Members' Meeting: Societal challenges for heritage science research

Thursday 10 December, 10:00-12:30 (virtual meeting)

Chair: Prof. May Cassar

The 2020 Members' Meeting presented work by the NHSF Research working group on five societal challenges for heritage science research. This work was prompted by discussions at the 2019 Members' Meeting on what is needed to create an environment that enhances interdisciplinary research. The conclusion of the 2019 meeting was that heritage science research must connect to the big issues that matter to society and the community should build partnerships with researchers from other disciplines to address these challenges.

The 2020 meeting brought together people from across NHSF's membership to address the following objectives:

- Examine the societal challenges in the context of wider strategic initiatives.
- Agree actions that will change the way the connections between heritage science and society are thought about and addressed.
- Discuss how connecting heritage science to societal 'Grand Challenges' can catalyse new cross-disciplinary approaches and strategic partnerships beyond the field of heritage science.

A 'provocation' paper had been drafted by the NHSF Research Working Group and distributed to participants ahead of the meeting. It identified five societal challenges:

- Improved wellbeing
- Digital Society
- Climate change
- Equality and inclusivity
- Sustainable development

The meeting marked the first opportunity for members to engage with the societal challenges that had been identified by the working group and for participants to think about the connections between their work and wider societal challenges.

The event programme featured five 'lightning' talks from external speakers to provide strategic context to thinking about the role of heritage science in addressing the societal challenges.

Speaker 1

Dr Jamie Davies (International Partnership and Engagement Manager, AHRC)

This talk focussed on the JPI for Cultural Heritage's 'Strategic Research and Innovation Agenda 2020' which sets out the agenda for cultural heritage research in Europe and had been revised and published in 2020.

The JPI-CH (Joint Programming Initiative on Cultural Heritage and Global Change) is a network of research funders from across Europe. Its research agenda was developed in 2014 and was instrumental in defining its work and presenting cultural heritage as a holistic and integrated research area. However, the heritage landscape has changed a lot since 2014 so there was a need for it to be updated. Change factors included:

- increasing threat from climate change
- importance of UN sustainable development goals
- increased threat from terror and conflict
- COVID-19 pandemic
- increased digital innovation
- politicisation of heritage
- wellbeing
- participatory governance and involvement

The process of updating the strategic agenda began in 2019 and was coordinated by AHRC. AHRC worked with their 18 counterparts across Europe to agree a methodology. Each member nation had its own consultation panel who fed into the process. This process was needed to gain agreement across all 18 member research councils.

The goal was to set an overarching set of principles that would underline all the activities of the JPI. They took a holistic approach to what cultural heritage is: no division between cultural and natural heritage. They wanted to encourage collaborative and transdisciplinary research, ensure participatory and citizen science approaches were included, embed digital approaches, ensure educational opportunities, ensure maximising impact and dissemination, and work with other initiatives.

Four priority themes were established (these have been mapped against the Sustainable Development Goals with specific examples of what research in each area could look like provided in agenda):

- Reflective heritage for a resilient society (about inclusion, wellbeing and a multi-narrative understanding of heritage)
- Sustainable management of cultural heritage (same as 2014 priority but more emphasis on the politicisation of heritage and wellbeing. It covers innovative management and conservation techniques, and innovation in digital approaches)
- Cultural heritage in a changing context (expanded from 2014 to include pandemics and migration and demographic changes and tourism)
- Cultural heritage facing climate and environmental change (this was the biggest change; there was clear input from the consultation that environmental change is of great importance and needed its own priority area).

Now the themes are in place, a roadmap is being mapped for funding calls (it is anticipated there will be a call each year). It will not only be used to promote standard research calls but also to target ECR's, and international networking both inside Europe and the rest of the world. The policies of the individual research councils across Europe will be aligned to this JPI strategic agenda.

Speaker 2

Lizzie Glithero-West (Chief Executive of the Heritage Alliance).

This talk was based on the Heritage Alliance's new report on Heritage, Health and Wellbeing (published September 2020). The Heritage Alliance is the umbrella body in England for heritage interests.

The Heritage Alliance's 2017 Heritage Debate marked the start of the Alliance's focus on the relationship between heritage and health. Although there had been a lot of work by the sector before that time, the debate prompted work to capture more evidence, for example through case studies, to demonstrate what is instinctively known (i.e. heritage is good for wellbeing and mental health).

The Heritage Alliance's Heritage Health and Wellbeing Report (published September 2020)

- Focuses on the positive impact heritage spaces and organisations can have on wellbeing.
- Showcases over 30 case studies covering breadth of heritage sector.
- Is the result of 3 years of research and conversations to understand the needs of the health and heritage sectors and to gather best practise.
- Demonstrates how heritage spaces have provided a backdrop for community-building projects.

The report shows that Alliance members are improving the nation's health and wellbeing both inadvertently and increasingly as part of specific wellbeing strategies.

Specific findings include:

- Heritage can contribute to all five of the 'ways to wellbeing[1]' though it's not always explicit in the work done by heritage organisations.
- Heritage is unique in the opportunities it presents for building community cohesion and opportunities for reflection.
- Heritage helps individuals at risk of exclusion to acquire new skills.
- A focus on wellbeing can help with the sustainability of an organisation and should be at the heart of rebuilding the sector after COVID-19.

From the report, Lizzie focused on four main areas of challenges to be addressed by future work:

1) Inclusivity & access - needs to be at the focus of work if wellbeing benefits are to be gained by all.
2) Research challenges – the approaches used by the cultural sector (smaller samples & qualitative data) are different to those used by medical researchers (e.g. randomised control trials) can make it hard to prove credibility and impact to health funders or policy-makers. There is no single approach so this is an opportunity for cross-sector partnerships.
3) Capacity - sustainability of wellbeing initiatives depend on internal and external support and funding. Need a shift from short-term interventions to longer-term approaches that are integrated into organisations' plans.

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[1] See New Economics Foundation – [Five Ways to Wellbeing](#)

4) COVID-19 - social distancing will make wellbeing initiatives challenging but such initiatives will be increasingly needed.

Speaker 3

Dr Ewan Hyslop (Head of Technical Research and Science at Historic Environment Scotland).

This talk focused on the Climate Heritage Network, launched in 2019 with a core of 70 founding member organisations, and has now grown to over 200. All members sign the network's memorandum. The vision of the network is to mobilise the talents of those in the cultural/arts/heritage sectors on climate change issues.

Ewan set out some key messages:

Cultural heritage offers immense and largely untapped potential to drive climate action and support the transition by communities to low carbon climate resilient futures. However, realising this potential requires a breakdown of barriers (real or perceived) to see climate as a cultural issue and culture as a climate issue. Climate change impacts are already adversely impacting people, culture and heritage. This puts at risk the knowledge encompassed in heritage as well as the cohesion and sense of place it provides. There is an urgent need to prioritise the safeguarding of these cultural resources against these impacts but it needs to be done smartly, i.e. employing the latest research and science. Ultimately, protecting heritage assets and cultural resources requires mitigating climate change. Reducing emissions must therefore be a key issue for the cultural heritage. The changes required will be difficult, disruptive and may also be unfair – it is known that the people most likely to be negatively affected by the impacts of climate change are also least likely to be able to do anything about climate change. Through a people-centred approach, culture-based climate action can engage communities to unleash their energy and potential to find solutions. This could lead to more durable outcomes and to long-term, multi-generational solutions.

Challenges that may be relevant to discussion around the role of heritage science in addressing climate change include:

- Carbon mitigation (e.g. sensitively reducing the carbon footprint of the historic built environment, promoting a culture of re-use to retain embodied energy and prevent new emissions and the environmentally costly use of new resources, a role in guiding the siting of renewable energy, promoting low carbon land use patterns through traditional knowledge and sound environmental management.
- Adaptation (this includes planning for adaptation and contributing to disaster risk reduction but can also include leveraging heritage values to enhance the adaptive capacity of communities, and reducing vulnerability through participatory approaches that are guided by a combination of science and local knowledge – another example of a people-focussed and cross-sector approach).
- Dealing with loss and damage (Climate change is already resulting in loss and damage to heritage (sites and values). How do we prepare for loss, including slow-onset events and how do we integrate this into risk management approaches? How do we manage the process of physical loss in order to maximise benefit and how do we articulate and quantify 'non-economic' losses such as loss of culture?).
- The role of heritage in climate science and communication (Heritage anchors a sense of place and every place has a climate story, building understanding and capacity is likely to work best when it's culturally appropriate. Heritage science and technologies can help to understand how climate has changed over time and past adaptation efforts).

Speaker 4

Dr Sonia Raikova (Portfolio Manager at EPSRC)

This talk gave an insight into the Digital Economy Theme, which is a partnership between EPSRC, AHRC, ESRC and Innovate UK. The theme supports research on the transformational impact of digital technologies on aspects of community life, cultural experiences, future society, and the economy.

The research EPSRC supports is technical but it is also people-focused and interdisciplinary. In 2020, through various stakeholder consultations, ESPRC refreshed their 5 priorities to frame funding activities for the Digital Economy Theme. The resulting five research priorities are:

- Trusted, Identity, Privacy, and Security (socio-technical aspects of cyber security)
- Content, Creation, and Consumption (focuses on the digital aspects of cultural heritage - overlaps with improving wellbeing, e.g. virtual museums).
- Beyond a Data Driven Economy
- Sustainable Digital Society (overlaps with climate emergency challenge and sustainable development). This research area uses digital technologies to address environmental impacts and making digital tech sustainable.
- Equitable Digital Society (overlaps with digital society, equality, and inclusivity).

EPSRC is running a call within the Sustainable Digital Society research area. As part of this, a workshop was held in June 2020 with attendees form across academia, industry, the public sector and the third sector to establish the main research challenges for short term funding. The three key research challenges identified were:

- Embedding environmental sustainability throughput digital tech and services
- Digital technologies that can influence behaviour change throughout society.
- Digital technologies that can enable a circular economy.

Another key theme of focus is Equitable Digital Society. This theme focuses on addressing inequality within the digital space; promoting co-creation and design; digital design and services that support a fairer society; addressing algorithmic inequality and decision making that does not result in prejudice or discrimination; bridging digital divide and promoting digital literacy).

Sonia drew attention to the Not Equal Network Plus (https://not-equal.tech/) as an initiative that may be of interest as it looks at algorithmic inequality and injustice. The network aims to foster collaborations and stimulate ideas. It is currently scoping a call for proposals based on the Equitable Digital society theme for 2021.

Speaker 5

Alison Heritage (Project Manager in Strategic Planning and Research at ICCROM)

Alison spoke about how heritage science intersects with the UN Sustainable Development goals (SDG's).

As an inter-governmental organisation and part of the UN family, everything ICCROM does is aligned to the SDG's. Mapping activities to the SDGs can help organisations to focus their intentions more clearly on where they provide societal benefits, but it can be a complex framework to get to grips

with and is a remote concept to members of the public. It is easier to break it down and look at the 5 P's: prosperity, planet, people, peace, and partnership. It is interesting to think about how the goals intersect with cultural heritage. When talking about sustainable development there has been a lot of focus on prosperity and planet and less on people, but this is where cultural heritage is particularly strong. People centred approaches are a key focus of ICCROM, as is integrating nature with culture in a more holistic approach.

The big question is, where does heritage science fit into all of this? To answer this one needs to understand the breadth of heritage science, beyond the traditional view of being related to materiality to encompass its expansion into new areas such as social sciences, environmental sustainability, and digital sciences. To deliver on the societal challenges identified in the provocation paper, there is a real need for heritage science to expand its identity beyond material-focused areas (not to say that these areas should stop being a core part of heritage science). Not only should heritage science become integrated with health and social sciences, but these areas should become part of what heritage science is. The heritage sector too needs to embrace this and think of heritage science as an expanded vision of science with a wider identity. Heritage science itself also needs to become more inclusive and reflective of the society it serves and change the current demographic in order to serve society in a more inclusive way.

The digital sphere is where you can reach the most people and provide the greatest access and work towards driving knowledge equity. To do this, we need to make more of the knowledge that is available and provide access to it. But as we move to open access, we need to address the enormous costs for researchers to get their papers published (address the 'pay to say' issue so that researchers from all backgrounds can publish their research). Finally, in terms of making sustainable development more people-centred we need to return to the notion of wellbeing and centre efforts on a common framework, perhaps based on wellbeing frameworks, to demonstrate the benefit of heritage science to society in a way that is meaningful to people.

Response from the Chair

With thanks to all speakers, these lightning talks show the journey that heritage science is on and how it is maturing. At its core it is a meta-reality but values, people and the environment are really core to heritage science and therefore the expanded definition of heritage science is growing to as we define its place in society.

Questions and Answers

There was an opportunity for questions to the speakers.

Question 1 - What might a vison for an overarching mechanism for joining up wellbeing/societal intervention efforts look like?

Panel responses – It's an area where the broader heritage and heritage science communities need to act together. There are good existing frameworks out there (such as the UK's wellbeing framework) that could be adapted to heritage science needs but there needs to be consensus amongst the community on where and how we can best measure impact.

- We might not get much traction on the value of heritage in itself in policy discussion over the coming years. It is therefore increasingly important to look at how heritage can contribute to other

existing issues. Society will not be normal for the next few years, so we should ask "what are the opportunities for heritage science to contribute to these issues?"

Question 2 – Is there is a risk of dilution if we move away from the core of materiality in heritage science?

Panel responses - Expansion of how we think about and identify with heritage science research is not as a replacement of a materiality but is an opportunity to build upon it. Bringing in other expertise can help improve the trajectory and bring creativity and new thinking into the mix.

Breakout sessions

Participants separated into three groups to discuss the societal challenges as set out in the provocation paper and how they might be used. Members of the groups were asked how the five societal challenges were being addressed by heritage science activity in their organisation, with three different themes to focus on.

Group 1- institutional research strategies and research ethics (group 1)

Group 2- research practice (group 2)

Group 3- approach to external engagement and partnerships (group 3)

Feedback from Group 1 - How can the five societal challenges be addressed through institutional research strategies and research ethics?

There are existing examples within cultural institutions and universities of how the five challenges have been applied and used in research strategies. These are not all at the same level (some at early level and some more highly developed).

For example, some of the institutions represented in the group have signed up to Black Lives Matter- and are looking at the language represented on research proposals, looking at colonial approaches to research, and the use of 'case studies' is being questioned. Work is underway towards diversification and a global perspective of research rather than Eurocentric legacies of empire.

Research on health and wellbeing is also underway. Digital society is a challenge that is a significant focus for research.

Society's priorities are being reimagined in response to the pandemic. There are opportunities in terms of how we undertake research and the skills that are needed to be developed in younger people to bring forward researchers that can represent the community more fairly. A significant challenge faced is that the research community has been doing things in the same way for a long time and research strategies might need time to change. But it was suggested that change can be accelerated by selecting case studies even if structures are slower to change. There needs to be greater focus on how we can open up research communities to BAME individuals. The group also discussed the tension between delivery of research around collection preservation and the need to be mindful of the climate emergency.

Feedback from Group 2 – How can the five societal challenges be addressed in research practice?

The breakout group felt this was a big theme and focussed discussion on how we create research and develop projects. This has been very traditional in the past and dictated by instruments available rather than the problems that need to be addressed. There needs to be a shift to putting the problem first and foremost. In archaeology, for example, it is important to go to the community and ask what they want to help define meaningful research. This approach also contributes to inclusivity and wellbeing. Themes that need to be focused on were thought to be: climate change, inclusivity and diversity, collaboration. It was suggested that we should be prepared to be challenged more by the public on research and cannot be or be perceived to be aloof and separate. There is also the need to share data/information more widely - potentially for re-use by other communities.

Feedback from Group 3 – How can the five societal challenges be addressed in approaches to external engagement and partnerships?

When discussing communication, this group concluded that sustainability can be used as an umbrella for all the other challenges. The group felt that case studies are potentially useful for external engagement but there are two sides to this. Showing how research links to societal issues is useful but could also be disruptive. It was noted that there is a lot of expertise on the different societal challenges in other disciplines which could benefit heritage science. There is a risk of reinventing the wheel if we do not engage with others enough but there is also a risk that new ideas could be shaped (limited?) by pre-existing expertise and methods if we act too fast. The group suggested that there is a need to be humble and explore common ground with patience and that new partnerships should not be taken lightly.

Speaker 5

Professor Jane Henderson (Cardiff University)

A final 'lightning talk' contribution was provided by Prof. Jane Henderson. Her talk centred on neutrality in conservation decision making, linking to the societal challenge of ensuring research questions and practices are inclusive.

To open, Jane proposed that when we're looking at what we want heritage science to do, there should be no distinction from what we want 'heritage' to do in terms of addressing society's challenges. Perhaps part of the challenge for heritage science is its singularity. Much of the current tradition and substance of heritage science still comes down to measures and precision and reducing unexpected outcomes (this has been the interpretation of what is at the heart of 'good' science). But this approach doesn't partner well with answering messy questions. It is the messy questions in society that we have to address when looking at what contribution heritage science can or does make.

To help address the messy questions, one of the strands we need to collaborate with is philosophy. We need to re-think our questions and the way we answer them. For example, where does digital sit with authenticity? (We have experience of thinking about authenticity and loss). What do we mean by good and bad outcomes? What are we trying to protect and understand? Are we trying to protect materiality or connections? If we're looking for heritage to provide connections between people, then the material aspects of heritage are not about their materiality but there value as a connection, so should look at how we maintain those connections and the values embodied in them. Sometimes we can drift from outcomes (such as wellbeing) by drifting back to materiality.

In heritage science, the risk of exclusion is insufficiently factored into decision making. All of society has equal rights to access heritage, it is not up to us to control access. This can happen in the way we think about the future (i.e. preservation 'for the future'). The future in not inherently better than the present and so we need to challenge baked-in inequality in current thinking when thinking about the future. Science is not inherently neutral. We need to question our lack of neutrality and think about what influences the questions we ask. How much are we allowing decolonisation into our decisions on conservation and science? How do we address decolonisation and repatriation in heritage science (these issues should be included in the societal challenges paper). How do we recognise expertise? Multivocality must be central to what we do but how do we access these wider voices? If we're looking to address 'big questions' it's far easier to address the big questions asked by our institutions, funders or government because these organisations represent the continuation of a stable society. But who are the outsiders excluded by those questions and where are they and their questions represented in heritage science? We need to have wild card questions included in our thinking and approaches.

Final feedback and discussion

A final plenary discussion revolved around representing voices not heard. It was proposed that we must look at each project/piece of work and make the effort to explore the questions and move away from assumptions.

Before the session came to an end, a brief update was given by the NHSF Communities and Impact working groups. They shared their aims, strategic outcomes and work they have been doing to achieve their outcomes. Each of the three working groups are complementary to each other, for example the Communities group is leading on work around equality, diversity and inclusion practices; and the Impact group is focusing on demonstrating how heritage science contributes value in different ways and to different audiences.

The next member meeting will be in the Spring of 2021 and will be led by the Impact working group.

Thanks to all speakers and participants for their contributions to this event.

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