

WALES IN THE INDUSTRIAL & MODERN PERIOD (post 1750)

REVIEW OF WORK UNDERTAKEN IN THE LAST FIVE YEARS

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

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.

PRESENT & REVISED PRIORITY LIST

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

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.

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 cottages, 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.

Partially Built Relict and Speculative Sites

Many 'model' industrial complexes were erected purely to induce wealthy speculators, often from outside Wales, to invest large sums of money. These complexes include the Bryndyfi Leadmine in north Ceredigion and the Banwen Ironworks near the top of the Swansea Valley. Other features such as the Gwauncaegurwen, Cribarth and parts of the Brecon Forest early railways in the same area were abandoned before completion. Both categories of site may not be of great economic importance but the evidence they provide from closely dated structures and for constructional techniques is invaluable.

To ensure the awareness and safeguarding of early plans & maps

One area where such recognition is particularly important is in the retrieval and archiving of plans and documents relating to industrial sites, some of which are still working, which were still being destroyed

in large quantities by those who did not understand their value. The RCAHMMW has made particular effort in this area with limited success, both from owners of such collections and sometimes archivists need help in assessing their importance for the Historic Environment Record and the need to add locational information to their cataloguing. One of the earliest and most informative map collections on the period is missing from Wales but is now available online at <http://www.bl.uk/onlinegallery/onlineex/ordsurvdraw/index.html> and should be used by all archaeologists undertaking map regression work for this period (i.e. there were two unpublished sets of 2" to the mile Ordnance Survey Drawings in the first three decades of the nineteenth-century and this is the largely unknown improved and corrected set).

Domestic Homes

A question was also raised concerning the use of the term 'Workers Housing' and how we look at the domestic activity within the home in relation to traditional male/female roles. The evidence for domestic activity needed to introduce the role of the women within Industrial Archaeology, but it needed to be made clear that there was not a case made for separate 'Industrial' and 'Domestic' categorisation but that everything was held together by the central role of the economy.

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 RCAHMMW 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.

However sites of arguable international value such as the Upper Bank Copperworks at Swansea, the Ystalyfera Tinsplate and Ironworks in the upper Swansea Valley, the Dowlais Ironworks mining & water-power field at Merthyr Tydfil and the Ebbw Vale Ironworks may have provided some exemplary archaeological results that can be used as a basis for further research but as potential resources for future international

tourism and more considered long-term research such globally irreplaceable structures are still being lost. It is important that the overall international significance of a site is appraised before any emphasis is prioritised for largely interpretive resources on sites where other features important to the integrity of a complex are either demolished, built-over or largely obscured as has happened at the Ebbw Vale Ironworks. It is important that the overall international significance of a site is appraised before any emphasis is prioritised for largely interpretive resources on sites where other features important to the integrity of a complex are either demolished, built-over or largely obscured as has happened at the Ebbw Vale Ironworks complex.

It is important however that these do star sites of great importance to the international community 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.

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. The slate industry of north-west Wales has importantly now been accepted onto the UK tentative list. However the specialist committee examining the case did recommend that the remains overall of the south Wales iron industry should be the subject of further

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