

<b>Institution:</b> King's College London
<b>Unit of Assessment:</b> 31 Classics / Centre for Hellenic Studies
<b>Title of case study:</b> <b>Saving and managing for public benefit the cultural heritage of Roman-period Libya.</b>
<p><b>1. Summary of the impact</b> (indicative maximum 100 words)</p> <p>This impact derives from Wootton and Walda's archaeological research into the Roman sites of Libya, including the GIS mapping of site locations, and study and conservation of Hellenistic and Roman mosaics. Against the difficult background of Gaddafi's regime, its fall and the aftermath, they have, by invitation, provided training and advice to the Libyan Department of Antiquities in the documentation, conservation and management of archaeological objects and sites, especially mosaics. They provided Blue Shield, on request, with a watch-list of sites with GIS co-ordinates to enable NATO to target their airstrikes to avoid them. The primary beneficiaries are the Libyan people, to whose national pride and identity this patrimony is crucial, and the Libyan Department of Antiquities. The secondary beneficiaries are the international community, to whom Libya's rich Roman-period cultural patrimony is of major concern.</p>
<p><b>2. Underpinning research</b> (indicative maximum 500 words)</p> <p>Wootton has been employed at King's since 2006 as an RCUK Fellow and from 2011 as Lecturer in Roman Art. His research focuses on ancient crafts, especially the techniques of production, and he has developed innovative approaches to the study of ancient mosaics (3.1), informed by his own past as a professional mosaicist. In particular he has worked on new documentation methods of use to the archaeological and conservation communities to ensure the proper recording of primary materials and the application of appropriate methods for their future preservation (3.2). His research into documentation and presentation also has an important digital component, and he has just completed a two-year Leverhulme-funded project into an innovative methodology, developed with the collaboration of a working sculptor (Peter Rockwell), for the identification and mapping of Roman stoneworking techniques, which also explores the best methods for the conservation and recording of ancient sculpted monuments (3.2).</p> <p>Wootton's work in Libya stems from his involvement in excavations at Euesperides (Benghazi) between 2003 and 2005. He trialled there his new methods for recording and interpreting mosaics, and advised on the first mosaic reburial to take place in Libya - see team reports in <i>Libyan Studies</i> 34 (2003) 191-228, 35 (2004) 149-90, 36 (2005) 135-82. He has also insisted on the critical value of proper archaeological documentation beforehand, and this combination of archaeological and conservation research is at the heart of <i>Conserving and Managing Mosaics in Libya</i>, a project developed with Walda and funded by the Getty Foundation to assist the Libyan Department of Antiquities in heritage management (3.4, 3.5), whose impact is described in section 4 below.</p> <p>Walda has worked at King's as a researcher in Roman archaeology and digital humanities since the 1980s, moving with consecutive projects between the Department of Classics, the Centre for Hellenic Studies and the Department of Digital Humanities. He is currently the Libyan Heritage Management Research Fellow in the CHS. Walda ran his own excavations at the major site of Lepcis Magna in 1994-1998 (<a href="http://www.alnpete.co.uk/lepcis/">www.alnpete.co.uk/lepcis/</a>). He pioneered the use of GIS and other mapping technologies for the presentation and interpretation of archaeological materials online as part of Roueché's epigraphic projects, <i>Inscriptions of Roman Tripolitania</i> and the ongoing <i>Inscriptions of Roman Cyrenaica</i> (3.3a-b). He has also worked on the integration of this information with other web-based data such as <i>Pleiades</i>, the online gazetteer of ancient places being developed at the Institute for the Study of the Ancient World, New York University, with the long-term aim of establishing, systematically recording and making available reliable co-ordinates for Roman-period archaeological sites. His GIS expertise and research and local knowledge led to his invitation to join two Blue Shield missions to survey the condition of heritage sites in Libya after the</p>

revolution (see further section 4), and Walda contributed to the resulting reports (5.2a-b).

**3. References to the research** (indicative maximum of six references)

- 3.1. W.T. Wootton, 'Ancient mosaic techniques and modern conservation: an archaeologist's perspective', in *Conservation: An Act of Discovery. Proceedings of the 10<sup>th</sup> Conference of the International Committee for the Conservation of Mosaics, Palermo, Sicily, October 20-26, 2008* (2013):  
[https://kclpure.kcl.ac.uk/portal/files/10127603/Ancient\\_Mosaic\\_Techniques\\_Will\\_Wootton.pdf](https://kclpure.kcl.ac.uk/portal/files/10127603/Ancient_Mosaic_Techniques_Will_Wootton.pdf)
- 3.2. W.T. Wootton, *The Art of Making in Antiquity: Stoneworking in the Roman World*, Leverhulme Project (2 years, £209,834), results published (2013) at: [www.artofmaking.ac.uk](http://www.artofmaking.ac.uk).
- 3.3a. C.M. Roueché, with G. Bodard, J. Reynolds, *Inscriptions of Roman Tripolitania* (2009; JISC/NEH funded) - Walda's contribution:  
<http://irt.kcl.ac.uk/irt2009/about/acknowledgement2009.html>
- 3.3b. C.M. Roueché, with G. Bodard, J. Reynolds, *Inscriptions of Roman Cyrenaica* (in progress; Leverhulme funded) - Walda's contribution: <http://www.ircyr.kcl.ac.uk/people/index.html>
- 3.4. W.T. Wootton and H. Walda, Getty Foundation Grant (2010, £64,000) for *Conserving and Managing Mosaics in Libya*, November 2010; project completed April 2013 (cf. 5.6).
- 3.5. W.T. Wootton, 'Conserving and managing mosaics in Libya: a report on a new collaborative project', in *Managing Archaeological Sites with Mosaics: from Real Problems to Practical Solutions. 11th Conference of the International Committee for the Conservation of Mosaics, Meknes (Morocco), October 24-27, 2011* (2013):  
[https://kclpure.kcl.ac.uk/portal/files/10081769/Conserving\\_and\\_Managing\\_Mosaics\\_in\\_Libya\\_final.pdf](https://kclpure.kcl.ac.uk/portal/files/10081769/Conserving_and_Managing_Mosaics_in_Libya_final.pdf)

Quality: 1 and 5 are peer-reviewed papers; 2, 3 and 4 peer-assessed competitive grants.

**4. Details of the impact** (indicative maximum 750 words)

Wootton, a former mosaicist himself, is passionate about the conservation of ancient mosaics and their presentation to the public. Since 2007 he has organised, and hosted at King's College London, the annual AGM and Symposium of the Association for the Study and Preservation of Roman Mosaics (ASPROM), of which in 2011 he was elected Chairman. During the ASPROM events and those run by him as part of the Applied Arts series (see <http://www.kcl.ac.uk/artshums/depts/chs/events/specialevents/AAW.aspx> and <http://www.kcl.ac.uk/artshums/depts/chs/events/specialevents/AAW2013.aspx>), he has showcased recent work on mosaics in the UK and abroad, including advances in documentation and conservation, to a large and diverse audience. Wootton had already brought his experience in the study and conservation of mosaics to Libya in the excavations at Euesperides (Benghazi) between 2003 and 2005 (see section 2 above). In his 1994-98 excavations at Lepcis Magna, Walda had instituted a training programme for Libyan as well as British students ([www.alnpete.co.uk/lepcis/](http://www.alnpete.co.uk/lepcis/)). Walda has also for many years advised the Department of Antiquities in Libya, of which he is an accredited international representative, on how to support the care of antiquities in Libya.

Because of their track record of research and local involvement, in November 2010 the Getty Foundation awarded Wootton and Walda a grant of £64,000 for *Conserving and Managing Mosaics in Libya*, a project to organise a series of workshops in Libya on the conservation of mosaics and the management of archaeological sites (3.4-5). Gaddafi was then in power and the Department of Antiquities was struggling to manage their heritage sites and train their employees. The ancient mosaics, in particular, had been deteriorating badly due to their exposure and the lack of care. The project's aim was to ameliorate the situation through workshops, using the research experience of Wootton and Walda, and that of their international team, in the documentation,

conservation and management of archaeological sites.

Implementation of the project was delayed by the uprising against Gaddafi which began in February 2011. Instead, in March 2011 Walda and Wootton, as known experts on the sites, both received e-mail requests from Blue Shield ([www.ancbs.org](http://www.ancbs.org)) and ICOMOS (International Council on Monuments and Sites) to provide a list of sites of cultural importance in Libya with their GIS coordinates (5.1). This was wanted by NATO and the MOD (after the problems in Iraq) in order to minimise collateral damage to heritage sites by airstrikes during Operation Unified Protector in March to October 2011. Walda, aided by Wootton, was able to extract and make user-friendly the data from his research in support of Roueché's epigraphic projects, which Blue Shield then supplied to NATO and the MOD. Walda was an invited member of the team sent by Blue Shield on two missions to Libya in early 2012 to report on war damage to antiquities, and he contributed to the subsequent reports detailing the archaeological impact of the uprising and the NATO airstrikes (5.2a-b). During and since the conflict he has been in frequent demand from the worldwide media, including NATO features, to comment on the state of the antiquities there (5.4, 5.5). Contrary to some hasty claims (e.g. 5.5c), NATO's 'No strike list' was a great success (5.3, 5.4, 5.5). The value of the input by Walda and Wootton has been acknowledged by the President of the International Association of Blue Shield Committees in the second Blue Shield report (5.2b) - 'The mission would not have been possible without the specialised knowledge and the contacts of Dr. Hafed Walda' - and again in his public lecture on the work of Blue Shield at King's in June 2013 (5.2c). The GIS data are now being used to form the basis for a comprehensive record of sites and monuments fundamental for managing Libya's archaeological heritage.

Between April 2012 and April 2013 Wootton and Walda were able to implement their Getty-funded project. They completed an evaluation trip and delivered two workshops with John Stewart (English Heritage) and Alaa El-Habasji (Monafia University). They gave general presentations on mosaic conservation and management to nearly 150 people, followed by tailored workshops to some 50 staff, from senior and middle management to site controllers and technicians, of the Libyan Department of Antiquities. The feedback shows that the workshops gave the Libyan staff the confidence to assess the conservation problems of mosaics and implement appropriate plans to mitigating them (5.6, 5.8). Even those with no responsibility for mosaics acknowledged the value of the methodology as a framework for the management of the particular heritage in their region, as well as practical tips such as the use of lime mortar rather than cement. Changes in practice are already taking place. During the evaluation trip Wootton and Walda advised on reburial of a mosaic at Tocra, now completed by Ahmed Buzaian (5.7), and created a scheme for the reburial of mosaics in Sabratha at the request of the site controller, Mohamed Abougela (3.5). They gave talks about their project to community groups and the media, and were invited to meet the Municipal Council of Sabratha and the acting Governor to discuss practical steps for heritage conservation in the current situation. In its response to Wootton and Walda's report, the Getty Foundation praised 'the excellent training that has been achieved on the project, especially in the light of the dramatic socio-political upheaval' (5.6). Back at King's in February 2012 Wootton and Walda held a public event, the 'Libya Matters Workshop', jointly with the Society for Libyan Studies to promote the importance of Libya's heritage (<http://www.kcl.ac.uk/artshums/depts/chs/events/specialevents/Libya.aspx>). The international community benefits greatly from this contribution to conserving Libya's Roman (and pre-Roman) heritage, but the local context is paramount. As the report on the second Blue Shield mission concluded: 'Once again the importance of Cultural Heritage to restore national identity and to function as a binding factor for all tribes and factions became apparent. The Libyan cultural heritage and political authorities acknowledged this on more occasions'. The challenge now is to sustain support and progress in training Libyan heritage staff and supporting conservation projects. Wootton and Walda are developing a follow-up project, which will depend of the availability of finance (as well as political developments in Libya); on 12 March 2013 the Chairman of the Libyan Department of Antiquities wrote to Wootton to confirm the Department's support (permits, accommodation and maintenance, training facilities) for a forthcoming major grant application to continue the work (5.8).

## Impact case study (REF3b)

**5. Sources to corroborate the impact** (indicative maximum of 10 references)

- 5.1. March 2011 requests for a list of Libyan cultural heritage sites, and subsequent e-mail correspondence with Blue Shield, English Heritage and ICOMOS.
- 5.2a. K. von Habsburg, J. Kila, T. Schuler, H. Walda, *Civil-Military Assessment Mission for Libyan Heritage by Blue Shield and IMCuRWG September 28 to 30, 2011*; available at [http://www.blueshield.at/libya\\_2011/09-2011/mission\\_report\\_libya\\_09-2011.pdf](http://www.blueshield.at/libya_2011/09-2011/mission_report_libya_09-2011.pdf).
- 5.2b. K. von Habsburg, J. Kila, T. Schuler, H. Walda, *Mission Report. 2nd Civil-Military Assessment Mission for Libyan Heritage November 12 to 16, 2011*; available at [http://www.blueshield.at/libya\\_2011/11-2011/mission\\_report\\_libya\\_11-2011.pdf](http://www.blueshield.at/libya_2011/11-2011/mission_report_libya_11-2011.pdf).
- 5.2c. K. von Habsburg, June 2013 lecture: <http://www.kcl.ac.uk/artshums/depts/chs/eventrecords/2012-13/blueshield.aspx>.
- 5.3. NATO News 4 January 2012: [http://www.nato.int/cps/en/natolive/news\\_82441.htm?selectedLocale=en](http://www.nato.int/cps/en/natolive/news_82441.htm?selectedLocale=en)
- 5.4. NATO features (using Walda) on future of Libya's archaeological heritage (Nov/Dec 2011): [http://www.youtube.com/watch?v=dj-d-s\\_GIAo&feature=youtu.be](http://www.youtube.com/watch?v=dj-d-s_GIAo&feature=youtu.be); <http://www.youtube.com/watch?v=BwDeFXmfPYM> and <http://www.youtube.com/watch?v=6cZz8qiGPDw>; cf. <http://www.youtube.com/watch?v=5nKu0iWLIeg>
- 5.5. Selected contributions by Walda to media reports:
- Agora (Italy), Feb and June 2011: <http://agorargo.wordpress.com/tag/hafed-walda/>.
  - Süddeutsche Zeitung (Germany), Aug 2011: <http://www.sueddeutsche.de/kultur/libysche-kulturschaetze-kein-zweites-kairo-1.1134614>.
  - Science, September 2011: <http://news.sciencemag.org/scienceinsider/2011/09/claims-of-mass-libyan-looting.html>.
  - CNN, September and November 2011: <http://edition.cnn.com/2011/WORLD/africa/09/03/libya.archaeological.sites/index.html> and <http://edition.cnn.com/2011/11/11/world/europe/looted-treasure-libya/index.html>.
  - BBC, November 2011: <http://www.bbc.co.uk/news/world-middle-east-15557403> and <http://www.bbc.co.uk/news/world-africa-15582483>.
  - The World, November 2011: <http://www.theworld.org/2011/11/libya-historic-treasures-survived-civil-war/>.
- 5.6. Report of June 2013 to Getty Foundation on completion of *Conserving and Managing Mosaics in Libya*, including feedback from Libyan participants; 3 July 2013 response from Getty.
- 5.7. Article submitted 2013 by Ahmed Buzaian to *Libyan Studies* on the reburial of a mosaic in Tocra and recording the help of *Conserving and Managing Mosaics in Libya*.
- 5.8. Letter of 12 March 2013 from Chairman of the Libyan Department of Antiquities in support of plans to continue *Conserving and Managing Mosaics in Libya*.

(Copies of all sources are on file at King's and are available on request; PDF of 5.8 has been uploaded.)