

Institution: University of Lincoln
Unit of Assessment: 32 Art and Design
<p>1. Unit context and structure, research and impact strategy</p> <p>Context and Structure</p> <p>The Art and Design Unit of Assessment (UoA32) at the University of Lincoln extends across the College of Arts and the College of Science with researchers located within the School of History and Heritage, the School of Design, the School of Fine and Performing Arts, and the School of Chemistry. This range is indicative of the interdisciplinary nature of the Unit: researchers work on a coherent set of specialisms from a range of disciplinary perspectives. There are 17.7 FTE academic staff returned in REF 2021, compared to 13.1 in REF 2014. The income for the Unit has grown 104% since REF 2014, from £940,851 to £1.9 million (based on HESA return). These achievements have allowed the Unit to sustain its strong links to external partners and continue its publication record, commercially orientated research, exhibitions and creative practice. Within conservation, our commercial research Unit now trades as 'Lincoln Conservation' (formerly 'Crick-Smith Conservation').</p> <p>In our Unit, cultural history and critical heritage studies blend with creative practice, materials science and conservation practice, a range symptomatic of our interdisciplinary work. While we embrace the University's encouragement of 'the academic freedom of individual researchers' (University Strategic Plan) we encourage the collective identity of groupings within the Unit through groups such as the Nineteenth-century studies group, and the Global and Transregional Studies Research group, the Critical Heritage and Place Consumption seminar and the Critical Encounters Lecture series. Since REF 2014, we have expanded existing strengths in critical heritage studies and conservation, initiated a new research area in the history of art and sustained activity in both design and fine art.</p> <p>Achievement of REF 2014 Research Strategy</p> <p>In REF 2014 our Unit (then UoA 34) proposed five themes for the following REF cycle: Art, Design and Cultural History; Contemporary Art and Curatorial Practices; Participatory Arts and Sustainable Design; Design and Designing; and Heritage Science and Conservation. These themes were to be developed through objectives such as the creation of research centres, raising the quality of our research outputs, attracting research-led staff, strengthening postgraduate research, increasing external income generation, improving dedicated research space, and developing collaborations. A strong response is evident to many of the REF 2014 objectives although our implementation of them has evolved in response to changes in staffing and institutional structures. Strategies have been initiated by both individuals and groups, many being agile responses to commercial and intellectual opportunities.</p> <p>A consensus emerged within the Unit that research groups, rather than centres, fitted the diversity of our research interests. Two research groups have recently been formed, the Critical Heritage and Place Consumption Group and the Global and Transregional Studies Research Group. These groups foster the integration and support of ECRs, PGRs and visiting researchers. For example the Critical Heritage and Place Consumption Research Group evolved from a seminar series on Heritage and Flooding in 2019 and since 2020 has hosted external and internal speakers including co-investigators on funded projects. This group is strongly aligned with the institutional priority theme of heritage (see Institutional Environment Statement) allowing for collaborative, cross-disciplinary research opportunities. Long standing research groups, such as 'Nineteenth-Century Studies' provide a platform for internal, external and PGR speakers. Research outputs have been encouraged and developed through the Individual Research Planning process (see section 2) where each researcher's achievements and plans are assessed by a senior member of staff to encourage quality and enable research activity in the context of other responsibilities. As an example, this research mentoring has helped Vescovi to plan outputs, submit funding bids and achieve institutional research leave in 2021.</p>

Since REF 2014, a strategic aim of our Unit has been to build on staff expertise and develop cross-school collaborations through projects and research funding applications. In line with this, research-led staff have been recruited in line with the Unit's REF 2014 themes. We have prioritized Art History: the appointment of a professor (**Morrison**) and two lecturers (**Corry**, **Vescovi**) has given the Unit specialists in Scottish painting, Renaissance studies and medieval spatial and sculptural studies. We have strengthened contemporary art with two theorist-practitioners (**Klee**, **Lang**), while interior design has been enhanced by a specialist in spatial perception and colour (**Ulusoy**). Heritage science and conservation have been broadened through an appointment in heritage and climate change (**Daly**) while conservation practice has been consolidated by the appointment of an accredited painting conservator (**Clarricoates**). Postgraduate research completions reflect our REF 2014 themes: history of art (Julie Bush 2017), fine art (Michael Lent, Yuen Fong Ling and Cilla Eisner, 2014, 2016, 2017), participatory design (Emmanuel Etsaname, William Wilson, 2017, 2018); conservation and cultural history (Alison Fairhurst, 2015), critical heritage (Anastasia Samara, 2019) and materials science (Nicole Fielding, 2015).

We have nurtured the experience of academic staff by pairing experienced supervisors with new staff: **Smirniou** worked with Hoskin (UoA 28), while **Skipper** and **Daly** worked with Cheshire (UoA 27). These three new supervisors have now all supervised projects to completion. Curatorial collaborations have taken place across the REF 2014 themes: 'Madonnas and Miracles' at the Fitzwilliam Museum (cultural history), '3D Printing: The Good, the Bad and the Beautiful' at National Centre of Craft and Design (Design, co-production), 'Bummock: the Lace Archive' at Nottingham Trent University Lace Archive (Fine Art), 'Kobi Levi and the Playful World of Shoes' at Northampton Museum and Art Gallery (design studies), 'The Typographic Dante' (design studies). Conservation and heritage practitioners collaborate continuously with commercial clients through Lincoln Conservation and with policy makers through commissioned research on heritage and climate change.

Achievement of Impact Strategy

Our central impact goal of REF 2014 was to 'influence policy and practice and enhance public awareness and understanding of art, conservation, cultural heritage and design'. We have achieved this goal through the appointment of outward facing staff, a culture of exhibiting and curating and co-production and impact mentoring. Institutional investment in impact infrastructure has resulted in the establishment of the Lincoln Impact Literacy Institute (see Institutional Environment statement) and the appointment of two Impact Support Administrators within the College of Arts. The former has guided staff in the formation of impact goals while the latter has supported staff in articulating their impact activities. These appointments have been supplemented by the appointment of a Professor for the Public Understanding of Research. Newly appointed staff **Daly** (previously a commercial conservation consultant) and **Clarricoates** (previously commercial conservation practitioner) have expanded institutional knowledge around public policy and commercial practice and both feature in the Unit's Impact Case Studies. Curatorial practice and exhibiting across the Unit encouraged the interaction of academics, gallery staff and visitors: **Chick**'s work on exhibition design and visual impairment resulted in new recommendations for curation based on the experience of partially sighted visitors, while **Tullett** has reached a range of audiences through exhibitions of his work in London, Dublin and Edinburgh. In terms of heritage, **Waite's** work used community archaeology and a residency to enhance awareness of the value of post WW2 public housing: this work used co-production to help residents understand and engage with their lived environment. Impact has been integrated with research activity through an evolving series of structures: the 'AIM' strategy and 'College of Arts Impact Focus Group' have been rationalized into the more comprehensive annual Individual Research Plan process through which every active researcher's outputs and impact activity are identified and monitored through mentoring.

Our investment in commercial infrastructure has enabled impact activity for academic staff. For example, **Daly's** research commissioned by the Department of Arts Heritage, Regional, Rural, Gaeltacht Affairs of Ireland (2016/17) funded the relief of her teaching workload which allowed her to contribute to policy development and legislation: she is one of the co-ordinators of the ICOMOS International Climate Change and Heritage Working Group. She attended the World

Heritage Committee meeting in Bahrain June 2018 and took part in policy discussion for UNESCO World Heritage (Vilm October 2017), ICCROM & IUCN (Rome 2018), Irish government (2018). This initial period of leave led to further consultancy: in 2018-19 Daly was employed as lead researcher and author for 'Climate Change Adaption Sectoral Plan for Built and Archaeological Heritage' a Department of Culture, Heritage and the Gaeltacht Public Consultation. This research activity has formed the basis for one of the Unit's Impact Case Studies.

Lincoln Conservation has been developed into a more balanced and broader operation, now capable of handling external projects involving digital reproduction and painting conservation in addition to existing strengths in historic interiors and architectural paint research. Critical heritage studies now sits alongside our work in conservation practice with researchers exploring the importance of heritage to migrant communities, community archaeology and heritage and climate change, (**Catalani, Waites, Daly**). Beyond the Unit the university initiative to launch 'Heritagedot', an international digital heritage conference, brought together a number of academic disciplines and heritage organisations, **Smirniou** was on the organisation committee while **Croft** and Smirniou delivered papers. Design theory has been pursued through projects relating to product obsolescence and sustainability and the relationship between modernist planning, place and memory (**Maycroft** and **Waites**). Outward facing partnerships and collaborations have been expanded in a number of different areas as outlined in Section 4.

Research & Impact Strategy for the Next Five Years

During the next REF cycle, we will enhance the quality, rigour and relevance of our research and facilitate our ability to reach new audiences. In order to do this, we will: -

- Enhance and consolidate our existing strengths through collaborations between the arts and science, both within our institution and externally. We will encourage this through investment in digital heritage practice, in particular scanning buildings and presenting related Virtual Immersive Environments.
- Increase external income through grant applications by encouraging staff with successful small bids to develop larger projects: Catalani, Smirniou and Maycroft all have projects (outlined in section 4) which can be scaled up into major grant applications.
- Increase external income through commercial projects by prioritising tenders in excess of £20,000 and staffing these projects through specific appointments.
- Build on socially engaged heritage research through submitting at least two large interdisciplinary research grant applications (over £100K) and two smaller applications (c. 30K) to national research councils.
- Expand our international collaborations by making use of current research projects in design ethics, co-production, critical heritage and art history and pursue links made through visiting fellowships and academic networks (see section 4). This will include projects led by Maycroft, Chick, Catalani, and Vescovi.
- Enhance impact through delivering Continued Professional Development and short courses within the heritage industry.
- Develop PhD provision and completions through bidding for external schemes (such as AHRC Collaborative Doctoral Awards), utilising local archival and laboratory-based resources and supporting the integration of part-time teaching and doctoral study..

Progress towards Open Research

Our Unit is committed to the policy of open access and the University is a signatory to the San Francisco Declaration on Research Assessment (see Institutional Environment Statement). Through the University repository, all members of staff have access to a site for open publication. All journal publications published since January 2014 are fully compliant with the demands of green open access, as specified by REF, via the University of Lincoln Repository. **Smirniou** is Managing Editor of *The Journal of Conservation and Museum Studies*, an Open Access journal and we are gradually increasing our proportion of 'gold' open access outputs as evidenced by publications by **Corry, Vescovi** and **Daly** (3 outputs).

2. People

Staffing Strategy

Since REF 2014, our Unit has undergone a number of changes, concerning both its key research areas (the Unit has expanded into Art History, Critical Heritage Studies, Participatory Design and Interior Design) and the recruitment and promotion of its research-active staff. These changes have been largely the result of strategic staffing in emerging areas, which tackle contemporary global challenges (e.g., climate change and the impact on cultural heritage; co-production and co-design in museums; forced migration and heritage practices) and partly the result of staff moving to posts in other institutions. Hence, the recruitment of staff has been central to the Unit's research strategy, closely aligned with the University's research objectives, which aim to produce "purposeful research with impact", from "local to global" scale (see Institutional Environment Statement).

During the past 6 years, there have been 9 new appointments to strengthen and further the unit's research themes: 3 new ECRs (2015-2018: **Smirniou** and **Clarricoates** [Conservation]; 2015 **Daly** [Critical Heritage Studies]; 2 Lecturers (2017, **Klee** [Fine Art]; 2019: **Corry** [History of Art]; 3 Senior Lecturers: 2019: **Ulusoy** [Interior Architecture and Design]; 2016: **Lang** [Fine Art]; 2015: **Vescovi** [History of Art]) and 1 Professor (2019: **Morrison** [History of Art]). There has also been 1 promotion (as part of the annual academic promotions process) from Senior Lecturer to Associate Professor (2016, **Maycroft** [Design]). These appointments and promotions have been made at different points of the REF cycle in order to consolidate existing, key research areas (Fine Art, Conservation) and to expand new ones (History of Art, Interior Design, Critical Heritage Studies).

In addition to academic staff, the Unit employs 2.0 FTE eligible independent research staff in Lincoln Conservation: **Clarricoates & Croft**. The research fellows are supported by two Associate Professors with management roles built into their workload: **Gardiner** (returned in UoA 15) acts as Director of Lincoln Conservation and **Cheshire** (returned in UoA 27) acts as its historical consultant. The Research Fellows and Managers are supported by the College Business Development Manager.

Staff Development

The development of Unit staff is supported through a number of initiatives and mechanisms, both at College and School level. At College level, all staff with research responsibilities go through an annual Individual Research Plan (IRP): this includes the identification and monitoring of the yearly targets for research dissemination, the planned and submitted research funding applications, the assigned doctoral supervisions, the individual research esteem indicators as well as the longer-term (3-year) research plans. The IRP is discussed with a school senior research colleague, which not only facilitates the identification of areas of personal development, but also provides opportunities for regular, individual research mentoring as well as informing further forms of support from School and the College of Arts. Through the Research and Enterprise Research Office Newsletter, staff are made aware of regular training opportunities (including bid writing workshops) and research funding calls (both national and international). Furthermore, staff planning grant applications are offered the support of the University research officers and all research active staff are invited to attend meetings with funding bodies including the AHRC and Leverhulme Trust. Following these meetings, a number of staff have successfully applied to the AHRC: for example **Waites** is now co-investigator on Decommissioning the Twentieth Century funded by the AHRC.

All staff are encouraged to apply for the research leave scheme (run by the College of Arts), which provides teaching relief for one semester to focus on the delivery of specific research outputs. **Vescovi** was awarded research leave in 2021. Three times per year, research staff and PhD students can apply for the College of Arts research funds calls which regularly funds towards research fieldwork expenses, conference attendance and conference presentations. Across the Unit's Schools there is a uniform and consistent approach to career and research development, through the annual academic appraisal scheme, whose purpose is to review progress and explore development needs and career aspirations. This happens through: dedicated allocation allowance for research and scholarly activity in the workload for staff; regular research seminar series attended both by staff and postgraduate students and writing workshop / away days for colleagues at all career stages to explore writing strategies (for

example a total of 6 writing retreat days have been held to support conservation practice staff). ECRs have a more generous research allowance and for the first year of their appointment, they also have a limited teaching load so that they can develop their own research and practice. Additionally, staff and students have access to 'Project Space Plus', the University dedicated exhibition space, where they can test and put into practice new research ideas or exhibit their work in-progress, while sharing their research and reaching out wider audiences, beyond the University. For example, **Bracey** (Fine Art) together with independent artist Annie Morrad curated an exhibition (2017) which included the reproduction of historically important paintings, through the application of a layer of clear gesso and the recording of its reaction with the photographic print when moved on a surface.

Our Unit has been home to fixed-term international visiting research fellows and artists in residence since 2014, including, Witiya Pittugnapoo (Design: 2015 British Council and 2016-2018 Newton Research Fellow), from Naresuan University, Thailand who has been exploring the impact of flooding on cultural heritage sites and developing a set of guidelines for best practice. As artists in residence, the Unit has hosted Chunmei Lui and Zhang Tao (2015-2016), China; Ruth Ewan, Raqs Media Collective and Anneka Erikson as part of the 'Gymnasium' project 2015-16. Eleni Kotoula was employed from 1/2/2018 to stimulate activity in digital heritage and ran digital humanities workshops for staff in 2018.

The University's approach to research integrity is governed by the Concordat to Support Research Integrity and the University's Code of Practice for Research (see institutional environment statement). Staff are supported in research integrity through mentoring and the university new online ethical approval process (see Institutional Environment Statement). Mentoring takes place through the IRP process and through School research ethics representatives: **Catalani** sits on College and University Research Ethics committees and reviews applications on the new online system. Ethical approval is required as part of PGR progression and on a project-by-project basis for academic staff. Ethics and research integrity is a standing item on the respective School Research Groups. PGR students and their supervisors review ethical aspects of the student's research every year as part of the annual monitoring review (see Institutional Environment Statement).

Support for PGR students

As future researchers and creative practitioners, our PhD students are supported, both by the Schools and by the College, both in terms of their research and professional development. The Unit's PhD student numbers have increased since the last REF cycle, with each School having been able to attract high quality and dedicated students. In addition, the Unit has hosted a visiting PGR student from an international University (2015-2016, School of Design **Wilailak Chochooy**, University of Bangkok, Thailand). We also have a record of joint PhD programmes with other institutions. For example, **Morrison** has established a co-tutelle agreement in the History of Art in collaboration with the University of St. Andrews.

All PhD students are aligned to the relevant School's research group and University theme and engage actively in their activities (including presentations at the Schools' research seminars). Training, supervision and personal development needs of PhD students are closely monitored by the student supervisors, the relevant School Director of Research and by the School/College research degree committees. Our staff help to manage and mentor PhD students, for example **Maycroft** acts as postgraduate research lead for the School of Design.

PhD students are supported by a supervisory team consisting at least of two supervisors (with one of the two having had at least one PhD completion) with whom they meet monthly. The supervision process is monitored and supported by the university's Doctoral School and through Progress Meeting forms, which monitor the student's progress as well as their training regime (through a training needs analysis). Bespoke training events have been hosted within the Unit, **Chick**, for example, contributed in 2018 with a session focusing on doing research with external partners and co-creation. The Unit's PGR students are given opportunities to engage with the school's teaching activities, so that they can maximise their career opportunities while developing a range of transferable skills and building up teaching experience.

PhD completions have increased slightly since the last REF cycle. Our doctoral graduates have been remarkably successful in finding permanent jobs: **Emmanuel Estenave** (graduated 2017)

was appointed as Senior Lecturer at the Federal University of Technology (Akure, Nigeria); **Will Wilson** (graduated 2018) was appointed as Lead Neighbourhood Planner for Bassetlaw District Council; **Yuen Fong Ling** (graduated 2016) was appointed Senior Lecturer at Sheffield Hallam University and **Michael Lent** (graduated 2014) is currently Head of Fine Art at Teesside University.

Our PhD students are encouraged to disseminate their work by attending, presenting and discussing future practice and current research at the annual College of Arts PG Research Day and at the monthly 'Tower Talks'. Josephine McKenzie (Conservation) gave a talk in 2019 about her research on 19th century ecclesiastical interiors. Finally, the University recognises that space is really important to form collaborative networks, develop healthy working practice, discuss career plans and to maintain a healthy work-life balance. Hence, our PGR students, at college level, are provided with dedicated desk space, lockers and IT facilities. Since the outbreak of Covid-19, students have been allowed to interrupt their studies without this impacting their registration period and supervisors have been maintaining contact with students via online tutorials even if the student has opted to take interruption.

Equality, Diversity and Inclusion

Art and Design is a well-balanced Unit in terms of gender: just over 50% of our FTE are female. 3 female academics are in leadership roles, 2 Professors (**Chick, Colston**) and 1 Associate Professor (**Catalani**) however, we aim to increase the number of female academics in leadership roles by the next REF cycle. In terms of inclusion, staff of the Unit with caring responsibilities and other protected categories benefit from flexible working hours during the teaching semester. Two members of staff have been supported by the university's enhanced maternity leave scheme, while another has benefitted from adoption leave during this REF cycle (**Corry, Wroe, Catalani**). **Catalani** participates in the 'Reimagining Lincolnshire' project: a university wide initiative to reassess the county's heritage provision in response to the Black Lives Matter movement.

The Eleanor Glanville Centre (see Institutional Environment Statement) is a key factor in creating university wide progress towards EDI goals. **Colston** is the founding Director of the Eleanor Glanville Centre and 0.5 of her FTE is allocated for this purpose. **Skipper** was supported by a grant of £10,000 from the Eleanor Glanville Centre's 'Academic Returner's Research Fund', which enabled a period of research leave immediately after her period of maternity leave in 2014.

Colston has been awarded an EPSRC Inclusion Matters grant to develop new research interests in innovative strategies and mechanisms for measuring, monitoring and evaluating the impact of EDI interventions on attitudes and behaviours in the research environment. Colston is also UKRI Gender Equality Act Compliance External Advisory Board (2019 - present) and a co-founder of the Newton Academy - the science club for girls. The Unit is committed to the Athena Swan charter's principles, Colston is the institution lead for this scheme.

3. Income, infrastructure and facilities

External income generation within our Unit has increased 104% since REF 2014. This increase has been facilitated by grant application activity and investment in commercial infrastructure which in turn has allowed investment in equipment and external facing opportunities for staff. Grant income has been generated both through UK Research Councils and Arts Funding bodies.

Commercial research and consultancy are encouraged in our Unit through a well-developed business infrastructure, grounded in the university wide Research and Enterprise office, which encourages commercially funded research activity. Lincoln Conservation (<http://www.lincolnconservation.co.uk/>) is an outward-facing research and enterprise centre that generates income, provides research opportunities and facilitates impact. Since restructuring in 2017, its annual income has built steadily: 2018–19: £191,977; 2019–20 (Covid affected) £59,317; 2020–21 (five months only) £191,325. From a limited focus on Architectural Paint Research, Lincoln Conservation has expanded its range of services to historic material analysis, historic buildings consultancy, conservation of historic interiors, three-dimensional scanning and

replication and paintings conservation. In addition, Lincoln Conservation supports continuing professional development and knowledge exchange through providing continuing professional development within the cultural heritage sector. The 'Lincoln Conservation Business Plan 2018-21' gives a strategic overview of current activities, developing areas and projected income. Three permanent research fellows (two independent researchers **Croft, Clarricoates**) are supported by two associate professors with management roles built into their workload: Gardiner (UoA 15) acts as academic director and Cheshire (UoA 27) acts as historical consultant and academic liaison. The research fellows and managers are supported by the College Business Development Manager. Research fellows and management staff attend fortnightly meetings when current and potential contracts are discussed. Academic members of staff from History and Conservation are invited into meetings to discuss potential involvement with commercial projects and explore the use of equipment and facilities. Staff that have benefitted from Lincoln Conservation projects include **Shultz** (conservation project at Ripon Cathedral £7,340), **Vescovi** (training and use of building scanner for research on Lincoln Cathedral). **Daly's** consultancy for the Irish Government was encouraged and administered through Lincoln Conservation, this comprised two periods of consultancy (£22,371 in 2018/19 and £4,064 in 2016/17), this research forms the basis on one of Unit's Impact Case Studies. All projects are recorded and administered through the University's 'Awards Management System'.

Staff seeking to make **research bids** are supported in a variety of ways. At School level they receive one to one mentoring from the School Director of Research or another appropriate senior colleague. A College-level system of reviewing proposed bids ensures that they all receive appropriate guidance. Staff must submit an 'intention to submit' form which alerts their School Director of Research to their bidding proposal and allows assessment and guidance at the start of the bidding process. All bids are blind peer reviewed (by one reviewer for bids up to £50,000 and by two peer reviewers for bids over that amount). At College level, away days have also provided intensive workshops on writing bids with experienced mentors available to guide those making their first bidding attempt. The university's Research Office provides one-to-one guidance on costings for bids and through its on-line research bidding scheme guides staff through the process of completing on-line bidding systems. In addition, it provides regular training events, distributes details of new and current bidding rounds focused on the relevant School, and provides the opportunity to meet with, and listen to, representatives of funding bodies, including AHRC, the British Academy, the Leverhulme and ESRC.

AHRC grants include: Unearthing Utopia, £3,000 & £20,000 (**Waites, Co-I**). Arts Council England Grants include 'Bummock', £12,000, £12,925 & £14,375 (**Bracey**); 'Taking the Lead – research through action', £1,060 (**Waites**). British Academy Grants include: 'Flooding adaptation and strategy for cultural heritage and landscape preservation', £28,884 (**Catalani**); 'Technological change and transmission in the Silk Road: A study of the early glass industry', £5,160 (**Smirniou**). Other grants were awarded by the British Council: 'Flood resilient planning strategies for cultural heritage in Southeast Asia', £14,180 (**Catalani**); Social Research Foundation: 'The Thrown Away: Towards a Manifesto of Dispossession', £3,000 (**Maycroft**); 'Rakow Grant for Glass Research (Corning Museum of Glass) 'Study of early Islamic glass from the site of Otrar, Kazakhstan', £4,110 (**Smirniou**). A Robert R Wark fellowship at the Huntington Library USA for a period of 2 months has recently be awarded to **Clarricoates** (\$3,500 per month, delayed by Covid-19).

Research trips and conference attendance are supported through a College-level Research Resources Allocation Fund, to which applications can be made three times a year. Ten staff have received grants from this fund amounting to £8,248 over this REF census period. These grants have facilitated: conference participation, fieldwork, library and archive visits and additional research days. Staff in the Unit have access to the University Library and Cathedral Library, support from an academic subject librarian and unlimited interlibrary loans (see Institutional Environment Statement). The Unit has also created close links with its unique local resources, especially the Lincolnshire Archives & Lincoln Cathedral. Staff play important roles in helping to administer and promote these bodies. For example, **Clarricoates** serves on the

Diocesan Advisory Committee for Lincoln Cathedral, while **Bracey** stages exhibitions rooted in creative interpretations of archival objects.

Facilities

Strategic university investment has provided Lincoln Conservation with a dedicated staff office and a specialist laboratory. Through internal bids for central university funds, the Unit has acquired a handheld XRF device (c. £30,000) and 2 Polarising Light Microscopes (c. £3,000 each) to aid commercial analysis of materials and pigments. The purchase of a SciQuip environmental chamber (£15,595) has recently been approved: this will enhance the correction of colour values analysed through architectural paint research.

Lincoln conservation purchase and maintain technical equipment that is also used by members of our Unit. This has aided the adoption of digital technologies by academic staff, for example a 'Faro Focus S laser scanner' (£47,000) has the capability to scan buildings and was used by **Vescovi** as the basis for a bid for a research fellowship – he was trained by Croft and McDonnell. A 'Matterport 3D scanner' (£2,400) is currently being used for scanning objects and building and the presentation of Virtual Immersive Environments. The School of History and Heritage purchased a 'surtronic surface characterisation machine' for use during field work in 2016 at a cost of £ 2,270: this allowed **Daly** to conduct a long-term experiment to measure environmental degradation of different types of building stone.

Commercial infrastructure has generated both of our Unit's impact case studies, while outward facing staff, exhibitions, impact mentoring have enhanced impact across the Unit. The Impact Case Study 'Climate Change and Cultural Heritage' (**Daly**) has been facilitated by structures that have enabled commercial consultancy and teaching replacement. The Impact Case Study 'Enhancing Heritage Sites and the Heritage Profession through Conservation Research' (**Croft, Clarricoates, McDonnell**) has been generated by research fellows in Lincoln Conservation.

4. Collaboration and contribution to the research base, economy and society

The work of our Unit often focusses on global challenges and beneficiaries beyond higher education. Exhibiting, curation and co-production are important methodologies of collaboration within our research and we work with a range of academic, commercial and community partners.

Collaborations, Networks and Partnerships

Art Historians collaborate extensively with key national institutions: **Morrison** supervises an AHRC Collaborative Doctoral Award with National Galleries Scotland on Scottish History Painting (ongoing) while **Corry** collaborated with the Fitzwilliam Museum on the exhibition *Madonnas and Miracles, the Holy Home in Renaissance Italy* (2017). **Vescovi** was a Mercator Fellow (2017) at the University of Heidelberg (Germany) for the research project: *Materiale Textkulturen*, and this project funded one of the Unit's 'gold' OA outputs.

Researchers working within Design, Conservation and Critical Heritage Studies collaborate with academic networks and policy makers on heritage & climate change, migration, visual impairment and sustainability. For example, **Catalani** participated in research networks on heritage and climate change funded by the British Council with Ho Chi Minh City Institute for Development Studies, Vietnam and Faculty of Architecture, Naresuan University, Thailand and has research links with Manchester City of Sanctuary and Rethink Rebuild (a charity run by Syrian volunteers in Manchester). She has also given a guest lecture on: 'Heritage and forced migration' at Centre for Applied Heritage, Linnaeus University, Sweden (2017). **Catalani** was also one of the co-chairs of the Working Group: 'Memory and Migration' (2018-2020), Memory Studies Association and a Trustee of Manchester City of Sanctuary (May 2020-December 2020). She is currently part of the scientific committee of the Intangible Cultural Heritage International Network (2016- ongoing) and is a member of the scientific committee of the Conference series *Tourism and Creative Industries. Trends and Challenges* (Croatia, 2017-ongoing). **Daly's** collaboration with the Department of Culture, Heritage and the Gaeltacht, Ireland, (2019 – ongoing) has resulted in the formation of major policy developments for Ireland as detailed in the Impact Case Study. **Chick** collaborated with a European network on addressing food waste through design research, participating organisations included the Dutch Design Foundation, In

Ovo, Greenco Packing, (Netherlands); Innovatiesteunpunt, Flanders Food, (Belgium); Spessart Regional, Fachhochschule Fulda (Germany); AC3A, Laval Mayenne Technopole (France); Irish Fishery Agency, and Clean Technology Centre (Ireland). **Maycroft** was an invited participant in *Bodies of Planned Obsolescence; Digital Performance and the Global Politics of E-waste* an AHRC network. Research performance and exhibitions took place in the UK, Hong Kong and Nigeria, and involved participants from London School of Speech and Drama, Hong Kong University, University of Ibadan, Nigeria, Watermans Art Centre, Victoria & Albert Museum; 'Uselessness' as a response to ambiguity: diminished things and marginal places' was delivered in Unnecessary, Unwanted and Uncalled-for: A Workshop on Uselessness, 29-30 March, 2017, UVA, Amsterdam; 'Consumerism: reflections in a splintered paradigm' was delivered in: Human Being, Society, Culture: Critical Multidisciplinary Reflections On Essences And Research Paradigms, University of Kiel, Germany (2016).

The lecture series 'Critical Encounters' invites a wide range of external and internal speakers to engage with academics, students and artistic practitioners beyond the academic sector, **Bracey** and **Klee** have co-curated this series. The Unit's artists and designers have exhibited internationally in a range of venues: **Bracey** has exhibited across China, Australia and the UK: 'Bummock: The Lace Archive' (2018), 'Textiles and Place' at Manchester Metropolitan University and Backlit Gallery, Nottingham (2017); 'Rummage to Bypass: Alternative Ways of Accessing the Archive', The Archive Unbound, Cardiff University (2016); 'Bummock', hARTSlane Gallery, London (2015); The Work is a Score, The Lock Up, Newcastle, Australia (2015); 'Midpointness', Airspace Gallery, Stoke-on-Trent (2016); 'The Work is a Score' part of TransArt Triennale The Lock Up, Newcastle, Australia (2015); 'Documents Alternatives', Verge Gallery, Sydney; BSAD Gallery, Bath; ONCA Gallery, Brighton (2017); 'There, But Different', Cornerstone Gallery, Liverpool (also curator); 'Re-defining the Artistic Canon', Jing Shi Gallery, Beijing; 'East Meets West', China University of Mining and Technology, Beijing (2015). **Klee** has exhibited at LAM Gallery, Los Angeles (exhibition, 2016), Acadia Missa Gallery, London (exhibition 2016), Five Years gallery, London (2015), *Töne Festival*, Chatham Historic Dockyard (2014: performance and exhibition titled *Too Prolix: A Tour Out of Time*) and **Lang** has exhibited at 'Fit for work', London, Nottingham, Rotherham (2019, London), and 'Derelictus' (2016, Canterbury).

Tullett has performed and exhibited widely for example: Talk / performance The Contemporary Poetics Research Centre – Steve McCaffery's Carnival, Birkbeck University, London, Bronač Ferran (2019); Performance of 'Song for an Art School' Whitechapel Gallery, London (2015); 'The Typographic Dante' in *Poetry by Design: a re-appraisal of visual poetics*, University of Leeds (2019); 'Typography, poetry, artists' books, Dante's Inferno', Norwich University of the Arts, Norwich (2018); 'The Typographic Dante' Mouth: Poetry and Illustration Forum, Falmouth (2018); 'Typewriter Art and The Caserom Press' *Northumbria University, Newcastle* (2016); 'Typewriter Art and Single Sided Books' Edinburgh College of Art, Edinburgh (2016); 'The Ghost in the Machine (Portraiture and the Typewriter)' *eleventh International Conference on The Image*, Liverpool (2016); 'The Technology of Typewriters (of Progress and Loss)' *Face Forward Symposium, Dublin* (2015).

The **Lincoln Centre for Culture and Creativity** was established in 2016 to facilitate knowledge transfer and impact between academic research and a range of regional and national communities (see Institutional Environment Statement). Our Unit's staff have both used and facilitated this interface between research and local beneficiaries. Waites is a regular participant in C4CC's 'Mansions of the Future' project, through the 'Lincoln Creates Network'. Publications co-written by **Maycroft** underpin the 'Creative Lincoln Shire' Project, a research and development programme to support the growth of the creative economy across Greater Lincolnshire. Smirniou, Croft and Cheshire have been instrumental in planning HeritageDot, a digital heritage conference co-hosted by the University of Lincoln, the National Lottery Heritage Fund and Imperial War Museums.

Users, beneficiaries, audiences

Our Unit's collaborations address a wide range of users, beneficiaries and audiences. Conservation and heritage researchers have well established relationships with professional bodies: **Daly** delivered the guest lecture 'Climate Change & World Heritage; a view from Ireland' at the annual alumni meeting of the Board of the International Association of World Heritage Professionals e.V. at BTU Cottbus-Senftenberg (2019) and 'Climate Change Planning for Culture; Ireland Developing a National Adaptation Plan' the Sea Change conference organized by Blackpool Council and the World Monuments Fund 6th September 2019. Daly also participated in a seminar organised by **Catalani**: 'Heritage and Climate Change: communities responses and cultural institutions', funded by the British Academy and Newton Fund, 5 December 2018, part of the Critical Heritage and Place Consumption Seminar series.

Clarricoates and **Croft**'s work for Lincoln Conservation resulted in continued professional development for RIBA and extensive benefits for heritage organisations as outlined in the Impact Case Study. In addition, **Clarricoates**' work as a conservation practitioner for commercial clients has benefitted a range of heritage organisations including: Stowe House, Buckinghamshire (2018- ongoing); Stamford Town Hall (2018); Kettering Baptist (2019); Bonington Gallery and Nottingham Trent University (2019); Derby Cathedral (2019). Her work has also been disseminated via guest lectures to Friends of Lincolnshire Museums and Art Gallery on the conservation of paintings at The Usher Gallery (2018) and her paper 'The role of digital replication in the reinstatement of an early 20th century ceiling' at HeritageDot, University of Lincoln (2019). **Croft**'s work as a conservator has been of particular benefit to maritime heritage organisations: his work on H.M.S Victory, H.M.S Caroline (both for the National Museum of the Royal Navy) has had major benefits for heritage visitors. **Skipper** delivered lectures to the Museums Development East Midlands (MDEM) Regional Collections Symposium (2017 and 2019). Since 2015, **Wroe** has been a member of the Executive Committee of The Costume Society, and web media co-ordinator, helping to build relationships with existing and new audiences.

Waites has combined co-production and community engagement by working with residents of a post WW2 Housing Estate in two projects. 'Back to the Future 1965' (2015-2016) was an on-site residency comprising a 1960s living room installation, which formed the basis for two films that captured community engagement with the project: 200 people have since viewed the films and Waites' blog post about the project has attracted over 1900 page views. 'Exploring Middlefield's Archaeology', was a community archaeological dig that took place over two weekends in May 2016. 20 test pits were excavated and finds recorded by nearly 100 residents, schoolchildren and other volunteers, working alongside **Waites** and Lewis (returned in UoA 15). Residents benefitted from the opportunity to build their social and cultural capital and, as a result, the vast majority of those involved felt they knew more about the archaeology and history of the area than before the project, and helped residents to fundamentally re-conceptualize their estate as a resilient place with an interesting and worthwhile history of its own. This project also worked with KS1 pupils at the nearby Hillcrest Early Years Academy who were taught how to dig their own test pits within the school grounds.

Schoolchildren were encouraged to engage with the Unit's research through the European Commission-funded Marie Curie festival of research, LiGHTS in 2016 and 2017 (see Institutional Environment Statement) an initiative designed to enthuse wider publics about research. For LiGHTS **Skipper**, **Daly** and **Smirniou** staged conservation-in-action demonstrations and research displays in St. Mary Le Wigford Church including sections on architectural paint research and materials testing and analysis. The event as a whole attracted over 1000 schoolchildren from over 20 schools across Lincolnshire on each occasion, along with local visitors of all ages. **Skipper** and **Daly** also engaged with broad audiences for two Lincolnshire Heritage Open Days, through leading laboratory tours and running displays designed to engage broad public audiences at the Lincolnshire Show in 2018, where they interacted with children from over 60 different schools. PEARL (Institutional Environment Statement) was established in 2017 to embed public engagement within research, **Chick** was awarded a Vice Chancellor's award through PEARL for working with blind and partially sighted heritage audiences through inclusive exhibitions in 2018.

Many of the Unit's researchers work with the museum and gallery sector, thus addressing a wide range of visitors. **Catalani** was guest curator of 'Kobi Levi and the playful world of shoes' Northampton Museum and Art Gallery (2014). **Chick** worked with the National Centre for Craft and Design, Sleaford on an exhibition that explored how visually impaired visitors could benefit more from museum displays (2017), this was followed by her guest lecture delivered on: 'Inclusively designed and curated exhibitions for visually impaired visitors' at the 1st International Conference on Disability Studies, Arts, and Education, (2017), Aalto University, Helsinki, Finland. **Tullett** has done a series of gallery-based talks: 'Typewriter Art' New Monday Art Group, Usher Gallery, Lincoln (2017); 'Utopian Tales' Fruit market Gallery, Edinburgh (2015); 'Utopian Tales' Small Publishers Fair, London (2015); 'Typewriter Art' Fruit market Gallery, Edinburgh (2015).

The Unit's research addresses wide audiences through collaborating with broadcasters: **Clarricoates** featured in numerous national and international media reports of the architectural paint research for the Elizabeth Tower (Big Ben) restoration project, including: Channel 4, the BBC News, *Daily Mail*, *The Evening Standard*, *Yorkshire Post*, *The World News* and *Lincolnshire Live*. **Morrison** acted as consultant for a for 4 part series on Scottish Art (BBC 2, BBC4, 2015) and published in national print media ('The Story behind Scotland's art is not being told – here's why' *Independent* 14/10/2016) and contributed two pieces to a Podcast ('Reflections: Art, Life and Love', 2019) and ('Reflections: Art, Life and Love'). **Corry** worked on the PBS documentary 'Leonardo: Art and Science', while **Lang** has published in art magazines, including *Trebuchet* (2018 and 2019) and the *Jackdaw* (2017). **Waites** was commissioned to write an exhibition catalogue essay (2016, 'Extramural: Public Art in Britain 1951-2016'), in *The Russell Chantry: Lothar Gotz/Duncan Grant*, The Collection Lincoln. He was also invited to write a book review ('Breaking ground: art, archaeology & mythology') for the *International Journal of Heritage Studies* (2017) and took part in two radio interviews on the archaeology of the post-war council estate (BBC Radio 4 'Making History' programme 2017 and BBC Radio 3 'Free Thinking' programme 2018). Drawing upon her research expertise on heritage and the impact of flooding **Catalani** was invited to publish a review (2016) of an edited volume about the relation between water and heritage (*International Journal of Heritage Studies*). **Clarricoates** has published two reviews for the *Journal of Architectural Conservation* (2015 and 2017) both on the standards in architectural paint research.

Wider contributions and activities

Our Unit's researchers have been serving as peer-reviewers and as associate editors in a range of journals. **Chick** (Design) has been on the editorial board of *The Design Journal* since 2013. **Clarricoates** (Conservation) (2012-ongoing) has been a technical editor for a series of post prints from conferences hosted by the Institute of Conservation's Paintings Group, published by Archetype Publications. **Smirniou** is Managing Editor of *The Journal of Conservation and Museum Studies*. Journals where our academics serve as peer-reviewers include: *African Conflict and Peace Building Review*, *The Antiquaries Journal*, *Capital and Class*, *Journal of Cleaner Production*, *Journal of Conservation and Museums Studies*, the *Design Journal*, *European Journal of Marketing*, *Journal of Marketing Management*, the *Journal of Material Culture*, *The Mediaeval Journal*, *Museum and Society*, *Open Sage*, *Science Museum Journal*, *Speculum*, *Third Text*, *Journal of Tourism and Cultural Change* and *Visual Communication Journal*.

The contribution that the Unit's researchers make to research is acknowledged by their activity as reviewers, in national and international research councils. For instance, **Colston** is part of the peer-review college for the EPSRC and a panel member for: Research Promotion Foundation (RPF) Cyprus, The Netherlands' Research Council, NWO (Council for the Humanities of Netherlands Organisation for Scientific Research), EU-JPICH (Joint Programming Initiative in Cultural Heritage), and the Association of Commonwealth Universities Promotions (Professorial). **Catalani** has been a reviewer for research grants AHRC (2015), ESRC (2019), HERA (2018), UKRI (2020) applications. **Chick** is a regular peer reviewer for the AHRC; **Klee** was a member of the Selection Panel C (Arts Practice), allocating AHRC grant money (CHASE consortium),

held at the Courtauld Institute (2014 & 2015); **Morrison** has been an External Expert Evaluator, Killam Research Fellowship, Canada Council for the Arts (2015).

Our staff interact with a number of other institutions through doctoral projects. **Morrison** established an AHRC Collaborative Doctoral Partnership with the National Galleries of Scotland on the subject of Scottish History Painting; **Catalani** is the second supervisor of Claire Montado, a PhD student enrolled at the University of Gibraltar. Unit staff have acted as External examiners for a number of Doctoral Vivas, including: University of Kent (**Klee**, Fine Art); the University of Edinburgh (**Morrison**, History of Art); the University of Cagliari, Italy (**Vescovi**, History of Art).