

WALES IN THE INDUSTRIAL & MODERN PERIOD (post 1750)

Introduction

The Industrial and Modern period (post-1750) in Wales is the country we inhabit today. In this time-frame, an agricultural and pastoral society evolves to become a leading industrial export economy, supplying not only iron and copper products, coal, tinsplate, lead, granite and slate to world-markets and to an imperial polity, but also labour and know-how, as Welsh émigrés took their skills with them to the USA, to Russia and elsewhere. Wales ceases to be a receptor-culture and becomes an initiator-culture in the Industrial and Modern period. At the same time, strong cultural continuities are also apparent, in the growing strength of the Welsh language and in the vitality of small rural communities. For these reasons, the period offers strong narratives of innovation and renewal, of transformation and social conflict, which inform the contemporary sense of Welsh identity.

RELEVANT RECENT RESEARCH IN THE LAST FIVE YEARS

Active research is being undertaken in a number of areas. These include industrial-era site types such as canals (Llangollen and Swansea), early (pre-1850) railways, the slate industry, copper-mining and processing, and in Wales' international trading links in industrial materials and products. There is also a considerable amount of research currently being undertaken into the buildings of Wales, including chapels, urban townscapes, vernacular dwellings, and to some extent on industrial and institutional buildings, through individual study, the Pevsner series and urban characterisation process,

HOW DOES THIS TIE IN WITH THE RESEARCH FRAMEWORK PRIORITIES?

Much of the research currently undertaken specifically addresses the priorities identified in 2007, with its strong emphasis on the industrial and the innovative aspects of the period 1750 onwards – new technologies of production and transport, and new types of religious and social organisation.

In summary, already-identified priorities include assessment of:

- The significance of technical change in, and the scale, landscape impact and survival (including below-ground archaeology) of, the major industries of coal, iron, copper, tin, lead and slate; their context and significance in terms of similar sites elsewhere in the world; their relationship with the markets they served
- The extent to which some industrial sites might have origins predating 1750

- The significance of military and defensive sites
- The erosion or survival of local and regional characteristics in domestic building from the later eighteenth century onwards; the varieties of planned and unplanned settlement; evidence for migration and social diversity in housing stock
- The extent to which the proliferation of social infrastructure and communal institutions such as chapels, churches, institutes is a distinctive feature of the period and in what ways these structures might be distinctive to Wales
- The significance, form and archaeological survival of transport corridors – turnpikes, government-sponsored roads, canals, railways – in terms of their engineering, the industries they served and the settlements they sustained; their context and significance in terms of similar sites elsewhere in the world
- The significance, form and archaeological survival of major dock systems; their context and significance in terms of similar sites elsewhere in the world

RELEVANT RECENT LITERATURE

Judith Alfrey, 'The language of its builders: stone in the vernacular of rural Wales during the nineteenth century', *Vernacular Architecture* 37 (2006), 54-60.

- 'The Habitations of wretchedness? Clom Buildings in Wales', *Vernacular Architecture* 39 (2008), 71-7.

Cadw, Understanding Urban Character (Aberdare, Caernarfon Waterfront, Denbigh, Dolgellau, Flint)

Huw Edwards: *Capeli Llanelli: Our Rich Heritage* (Carmarthenshire CC, 2009).

Susan Fielding: 'Recording the Structures of the Llangollen Canal', *Patrimoine de l'Industrie: ressources, pratiques* 18 (2008).

David Gwyn: *Gwynedd: Inheriting a Revolution: The Archaeology of Industrialisation in north-west Wales* (Phillimore, 2006).

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- "'What passes and endures": the Early Railway in Wales', *Transactions of the Fourth Early Railways Conference* (2010).

Industrial and Modern

- "'Best adapted to the general carriage": railways of the Llangollen canal, their history and archaeology', *Patrimoine de l'Industrie: ressources, pratiques* 18 (2008).

Richard Haslam, Julian Orbach, Adam Voelcker: *The Buildings of Wales: Gwynedd* (Yale, 2009).

Stephen Hughes: *Copperopolis: Landscapes of the early industrial period in Swansea* (revised ed., 2005).

- Thomas Thomas, 1817-88: the first national architect of Wales (Arch. Camb./RCAHMW, 2006).

- 'The International Canal Monuments Study: part of the Global Strategy for a balanced World Heritage List', *Patrimoine de l'Industrie: ressources, pratiques* 18 (2008).

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- 'Conclusions of the Pontcysyllte Conference', *Patrimoine de l'Industrie: ressources, pratiques* 18, 107-20 (2008).

- 'Social archaeology: a possible methodology of the study of workers' settlements based on the 18th- and 19th-century copper industry of Swansea', in *The Archaeology of Industrialization*, in Barker and Cranstone (Ed.), Maney: 2004, 137-54.

- 'Institutional buildings in worker settlements', *Industrial Archaeology Review*, 26 / *Understanding the Workplace*: (2005), 153-61.

- 'The Characteristics of Extractive and Smelting Landscapes of the Industrial Revolution at Swansea and Blaenavon', *Landscape History*, 30.1, (2009), 1-30.

Alan Vernon Jones: *The Chapels of the Cynon Valley* (Cynon Valley History Society: 2004).

Gwynfor Pierce Jones and David Longley: 'A Slate Saw Table at Twll Coed Slate Quarry in the Nantlle Valley, Gwynedd', *Industrial Archaeology Review* 31 2 (2009).

Nigel Jones, Mark Walters and Pat Frost: *Mountains and Orefields: metal mining landscapes of mid and north-east Wales* (CBA Research Report 142, 2004).

Stephen K. Jones: *Brunel in South Wales, Vol. 1, Trevithick's Tracks* (Tempus: 2005).

- *Brunel in South Wales, Vol. 2, Communications and Coal* (Tempus: 2006).

- *Brunel in South Wales, Vol. 3, Links to Leviathans* (Tempus: 2009).

van Laun, *Industrial Archaeology in Blaenau Gwent* (Blaenau Gwent, 2008).

- *The Clydach Gorge Industrial Archaeology Trails* (Bloreng, 2009).

Industrial and Modern

Thomas Lloyd, Julian Orbach and Robert Scourfield: *The Buildings of Wales: Carmarthenshire and Ceredigion* (Yale, 2006).

Len Ley: *The Iron Cradle: Ystradgynlais & the Upper Swansea Valley* (Ley, 2005).

Marilyn Palmer and David Gwyn (eds): *Industrial Archaeology Review: Understanding the Workplace: A Research Framework for Industrial Archaeology in Britain* (2005).

John Rodger: 'Blaenavon Industrial Landscape and World Heritage Site Regeneration Benefits', *Patrimoine de l'Industrie: ressources, pratiques* 18 (2008).

Stephen Rowson and Ian L. Wright: *The Glamorganshire and Aberdare Canals: Volume 2, Pontypridd to Cardiff* (Black Dwarf: 2004).

Richard Suggett: *Houses and History in the March of Wales: Radnorshire 1400-1800* (RCAHMW: 2005).

Keith Thomas: *The Civil Engineering Heritage of Wales* (ICE: 2010).

Barrie Trinder: 'The Holyhead Road and the legacy of Thomas Telford', *Patrimoine de l'Industrie: ressources, pratiques* 18 (2008).

- and David Gwyn: "'Images Bold and Thoughts Sublime": the Cultural Landscape of the Llangollen Canal', *Patrimoine de l'Industrie: ressources, pratiques* 18 (2008).

- *Barges & Bargemen: A Social History of the Upper Severn Navigation 1660-1900* (Phillimore, 2005).

Peter Wakelin: *Blaenavon Ironworks and World Heritage Landscape* (Cadw, 2006).

- 'Pontcysyllte Aqueduct and the Influence of British Canals', *Patrimoine de l'Industrie: ressources, pratiques* 18 (2008).

- (ed.): *Pontcysyllte Aqueduct and Canal: Nomination as a World Heritage Site: Nomination Document 2008* (Wrexham CBC and RCAHMW, 2008).

Eurwyn Wiliam: *The Welsh Cottage: Building Traditions of the Rural Poor, 1750-1900* (RCAHMW, 2010).

AMENDMENTS TO THE RESEARCH QUESTIONS; HOW MIGHT THESE PRIORITIES BE ADDRESSED?

The studies identified above have gone some way to addressing the questions posed in 2007, and knowledge of the 'industrial' element of the Industrial and Modern period has been to some extent increased. However, the sheer scale of the archaeological resource, of for instance, the coal industry, makes any sort of conclusive study of Welsh industrialisation a daunting task.

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A number of the studies identified above, particularly of the building stock of Wales, have emphasised that there were both strong continuities with earlier periods and that 'vernacular' building enjoyed a new lease of life in this period (Suggett 2005; Lloyd, Orbach and Scourfield 2006; Haslam, Orbach, Voelcker 2009; William 2010). It has also been argued that industrialisation stimulated new regional styles, and sustained cultural distinctiveness, and that both agriculture and industry should be considered within broader patterns of social change (Gwyn 2006, 2007).

On this basis, it is suggested that whilst the emphasis on the transformative nature of industrialisation in Wales from 1750 onwards must continue to provide a focus the Research Framework as it evolves, it is also important both that other aspects of the social and economic changes of this period and also those aspects of the local character and distinctiveness of Wales that survived alongside what was new be considered.

Local and regional character

The assumption that industrialisation effaces local and regional character, and the counter-suggestion that it may in fact have increased it, both need to be examined. More work is needed to identify regional and local character so that its components are better understood, and effectively sustained.

Settlements and towns

Communal buildings and infrastructure need further study, which should be widened to include evidence of retail. More work is needed to increase an understanding of settlement formation and growth in this modern period, and on the transformations wrought during the nineteenth century on most towns (whether industrial or not)

Housing stock

The organisation of the building industry is crucial to understanding the nature and extent of Wales' housing stock from 1750 onwards. It is clear both that distinctive local and regional styles survived the coming of industrialisation, and also that burgeoning industrial communities developed their own often distinctive regional and local idioms. The range and capacity of locally-based builders, masons and architects needs to be assessed. It would be useful to know more about how building work was organised, who paid for it, who commissioned it, who actually carried out building work, and who it was intended for. There is more work to be done in specific areas relating to twentieth century building, for example to gain a better understanding of the work of public authorities and other public bodies, and of specific building types.

Chapels and Institutional Buildings

Nonconformist chapels contributed to a distinctive Welsh industrial townscape and need further internal recording before most of the original interiors are lost. The intensive architectural recording undertaken by RCAHMW in partnership with *Capel* now needs publication. The substantial stock of Victorian and Edwardian churches, significantly threatened with closure, requires a programme of recording to understand the dynamics of the industrialist- worker relationship. The late great flowering of mechanics and workers institutes merits recording in order to understand the educational and other aspirations of worker communities themselves.

Agriculture

The agricultural sector remained important in Wales and saw many fundamental changes in this period, including enclosure, the development of court-yard farms and even of mechanised 'high farming' in some places. Improved transport links altered much of the character of Welsh agriculture in this period. Study of the many new farm-yards and agricultural buildings of this period must be a high priority.

Horticulture

Horticultural practices should be studied in greater depth. Much knowledge has been lost because a majority of gardens associated with most building types and social classes have been continuously developed. The potential to study and understand historic horticultural contributions to economy and society are much neglected, with virtually no surveys yet made of old allotments and few surveys of old kitchen gardens and commercial nurseries to base serious conclusions upon. It is important to study agricultural cottage, industrial workers' and town house gardens, as these are badly neglected and were fundamental complementary parts of everyday life.

Tourism

Tourism remains largely unconsidered, either in terms of the gentry 'discovery' of Wales from the late 18th century or of the growth in mass-holidaymaking from the 19th. These have left their mark in terms of transport links, distinctive structures and settlements, and are particularly important as the archaeology of what is now Wales' most significant industry.

Recreation

In addition to the question of tourism, the Research Framework should develop strategies to understand the growing importance of organised

recreation in the 19th and 20th centuries, such as swimming pools, football and rugby stadia *etc.*, building on work of the RCAHMW/Swansea University.

CONCLUSIONS

Since 2005, the Research Framework has informed much of the work that has been carried out on industrial sites, transport links and to some extent on industrial settlements, and measures have been put in place (such as by the RCAHMW and the Universities of Swansea and Glamorgan) to ensure that the international dimension of Welsh industrialisation is understood. It is important that these sites continue to be a major focus of archaeological investigation and that they be considered within their appropriate world-wide context.

It is important however that these do not preclude study of other types of environment where change was far less radical, or took a different form, and where traditional/established practices continued. Recent studies have been an important reminder that vernacular traditions were by no means killed off by industrialisation.

WHERE HAS THE RESEARCH FRAMEWORK BEEN USED?

The successful process of nominating the Llangollen canal and its aqueducts for World Heritage status was informed by the Research Framework, as are the studies being undertaken by the RCAHMW, Swansea and Glamorgan universities and the National Waterfront Museum of the copper industry and its transport systems, and by the RCAHMW of the slate industry. The recent nominations to the DCMS for the UK tentative list of potential World Heritage Sites by Gwynedd County Council and of the County Borough Council of Merthyr Tydfil of the slate industry of North Wales and of the Merthyr iron industry respectively were also informed by the Research Framework.

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