



Preserving Our Past – Workshop Report

Introduction

The Preserving Our Past workshop was held at the Hilton Birmingham Metropole Hotel, NEC, Birmingham on 29 March 2006. The workshop was funded by AHRC, EPSRC, ESRC, NERC and English Heritage as a need was identified to build effective working relationships across discipline barriers in the historic environment research community. In addition, new relationships between academic researchers and those working in the creative, cultural and heritage sectors needed to be developed to meet the needs of the historic environment. Attendees at the event were from a diverse range of disciplines and backgrounds. Ideas were shared and future collaborators identified.

Identification of Cross-Cutting Themes

The main output of the workshop was the identification of five cross-cutting themes that historic environment research should address. The five themes which were agreed upon were:

1. Integrated Methodologies
2. Values
3. Engagement and Interpretation
4. Impact of Climate Change on the Historic Environment
5. Sustainability

It is hoped that a cross-disciplinary Research Cluster can be funded in each of these themes. Only those people who attended the workshop are eligible to apply for Research Cluster funding as the Principal Investigator but participation in any future cluster activities should be open to all.

Content of Report

The main body of the report records the outputs of the afternoon sessions of the workshop. The outputs are split by theme. The group lists give the names of the workshop participants who chose to discuss each theme.

Within each theme participants were asked to identify what grand challenges could benefit from cross-disciplinary research. These challenges were prioritised

and a poster produced on each challenge identified as high priority. These posters are transcribed below. Challenges are highlighted in bold and underlined.

An appendix contains a list of all the theme ideas and grand challenges that were suggested on the day. Participants of the workshop may find this information useful.

Theme 1: Integrated Methodologies

Group List

Donald Davidson	Dan Hicks	Clifford Price
Mark Dowsett	John Hughes	Colin Prosser
John Farmer	Adrian Hyde	Armin Schmid
Mary-Cate Garden	Jian Kang	Andy Smith
Peter T Gaskell	Alick Leslie	Heather Viles
Ken Grattan	Eric May	Pete Walker
David Harvey	Angie McClanahan	

Achieving Interdisciplinarity – Integrative Methodologies (2 posters)

Poster 1:

What are the names and expertise of those interested in the challenge?

All subjects necessary to developing understanding of historic environment "continuum" e.g. Archaeologists, Historians, Anthropologists, Geography, Environmental sciences.

What other academics/users would need to be involved?

Any necessary to Ensure dissemination of knowledge

- Relevance + Value Added + Accessible
- Public - Participatory Management
- Education
- Knowledge Transfer

What Research Cluster activities might help identify research ideas to overcome this challenge?

- Education – Workshops - Public/Practitioner
- Focus Groups
- Evaluation/audit of specific information sources

Eric May
Donald Davidson – Stirling University
Alick Leslie
Angie McClanahan
Mary-Cate Garden

Additional Comments

This should consider how we translate blue-skies interdisciplinary activity into user focused outputs! - Joe Howe – Queens

Tony Brown - Exeter

'3M' - Monitoring, Measurement and Management (2 posters)

Poster 1:

What are the names and expertise of those interested in this challenge?

Andy Smith (Central Facilities)
Ken Grattan (City University)
Armin Schmidt (Archaeological Geophysics)
Pete Walker (Department of Architecture and Civil Eng. Bath University)
Colin Prosser (English Nature - Geology and Wildlife)
English Heritage and Scotland/Wales/NI Equivalents

What other academics/users would need to be involved?

Anthropologists/Humanities
Social Scientists
Policy Makers (Local Authorities)
Geographers (Remote and in situ sensing)
Local Heritage Groups
Owners
Surveyors
Data Analysis and Modelling

What Research Cluster activities might help identify ideas to overcome this challenge?

Workshops: users – Inclusive Workshops
Summer Schools
Brainstorming
Case Studies/Site Visits
Pilot Projects: 'Pump Priming' Funding £
Networks
Dissemination on Broad Front – Knowledge Transfer

Additional Comments

John Howe – Queen's
There is a need to engage with main players e.g. DEFRA, ODPM, OST, Scottish Exec.

Others who expressed an interest in this challenge

Bernard Smith - Queen's University, Belfast
Phil Banfill - Materials Scientist
Eric May – Microbiologist
John Hughes – Geologist – University of Paisley

Poster 2:

Integrated scientific and social monitoring and management

What are the names and expertise of those interested in this challenge?

Mark Dowsett – Physics/instrumentation
Jian Kang – Sound Environment
John Farmer – Environmental Chemist
Peter Gaskell – Human Geographer
Clifford Price – Conservation scientist

What other academics/users would need to be involved?

Social scientists
Conservation scientists
Conservators
Curators
Natural Scientists
Artists
Historians
Government Agencies

What Research Cluster activities might help identify ideas to overcome this challenge?

Workshops
Site visits e.g. monuments, museums, facilities, sites,
Shadowing – cross-discipline – experience other institutes / faculties

Additional comments

Literature Searches as an activity?
What does “Integrated scientific and social monitoring and management” mean?
Assumes knowledge of the object of enquiry.

Others who expressed an interest in this challenge

Lanfranco Aceti
David Arnold
Mags Adams
Paul Selman

Theme 2: Values

Group List

Ian Strange	Deyan Sudjic	Nigel Clubb
Peter Borsay	Aylin Orbasli	Martin Cherry
John Pendlebury	Chris Andrew	Noel Fojut
Dana Arnold	John Carman	John Barrett
Mags Adams	Jaime Kaminski	Lesley McFadyen
Steve Shaw	Rob Pickard	Brian Garrod
Peter Brimblecombe	Lisanne Gibson	Charles McKean
Bernard Smith		

Whose Past?

What are the names and expertise of those interested in this challenge?

Nigel Clubb - Archivist/Audience Development
Ian Strange - Leeds Metropolitan University - Planner/Geographer
Martin Cherry - Historian/Conservation Policy
Noel Fojut - Archaeologist/Heritage Manager
Pete Borsay - Historian
Lisanne Gibson - policy/history/critical theory
John Pendlebury - Conservation - planner/social scientist
Dana Arnold - Architectural Historian

What other academics/users would need to be involved?

Sociologists
Artists
Folk-life studies
Local history groups
Museum Curators
Heritage Practitioners
National Trust
Creative Industries/Cultural practitioners
Need to consult citizens/users

What Research Cluster activities might help identify ideas to overcome this challenge?

Workshops
Study Visits

Questions

- Of evidence
 - Survival of 'past'
 - Oral, material, textual, visual

- Change across time and cultures
- Construction of identity

Others who expressed an interest in this challenge

Armin Schmitt – Bradford

Nicki Whitehouse – Cultural values of woodlands

Additional Comments

I think that tourists are an important/effectual group here - tourism specialist needed

National Trust can provide the studies and practical examples – Sarah Staniforth

Regeneration and Planning/Changing values in the historic environment

What are the names and expertise of those interested in this challenge?

Rob Pickard - Financial/Regeneration/Legal

Jaime Kaminski - Business Analyst

Steve Shaw - Planning and Tourism

Mags Adams - Decision Making and Qualitative Methodology

Charles McKean - Architectural and Urban History

What other academics/users would need to be involved?

Generic Users

What Research Cluster activities might help identify ideas to overcome this challenge?

Developing cross-disciplinary methodologies to assess values for the protection, management and regeneration of the historic environment.

Additional Comments

Joe Howe – Queen's

A user focused output that details the relationship between historic environments and the value to local economies.

Role of tourism in forming/charging/distorting values is important here.

And to understand social consequences of this - Lianne Gibson.

What are the techniques for facilitating interdisciplinary discourse?

What are the names and expertise of those interested in this challenge?

John Carman – Archaeologist – Heritage Value
Aylin Orbasli – Architecture
Bernie Smith – Geomorphologist
Peter Brimblecombe – Chemist

What other academics/users would need to be involved?

Cross-cutting:
Researchers
Practitioners
Policy Makers
Educators
+ Facilitator (see below)

What Research Cluster activities might help identify ideas to overcome this challenge?

Structured workshop targeted at enabling research.

Others who expressed an interest in this challenge

May Cassar – Language Barriers

Interrogating Authenticity

What are the names and expertise of those interested in this challenge?

Deyan Sudjic - Architectural Historian
Chris Andrew - Psychologist
John Barrett - Archaeologist
Lesley McFadyen - Prehistorian
Brian Garrod - Tourism

What other academics/users would need to be involved?

Public - Market Research
National Trust
Curators
Architects
Designers
Artists

What Research Cluster activities might help identify ideas to overcome this challenge?

A practice based project
Workshops on specific sites
Curating

Other Comments

English Heritage will be publishing "Conservation Principles, Policies and Evidence" in January 2007 which defines values contributing to significance. "Authenticate" is a subject concept in this field. - J Fidler, EH

National Trust can provide case studies – Sarah Staniforth

Others who expressed an interest in this theme

Richard Jones	Jaime Kaminski –	Deyan Sudjic
Clifford Price	Brighton	Gill Chitty
Lanfranco Aceti	Angela McClanahan	Mags Adams
Jian Kang	David Harvey	John Carman
Peter Gaskell	Antony Long – Durham	Rob Pickard
Anne Bacon	Brian Garrod	John Pendlebury
David Arnold –	Fiona McLean	John Oxley – City of
Brighton	Mary-Cate Garden	York
Peter Borsay	Kirsten Holmes	

Theme 3: Engagement and Interpretation

Group list

Damian Murphy – University of York
Banu Gunel – University of Surrey
Christian Heath - Kings College
London
Anne Bacon – Northumbria
University
Kathryn Hallett – Historic Royal
Palaces
Fiona McLean – Glasgow Caledonian
University
Kirsten Holmes – University of
Surrey
Mathias Fuchs – University of
Salford

Gill Chitty – Council for British
Archaeology
Adrian Olivier – English Heritage
Richard Jones – University of Cardiff
Graeme Barker – University of
Cambridge
David Arnold – University of
Brighton
Pat Sterry – University of Salford

Interpreting the past

What are the names and expertise of those interested in this challenge?

Kirsten Holmes – Visitor Research
Banu Gunel – VR
Pat Sterry – Capturing/testing interpretation/visual studies/interpretive training
David Arnold – Computer Graphics/VR/Usability
Damian Murphy – Virtual audio environments/sound art
Richard Jones – Archaeologist/landscapes
Mathias Fuchs – Game design, artist
Kathryn Hallett – Conservation scientist

What other academics/users would need to be involved?

Natural Language Processing
Sociologists
Professional Interpreters
The public
Geographers
Planners/Architects
Historians
Information scientists
Educationalists
Exhibition Designers
Conservators
Scientists

What Research Cluster Activities might help identify research ideas to overcome this challenge?

Researching how people interpret historic environment

- GPS/GIS
- Social Science Methods
- Planners
- Historians/Archaeologies

Develop ways of using new technology and mixed media to present multiple narratives in mediated settings

Capturing and testing existing and new forms of interpretation

Additional comments

Studies of perception and language

Others who expressed an interest in this challenge

Lanfranco Aceti
Mags Adams
Clifford Price
John Oxley
Chris Andrew
Mark Bateman
Antony Long
Jian Kang

Brian Garrod
Steve Shaw
Anne Bacon
Andy Howard
John Carman
Alick Leslie
Lisanne Gibson
Mark Dowsett

Deyan Sudjic
Fiona McLean
Martin Cherry
Ian Strange
Kirsten Holmes
Banu Gunel
Gill Chitty
Peter Borsay

Engagement

What are the names and expertise of those interested in this challenge?

Graeme Barker – Archaeology
Fiona Mclean - Heritage Studies
Anne Bacon – Paintings Conservation
Christian Heath – Sociology
Adrian Olivier – Heritage Manager
Gill Chitty – Voluntary Sector

What other academics/users would need to be involved

Artists	Designers
Craftspeople	Economists
Conservators	Applied scientists
Archaeologist	Environmental scientists
Historians	Curators
Social Scientists	Managers
Computer Scientists and engineers	Policy Makers
Educationalists	

What Research Cluster Activities might help identify research ideas to overcome this challenge?

Creating new affinities between the formal & informal contexts for engagement
Crossing boundaries (professional, academic, voluntary, community, private)
Connecting sectors e.g. science, technology (old and new) with the humanities and social sciences
2 way link between society and historic environment services

Additional comments

- Studies of perception and language
- The challenge is the translation of high-quality joined up science into user focussed outputs for multiple end-users - Joe Howe – Queen's

Others who expressed an interest in this challenge

David Arnold
John Pendlebury
Damian Murphy
Lanfranco Aceti
Ian Strange
Mags Adams
Brian Garrod

Richard Jones
Jian Kang
Angela McClanahan
Jaime Kaminski
John Carman
Mary-Cate Garden

David Harvey
Lisanne Gibson
Fiona McLean
Kirsten Holmes
Banu Gunel
Peter Borsay

Theme 4: Impact of Climate Change on the Historic Environment

Group List

Mark Bateman – Sheffield University	Phil Banfill – Heriot-Watt University
Paul Baker – Glasgow Caledonian University	Jian Kang – University of Sheffield
Edward Impey – English Heritage	Lanfranco Aceti
Georgina Enfield – University of Nottingham	Daniel Watt
Richard Morris – University of Leeds	Mags Adams
Tony Brown – University of Exeter	Deyan Sudjic – Kingston
Antony Long – Durham University	John Pendlebury – Working on pathfinder
Andy Howard – University of Birmingham	John Oxley – City of York
	Richard Avent – Cadw

Retention and Refurbishment vs. Demolition and Rebuilding? Toward multidisciplinary decision making driven by climate change and carbon emissions

What are the names and expertise of those interested in this challenge?

Paul Baker
Phil Banfill
Edward Impey
Building Economist
Building Scientist
Planner
Historian
Sociologist
Geographer
Life Cycle Assessments

What other academics/users would need to be involved?

Community Groups
Housing Assoc./Social Landlords
Local Authority Planners
Statutory Consultees
Construction Industry
CITB
Architects/Designers
Urban characterisation Specialists

What Research Cluster activities might help identify ideas to overcome this challenge?

Site Visits/Field Trips
Workshop to define scope
Research Tasks
Consultation

Other comments

- There is a need to develop applied methodologies that draw upon different disciplines for practice. e.g. further develop sustainability appraisal - Joe Howe, Queens
- Need to consider also environmental obsolescence
- And how does climate change impact on this?
- Need sensors and telecoms for remote monitoring?
- Embodied Carbon/Whole Life Costing
- ODPM involvement

Others who expressed an interest in this challenge

John Oxley - City of York
Pete Walker - Civil Engineer, University of Bath
Tom Hughes - Geologist / materials
May Cassar
Charles McKean
Kathryn Hallett
Steve Shaw

Occurrence, Nature & Responses to Extreme Weather Events in the Past

What are the names and expertise of those interested in this challenge?

Tony Brown	B.H.S.
Mark Bateman	Historians
Georgina Endfield	Archaeologists
Richard Morris	Geographers
	Social scientists
	Engineers (civil)
	Literature/Poetics
	English Heritage and National Agencies
	Natural England and National Equivalents

What other academics/users would need to be involved

Tyndall Centre/UEA
Environment Agency
Met office (including Archivists)
AHRC – Landscape & Environment

Policy Formulation – DOE, ODPM, DEFRA
Centre for Ecology and Hydrology

What Research Cluster Activities might help identify research ideas to overcome this challenge?

Establishment of a field academy
Facilitated Site/Field visits
Short Course for User Community
Trans-Disciplinary Seminar Series
Living Arts Involvement

Others who expressed an interest in this challenge

Graeme Barker – Cultural impacts of extreme events
Andy Howard - climate and land use in fluvial symptoms
Bernard Smith – Interested in sequences of events – magnitude/frequency interactions
Alick Lesley – aleslie@jgs.ac.uk
Nicki Whitehouse - Societal responses to extreme long term/short term events
Antony Long - Interested in Working on this project, especially storms, tsunami and coastal erosion
Heather Viles - Storms, N.A.O. and the built environment

Additional comments

- Joe Howe – Queens – There is a need to consider past extreme events and impact and then project forward to future extreme events and how we manage them
- Include “historic environment” in title

The Sustainable Preservation of the Historic Environment During Climate Change

What are the names and expertise of those interested in this challenge?

Andy Howard – Quaternary science – Geoarchaeology
Anthony Long – Coastal geomorphologist and sedimentology
Richard Avent – Heritage Management

What other academics/users would need to be involved?

Specialists in climate prediction - Met Office, Hadley Centre
Environment agency, Natural England (and equivalents in devolved administrations)
National historic environment organisations
Specialist University Departments
Government Research Bodies
The building Industry

Local Authorities
Conservation bodies and amenity societies
National Trust
Social scientists and economists
Wind power sector, renewables – energy futures
Materials conservation specialists

What Research Cluster Activities might help identify research ideas to overcome this challenge?

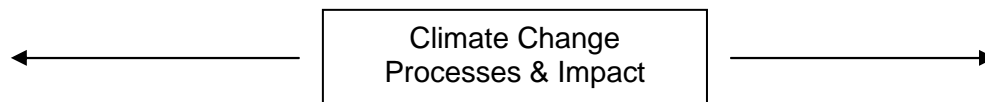
Seminar programme with cross-cutting themes by historic environments

Historical Environments
Uplands

Flood plains/ Wetlands

Urban

Coastal Zone



Themes: Prediction, Modelling, Mitigation, Monitoring

Others who expressed an interest in this challenge

May Cassar
Adrian Hyde – Geotechnical engineering
Phil Banfill – Building materials specialist
Heather Viles – Urban maturing & ultimate change
Mark Pollard, RCAHA, Oxford University
Alick Leslie – aleslie@bgs.ac.uk
Andrew Wareham – ajkcl.ac.uk
John Oxley – York
John Hughes – Geologist/Materials – Paisley University
Nicki Whitehouse - Peatlands/Cultural records
Eric May – Impact of climate change on microbial weathering
Ian Simpson – Soils/Sediments based cultural records
Armin Schmidt – Archaeological Geophysics
Mark Bateman – Quat Science/Geoarchaeology
Tony Brown – Archaeology and earth resources

+

Additional comments

- Building Scientists?
- Do an OST foresight exercise: Output will be for end-user community - Joe Howe – Queens
- Historical records of landscape and losses, changes as a result of past climate change - G. Enfield

Theme 5: Sustainability

Group list

Martin Jones
Joe Howe
Paul Selman
Ian Simpson
May Cassar

David Watt
Andrew Wareham
Simon Glasser
Mark Pollard
Sarah Staniforth

Nicki Whitehouse
Lanfranco Aceti
John Fidler
Peter Robinson

How do we Define Acceptable Change?

What are the names and expertise of those interested in the challenge?

Sarah Staniforth, National Trust – Practitioner
David Watt - Built Fabric and Practitioner
Lanfranco Aceti, Fine Art – Digital Media, C.S. (V.R.)
May Cassar, UCL Centre for Sustainable Heritage
John Oxley, City of York - Practitioner
Ian Simpson, Stirling - Environmental Assessment
John Fidler – English Heritage
Joe Howe, Queen’s – Environmental Planning/Engineering
Mark Pollard, RLAHA, Oxford

What other academics/users would need to be involved?

Sociologists
Economists
End Users – Managers, Policy Makers
ALGAO, ALGE, IHBC
RACS, RIBA, RTPI, LI, ICE
ICOMOS, ICCROM
Local Authority community strategies
“Common Ground”/Ground Work
Environment Link

What Research Cluster activities might help identify research ideas to overcome this challenge?

Provision of test sites / case studies / practical experience
Workshop to gather together existing empirical knowledge / research
Practice based projects / empirical knowledge / applications
Dissemination
Facilitate workshops / test sites / archive of previous actions
Site visits / existing practice
Literature reviews on monitoring, performance etc – cross-disciplinary review
Fully integrated knowledge transfer pack on sustainability appraisal for user communities

Additional comments

- Link built, urban, landscape aspects.
- Acceptable change – to communities

Others who expressed an interest in this theme

Heather Viles - University of Oxford

How do we Develop a Single Discourse for Cultural and Natural Systems?

What are the names and expertise of those interested in the challenge?

Martin Jones, Bio-Archaeology
Nicki Whitehouse, Palaeoecology
Sarah Stanforth, National Trust – Practitioner
Lanfranco Aceti, Fine Art, Digital media, C.S. (V.R.)
May Cassar, UCL Centre for Sustainable Heritage
Ian Simpson, Stirling - Cultural, natural records in soil systems
Paul Selman, Landscape Planning
John Oxley, City of York

What other academics/users would need to be involved?

Ecologists
Natural England
Environment agency
Humanities / Historians / Env Historians
Archaeologists
Linguists and Poetics – evolution of vocab
ALGAO / ALGE / IHBC
Systems Modellers
Cultural Geographers
National Commission for UNESCO
National Trust
English Heritage / CADW / Historic Scotland / EHSNI.
Scottish Natural Heritage / CCW
Council for British Archaeology
Environment Link

What Research Cluster activities might help identify research ideas to overcome this challenge?

Workshops
Seminars
Practice Base projects – Empirical Knowledge and Applications
Collaborative Research
Literature Search
Interdisciplinary workshop with “Natural England” + “EH” + “RCS”
Facilitator – 1 year full time ideally!

Field Visits
Case Studies
Scenario Modelling

Additional comments

See also Integrated Methodology Groups

Others who expressed an interest in this challenge

Tony Brown
Graeme Barker
Ian Strange - Leeds Met

Jonathan Bake – London
Richard Morris

How do we Understand the Influence of Timescales on Decision Making?

What are the names and expertise of those interested in this challenge?

Sarah Staniforth, National Trust – Practitioner
Nicki Whitehouse – Palaeoecology
Paul Selman – Landscape planning
Ian Simpson, Stirling – Long-term environmental change
Joe Howe, Queens – Environmental planning/engineering
May cassar, UCL centre for Sustainable Heritage
John Oxley, City of York Practitioner
Andrew Wareham, CCH, KCL
Mark Pollard, RLAHA, Oxford University

What other academics/users would need to be involved?

OST, DEFRA, ODPM, RSPB, WWF.
Politics / Governance / Economists
Climatocogists
ENO Users (Managers)
Ecologist / Palaeoecologists
GIS Specialist

What Research Cluster Activities might help identify research ideas to overcome this challenge?

Provision of test sites / Case studies / Practical Experience
Live mapping exercise
Site Visitors
Workshop to backcast and forecast case studies
Single site / Data rich case study - funded
Demonstration / Pilot project to unpick the research questions associated with this challenge
OST Foresight Type Project

Appendix 1: Grand Challenges

The appendix contains a list of all the theme ideas and grand challenges that were suggested on the day, these are split by theme.

Cards grouped under themes in the morning session were those used in the clustering exercise during which the cross-cutting themes were identified.

What are the Grand Challenges within this theme that could benefit from cross-disciplinary research? – The lists under this heading correspond to the 1 or 2 cards that each participant was asked to complete to answer this question. These cards were used to prioritise which challenges were highest priority and on which posters should be produced.

Participants of the workshop may find this information useful.

Theme 1: Integrated Methodologies

Cards Grouped Under the Integrated Methodologies Theme in the Morning Session

- Multidisciplinary studies of decay processes of construction materials
- Sharing technologies, resources, and approaches creating new affinities between disciplines and approaches
- Monitoring performance in use of construction materials
- Integrated conservation research – The cathedral example
- Training and understanding
- Developing integrating mythologies for achieving/maximising interdisciplinary synthesis.
- Monitoring – From large scale infrastructures to small scale sensors
- The ground as an archive
- Philosophies and methods of conservation decision making (inclusive, collaborative decision making)
- Modelling of physical environment of historic/ancient sites
- Identifying – training skills, development needs, and motivation to work in the historic environment
- Impact of biology / microbiology on structures, artefacts, landscapes
- Methods of enquiry: Methodologies and practices
- Development of non-invasive / unobtrusive technologies for historic environment (e.g. remote sensing...)
- Historic evaluation - understanding benefits & effects / Social, Cultural, economic environmental
- Tracing evolving relationship between 'cultural' & 'natural' environments - human self-perceptive, trajectories in land use, attitudes to change
- Materials supply & research, social-economic issues

- Understanding buried landscapes e.g. peat, sand, later settlement, submerged/off-shore

What are the grand challenges within this theme that could benefit from cross-disciplinary research?

- Moving beyond the socioeconomic approach to 'value' (i.e. quantitative), and embracing more culturally sensitive methods (i.e. qualitative methods like ethnography.)
- Integrated approaches: to assess buried remains (technology, soils...), to monitor preservation (in situ), to solicit user-ownership. Community engagement to ensure preservation
- Facilitating communication between professionals – e.g. physicists and curators
- Development of methodologies to foster interdisciplinary collaboration. Specific issues – time / space resolution
- Database of methods for heritage research
- Incorporating methods of dealing with people in relation to the historic environment (e.g. ethnography.)
- Democratizing methods – questioning "expert" knowledge and processes of knowledge construction
- Involving 'public' at foundation stage bottom up approach
- Built Heritage: Long term resource provenance & assessment. Including databases, GIS, etc
- Building material: Production and sourcing
- Sustainable materials supply for conservation & understanding life cycle
- Damage potential of micro-organisms for heritage artefacts and buildings
- Maximising the extraction of information from subsurface archaeology
- Monitoring technologies and sensors for: monitoring performance in work, monitoring deterioration, monitoring the effectiveness of treatments
- Evolving cheap sensors for sophisticated monitoring
- Improved in-situ monitoring and sensor systems for quantitative measurement of change
- Building materials: Methodologies for testing and appraising building materials, and repair techniques and structure
- The indicators for monitoring change in the historic environment so far selected are totally inadequate. There is a pressing need to bring historic environment monitoring methodologies and practices to a level of rigour which matches those in place for monitoring the natural environment. Evidence – based policy making requires evidence and we can't provide in at present. We need to develop cost effective quantitative and qualitative techniques
- Ontological foundations of methodological approaches – What is it that we are counting, measuring, describing etc.
- Using technology to provide access to hidden archaeology
- National, regional, JCA level data on the nature, condition and management of the

- historic environment
 - Giving appropriate weight to methods from the arts & humanities: e.g. writing archaeological fieldwork, contemporary art / practice-based research, etc
 - Integration of qualitative & quantitative research – Including giving parity to experience & perception
 - Creating interdisciplinary – yet cohesive – methodologies to assess elements like
 - cultural value, feelings about heritage, and to gauge people’s perceptions of the historic environment
 - Integrated inter-disciplinary interpretation of the past
 - Site management: assessment, recording, management plans, understanding and interpretation
 - Simulate/model acoustic environment – Introduce aural dimension
 - Making science & scholarship more relevant to real issues facing our heritage
 - Encouraging the development of innovative methods for addressing key practical issues – an integrative framework?
 - Understanding and defining the ‘problems’
 - Consider materials from multiple – disciplinary viewpoint e.g. acoustic features
 - Integrated materials characterisation & testing with decision making
 - Materials analysis: quantification of decay, geochemical analysis – new techniques
 - Nature of materials: composition, origins, change (weathering). Geology – Chemistry – Microbiology – policy & training
 - Multi-disciplinary studies of decay processes in historic materials
-

Theme 2: Values

Cards Grouped Under the Values Theme in the Morning Session

- Value and Significance
- Valuation of the historic resource
- Identities
 - Whose history?
 - Understanding identity construction
 - Sense of place
- Governance
 - Legal frameworks
 - Policy frameworks
- Socio – economic - cultural. Value. Investment. Appraisal
- Whose values? Why? How? In the historic environment
- Tourism versus identity
- Studies of cultural value from physical and sociological/psychological perspectives
- What are we preserving and why?
 - Does context give object meaning?
 - Who is involved in process of giving meaning?
- Inclusion + Access
 - Physical

- Intellectual
- Cultural
- Cultural identity and value
- Historic and contemporary perceptions / social constructions / story-telling
- Memory and forgetting
- Understanding and 'capturing' identity in the historic landscape + environment
- Recontextualising historic environment. New techniques. New resources.

Access

- Changes to the physical historic environment and perceptions of value (social, aesthetic...)
- Preservation or digitisation?
- What value tourism?
 - Regeneration / place
 - Local identity
- What makes us value the past?
- What aspects of the historic environment people most identify with and how this should be used as a tool in evaluation and decision making.
- Future vs contemporary vs past values
- Social, political + economic effects of heritage
- What are we 'preserving' and who is involved in this process?
- The 'politics' of value. Value into policy and practice. Who defines value?

Power?

- Does 'science' objectify value?
- What is the difference between aesthetic and cultural value?
- How might soundscapes be valued + preserved over time (in the way that the visual + material environment is currently)
- Whose identity / value / history?
- Integration of the physical assessment of built heritage with assessment of its cultural value – methodologies for "assessing" cultural value.
- The interpretation of identity
- Plural values in unique assets.

What are the Grand Challenges within this theme that could benefit from cross-disciplinary research?

- Moving beyond economic approaches to value
- How do we measure cultural value? Is there such a thing?
- How to accommodate the multiple interpretations and values of the past in planning for diverse communities? What does social inclusion mean in a historic environment context?
- Heritage led regeneration. How to widen participation and capture social values of places and spaces.
- Using social + economic values as the basis for increased understanding of the heritage system.
- How do we?
 - Increase the understanding of the social value of heritage
 - Use this information to drive policy
- The way different value systems (commercial, aesthetic, authenticity, academic...) converge upon and make different demands upon heritage resources and the

- challenge of releasing value to the wider community.
- Reconciling specialist views (“The official narrative”) with popular values (including ‘conflicting values’)
- Enabling public access to heritage resources in a context of preservation and conservation.
- Time, space and value. Changing meaning of ‘value’ across time ‘the past’ and space. How ‘value’ is established historically. Space and value.
- How can we integrate knowledge from different groups (ethnic, gender, age related etc) into decisions about what and how to preserve today?
- How are individual + collective identities constructed + how does this relate to the built / historic environment?
- How do we understand authenticity
- Dealing with the tensions that tourism introduces into the equation e.g. tourism’s use of images vs. community’s perception of place / sense of place
- Relating physical + chemical change to aesthetic change + loss of value.
- What are we creating knowledge of? Different kinds of knowledge and what we do with this difference...
- Defining / delineating value schemes appropriate to different approaches to the historic environment
- Whose past? Whose history?
- Values shift over time. How does this transform the object / environment?
- What should we be preserving – and why?
- Conservation has negative as well as positive social consequences
- Achieving a truly interdisciplinary understanding of the ‘value’ or ‘worth’ of the historic environment
- The role of the past in the future
- Communicating value? Training professionals working in the historic environment..
How do you communicate value?
- The language business between disciplines
- Developing a methodology to measure values through benefits and effects of investing in the historic environment by reference to social, cultural, economic and environmental issues.

Theme 3: Engagement and Interpretation

Cards Grouped Under the Engagement and Interpretation Theme in the Morning Session

- Communication and engagement
- Public engagement with the past
- Bringing the past to life
- Access to knowledge base. Digital Achieves formation / maintenance sustainability.
- Perceiving / experiencing the historic environment
- Access and interpretation supported by ICT

- Historic environment and community
- Sensory Experience
 - Practice of making and imagining the past
- Politics + ownership of heritage – community as curators, traditional crafts as conservators, and the role of state institutions
- Participation / engagement, social impact on historic environment
- To identify the processes that act as a catalyst for public / community enthusiasm
 - for historic environment and their relationship to current policies of conservation.
- Broadening experience of H.E.
- Public / community / access / participation

What are the Grand Challenges within this theme that could benefit from cross-disciplinary research?

- Moving away from concept of access (1-way) to participation / inclusion (2-way)
- Finding out what is relevant to all participants
- Exploring the impact of that relevance (socio-economic / emotional impacts) on our perceptions of the historic environment.
- Reshaping the historic environment to encompass these perceptions.
- Learning how to manage this properly.
- Interpretation: Access + conservation 'partnership' not 'take-over'
- Developing tools for access and evaluation of experience
- Accessibility for all groups of society. Achieving experience through VR - audio / video / historians / sociologists. What do we need to enable access for? Relation to values. Achieving a large library of historic environments.
- A consideration of how we present and interpret the historic environment to the public.
 - Cultural heritage management
 - Who for - families? Singletons?
 - Experience different stakeholders
 - Social inclusion
 - Interpretation
 - Story telling
 - Authenticity
 - Design
 - Interactive design
 - Tourism
- Cross disciplinary research can explore historical environments from the viewpoint
 - of a media analysis into forms of representation of the historical objects.
- Use of heritage to raise public engagement in science (House of Lords inquiry, SET committee) (Schools+) + vice versa
- Empowering the social enterprise in cultural heritage; with intelligent ICT tools suitable for non-specialists; coupled with understanding organisational motivations.
- Widening access / interpretation for increased understanding - a broader audience
 - for specialised knowledge leading to increased awareness + 'valuing' - "lost"

- knowledge existing practitioners
- Enhancing experience through understanding of experience
 - Community Participations
 - Understanding how people engage with the past outside of formal settings (e.g. where they live)
 - Historic environment as text.
 - How do we read the HE?
 - Is there space for multiple readings?
 - Is there opportunity to present these alternatives?
 - How do we challenge top-down interpretations?
 - Can we encourage bottom-up readings?
 - Can we get away from socio-economic and political readings?
 - Can we accommodate personal and cultural readings?
 - How can we make the HE more immediate – tactile / auditory / experienced?
 - Community ownership of environment
 - Historic environment and the community
 - Not 'public'
 - But individual, household, local community
 - Explore their engagement with HE
 - Explore how this informs what we do / present / preserve HE
 - Break down academic – community divide
 - Break down disciplinary approaches and form links with the social sciences
 - At what scale are HE's relevant and to whom?
 - How does familiarity / novelty affect how the HE is perceived?
 - How and when is it experienced?
 - Through which media?
 - Using which senses?
 - Understanding and capturing the needs of those who use + visit the historic environment (end-users, visitors, stakeholders, audiences, conservators, communities). Embrace all aspects – heritage assets. Landscape built / human.
 - Cult attractions / museums / galleries / sites / buildings
 - Understanding the visitor experience in formal settings (museums, heritage attractions)
 - Using other media – design (Psychology – ICT – Historians)
 - Bring the past to life for the citizen
 - interpretation, story telling
 - multi linguistic
 - interactive experiences
 - applications - education – edutainment
 - Major driver for public policy for the historic environment is public engagement and participation, citizenship etc (social capital). "Sustainable communities" "double devolution". BUT we know very little about who, why and how this notional interaction happens. And what the public blue fits are. The methodologies of the actual frameworks for this are in the social sciences and we need to bring this to bear on these questions.

- The Leicester problem / opportunity
 - Linking technology aspects (new ways of displaying sites, experiencing sites etc)
 - with humanities aspects of value, past and present – what was the past and who owned / owns it, plus social sciences aspects e.g. behaviour, alienation, attraction, audience mix, engagement etc.
 - Developing new methods of accessing the HE based on multi-sensory, interactive, interpretive materials
 - Perception of the HE – Virtual reality?
 - Personal experience of the HE
 - What role does art have to play in innovative interpretation of the HE?
 - Enhancing engagement and participation in historic environments
-

Theme 4: Impact of Climate Change on the Historic Environment

Cards Grouped Under the Climate Change Theme in the Morning Session

- Managing impact of climate change
- Understanding nature of future threat
 - Climate
 - Anthropogenic
- Sustainable sourcing & applications (embedded energy), (Stone / Build materials)
- Sustainable preservation
- The impact of climate change
- Pervasive impact of renewable energy
 - Onshore & Offshore
 - Macro & Micro (e.g. towns)
- Climate change: evidence of past impact, understanding and mitigating current impact on historic environment
- Impacts of 'Global warming' on the historic environment. And Implications – Sustainability values / issues
- Climate Change
- Climate change. Interdisciplinary management of impact (Coasts, water, wetlands). Technology.

What are the grand challenges within this theme that could benefit from cross-disciplinary research?

- Impact of climate change on the historic fabric of buildings etc. Decay determination
- (IN SITU) Preservation of the historic environment (artefacts, fabric, landscape).
Technical Innovation in monitoring, prediction, mitigation. Valuation.
- Preservation issues
 - Risk assessment of climate impact
 - Conservation Practice
 - Monitoring

- Socio-Economic factors e.g. impact on building use.
- Managing Coastal retreat – The implications of coastal retreat on the HE
- Impacts of climate change on the historic environment. Direct impacts – Landscapes/Buildings
- “Energy”. Upgrading strategies to improve energy efficiency, comfort & amenity in “historic” housing, whilst retaining historic character, etc.
- Appropriate mitigation methods for e.g., CO2 from historic buildings which are also consistent with principles of conservation
- Energy consumption past and present in the construction & use of buildings: How could we model the true energy consumption, impacts of demolition (loss of energy) also rebuilding (use of energy in construction, reduced loss in use, and integrate the results into strategies for the conservation of the historic environment
- Research into impact of renewable energy including offshore wind farms on HE
- Understanding past changes to... ID, valuing & protecting heritage landscape
- Resilience of natural and social systems to climate change
- Historical development of concepts of environment, nature, climate – climate’s language
- Understanding past climate change to inform future predictions & response
- Conceptualisation of climatic variability in the past (How past societies understood, interpreted, responded)
- Climate change in history - extreme weather events - trends, impacts (Human & Environmental), responses.
- Impacts of climate change on the historic environment. Indirect impacts:
 - Hydrol. mitigation
 - Coastal defences
 - Development
- Sustainable preservation – e.g. in situ building, artefacts
- What happened when under what conditions (impacts of past changes on...). Future models/seminars. Management at regional level or landscape component e.g. coastal, floodplain, limestone
- Occurrence, nature and the response to extreme weather events in the past

Theme 5: Sustainability

Cards Grouped Under the Sustainability Theme in the Morning Session

- Isolation of the preserved past and involving communities
- Dynamism and Temporality
 - Shifting meanings + interpretation
 - Accessibility of archives
 - Constructing + communicating meaning
- Disappearing Human Ecosystems
- Sustainability of historic environment
- Defining sustainability and carrying capacity in historic environment context

- Disappearing Historic Landscapes
- Indicators / impact assessment / sustainability
- Sustainability - What does it mean in context of historic environment?
- Modelling the historic environment as an energy system to enable the management of that system as part of a large 'ecology' and to map net benefits of change.
- Long term futures for the past
- Integrating 'Time-Depth' into development and land use decision-making.
- Digital mapping and applications for historical environment. Integrating community survival, regeneration, technology and design

What are the Grand Challenges within this theme that could benefit from cross-disciplinary research?

- In situ preservation of above and below ground archaeological deposits. Efficacy of strategies. What do we mean by preservation?
- How best to allocate scarce public resources across the sector.
- Carrying capacity of the historic man-made environment - managing the leisure culture and its impact.
- How does knowledge transfer into policy?
- Knowledge integration to policy measures.
- How do we quantify benefits of change / development?
- How do we balance use / access with conservation of historic environment?
 - Tourism
 - Regeneration
 - Agriculture
 - Landscape
- Sustainability in terms of being true to the past while taking advantage of changing technologies. Culture / nature interface
- Interrelation between natural / cultural + policy. Joined up Thinking. Cultural Construct.
- How do we bring about convergence between natural heritage (ecological systems) and historic environment / cultural heritage (human or engineered systems)? – Development of common indicators of change (-ve and +ve)
- Disappearing cultural ecological resources
- Historical ecology – resilience of human ecosystems (socio-ecological systems) over time. "The long durée"
- Understanding the scientific basis of the processes which determine the sustainability of the cultural heritage
- Studies of long term change management strategies.
- The development of the cultural Holocene landscape + its implication for sustainability + conservation (i.e. using the past to inform present future management) (part of that may be conservation of archive)
- Contrasting temporalities. Different timescales
- Sustainability:
 - Long term monitoring and prediction modelling of change management.
 - Studying long term risks to historic assets and devising responses.

- Mainstreaming history / heritage into other policy / planning areas. "Time depth" at the neighbourhood + landscape scales
- Preserving the past for land use futures
- Developing performance indicators for historic built environment:
 - Life / whole life costing
 - Materials
 - Repairs / maintenance
 - Effective decision making
- Developing sustainable safeguards for the historic environment in the context of urban and rural development / growth.
 - Culture / meaning / values
 - Not missing opportunities or threats
 - Proving / providing sustainability in development context
- Sustainability in terms of maintaining systems once the excitement of "new projects and new investment" has passed

Appendix 2: Delegate List

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