

Institution: University of Bristol

Unit of Assessment: 17 – Geography, Environment Studies and Archaeology

a. Context

Achieving high impact lies at the heart of everything we do in the Department of Archaeology and Anthropology at the University of Bristol. We believe that in many areas of our complementary disciplines, true research excellence is only ever achieved when scholarship of the very highest quality leads to major cultural enrichment and societal benefits, and this idea underpins the Department's research culture. In achieving impact, the department exploits its scientific approach towards some of the biggest questions on themes of great contemporary significance. These include the origins of agricultural societies worldwide, family dynamics and demography in the Developing World, European colonization and the trans-Atlantic slave trade, and anthropology of business and social media. Accordingly, contemporary cultural significance drives the fundamental questions we ask and the impact of our research. Among many examples, one is our study of colonial Bristol and the trans-Atlantic slave trade, including the excavation/analysis of hundreds of 19th century slave burials on the Atlantic island of St. Helena. Another example is the archaeology and memory of the First World War as it approaches its centenary, and the display and interpretation of the remains from the Great Arab Revolt in Jordan.

As a result, a substantial component of our impact is public engagement. Department staff have, during the REF period and before, acted as perennial presenters for internationally syndicated series such as BBC *Coast* and *Genius of Invention* and Channel 4's *Time Team*. Staff also write magazine articles and guest columns for *New Scientist* or the *New York Times*. Our public engagement also includes work with local communities worldwide, as our field research runs from the Middle East to Europe, North and South America, Ethiopia and Mongolia. In the UK, we work with local groups at Stonehenge, Avebury, South Cadbury and Berkeley Castle. Beneficiaries of our research range from major Non-Governmental organizations, museums and trusts (Imperial War Museum in London, M-Shed Bristol, Brunel Institute, Bill and Melinda Gates Foundation, Royal Anthropological Institute), numerous National Governments and civil services both in the U.K. (Parliament, Ministry of Defense, Bristol City Council) and internationally (Council of the International African Institute, Mongolia National University, University of Ghana and Addis Ababa University, the Fulbright Commission), international corporations (e.g., Sony Europe, Unilever, Sanofi Pasteur) and smaller enterprises in the UK (e.g. Volterra LLP).

Our research has been focused in delivering impact within the economic, environmental, cultural and educational, and policy areas, particularly training in research skills in the developing world, the influence of public policy and engagement with the business and commercial world through the insights gained from our anthropological research.

Much of our **educational impact** is in the Developing World, in cultural understanding of past and present societies, and training for local government officials and academics (over 50 trained during the REF cycle). For example, our MOU with the National University of Mongolia, supported by the Open Society Institute, is explicitly for training Mongolian students in field methods. Our British Academy - Africa collaboration trains Ethiopian scholars in analytical methods, leading multiple scholars from University of Addis Ababa to visit our Department for extended periods. International engagement projects with the Fulbright Foundation and the British Museum are described below.

Our **cultural impact** concerns local heritage - examples include conservation by the World Monuments Fund of the ruins of Songo Mnara (UNESCO World Heritage Site), the conservation of the World Heritage Nazca lines. In Europe, examples include dating the earliest Paleolithic Rock Art, identifying the cultural sophistication of Neandethals, locating and displaying Paleolithic rock art in Britain, the first European family, identifying the remains of Kings and Queens of England.

Our **economic impact** lies in the regeneration that often follows our archaeological and anthropological research, including new museums, exhibitions and the redisplay of monuments. Examples of these include the Magdeburg and Winchester Cathedral projects, new museums on the Swahili coast of East Africa (Zanzibar and Pemba), the world Heritage site of Songo Mnara, and enhanced tourism and a dozen documentary films concerning Berkeley Castle (Gloucester).

Impact template (REF3a)

b. Approach to impact

As we work between disciplines, our research takes on a thematic rather than a specific historical or geographical focus. We use a range of methodologies to deliver focused impact that is relevant to the modern world, and we draw on expertise and facilities across the University including Chemistry, Earth Sciences, Geography, Clinical Medicine and Experimental Psychology. Over the assessment period we have undertaken specific actions to: (1) enable academics to interact with key beneficiaries, users and audiences; (2) support Department members to achieve impact from their research; and (3) provide access to university resources to achieve impact.

The Department encourages interaction with key beneficiaries, users and audiences. We have an extremely wide range of end users through formal Memoranda of Understanding, major research projects, workshops and conferences to bring academics and research beneficiaries together, and one to one connections between academics and end users. The Department facilitates such interactions through: (1) rigorous workload management to allow academics time to develop end user connections; (2) the promotion of an interdisciplinary research culture in which such efforts are valued highly and equal in worth to blue skies activity; and (3) the provision of space, time, funds and administrative support to make such connections happen. We encourage academics to engage with end users at an early stage in the development of research to identify fundamental questions whose solution will lead to major impact and benefit. One example is the ~£2M EuroTAST project to study the transatlantic slave trade (see below).

Our approach to impact embodies a culture of communication and public engagement. An example of long term planning for media impact comes from the start of the REF period, in 2008, when our staff travelled with a BBC media crew to northern Spain to collect samples of cave paintings, which later became the basis for a 2012 *Science* paper on the world's oldest cave art, richly reported by international media, with podcast interviews and associated online videos. Other highlights include international coverage of public discourse on climate change, fertility rates and development in Africa, the oldest surviving remains of an English royal burial, the purpose of the mysterious Nazca Lines in ancient Peru, expression of emotions in books, and the trans-Atlantic slave trade. During the REF period, our staff authored invited columns for *The Huffington Post*, *The New York Times*, *New Scientist*, *European Business Review*. Staff also often give radio interviews for BBC World Service, BBC Radio 4, and National Radio in the USA and other countries.

The end users with whom the Department has established relationships include:

- Major Museums (e.g., Imperial War Museum, Natural History Museum, Saxony-Anhalt State Museum of Prehistory, Liverpool Museum), and Bristol museums (M-Shed, SS Great Britain)
- Television media companies (BBC, Channel 4) and their international audiences
- Professional training in Middle East (e.g. Turkey, Jordan), Asia (Mongolia) and Africa (Ethiopia, Madagascar)
- Memoranda of Understanding with Addis Ababa University, National University of Mongolia
- National societies: Discovery Institute (Ireland), Prehistoric Institute, Royal Society of Arts
- Brunel Institute and SS Great Britain Trust in Bristol (serving on Board of Directors)
- Commercial companies (Google, Unilever, Sony Europe, Sanofi Pasteur pharmaceuticals)
- Charitable organizations (School of Life, Gates Foundation)
- National Governmental bodies abroad (including Ethiopia, Ghana, Mongolia)
- U.K. Government (Parliamentary Committees and Ministry of Defense)

Resources we use via the University's Research and Enterprise Development Office include:

- Access to internal and external funds to support developing research impact including: the Higher Education Impact Fund and Bristol's Centre for Public Engagement.
- Support from the University's Research Development teams in preparing pathways to impact plans and developing strategic partnerships with industry and NGOs.
- Training and mentoring for student business start up and entrepreneurship via the University of Bristol initiated BaseCamp organisation (www.businessbasecamp.co.uk).
- Practical advice for business acceleration and development by the University's business incubator unit and the SETSquared partnership (www.setsquared.co.uk).

c. Strategy and plans

After a major departmental re-organization and staffing of the past two years, our main aims for achieving impact now lie in long term stability in scientific research orientation and strategy. This we believe is a major factor in knowledge transfer as the connections, evidence and trust necessary to achieve impact clearly develop over long time scales. This stability and research breadth leads to a wide range of impacts including: (1) engagement with the public through mainstream and social media, museum collaborations and ancillary accessible resources aimed at adults and young learners alike; (2) the development of tools and knowledge relevant to end users which we validate and place in the public domain via International peer-reviewed literature (open-access wherever possible); (3) expert advice to companies, governments and NGOs concerning policy or commercial activity; (4) changes in professional standards and practice, such as Health and Safety in archaeological excavation; (5) contributions to Continuing Professional Development; and (6) research-led analysis protocols for uptake by business and public policy organizations.

In terms of timely research, a major opportunity is the centenary of the First World War. As the focus of Nicholas Saunders' research in conflict archaeology, we have an outstanding opportunity to make an impact with the British and EU government offices seeking to convey the history of this war to an international audience. Saunders is already having these conversations with people at the Imperial War Museum, in the U.K. government and Bristol University to plan this strategy.

Another major theme is the study of the transatlantic slave trade in colonial history, through the physical remains of a diaspora that otherwise lacks historical record. The excavation of hundreds of slave remains, in a cemetery on the island of St. Helena, will surely be the subject of intense interest as we continue to publish findings on the human remains through the EuroTAST project. We will also host a visiting professor in 2014 whose archaeological work focuses on the trans-Atlantic slave trade. This research activity directly contributed to Bristol obtaining a 3-year contract (2013-2015) with the Fulbright Commission to host a 4-week summer institute on "Slavery and the Atlantic Heritage," teaching some of future leaders in America about Bristol's role in a history that is core to both British and American culture, politics and society.

Our contributions to professional development include flexibility in scheduling Fellowships and Secondments aimed at developing research impact. We enable connections to external organisations via close working with the University's Research and Enterprise Development office. Staff and student entries to the University of Bristol New Enterprise Competition are supported; one example was a student start-up project on Ground Penetrating Radar and agricultural prospecting.

d. Relationship to case studies

One case study demonstrates the impact of Mark Horton's public engagement, in research expressed through the BBC *Coast*, in legislation passed by Parliament to protect Britain's coastal heritage. This shows how our Departmental culture of media engagement can translate into action by government officials. Similarly Dr. Alice Roberts, whose media experience at Bristol led her to become Professor of Public Engagement in Science at Birmingham University, has a repertoire of television production and books aimed at public enrichment. Many presenters for Channel 4's *Time Team* series were based at Bristol (Horton, Prior, Aston, Roberts, Newland), and this inspired a generation of public and student interest in archaeology and British prehistory. Future impact may come from graduates of our Masters in Archaeology and Screen Media programme.

Our second case study concerns the relevance of scientific anthropology and archaeology to business and governmental practice, particularly in communications and marketing engagement. This demonstrates how the cross-cultural, scientific study of culture change through time – in archaeology or anthropology – is highly valuable for businesses and government aiming to communicate in a rapidly changing, socially networked world. In terms of the engagement with business, we will continue to give presentations and make appearances high-profile business events, where we can continue to network. In 2013, for example, we delivered a seminar for Activate Networks (www.activate networks.net), which has a U.S. Senator and international business leaders on its Boards of Directors/Advisors. Similarly, we aim that our collaborations with Volterra LLP involves us with the offices of the Mayor of London (close relationship with Volterra).