

Impact case study (REF3b)

Institution: Swansea University
Unit of Assessment: 30 - History
Title of case study: Copperopolis: Regenerating and Transforming an Industrial Landscape in the Lower Swansea Valley
1. Summary of the impact

Research on the copper industry by Swansea historians has acted as a **catalyst for the regeneration** of the former Hafod-Morfa copperworks site in the Lower Swansea Valley. Until recently the abandoned site was associated only with industrial dereliction, but historical research on entrepreneurship, innovation and global trade has galvanised a new public appreciation of its international significance. Since 2010, an **extensive programme of public engagement activities** has persuaded key partners in local government to adopt an ambitious plan to **preserve and present its cultural heritage**. The project received national acclaim in Research Council UK's 2011 report on 'Big Ideas for the Future', which noted that '*The example set by the research in Swansea could be used across the UK*' (C1).

2. Underpinning research

a. Context

Historians have long recognised that by the end of the eighteenth century the Lower Swansea Valley was a world centre for copper smelting. Traditionally, the best-known legacy of this industrial past has been the environmental damage caused by copper smoke on the surrounding area, creating perceptions of Swansea as a place scarred by industry. The recent research of Bowen and Miskell looks beyond the smoke to explore the national and international significance of Swansea's copper industry. Miskell's work contextualises 'Copperopolis' as one of the major sites of Britain's industrial revolution, while Bowen has identified some of the key trading connections that shaped the copper industry's emergence as the first globally integrated industry.

b. Nature of research insights

The research of Bowen and Miskell draws on the institutional records of Swansea copper firms and of the East India Company, to produce a series of publications which shed new light on Swansea as an innovative industrial centre with global trading connections. In particular, their work shows that:

- i. Swansea was established as a smelting centre in the eighteenth century through the efforts of innovative industrial entrepreneurs who maximised the locational advantages of the Lower Swansea Valley, a site on a navigable river with easy access to coal, to financially out-muscle rival smelters elsewhere. (R4)
- ii. Far from being a marginal part of the Welsh economy, copper was well integrated into the metal- and mineral-driven industries of Wales, stimulating demand in other sectors, notably coal, iron founding and the shipping and maritime trades. (R1)
- iii. The major Swansea copper smelters were committed to enhancing and applying the latest scientific knowledge to the smelting process in order to improve productivity and quality and to minimise smoke pollution from the works. (R2)
- iv. As well as the industrial output from the works, the copper industry enhanced the urban status of Swansea by contributing to the formation of cultural and educational institutions and through the creation of a prosperous commercial class in the town. (R3)
- v. Swansea copper smelters were well-informed of – and responsive to – the fluctuating demands of global markets, and tailored their products accordingly in order to retain their overseas customers and remain competitive. (R5)

Impact case study (REF3b)

Building on these research insights, an ESRC-funded follow-on project focused on the interplay between the local and global factors that drove the growth of the copper industry and sustained Swansea's position as the world's leading centre of copper smelting until the 1870s. (G1).

c. Key Researchers:

Dr Louise Miskell is Associate Professor in History, having been a post-doctoral researcher when first appointed in Swansea in September 2000, and lecturer from 2002.

Professor Huw Bowen took up his current post as Professor of Modern History at Swansea in September 2007.

3. References to the research

a. Publications

(R1) L. Miskell, 'Separate Spheres'? Re-thinking the history of the metalliferous industries in south Wales', *Welsh History Review*, 21, 2 (December, 2002), pp.249-270. [Reviewed at pre-publication stage by two referees]

(R2) L Miskell, 'The Making of a new "Welsh Metropolis": Science, Leisure and Industry in early nineteenth-century Swansea', *History*, 88:1 (2003), pp.32-52. [Reviewed at pre-publication stage by two referees]

(R3) L. Miskell, *Intelligent Town: an Urban History of Swansea, 1780-1855* (University of Wales Press: Cardiff, 2006), pp. x + 232. [Reviewed by two press referees at pre-publication stage; and subsequently by journal reviewers]

(R4) L. Miskell, *The Origins of an Industrial Region. Robert Morris and the first Swansea Copper Works, c.1727-1730*, South Wales Record Society Publications, no.23 (South Wales Record Society: Newport, 2010), xii +127. [Peer reviewed at pre-publication stage by one referee; and subsequently by journal reviewers]

(R5) H.V. Bowen, 'Asiatic Interactions: India, the East India Company, and the Welsh economy, 1750-1830', in H. V. Bowen (ed.), *Wales and the British Overseas Empire: Interactions and Influences, 1650-1830* (Manchester University Press, 2011) pp. 168-93 [peer reviewed by two referees at pre-publication stage]

b. Grants

(G1) H.V. Bowen (PI), L. Miskell (CI), 'History, Heritage, and Urban Regeneration: The Local and Global Worlds of Welsh Copper', ESRC follow-on grant awarded, November 2009, £94,674 fec; project dates: 1 September 2010 – 30 November 2011. <http://www.esrc.ac.uk/my-esrc/grants/RES-189-25-0075/read/reports>

4. Details of the impact

The research of Bowen and Miskell has generated new ways of thinking about the value of Swansea's copper-smelting heritage among a variety of public, political, and policy-maker audiences. As a result, the location of former smelting works in the town is now the target of a heritage-led regeneration plan shaped by their research. This has been achieved in three stages: first, an extensive programme of **public engagement activity** to communicate research findings about the international significance of Swansea's historic copper industry; second, the formation of a **formal partnership** linking the historians with representatives from planning and the heritage sector, and the securing of **substantial funding** to deliver a major heritage-led regeneration project; third, the on-site work of **preserving and presenting industrial heritage** at the former Hafod-Morfa copper works.

1. Public Engagement

Following the decline of copper and its related industries in the twentieth century, the Lower Swansea Valley became a by-word for British post-industrial blight. High levels of toxicity in an environment peppered with derelict furnaces gave rise to the view among successive generations

Impact case study (REF3b)

of Swansea residents that their industrial history was best obliterated. As a result, little survived of the area's copper works and there was no interpretation to inform public understanding of the industry's past. Funded by Bowen's ESRC's follow-on grant, a range of activities were undertaken to raise awareness of the many ways in which modern Swansea has been shaped by its copper industry, and to persuade regeneration and planning officers in local and Welsh government of the untapped potential of the town's former smelting sites as a heritage resource. The highlights were:

- A series of briefings undertaken by Bowen to Welsh Government ministers and officials (15 June 2010, 9 March and 1 Nov. 2011) to explain the historic importance of the Hafod-Morfa site and how the research could shape the development of history-led regeneration projects.
- A one-day symposium on 'History, Heritage, and Urban Regeneration', co-sponsored by the Institute of Welsh Affairs (14 Oct. 2010). Key research findings were presented to 57 researchers, heritage practitioners, and policy makers.
- A one-day, city-wide Copper Festival in Swansea (5 March 2011) which attracted an estimated 2,700 visitors. By 30 Nov. 2011 the Festival website had received 2,848 unique visitors and had 9,938 page views (C2).
- A temporary exhibition on 'The World of Welsh Copper' at the National Waterfront Museum, Swansea held between 1 July and 30 Oct. 2011 during which time 104,492 people visited the Museum (C3).
- A project website 'The World of Welsh Copper' went live on 1 Nov. 2011. By 31 July 2013 it had received 9,675 unique visitors from 110 countries and generated inquiries for information from over 100 members of the public (C4).

These activities greatly extended the reach of the research by taking the findings to new audiences and in doing so they had the effect of persuading policy makers that Swansea's copper heritage was worth preserving and utilising in new plans for urban regeneration.

2. Partnership formation and income generation

In January 2011 Bowen led the formation of a **multi-agency partnership** between local authority policy makers, heritage practitioners and Swansea University, to explore the regeneration opportunities offered by the copper heritage of the Lower Swansea Valley (C5). The partnership focused on formulating a history-centred development strategy for the internationally significant Hafod-Morfa copperworks, on a 12.5 acre site at the heart of Swansea's former smelting district. A **formal fifteen-year collaboration agreement** between Swansea University and the City and County of Swansea was reached in 2012. In August, on behalf of the partnership, Swansea University secured **regeneration grant income** totalling £738,072, including a Cadw-Welsh Government Heritage Tourist Project funding package of £541,072 (C6). This package included contributions from the European Regional Development Fund (£243,450), Cadw-Welsh Government (£127,622), Swansea Area Regeneration Board (£150,000), and the City and County of Swansea (£20,000) (C7). In early 2013 the Minister for Housing, Regeneration, and Heritage approved two applications for supplementary funding amounting to £197,000 made to the Welsh Government's Swansea Regeneration Board. The securing of these finances enabled Bowen to lead the third phase of the project – the development of the historic site itself.

3. Preservation and Presentation of Industrial Heritage

The original Hafod works was built in 1810. By the 1980s the site lay abandoned and derelict, but crucially it contained 12 listed industrial buildings and structures adjacent to the River Tawe, albeit overgrown with vegetation, inaccessible and unsafe. By September 2013, £345,587 had been spent on capital works to secure the historic structures on the site and to facilitate visitor access. At

Impact case study (REF3b)

all stages, the research insights of Bowen and Miskell have informed this process. By September 2013 the main developments were:

- i. Securing the surviving Morfa Works Laboratory building as a symbol of the importance of scientific innovation on the copper smelting site. Work was undertaken to underpin the structure and reconstruct the north-east elevation (C8).
- ii. Consolidation work to the Vivian Engine Sheds including vegetation clearance, security and scaffolding support to preserve this key feature of the Vivian family's development of an integrated copper smelting business on the site. (C9)
- iii. Path construction to provide public access to the riverside. Some 577msq of macadam pathway and 300msq of resurfaced existing pathway has been completed and plans for the development of the waterfront copper wharf emphasise the importance of the River Tawe as the gateway to the industry's overseas markets. (C10).
- iv. Commissioning and design of artwork and ornamental railings to provide an entrance feature for the site, involving local school children, and with historically accurate depictions of copper workers and their tools. (C11)

This work has transformed what was a dangerous and unwelcoming place into an attractive destination. With a new car park with accommodation for ten cars and bicycle parking, the site is now easily accessible to visitors, providing **a stimulus to tourism** in a previously overlooked part of the city. The project has received widespread acclaim. Cadw's Head of Regeneration and Conservation stated in March 2011 that *'Plans for the Hafod Copperworks in Swansea are a very good example ... [of] how heritage can work in creating sustainable places for the future'* (C12). In April 2012 the local Labour Party manifesto highlighted the strategic importance of the project, stating that *'Swansea Labour applauds those, such as Swansea University, which work to celebrate our city's heritage, particularly the Welsh Copper project'* (C13). The Minister publicly acknowledged the beneficial impact that the project is already having when he stated that *'I am delighted that Welsh Government Regeneration Area funding is being put to such good use to benefit so many people and improve the city, which will in turn boost the local economy'* (see C8).

5. Sources to corroborate the impact

- (C1) Research Councils UK Report, *Big Ideas for the Future*, (June 2011), p. 73.
- (C2) <http://.goskar.co.uk/copperday> (Google Analytics report, 8 August 2013).
- (C3) Visitor figures supplied by National Waterfront Museum, Swansea (23/11/11).
- (C4) www.welshcopper.org.uk (Google Analytics report, 8 August 2013).
- (C5) Announcement of partnership agreement at <http://www.bbc.co.uk/news/uk-wales-south-west-wales-12241228>
- (C6) <http://www.thisissouthwales.co.uk/Swansea-regeneration-projects-receive-pound-500/story-18167163-detail/story.html#axzz2LGFuJl9m>
- (C7) Funding award letters, 1 August 2012.
- (C8) <http://www.swansea.gov.uk/index.cfm?articleid=54793>
- (C9) <http://www.flickr.com/photos/97373278@N07/sets/>
- (C10) <http://www.wales.groundwork.org.uk/bridgend--neath-port-talbot/what-we-do/hafod--morfa-copperworks.aspx>
- (C11) <https://www.dropbox.com/s/poh0tp18p4pz3n7/hafod.jpg>
- (C12) <http://www.walesonline.co.uk/news/wales-news/cadw-believes-studying-towns-history-1849336>
- (C13) http://www.welshlabour.org.uk/uploads/Swansea_Labour_Manifesto_2012_webver.pdf