digital Cultural Heritage cluster met virtually in October 2020 and February 2021, to introduce new cluster members and to share updates on cluster activities and opportunities for research collaboration. Discussions led to the development of the Critical Archives Reading Group which meets monthly, led by Dr Niamh Moore.



This graph represents the distribution of Digital Cultural Heritage cluster membership and expertise across the College of Arts, Humanities and Social Sciences. Each collection of connected dots represents a researcher

- Tourism and Heritage
- Digital Engagement, Learning and Participation
- Digital Documentation
- Geospatial Data and Heritage
- Copyright, Intellectual property, Access
- Working with Digital Archives and Collections



DIGITAL SOCIAL SCIENCE

Leads: Dr Karen Gregory, Dr Morgan Currie and Dr Kate Miltner

The Digital Social Science research cluster focuses on teaching and research in the digital social sciences. Broadly, the cluster looks at the affordances and limitations of new digital methods, research ethics, data access issues and problems related to corporate

relationships and the design and use of new tools. We are focused on supporting current research projects at the University of Edinburgh.

We try to make methods, tools, datasets and projects accessible to students and staff. The cluster's website features a range of ongoing digital research projects that we are happy to highlight and support. We hope that this list of projects is a useful resource as researchers consider their own digital projects and digital methods. The cluster facilitates the Meme Studies Network, organised by sociology PhD student Idil Galip. The network is a fascinating resource for students interested in studying digital economy, digital culture, and memes as art.

The cluster organised three digital methods workshops between October 2020 and January 2021. The first featured Richard Rogers from the University of Amsterdam to talk about using digital methods for studying different platforms, such as Wikipedia, Twitter, Facebook, and Reddit. The second featured Sabine Niederer from the Hogeschool van Amsterdam, discussing visual methodologies to facilitate public participatory projects. In January, Joan Donovan from Harvard Shorenstein Centre on Media, Politics and Public Policy presented a workshop on mapping the life cycle of media manipulation campaigns, identifying and tracking media manipulation and disinformation. These workshops are all available as video recordings on the cluster webpages.

The cluster also helped coordinate a two-day workshop on Racial Infrastructures in March 2021, co-hosted by RACE.ED and the School of Architecture, which focused on how infrastructural systems intersect with and extend racial discrimination and inequality.

Looking forward, we hope to remain sort of at the forefront of conversations within the University about how the social sciences sit more broadly at the digital table. More importantly, we hope that the resources we continue to build and curate can bring scholars in conversation across disciplines around topics relating to digital social science.

● Meme Studies Research Network

Scotland
Italy
England
US

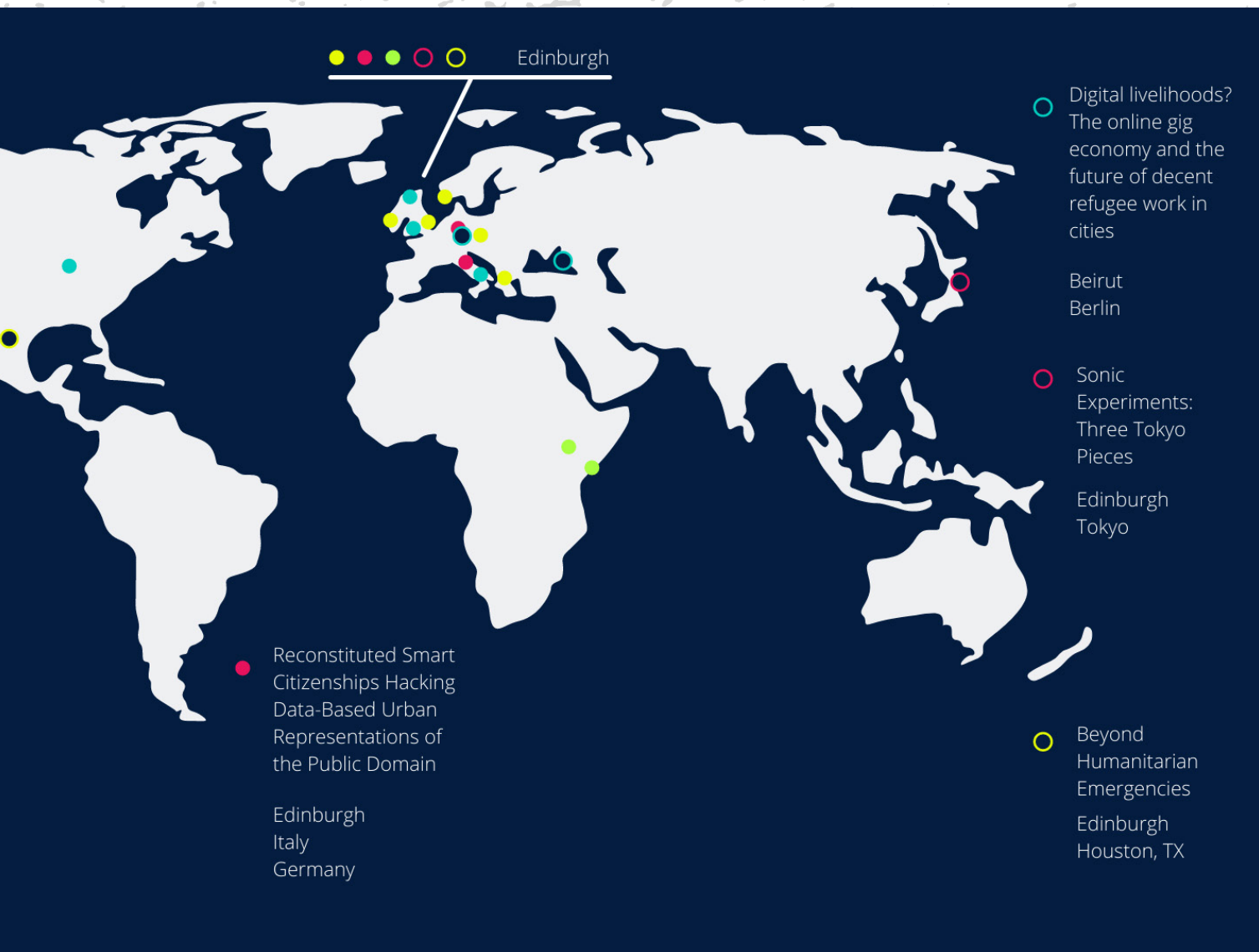
● Developing Data? Politics & Markets in Digital East Africa and Beyond

Kenya
Uganda
Edinburgh

● The smART social media eCOsystem in a blockchain Federated environment (ARTICONF) project

Edinburgh
Amsterdam
Austria
London
Dublin
North Macedonia

This graph shows the global reach and distribution of Digital Social Science cluster projects. Each dot represents a project site.



EVENTS

SITUATING AND DOING DIGITAL METHODS

Prof. Richard Rogers (University of Amsterdam) historicised and theorised digital methods, putting forward the notion of 'online groundedness', before leading a practical workshop that showed participants how to use digital methods.

VISUAL METHODOLOGIES FOR PUBLIC PARTICIPATORY WORK

Dr. Sabine Niederer, founder of the Visual Methodologies Collective at the Amsterdam University of Applied Sciences, introduced visual methodologies and, in particular, digital visual research that makes use of online data and content to research social issues.

DISINFORMATION - MAPPING THE LIFECYCLE OF MEDIA MANIPULATION

Dr. Joan Donovan, Research Director of the Shorenstein Center on Media, Politics and Public Policy at Harvard, demonstrated a case study approach to mapping the life cycle of media manipulation campaigns.

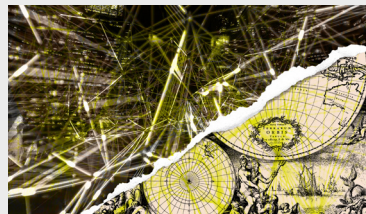


TOURISM, TECHNOLOGY AND DATA

Leads: Dr Ewelina Lacka and Joshua Ryan-Saha

The Tourism, Technology & Data Cluster focuses on

the strategic application of technologies in tourism and hospitality, and data analytics. Our research spans both local and global heritage contexts, and draws on a wide range of theoretical perspectives. Cluster Leads Dr Ewelina Lacka and Joshua Ryan-Saha held an initial networking event in April, featuring speakers Antonia Gieschen and Yuanming Qiu discussing how data can be used to reveal key visitor markets and tourism destinations post-COVID-19.



DIGITAL GLOBAL DEVELOPMENT

Leads: Dr Andreas Hackl and Dr Juli Huang

The Digital Global Development cluster focuses on the role of digital

technology in the context of international development and humanitarianism. It aims to build capacity in research collaboration across disciplines at the University of Edinburgh, while generating a fruitful exchange of ideas and research insights internationally.

RESEARCH EXPERTISE

TECHNOLOGIES IN TOURISM
DATA ANALYTICS
VISITOR ATTITUDES, BEHAVIOUR & FLOW
DESTINATION MANAGEMENT
SUSTAINABLE TOURISM

RESEARCH EXPERTISE

DIGITAL ECONOMIES
INTERNATIONAL DEVELOPMENT
SOCIAL MEDIA ACTIVISM
MIGRATION & REFUGEES
SECURITY & PEACEKEEPING

EVENTS

POST-COVID-19 RECOVERY: SUPPORTING SCOTTISH TOURISM WITH DATA LED INSIGHTS

Antonia Gieschen | Yuanming Qiu
29 April 2021

EVENTS

ILO REPORT LAUNCH: DIGITAL REFUGEE LIVELIHOODS AND DECENT WORK - TOWARDS INCLUSION IN A FAIRER DIGITAL ECONOMY

Thursday 29 April, 12:00 BST

PROJECTS

WE'RE ON A DATA MISSION.



Green shoots continue to appear even in the most challenging circumstance. This year we have been delighted to be able to support a variety of new projects, and see one of our previous pilot projects grow and bloom. CDCS has a text and data mining facility at the University of Edinburgh called defoe for interrogating large and heterogeneous text-based archives, and in the summer of 2020, we went ahead with our first CDCS Text Mining Lab, hosted remotely but otherwise as planned. We're currently in the early stages of our second Lab and continue to work closely with colleagues across the University of Edinburgh to develop support for this area of strategic focus.

AHRC FUNDING SUCCESS: ALICE THORNTON'S BOOKS

We are thrilled for our colleagues Dr Cordelia Beattie and Dr Suzanne Trill, who have been awarded over £800,000 from the AHRC for their project 'Alice Thornton's Books: Remembrances of a Woman's Life in the Seventeenth Century'. Suzanne and Cordelia approached us in 2019 looking for support to explore the potential of a digital scholarly edition of the Thornton manuscripts using TEI markup. We were delighted to be able to help them access training, technical help and software for the pilot project that laid the solid foundations for this exciting and ambitious larger project.

BEYOND HUMANITARIAN EMERGENCIES

Led by Dr Kate Wright, working in collaboration with Dr Anouk Lang (Edinburgh), Dr Dani Madrid-Morales (Houston, Texas), and RA Dr Andrew Jones (Exeter), 'Beyond Humanitarian Emergencies' analyses 20 years of Anglophone news output to see whether the meanings commonly associated with the term 'humanitarian' are changing over time and in relation to specific issues (refugees, climate change, CV19), as well as differences between news outlets around the world.

With CDCS funding, the team completed the world's first global corpus of humanitarian news, comprised of 1.6 million broadcast, print and online news texts in the English language which contain the word 'humanitarian'. Covering a ten-year period (2010-2020) and including news from 593 media outlets across 93 countries, this dataset will be made available through DataShare. The team worked with students in Autumn 2020 to conduct some exploratory data and analysis and visualisation projects, specifically on the relationship of humanitarianism and CV19, and are now training a neural network with subcorpora of news texts from different regions. They plan to investigate word associations and compare discursive differences in the way the news media in different locations represent humanitarian crises and action.

IT'S ALL ABOUT THE FEELINGS...

CDCS funding enabled Bev Hood and her research assistant Alison Mayne to gather information about gendered representations of AI within written publications, as well as actual AI incarnations developed for commerce, research and cultural imaginings within film, tv, literature and art. The resulting data showed very clearly the intersectional nature of this bias and therefore the research is continuing with an expanded scope, as 'It's all about the feelings...', a pilot performance project exploring bias within AI sentiment recognition systems.

The project has now received further funding from ECA RKE Fund (£2000) and a Challenge Investment Fund (£4869.40) and will use creative practice based research methods to develop a pilot digital performance exploring new critical ways to make visible and discuss the biases being perpetuated within sentiment recognition systems. The project will aim to create positive digital literacy around the use of sentiment recognition and the challenges of algorithmic bias. It is intended as a first step towards an ambitious, large-scale touring performance work, involving an interdisciplinary group of researchers and external partners (Hood, Hill, Catanzariti, Goldsmith, Experiential AI research Group and Tramway) which would take these pressing themes and concerns from academia to the tech industry and wider general public.

IMPROVBOT.AI

In 2020, the Edinburgh Festival Fringe (as we know it) did not go ahead for the first time since 1947. CDCS Director Prof. Melissa Terras, fellow researchers, and the Improverts – the Fringe’s longest running improv comedy group – responded to the situation by planning to provide festival entertainment via Twitter. They created a bot that would generate event blurbs using AI technology, creating an imagined Festival Fringe programme and inspiring improvised sketches that were shared online throughout August.

UNDERSTANDING THE DRIVERS OF THE DDI PROGRAMME

Edinburgh’s current aspiration is to be a ‘data capital of Europe’ through the ‘Edinburgh City Region Deal’ – a £1.3bn investment in the area, grounded in a vision of economic prosperity brought about by data-driven innovation. The University of Edinburgh has positioned itself in a vanguard role through the Data Driven Innovation (DDI) programme, which will receive £350,000,000 of City Region Deal funding over a ten-year period of research and development.

Following on from a panel about DDI during the 2019 Data Justice Week, which highlighted public questions about the motivations and underpinning policy behind the program, Morgan Currie, Jeremy Knox and Callum McGregor have begun a research project that seeks to understand the policy origins and different values and goals driving DDI projects since the program began in 2019. Support from CDCS has gone towards hiring a research assistant who has amassed primary source documents - founding policy documents and other textual artefacts behind the City Region Deal and DDI - and has begun an analysis of the origins, justifications, and aims of the DDI program.

USING SOCIAL MEDIA TO UNDERSTAND BUSINESS DYNAMICS DURING THE COVID-19 PANDEMIC

Covid-19 and the lockdown have dramatically affected business activities across the globe. This has raised a lot of questions around the determinants of the resilience of different businesses. Traditionally, businesses are evaluated using financial statements, but they are submitted only once a year. This project, led by Dr Galina Andreeva, investigates the potential value of novel sources of up-to-date information, such as Twitter and newspapers, that offer an invaluable resource for tracking the changing sentiments and attitudes.

CDCS funding has facilitated the development and presentation of the traditional benchmark model for Scottish tourism and hospitality, one of the sectors with the worst disruption. It has also been used to purchase a Twitter developer licence enabling data collection and the development of programmatic resources. The research will now concentrate on exploring how this information can enhance the benchmark business evaluation model, and on developing a set of Jupyter notebooks with python code.

CDCS TEXT MINING LAB

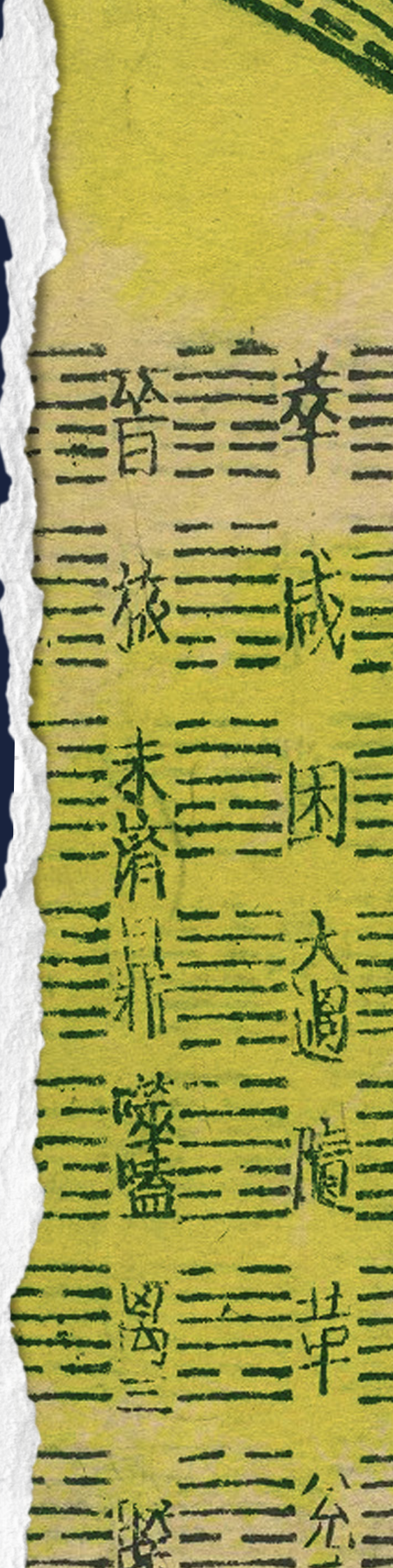
We organised our first CDCS text mining lab with support from colleagues at the Edinburgh Parallel Computing Centre, the National Library of Scotland, and our own Library and University Collections. Thirteen projects were pitched, with a fantastic range of research questions, from how to trace the reception of writers over centuries, to exploring the depiction of highlanders in English publications, to the portrayal of mental health issues in newspapers. We were able to assist researchers in learning about text mining scripts and developing queries, giving them a great insight into the requirements and challenges of computational text analysis.

This spring we ran another call and welcomed six new projects into our Lab. With the help of colleagues Amy Krause and Anna Roubířková at the EPCC, we'll be supporting researchers to develop queries to extract information about the emergence of public protest as a political tool, how the economy is framed in public discussion, the representation of Kashmir, and the reception of Latin poetry.

Alongside new projects, we are also supporting last year's projects as they develop. We have funded assistance for work exploring the emergence and growth of newspaper reviews and the use of Scots in printed chapbooks, on which researchers Sarah van Eyndhoven and Lisa Gotthard will present at the upcoming International Society for the Linguistics of English Conference organised by the University of Eastern Finland.



Dr Rosa Filgueira worked with us for six months in 2020 developing our text mining infrastructure and supporting our researchers with their projects during the 2020 Lab. She has now taken up a post as Assistant Professor at Heriot Watt University and will be the 2021-2022 National Library of Scotland Digital Scholarship Fellow. Her Fellowship will develop her work with historical collections, by exploring new ways to unlock the full value of the National Library of Scotland's Data Foundry collections by building a new AI toolbox called 'frances' and a web user interface that allows researchers to extract complex information from the collections.



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TRAINING

BUILDING DATA SKILLS.

Our training programme has been a real focus this year with the arrival in September of our new Digital Research Skills Training Manager, Lucia Michielin. Along with our CDCS Training Fellows, Lucia delivered an expanded programme of live training events in 20/21 and has been exploring ways to create and signpost to more online training materials. The training pages on our refreshed website have been developed to include information about where to find online training, and where to start with developing skills required for different methods. This year also sees us preparing for our first CDCS Summer School, and contributing to another summer school run by the Alan Turing Institute, which both point forward to an exciting future full of potential.

Questions stirred in this Pe
operly and fairly under y
view, it is necessary. For th
again the Windings and Fac
ns, tho' in former Papers
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ating those Matters upon
ament, and hath also rec
groundless Reflections upon
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the Question, and which
ce than to inflame the ill Re
on on one Side, and upon
inds of worthy and honour
who stood in the nearest Co

A



LUCIA MICHIELIN

Digital Research Skills Training Manager

Eight months ago, we welcomed Lucia to the team to develop our training offer. Having been awarded a PhD in Classics from the University of Edinburgh in 2019, Lucia's research background in the Digital Humanities has equipped her with a great deal of experience in applying digital methods to research projects, and she has considerable experience of designing and delivering training courses focused on data skills and digital research methods. It has been wonderful to watch Lucia apply her specialist technical expertise and knowledge to developing a digital research methods training programme, and we're excited to see how this aspect of our work will develop during her time with us.

This year's programme drew on the skills of trainers from across the College and University. As well as our fellows, introduced below, we enabled our community to benefit from the expertise of colleagues in EDINA, Library and University Collections and the Software Sustainability Institute. We continue to offer Carpentries workshops, and to maximise the value of online resources such as those provided by the Programming Historian. We're also capturing some of our courses and making them available online through a GitHub repository.

“ CLEAR FOCUS ON THE TOPIC, VERY EFFICIENTLY AND EFFECTIVELY PRESENTED - TARGETED EXACTLY WHAT I WANTED TO KNOW ”

TRAINING PATHWAYS

We have developed new Training Pathways that we hope will help researchers orient themselves and get started with learning new methods. So far, we have pathways for: Data Visualisation; Statistical Analysis; Managing Digitised Documents; and Text Analysis, and we plan to add more in the coming months.

METHOD OF THE MONTH

Another initiative to help those starting out, the Digital Method of the Month sessions are a chance to discuss practicalities and prerequisites for learning and implementing new methods. So far we've held sessions on 3D scanning, GIS, data visualisation, text analysis, databases and machine learning.

THE PROGRAMMING HISTORIAN

We're delighted to be an Institutional Partner of the Programming Historian, and this year we have successfully used their training materials in a new 'silent disco' format: participants work through online tutorials in a cohort with some support from one of our trainers.

TRAINING FELLOWS 2020-21

ESGRID SIKAHALL

Esgrid Sikahall Urizar has worked as a mathematics lecturer in Guatemala (including Numerical Analysis) before moving to the UK to study philosophy, religion and science. He has worked on Python, Matlab and as a web programmer using HTML, PHP, CSS, and MySQL. His current research is on philosophical hermeneutics (Hans-Georg Gadamer) and the implementation of historiographical works on science and religion in wider cultural spaces and discourses.

LUCY HAVENS

Lucy Havens is based in the School of Informatics. Lucy is researching bias in cultural heritage metadata. Combining natural language processing and data visualization technologies, she seeks to identify and classify bias present in the language of cultural heritage catalogues. She conducts this research through case studies with cultural heritage collections, such as the archives at the University of Edinburgh.

ANDREW MCLEAN

Andrew McLean is based in the School of History, Classics and Archaeology. Andrew is an archaeologist with research interests currently focused on the economy of the Roman Adriatic. His methodological approaches include GIS and statistical analysis, particularly expanding on traditional Least Cost Path (LCP) analysis by using circuit theory to model maritime movement. Through this, he is familiar with QGIS, R, Circuitscape, shell scripting and programming languages such as Julia and Python.



COMMUNITY

BRINGING PEOPLE TOGETHER.

As we've moved online this year, our networks have expanded dramatically. Our virtual seminar programme brought together speakers and participants from all over the world and our audience grew dramatically, with nearly 1400 registering to attend events over the course of the year. For our local community, providing responsive and flexible support has been more important than ever this year. We've continued to offer scholarships and training bursaries and social and informal networking opportunities, and experimenting with different online formats and platforms. We've also flexed to provide new forms of support and guidance in response to changing circumstances, and we've continued to look for ways to develop the research resources available locally.



SEMINARS

WITH OUR SEMINAR SERIES HOSTED ONLINE THIS YEAR, WE WERE ABLE TO HOST SPEAKERS FROM AROUND THE GLOBE.

DAVID LIVINGSTONE'S MISSIONARY TRAVELS MANUSCRIPT: DIGITAL EDITING AND THE LITERATURE OF VICTORIAN EXPLORATION

Dr Justin Livingstone
Queen's University Belfast

THE STEVENSON MAPS AND PLANS OF SCOTLAND: CREATING A MAP-BASED FINDING AID

Rachel Dishington
University of Edinburgh

ACCESSING HIDDEN HERITAGE: USING DIGITAL TECHNOLOGIES TO RAISE PUBLIC AWARENESS OF UNDERWATER CULTURAL HERITAGE

Jon Henderson
University of Edinburgh

BOOK CONSERVATION AND DIGITIZATION: THE CHALLENGES OF DIALOGUE AND COLLABORATION

Dr Alberto Campagnolo
University of the Arts London

PLATFORMS, COMPETITION AND THE CONSUMER: PROTECTING CHOICE AND ENHANCING RIVALRY

Arianna Andreangeli
Edinburgh Law School

RECOVERING LATE-VICTORIAN SCOTTISH WOMEN WRITERS AND THEIR CHILD READERS: EDINBURGH-BASED COLLECTIONS AND DATA VISUALISATIONS

Lois Burke
IASH

CULTURE IS BAD FOR YOU: INEQUALITY IN THE CULTURAL AND CREATIVE INDUSTRIES

Dave O'Brien
University of Edinburgh

SKILLS IN HERITAGE DATA SCIENCE: MEET THE DOGS OF 19TH CENTURY DENMARK

Henriette Roued Cunliffe
University of Copenhagen

ARCHIVING GAPS: READING ZIMBABWE AND THE INTERNET

Tinashe Mushakavanhu
IASH/University of the Witwatersrand

THE MORAL-IT DECK: A TOOL FOR ETHICS BY DESIGN

Lachlan Urquhart
University of Edinburgh

CHRONOTOPIC CARTOGRAPHIES: AN EMERGING (PROCESSUAL) METHOD FOR LITERARY MAPPING

Sally Bushell
Lancaster University

THE DIGITAL ARCHIVE & THE POLITICS OF DIGITISATION

Gerben Zaagsma
University of Luxembourg

ELECTRONIC LEGAL DEPOSIT: SHAPING THE LIBRARY COLLECTIONS OF THE FUTURE

Paul Gooding et al.
University of Glasgow

BEYOND GIS: LIMITS AND POSSIBILITIES OF GEOSPATIAL RESEARCH OF COLONIAL LATIN AMERICA

Maria José Afandor-Llach
Univerisdad de los Andes, Bogotá-Colombia

NETWORKING JACOBITES: MEDIA, CULTURAL MEMORY AND THE 'LYON IN MOURNING' MANUSCRIPT

Leith Davis
IASH/Simon Fraser University

PROJECT SOOTHE: DEVELOPING IMAGERY-BASED DIGITAL WELLBEING TOOLS

Stella Chan
University of Edinburgh

WHY IS IT HARD TO TALK ABOUT LABOR IN DIGITAL SCHOLARSHIP?

Paige Morgan
University of Delaware

IMAGINING AI: HOW THE WORLD SEES INTELLIGENT MACHINES

Kanta Dihal
University of Cambridge

“EXCELLENT PRESENTATION THAT WILL LEAD TO SOME THOUGHT-PROVOKING CONVERSATIONS WITH MY COLLEAGUES.”

OUR INAUGURAL ANNUAL LECTURE

HELLO WORLD: OR, HOW WE LEARNED TO STOP WORRYING, AND LOVE THE COMPUTER

We were absolutely delighted to host Professor Aimée Morrison (University of Waterloo, Canada), who delivered our inaugural annual lecture on 15 December 2020.

Aimée's paper was a enthralling whistle-stop tour through the cultural imaginary of the late 20th century. Focused on the history of personal computing, the lecture explored how new popular representations of computers and computing emerged in films, advertising and media, and how these imaginary engagements continue to influence our relationship with technology.

Almost 150 people registered to attend, and we were delighted to be able to share a little seasonal cheer by posting small Christmas gifts to those who signed up.



“

**THE BEST EVENT I'VE
'ZOOMED' SO FAR –
FUNNY, ENLIGHTENING,
FABULOUS.**

”

IASH FELLOWSHIPS

INSTITUTE FOR ADVANCED STUDIES IN THE HUMANITIES

We partner with IASH to offer funded Digital Scholarship Visiting Fellowships and Digital Scholarship Postdoctoral Fellowships each year.:

VISITING RESEARCH FELLOWS 2020–2021

TINASHE MUSHAKAVANHU (UNIVERSITY OF THE WITWATERSRAND, SOUTH AFRICA)

A scholar of literary and cultural studies of southern Africa, Tinashe Mushakavanhu's co-developed the platform readingzimbabwe.com, a webliography mapping the published history of Zimbabwe since the 1950s. His fellowship project, 'Reading Zimbabwe and the Internet', intends to visualise and analyse its corpora of data to better understand the thematic, spatial, and cultural dynamics of black cultural production, and in the process document the intellectual history of Zimbabwe.

LEITH DAVIS (SIMON FRASER UNIVERSITY, CANADA)

Leith Davis is a professor in the Department of English and Director of the Centre for Scottish Studies at Simon Fraser University, whose research focuses on examines media change and cultural memory in the British Isles in the 17th and 18th centuries. Her fellowship project uses digital humanities tools to analyse the 'The Lyon in Mourning' manuscript, a complex site of cultural memory and an act of data-collection and networking in the time of the 1745 Jacobite Rising.

POSTDOCTORAL FELLOW: LOIS BURKE

Lois Burke completed her PhD in 2019 at Edinburgh Napier University. Her fellowship project, 'Scottish Women Writers of the Golden Age of Children's Literature: Connections, Creativity, and Children's Cultures' utilises Edinburgh's unique collections to reveal the importance of forgotten Scottish women writers of the late-Victorian period, through use of Digital Humanities tools and methodologies.

PARTNERS

UCL DIGITAL HUMANITIES

This spring we have welcomed three of UCL's DH Masters students to internships with the Centre, with projects focused on training, accessibility, and text mining support.

INSTITUTIONAL PARTNERS OF THE PROGRAMMING HISTORIAN

This year we have again been pleased to lend our support to the Programming Historian through their institutional partnership scheme. Programming Historian provides high quality, peer-reviewed online training materials which we use in our programme, and we are keen to ensure the project continues in years to come.

READ-COOP

The University of Edinburgh is a founding partner in the new READ-COOP which oversees the development of the Transkribus platform. Melissa Terras is on the Board of Directors of READ-COOP. One of our PhD Affiliates is working on a PhD project focused on Transkribus, in collaboration with the National Library of Scotland.

NATIONAL LIBRARY OF SCOTLAND

In partnership with the Digital Scholarship Service, we support the use of the Library's Data Foundry and work together on training initiatives. We also collaborate with the Library on projects on a regular basis.

UCREATE STUDIO

CDCS works with the UCreate Studio to provide new technology for our research community, and to make the datasets produced by our community available through the University's Datashare service.

CENTRE FOR RESEARCH COLLECTIONS

We use the Digital Scholarship Centre and collections data provided by the Centre for Research Collections in the University Library.



RESPONDING TO THE PANDEMIC

With our expertise in digital methods and tools, we were in the perfect position to support colleagues when they had to pivot their research plans and adapt to remote and online working in the summer of 2020. We worked with the College Research Office to support the rapid development of the SERCH Resource Hub, which compiled trusted resources and guidance for carrying out research in the Covid-19 context.

As the situation in the UK begins to stabilise, we are programming a series of research adaptation workshops designed to surface information which will help us develop support that enables our community to remain at the forefront of research despite the ongoing challenges.

PHD / ECR SOCIAL EVENTS

To support our PhD and ECR community, we continued facilitating social events online. We experimented with different formats and, responding to requests from researchers, helped organise co-working sessions and held a virtual quiz with prizes!

HOSTING EVENTS ONLINE WORKSHOPS

We've gained a lot of experience in hosting online events this year and have tried to ensure that our experience benefits others. We partnered with our friends at the Institute for Advanced Studies in the Humanities to offer a number of workshops for colleagues who need to plan events, and have written a series of blog posts on the topic.

FIKAS

Since its launch, CDCS has been bringing our community together at a regular fika (a Swedish word that means a break, with coffee or tea, and a bite to eat: time for colleagues and friends to get together and chat). This year we have continued to do so, just online: we've been joined for coffee and chat by colleagues from all around the world.

THE CANCELLED CONFERENCE CONFERENCE

As conferences around the world were cancelled due to the Covid-19 outbreak, we decided to try to provide a platform for our community to share their latest ideas. We got a great response to the call for papers and were delighted to be able to showcase work from across the disciplines, including a performance screening of work by audio artist Jules Rawlinson who is based in ECA.

COLLABORATIVE EVENTS

ONE ORIGIN OF DIGITAL HUMANITIES: FR. ROBERTO BUSA IN HIS OWN WORDS

Jointly hosted by the Centre for Data, Culture & Society and the UCL Centre for Digital Humanities, this event featured contributors to the new volume *One Origin of Digital Humanities: Fr Roberto Busa S.J. in His Own Words*, edited by Julianne Nyhan and Marco Passarotti (2020).

ARTIFICIAL INTELLIGENCE & ARCHIVES: WHAT COMES NEXT? (AURA PROJECT)

We supported the final workshop of the AURA project (Archives in the UK/ Republic of Ireland and AI), which brought together all key actors in the archive “circuit”: from creators of data, to archivists and to users, with the aim of discussing artificial intelligence in the context of archives.

RACIAL INFRASTRUCTURES WORKSHOPS

This event was jointly hosted by Edinburgh School of Architecture and Landscape Architecture (ESALA), the Centre for Data, Culture & Society, and RACE.ED. It aimed to contribute to this growing body of scholarship and establish conversations that push critical thinking on the relationships between infrastructural systems, materials and arrangements and systemic racism.

INVESTMENT

MONEY

WELL

SPENT.



The Centre for Data, Culture & Society is financed by the College of Arts, Humanities and Social Sciences at the University of Edinburgh. We spend the majority of our budget on staff, training and research events and projects. We use what remains to support research by responding to the needs of our community.

PROQUEST WORKBENCH

We are making Proquest's TDM Studio available to our research community. Working with the Library, we have supported a year-long subscription to the TDM workbench which allows researchers to extract and analyse data from Proquest collections. Two pilot projects are currently underway and the workbench will be available for other projects from the summer.

TEI BY EXAMPLE

The Centre for Data, Culture & Society was pleased to provide funding to the TEI By Example initiative and to take on the hosting of this resource. Funding enabling an upgrade to the training materials and website infrastructure in Summer 2020.

The upgrade undertaken by the original TBE team, involved improvements to the website's back end such as setting up a git workflow, allowing the site code to be shared in a publicly available repository, and incorporating infrastructure that can accommodate translation into other languages.

NEW DATASETS

We are making data available to our community and supporting digitisation. This year we have purchased historical newspaper collections, including The Guardian, The Scotsman and the New York Times. We've also funded more digitisation of more of the Scottish Session Papers, the case papers of the Scottish Court of Session, Scotland's supreme civil court, which will be of broad interest across many disciplines.

TRAINING BURSARIES AWARDED

**SIOBHAN
O'CONNOR**
HiSS

Programming4Humanists Summer
2020 Gephi Course
Center of Digital Humanities
Research at Texas A&M University

**ROXANNE
GUILDFORD**
HCA

Naturalistic and Scientific
Illustration: Traditional Techniques
Transmitting Science

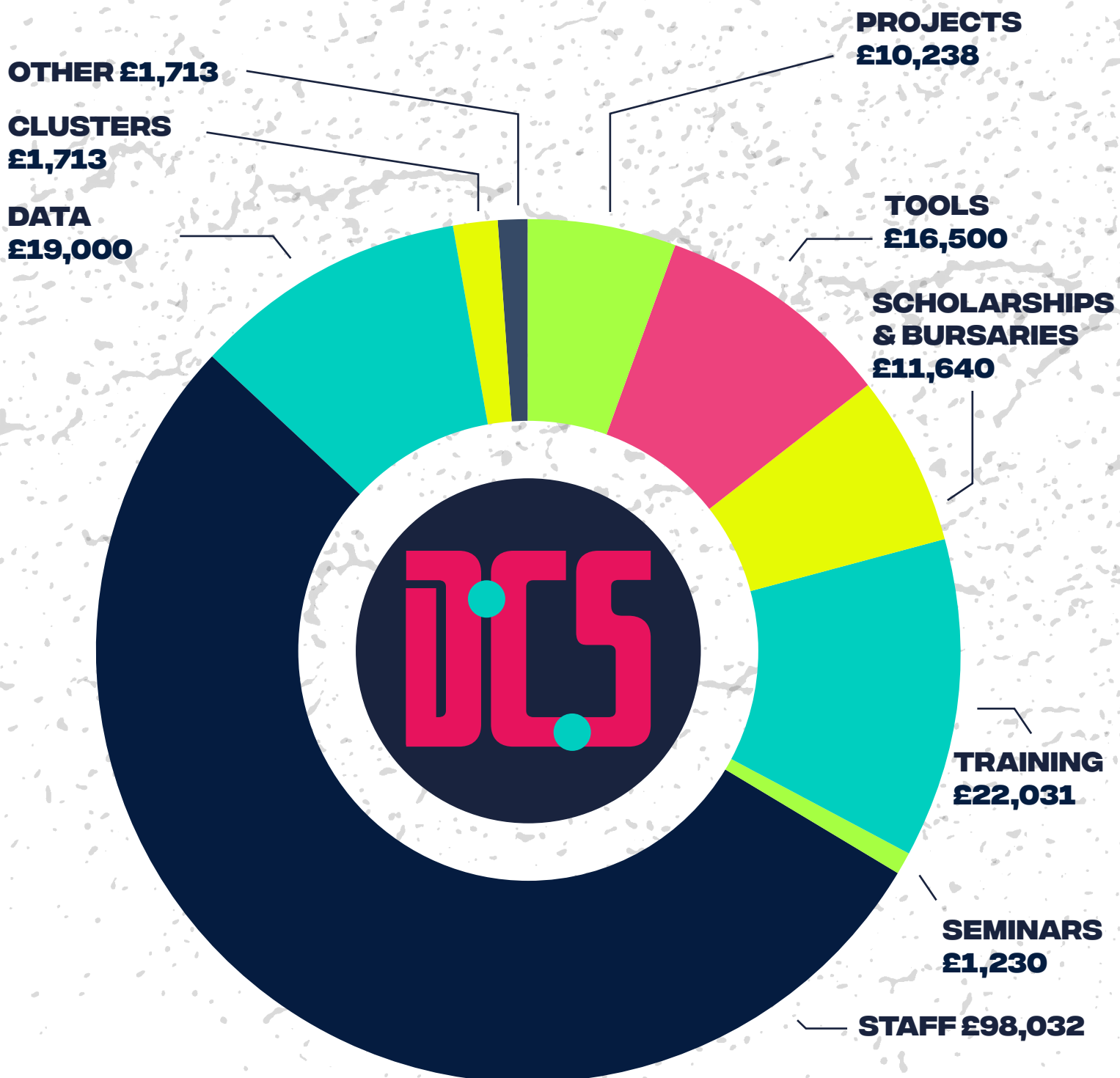
**SAM
HENRY**
PPLS

Inter-university Consortium for
Political and Social Research
(ICPSR) Summer Program in
Quantitative Methods of Social
Research

“**ATTENDING THIS COURSE WAS AN AMAZING EXPERIENCE... I AM CURRENTLY STUDYING DIFFERENT METHODS IN WHICH ZOOARCHAEOLOGISTS ANALYSE AND SHARE INFORMATION DIGITALLY, AND THIS COURSE HELPED ME UNDERSTAND PROCESSES OF CLASSICAL AND DIGITAL SCIENTIFIC ILLUSTRATION**”
ROXANNE GUILDFORD, PHD CANDIDATE

BUDGET MAY 2020 / APRIL 2021 BREAKDOWN

TOTAL SPEND £183,362



2021-2022

WE'VE GOT PLANS.

Next year our focus will be on:

**GROWING OUR CLUSTERS AND HELPING
THEM TO ACHIEVE THEIR AIMS**

**INCREASING OUR VISIBILITY AS A PLACE OF
SUPPORT**

**CONSOLIDATING OUR INFRASTRUCTURE FOR
TEXT MINING AND ANALYSIS**

**EXPLORING NEW OPPORTUNITIES TO EXPAND
OUR TRAINING PROGRAMME**

**BUILDING RELATIONSHIPS WITH PARTNER
ORGANISATIONS AND EXPANDING OUR
NETWORK**



THE UNIVERSITY *of* EDINBURGH
Centre for Data, Culture & Society

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CITE THIS PAPER

CENTRE FOR DATA, CULTURE & SOCIETY
ANNUAL REPORT 2020/21. (MAY 2021)
COLLEGE OF ARTS, HUMANITIES AND SOCIAL SCIENCES,
UNIVERSITY OF EDINBURGH: EDINBURGH.

DOI

[DX.DOI.ORG/10.7488/ERA/1101](https://dx.doi.org/10.7488/ERA/1101)

