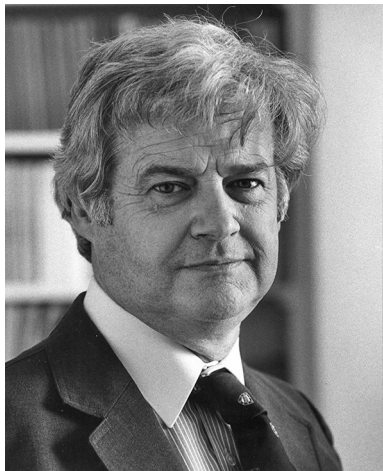


Obituaries

ROBERT GERAINT GRUFFUDD, 1928–2015



Robert Geraint Gruffydd was one of the most notable Welsh scholars of the twentieth century. His notability sprang not only from the wealth and depth of his scholarship but from his personality, the product of a powerful genetic inheritance and a wealth of experience.

Geraint was born in Talybont, Merionethshire at a farm called Egryn, which a century before had been the home of the inventive lexicographer, William Owen Pughe, the father of Aneurin Owen, the editor of the laws of Hywel Dda. Scholarship was in the air. Geraint's father, Moses Gruffydd was a well-known agricultural scientist and advisor and a founder member of Plaid Cymru. He was a man totally dedicated to those things in which he believed, a characteristic which his son inherited. He was a generous patron of Saunders Lewis who subsequently made Geraint his literary executor. Moses Gruffydd moved, when Geraint was seven, to take over the experimental farm of

Pwll Peirian in Cwm Ystwyth. Geraint was educated first at Dyffryn Ardudwy elementary school until 1934, then at Cwmystwyth until 1939 before moving to Ardwyn Grammar School in Aberystwyth. Moses Gruffydd's experience of public school men meant that he realized the value of the social self-confidence which their education gave them. In 1941, Geraint was sent to Gordonstoun which had been evacuated to Llandinam. He benefitted from the emphasis on physical education and became a good sprinter. In a sense this was symbolic, for it was his nature, whether on the running track or in his professional life, to push forward to achieve his aim. His Welshness was not neglected at Gordonstoun for he had lessons in Welsh from the vicar of Llandinam and in 1945, Geraint went as a student to the University College of North Wales, Bangor where he achieved a first class degree in Welsh. There, Geraint met his dedicated and delightful wife, Luned Roberts, was converted to evangelical Christianity and became an active producer of evangelical writing in Welsh.

From Bangor, Geraint moved to Jesus College Oxford where he completed a thesis under Sir Idris Foster who had a great influence on him. The topic of his thesis was 'Religious Prose from the beginning of the reign of Elizabeth to the Restoration', a subject he worked on intermittently for the rest of his life. He took one of the stars of the period, John Davies, alias Siôn Dafydd Rhys, as the topic of his Presidential address to the Cambrians in 1993. After Oxford, Geraint worked for two years on the University of Wales *Geiriadur Prifysgol Cymru – A Dictionary of the Welsh Language* as an assistant editor. This experience gave him a further acquaintance with Welsh texts both in print and in manuscript. After the two years, he was appointed to a lectureship at his old College at Bangor teaching early modern Welsh literature where he produced a crop of research students. Geraint remained there until 1970 when he was appointed to the Chair of Welsh at Aberystwyth. There he succeeded Professor Thomas Jones who had taught Early Welsh Poetry and Geraint took over this role. Stimulus in this field was provided by Professor Foster who with Dr Rachel Bromwich was organizing seminars every term to study the poetry of Aneurin. Some of the fruits of the seminar were published in *Astudiaethau ar yr Hengerdd* to which Geraint contributed an important

essay. Other essays on the same period followed. At Aberystwyth he reorganized the Department timetable and gathered around him a group of brilliant students which included Professors Christine James, Marged Haycock and Dafydd Johnston. In 1979, Geraint became National Librarian. Reorganisation was once again his theme in the National Library of Wales. This capacity for organizing as well as the breadth of his scholarship led in 1985 to his being appointed the first Director of the Centre for Advanced Welsh and Celtic Studies at Aberystwyth.

There had long been a movement to create a Centre for Advanced Studies for Celtic and in 1985 money was provided by the Arts and Humanities Research Council (AHRC) to finance a team of workers. The subject chosen for the first project was the work of the Poets of the Princes or *Gogynfeirdd*, that is the poetry sung to the princes of Wales between 1100 and 1282. Because of its formulaic and cryptic nature, editing this poetry was no small task. In addition to Geraint, a team of four was appointed to undertake the work. The University College provided accommodation and little else. Funds were scarce.

Geraint was resolved from the first that the Centre was to have an international reputation. Fortnightly seminars and three fora a year were held with lectures by invited speakers on subjects pertaining to all the Celtic languages. Young staff were sent to give papers abroad. Bonds were formed with Celtic establishments elsewhere such as the Dublin Institute. Looking back on the period, Geraint's achievements are incredible. The future of the Centre was ensured when salvation came in the form of a generous legacy from Dr Elwyn Davies. Geraint oversaw the erection of a new building to house the Centre beside the National Library. Other projects were begun: the AHRC funding went to a project on the 'History of the Welsh Language', under Professor Geraint Jenkins, and funds were found to continue the poetry project into another era, the era of the *Cywyddwyr*.

The volumes the Canolfan produced will be an eternal testimony to Geraint's vision, scholarship and organization, but he was active in other fields. He was awarded the Medal of the Cymmrodorion, was a power in the Welsh Academy, became a Fellow both of the British Academy and an Honorary Fellow of Jesus College Oxford, not to mention being President of the Cambrians. He lectured in many lands, bringing back with him to Aberystwyth scholars such as Dr Alexander Falileyev from post-Glasnost Russia and Professor John Koch from America. Geraint had intellect, energy, vision, great humour but most of all he possessed a very great humanity which enabled him to see the needs of others and respond to them in accordance with his very deep Christian convictions. His wife, Luned, and children, Siân, Rhun and Pys, survive him.

MORFYDD OWEN

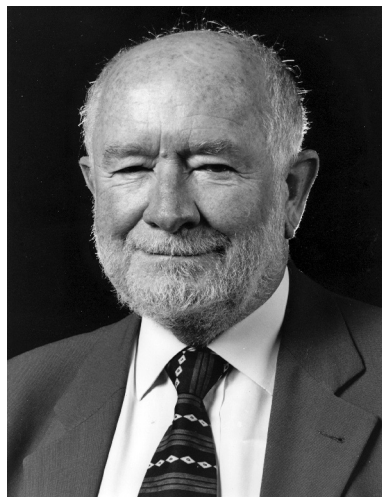
GEOFFREY J. WAINWRIGHT, 1937–2017

Geoff Wainwright, despite spending most of his working life in England, was a Welshman to his core. Born and educated in Wales, his first and his last excavations were in Wales and he was a Cambrian of long standing, serving as our President in 2002–03. He was an outstanding figure in British archaeology, pushing forward archaeological understanding and techniques through his many excavations, but also working to shape the organisation of professional archaeology throughout the UK and internationally.

He was born in Angle in west Wales and was educated at Pembroke Dock Grammar School. His family was not affluent—his father a miner, his mother a teacher—which perhaps bequeathed to him his leftward political leanings, his no-nonsense but kindly approach to life and his abiding love for Pembrokeshire. He studied archaeology at University College Cardiff and his first excavation, undertaken in his student years, was at Freshwater West, a Mesolithic site in Pembrokeshire. He later was to excavate further Welsh sites, an Iron Age enclosure at Coygan Camp in Carmarthenshire in 1963–65 (published by this society as a special volume in 1967) and Walesland Rath in Pembrokeshire in 1967–68, both sites threatened with destruction.

After graduating and completing his doctorate on the Mesolithic in south-west Wales at the London Institute of Archaeology under our past President Professor Grimes, he went to Gujarat in India as visiting professor at the new department of archaeology at the University of Baroda. He then returned to the UK to join the Inspectorate of Ancient Monuments in the Ministry of Works firstly as a field archaeologist, then as head of the newly-formed Central Excavation Unit and subsequently as Inspector for the south-west of England. It was there that I met him, a formidable presence in the adjacent room to my own; crossing Geoff was not something to be undertaken lightly as one swiftly learnt. But when as a junior Inspector I had done something ill-considered or naïve, a swift way back into favour was to embark on a discussion about the Welsh team's success, or otherwise, on the rugby field. He later rose to be Principal Inspector and then Chief Archaeologist for English Heritage. His excavations at Durrington Walls in Wiltshire, Gussage All Saints, Dorset, Shaugh Moor in Devon and more recently at Stonehenge, are perhaps the most celebrated of his numerous archaeological investigations. His work in championing the improvement of services and landscapes at Stonehenge helped towards the startling transformation in the previously rather gloomy surroundings of that iconic site and his work continues even now as we debate the proposed tunnelling of the A303.

Away from his beloved fieldwork, Geoff was highly influential in more administrative roles. He contributed to the pioneering English Planning Policy Guidance in 1990 that introduced the concept of developer-funded excavation, eventually adopted in Wales too, and his establishment of the professional rescue archaeological unit system in England revolutionised methods of archaeological response to development throughout the UK. As the English head of profession, Geoff would meet counterparts David Breeze in Scotland and Richard Avent in Wales for periodic liaison meetings and was always ready to agree, albeit with a slight degree of irritation, that the Welsh system of the four archaeological trusts was a highly successful alternative; indeed, he had been known to start a presentation in Wales with a firm declaration that he did not want to hear any more about how wonderful the Welsh system was.



After retirement, Geoff moved back to Wales, though remaining a force to be reckoned with in UK archaeology serving, among other voluntary positions, as President of the Society of Antiquaries of London and Vice Chairman of the Royal Commission on Ancient and Historical Monuments in Wales. He was fascinated with the connection between Stonehenge and the Preseli bluestones as shown by his Presidential Address to the Cambrians, published in our journal for 2005, that described his excavations and survey work with the Strumble–Preseli Ancient Communities and Environment Study. Never one to shirk a challenge, he entered the controversy over the meaning and transport of the bluestones, adding a new dimension in suggesting that they had a healing function that was highly prized by prehistoric man. His appetite for archaeological fieldwork and research remained undimmed through his last illness and within the last few years he had risen to the challenge of jointly authoring the Neolithic and Bronze Age section in Volume I of the *Pembrokeshire County History* (2016), allowing the publication of that much anticipated volume, continued to work on the Preselis and lecture widely, including at the Pembrokeshire Archaeology Day Schools, as well as becoming a fount of knowledge on the challenges of growing vegetables and the delights of Welsh beers. Brusque occasionally he may have been, but there was a humour and loyalty to his friends that never failed. He was one of the archaeological greats and the Cambrian Archaeological Association and the subjects it champions are much the poorer for his passing.

SIAN REES

SPRING MEETING, 2016

Historic woodland and parkland in Wales

The Cambrian's Easter Conference on 'Historic woodland and parkland in Wales' was organized by Dr Sian Rees and held between Friday 15 April and Sunday 17 April 2016 and based at the Beaufort Arms in Raglan. Forty-one people attended the conference, which included some members of Monmouthshire Antiquarian Association and the Welsh Historic Gardens Trust. Guides and speakers included Professor David Austin, Dr Stephen Briggs, Stephanie Evans, Lisa Fiddes, Prue Keely, Paula Keen, Pat Neil, Ken Murphy, Rob Thomas, and Dr Elizabeth Whittle.

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2016 was the tercentenary of the birth of the well-known landscape designer Lancelot 'Capability' Brown and accordingly, despite Brown himself having undertaken little direct work in Wales, the Cambrians contributed towards the UK-wide celebrations with this conference.

FRIDAY 15 APRIL

Members gathered at the Beaufort Arms in Raglan on 15 April and after lunch set off to visit nearby **Raglan Castle** where Liz Whittle, who has written extensively on her research work on the landscaped grounds, described the nature of the elaborate water gardens created below the castle by William Somerset around 1560. Members examined the shell alcoves created in the original moat wall and then went down to the terraces which overlooked the lake and the site of the complex 'knot garden' of small canals at its

upper end. From this formal Renaissance garden, members drove to **Clytha Park**, Monmouthshire—the epitome of the picturesque and romantic approach. The ‘Castle’ is little more than a façade: the focus of the view from Clytha House but it is also the stage from which the parkland can be admired. Sadly, many of the great trees in this park are reaching the end of their natural life and looking ‘venerable’ rather than inspiring. This emphasised the never-ending need for management of living landscapes, a topic which would be discussed the following day.

In the evening, after dinner, Professor David Austin, President of the Cambrian Archaeological Association, spoke about the concept of exclusivity in land use and enjoyment, from later prehistory (when boundaries first appear in the landscape) through to the early modern period when concepts of property and individual ownership lead to the present impression of ‘enjoyment for the elite’ which hangs over the term ‘parkland’.

SATURDAY 16 APRIL

On the following morning Paula Keen of the Woodland Trust spoke about woodland management and the importance of ‘ancient woodland’. In Wales the south-east has the highest proportion of surviving ancient woodland (and Wentwood Forest is the best recorded), despite the nineteenth-century pressure to grow conifers for pit props.

Liz Whittle then spoke on the evolution of parkland in Wales, illustrating her talk with examples of medieval deer parks. Known from the thirteenth century, they were essential woodland pasture and may be recognised by enclosure with a bank or wall with inner ditch and internal division for deer management. Several have lodges. They are a feature of large estates, both lay and monastic, and increasingly became a symbol of status rather than part of the agricultural economy.

Prue Keely described her recent research into William Emes (1729–1803), the designer of park and pleasure gardens, at least twelve of which were in Wales. Having worked on four estates for the Clive family, he then moved to Gregynog, Erddig, Chirk and Penrice. At Erddig, near Wrexham, where the archive of his plans is complete, we can understand how he devised the celebrated Cup and Saucer water feature as a brilliant answer to flooding problems. He was renowned for his technical ability with water, creating elegant and naturalistic lakes along with his planting of flowering trees, creating fine views through them.

Ken Murphy spoke of the surveys and archaeological analysis by the Dyfed Archaeological Trust at three notable created landscapes in south Wales, Hafod, Penllergare and Piercefield. Cambrians were entranced by his description of Piercefield, near Chepstow, which we were to visit later that day. The oldest of the three and most radically changed, it is now badly overgrown though a series of walks had recently improved accessibility. Hafod, Ceredigion, one of Wales’ most famous picturesque landscape, had been more subtly changed by its designer. Penllergare, near Swansea, was the product of industrial wealth.

Stephen Briggs described his discovery and study of the house and its parkland and formal garden at Gwernynyfed near Talgarth. A deer park was established in the medieval period, after which a Renaissance house and formal garden was established. It was probably due to its early abandonment that resulted in the unusual survival of the garden earthworks.

The Saturday afternoon was taken up with a trip to the sublime eighteenth-century landscape at **Piercefield**, where we walked through the woodland to the Eagle’s Nest viewpoint to look down over the meanders of the river Wye, a small sample of the six miles of picturesque walks available there.

The party then went to **Tredegar House**, near Newport, now owned by the National Trust, where Stephanie Evans took us around the garden and explained plans for restoration work which she spoke



Conference members at the spectacular Eagle's Nest viewpoint at Wyndcliff on the Piercefield Estate near Chepstow, with its distance views of the river Wye. *Photograph: Heather James.*

about in more detail on Sunday morning. The afternoon ended with a splendid tea in Raglan at the home of Sian Rees.

After dinner Stephen Briggs spoke again, about methods of researching parkland landscapes by use of paintings, map regression and newspaper accounts. He used as a case study, work at Newton House, Dinefwr, where four early paintings show plans of early garden layout.

SUNDAY 17 APRIL

On Sunday morning Rob Thomas of the National Botanic Garden of Wales and David Austin spoke of their historical survey work to inform the restoration of the designed landscape at Middleton Hall near Llanarthney, Carmarthenshire, now the National Botanic Garden. The estate had originally belonged to the Middletons of Chirk but the main developments were made in 1789–1825 by William Paxton, another wealthy nabob. They were followed by Stephanie Evans, who expanded upon her fascinating tour of Tredegar the day before with a description of the history of the parkland and the Morgan family, whose fluctuating family fortunes were the key to changes in the estate.

Lisa Fiddes of Cadw then turned the discussion from private to public parks, with a special emphasis on Roath Park in Cardiff. These were the product of the Victorian interest in good works and public health. Sometimes originating from private gardens, they often contained exotic plants and large greenhouses, with leisure and sports facilities added later. Many are now sadly suffering from a lack of maintenance.

The final lecture of the Easter Conference was by Pat Neil of the Friends of Pembrey Court, Carmarthenshire, on their fight to preserve and restore the house and garden, first recorded in the twelfth century, abandoned and therefore saved from modernisation in 1677, tenanted until 1948 when it was threatened with demolition, and finally sold for £1 in 2010. She thanked the Cambrian Archaeological Association for a grant towards a geophysical survey of the garden area.

SIAN REES

THE 163RD SUMMER MEETING

Vale of Clwyd, 2016

The 163rd Summer Meeting, held between Monday 4 July and Saturday 9 July 2016, was based in Ruthin. Some of the party of 44 stayed at the Goodman House, formerly the Anchor Inn, renovated by Ruthin Grammar School for their sixth-form students, and the remainder at the Castle Hotel. Transport was by M & H Coaches of Trefnant, who have an intimate knowledge of the Vale. The meeting was organized by Frances Lynch who would like to thank our many speakers, guides, hosts and contributors, including the following: Amanda Brewer, Emma Bunbury, Lady Carys Davies, Will Davies, Fiona Gale, Ian Grant, Graeme Guilbert, Chris Jones-Jenkins, Eirian Jones, Linda Jones, Dr John Kenyon, Emeritus Professor Prys Morgan, Mr and Mrs Peter Neumark, Dr Rachel Pope, Dr Sian Rees, Frances Taylor, Peter Welford, Canon Pauline Walker, and Professor Howard Williams.

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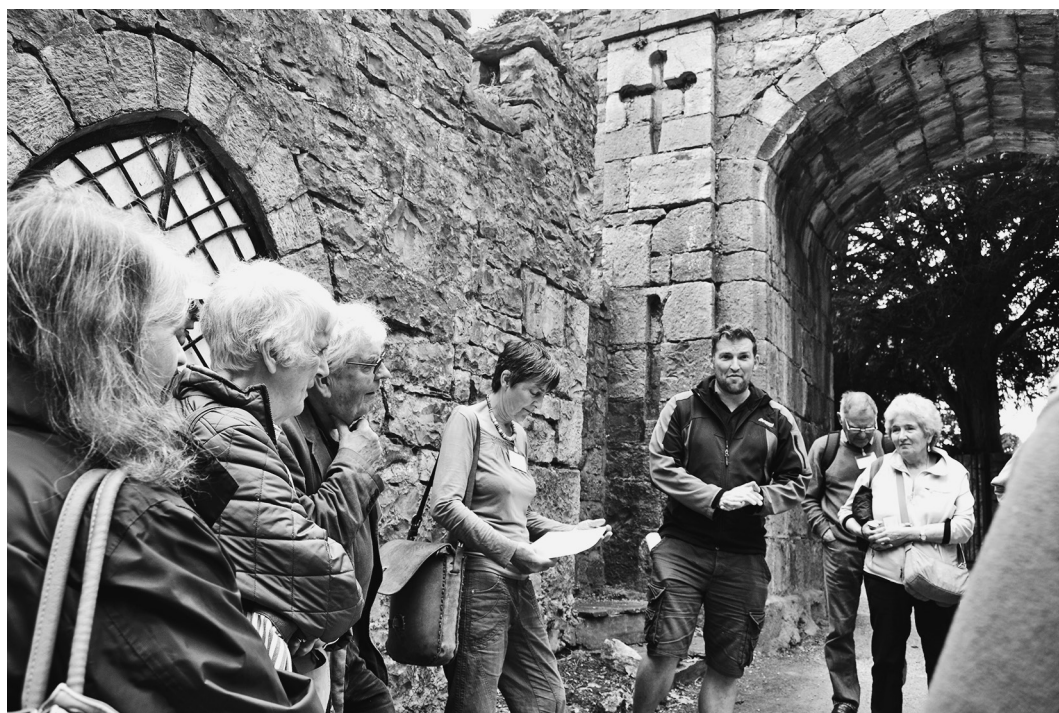
MONDAY 4 JULY

Throughout the morning of 4 July Cambrians were arriving in the town. At 2pm everyone went across to **Ruthin Gaol** and the meeting proper began with an introductory talk by Emma Bunbury and a tour of the building. The old County Gaol was built in 1775 and was a response to John Howard's pressure for reform of the prison system. It was extended to the rear in 1803 and an additional separate cell block was built in 1867. It ceased to be a gaol in 1916 but a number of original features remain and the cells are furnished and contain displays relating to crime and punishment and the social history of nineteenth-century Ruthin.

Leaving the gaol, the party walked up to the castle via the **Town Mill**, a successor to the thirteenth-century mill belonging to the castle. The large millpond behind it was fed from a long leat which cut off a meander of the Clwyd. In the nineteenth century the flat land within the meander was the site of a large bottling plant for mineral water from local artesian wells. This had royal patronage from the Prince of Wales who was a close friend of Mrs Cornwallis-West, the owner of the castle.

Emerging at the top of the ridge the party was met at **Ruthin Castle** by Will Davies of Cadw, who has been researching the surviving medieval elements of castle to inform a major conservation effort which is to be organised by the newly formed Ruthin Castle Trust, whose Development Officer, Amanda Brewer was also there to welcome us at the almost buried East Gate. The cantref of Dyffryn Clwyd was held in thirteenth century by Dafydd ap Gruffydd, brother of Llywelyn (the Last), who was an ally of Edward I when the building of the castle began in 1277, although it is unclear how far these works progressed. When he rebelled against the king in 1282 the castle was regained for the Crown by Reginald

de Grey and building work resumed. The de Greys were given Dyffryn Clwyd as a marcher lordship and were probably responsible for most of the surviving visible fabric. The de Greys' quarrel with Owain Glyndŵr precipitated his rebellion in 1400, when he attacked the castle and town. Ruthin was held for the king in the Civil War and slighted following a protracted siege, after which it was used as a quarry. Its original plan is obscured now by a succession of nineteenth-century castellated houses built over its southern end, firstly 1826 by Miss Harriet Myddelton, one of three sisters who inherited this part of the huge Myddelton estate in 1797. Of her house, the irregularly planned neo-Tudor limestone ranges in the upper bailey survive, including a covered passage crossing the central ditch. She left Ruthin to her younger sister who had married Richard West. The house was remodelled in 1848–53 under the auspices of the eminent Gothic Revival architect Henry Clutton, with some interiors by his protégé, a young William Burges. This work saw Harriet Myddelton's ranges in the smaller lower ward swept away for the towering Gothic sandstone block that dominates views of the castle today, with its tall octagonal tower and imposing entrance front. The Cornwallis-West family lived here until 1919, when the castle was eventually sold to a Scottish doctor who ran a fashionable private clinic there until 1962, when it became a hotel. The medieval castle was an elongated pentagon of two baileys separated by a massive rock-cut ditch, the larger, upper bailey in red sandstone and the lower in white limestone. Visible today are the remains of a huge and complex Edwardian twin-towered gatehouse, parts of up to five large corner



On the afternoon of Monday 4 July the Cambrians were met at Ruthin Castle by Will Davies of Cadw and Amanda Brewer, Development Officer of the newly formed Ruthin Castle Trust, who between them described the surviving medieval elements of castle and the major conservation project which is planned. *Photograph: Marie-Thérèse Castay.*

towers, a cleverly contrived sally port leading from the upper ward to the ditch and a lower gatehouse within the central ditch defended by a unique corbelled turret above. Whilst the surviving curtain walls and towers stand up to 10 metres high to the exterior, most of the visible medieval walls have been buried internally by landscaping for the gardens. Will Davies described to the Cambrians the many hours he had spent crawling down the nineteenth-century drains in order to record the medieval walls through which they had been cut. The party toured the curtain walls and towers and went round the outside to admire the surviving height of the walls from the lower slopes. Sadly, a torrential shower—the worst rain of the week—curtailed this tour and also dampened the enthusiasm for noting the attractive details of the houses in Castle Street and the Market Square as we sought shelter the church at the north end of the ridge on which the medieval town was built.

At **St Peter's Church** we were welcomed by the sexton who showed us all the features of interest, allowed us into the vestry to look at the earliest monuments and, as the skies had cleared, directed us around the buildings of the church close and allowed us into the remains of the fourteenth-century Augustinian college which today comprises a mixture of medieval vaulting and Regency windows and staircases. The church was begun by the de Greys in about 1282 as a simple chapel, but was re-established in 1310 as a collegiate parish church served by Augustinian 'Bonhommes' who lived a semi-monastic life in the contemporary (but now much altered) domestic buildings abutting the north side. The church originally had a simple nave without aisles, with a chancel and central tower. The south aisle was added in about 1350 but its chancel was demolished in 1663. The north nave roof is exceptionally elaborate, as are so many in this region. The church was extensively restored in 1854–59 by the Welsh architect Richard Kyrke Penson, who added the spire, but some seventeenth-century furnishings remain. There are some notable monuments in the church, of which fragments of two fourteenth-century effigies are the earliest. The most important person commemorated is Dr Gabriel Goodman, Dean of Westminster, who was a generous benefactor to his home town. Dean Goodman refounded the monastic school in 1574 as a grammar school and in 1590 he founded Christ's Hospital, an almshouse for a warden and twelve poor persons in the collegiate buildings which he had purchased. The vicar of Ruthin is ex officio warden of the almshouse and the title remains today. The eighteenth-century school buildings and the headmaster's house remain in the churchyard close but the school itself, which still flourishes, moved out in 1891 into the fine building by the architect John Douglas of Chester, sited on the road to Mold. There are three elegant monuments carved by Robert Wynne, a native of Ruthin. The earliest (1673) is to a later Gabriel Goodman (the Dean Goodman's family remained an important one in Ruthin), another is to Roger Mostyn, and the latest (1725) commemorates his own brother, John Wynn. There are brasses (c. 1560–80) to the Dean's parents, Edward and Ciselye Goodman. The wrought-iron churchyard gates of 1727 are by Robert Davies of Wrexham and are now illuminated in an installation of changing colours.

After leaving the church (and for some finding dry clothes!) the party reassembled at **Nant Clywd y Dre** (Nantclwyd House). Mr Phil Ebbrell unfortunately could not be with us as anticipated, but the house is now a self-guiding museum in which the 'Seven Ages' of the house are shown in rooms furnished to display changing aspects of the lifestyle of its occupants. The cruck-framed hall surviving in the centre of this much altered building is dated to 1435. It sits on what was probably a double burgess plot set out in the thirteenth century with a frontage on the main street. The hall marks a restoration after the Glyndŵr rebellion when the town was badly damaged. The house had several wealthy owners, notably Eubule Thelwell who added the distinctive porch and Renaissance study above. It became a school in the nineteenth century and in the twentieth century it was owned by two architects who began the restoration programme which was continued by Clwyd County Council which acquired the building in 1984.

The day ended with a return to the Castle Hotel, itself a fine eighteenth-century house, recently well-renovated by its current owners, for dinner.

TUESDAY 5 JULY

At 9am on Tuesday the Cambrians travelled to **Rhuddlan**, a town with a remarkable history which extends from the early Mesolithic to the present day, probably due to the presence of a sand ridge which forms one of the best crossings of the Clwyd marshes and river.

Professor Howard Williams of Chester University met the party at **Twt Hill**, the Norman motte standing high above the river. Professor Williams spoke briefly about the excavations in the late 1960s and early 1970s, led by Henrietta Quinnell, which had revealed late prehistoric occupation of this area, outside the Edwardian borough but central to both the Norman defences and the Saxon burg of the tenth century. He then spoke more fully of the historical records of these settlements which demonstrate the importance of this river crossing in the power struggles between the early Welsh kingdoms and Mercia. The Saxon town appears to have been short-lived, but three characteristic sunken huts were found in excavations around the school to the east of Twt Hill and it has been argued that a bank and ditch enclosing a large area of ground up to the A5151 road defines its perimeter. Others have argued that it is unlikely to have been much larger than the Norman town, whose ditch has been found near Abbey Road. However, the notable cluster of crosses in this region showing Saxon, Viking and Irish influence, reveals a strong cultural connection with Mercia over quite a long time. The large motte of Robert of Rhuddlan still stands, and in fact the party was standing on it. It survived as an earth-and-timber castle



Dr John Kenyon spoke to the Cambrians at Rhuddlan Castle, emphasizing the strategic siting of this Edwardian castle, with its sea and land routes. *Photograph: Marie-Thérèse Castay.*

well into the thirteenth century, changing between Anglo-Normans and Welsh hands several times. It is listed in Domesday Book of 1086 as having 18 burgesses, a church, and a mint. Archbishop Baldwin and Gerald of Wales were entertained there on their tour of Wales in 1188, but only the very scant ruins of the Dominican Friary are visible now.

The party then turned north to walk the few hundred yards to **Rhuddlan Castle** where the President-elect, Dr John Kenyon, spoke about the new military strategies represented by this great stone castle, which emphasizes the importance of both sea and land routes in the siting of the Edwardian castles in north Wales. The river Clwyd had to be canalized so that shipping could access the castle and this work initially involved many hundreds of diggers drawn from many parts of England. The castle had seven entrances, ranging from gatehouses to small posterns. Although much of the curtain wall of the outer ward has been robbed, enough remains to show how it revetted the dry moat on three sides of the castle, and that it had a number of turrets with internal steps that enabled defenders to access the moat under cover. The castle's large defended entrances, each originally with a gate and portcullis, were the west and east twin-towered gatehouses in two corners of the diamond-shaped inner ward. Five of the six towers of the inner ward had four floors each for accommodation, but the south tower had five. The interior has, of course, lost all its timber service buildings. The towers are all linked by a curtain wall standing to the wall-walks, even though the crenellated battlements no longer survive. The castle was begun here in the summer of 1277, soon after work had begun on Flint Castle, and work continued until early 1282, costing almost £10,000. Adjacent to the castle, to the north, was a new town with the classic gridiron street plan and earth and timber defences. Like Flint, the town was damaged in the Glyndŵr uprising in 1400, although the castle held out. Like many other Welsh castles, it was held for the king in the Civil War of the 1640s, but was taken in 1646 and partly demolished two years later.

From the castle the party walked to the **St Mary's** parish church where they were greeted the churchwardens and by a very welcome cup of tea. The parish church was established in the north-west corner of the Edwardian borough in 1300 and was enlarged into a doubled-naved church in the fifteenth century, with a slightly later tower. The church was extensively restored in 1868–70 by the architect Sir Gilbert Scott who worked at nearly every notable church in the region.

For lunch the party went to **Dyserth**, a superficially modern village with a very long history, though some of its features—such as Henry III's castle and the innovative powering of its quarrying and mining industry which declined in the early twentieth century—have now virtually disappeared. The age of the church is also deceptive: it was largely rebuilt by Gilbert Scott in 1870, but the foundation goes back to at least the eleventh century. Professor Williams spoke to the party about the early sculpture it contains, which includes the remains of two eleventh-century crosses which can be seen at the back of the church. One is represented by what is probably a base, and the other by a tall narrow shaft and broken cross-head decorated with interlace very similar to that on the complete cross at Maen Achwyfan near Whitford, Denbighshire. The shape of the crosshead is the same as those on the Penmon crosses, Anglesey. The cross, which originally stood in the churchyard, was first noted in response to Edward Lhuyd's *Parochial Queries* issued in 1696. The base of the cross was found during the restoration of the church in 1873–75. Another similar cross, now lost, is known from Meliden, Denbighshire, and there is a section of a shaft, with rather better carving, from Rhuddlan, but now no longer in the church. Altogether, this is a notable cluster of sculpture in a distinctive style which links the Viking-occupied lands of the Isle of Man and the Wirral with North Wales and Chester. The spectacular east window of the church was also admired. The upper part may belong to 1430 while the lower part, a complex Jesse Window, is said to have been installed in 1530 as the result of a legacy. The seventeenth-century hooded chest tombs in the churchyard were also examined. Hooded tombs are relatively rare but there is a notable cluster of them in north-east Wales where such Renaissance fashions were particularly enthusiastically followed.



The fine fourteenth-century cross in the churchyard of St Michael's Church, Trelawnyd, visited on the afternoon of Tuesday 5 July. *Photographs: Marie-Thérèse Castay.*

At the next stop, the churchyard at **Trelawnyd**, there was another example of such a tomb and also a fourteenth-century churchyard cross. Once very common, only 200 damaged crosses or bases survive now in Wales but Flintshire retains a notable cluster of them of which this is one of the best preserved.

Since there would not be time to climb to the **Gop Cairn**, Frances Lynch spoke about the Gop Cave with its Mesolithic occupation and use for burials in the Neolithic and about the huge limestone cairn which might cover a passage grave like Newgrange in the Boyne Valley (Co. Meath), or was perhaps a more enigmatic monument like the huge 'cenotaph' mounds in Wiltshire such as Silbury Hill. Excavations in the nineteenth century (like the early excavations at Silbury Hill) failed to reveal anything of significance. Both the cave and the cairn could be well seen from the church.

Just outside Trelawnyd the coach stopped for members to look at the slight remains of the **Whitford Dyke**. This dyke, one of several long 'land defining' earthworks along the border of England and Wales is first mentioned in 1278 and, until the 1980s, was generally considered to be part of Offa's Dyke. In Asser's *Life of Alfred*, Offa, the eighth-century king of Mercia, is credited with building the Offa's Dyke and, by and large, radiocarbon dating has confirmed this. However, the higher and more westerly Whitford Dyke is now judged to be a separate boundary running discontinuously along the centre of the Flintshire ridge from just east of Trelawnyd to just north of Babell, a distance of some 9 kilometres. It has a central bank, 2 metres at its highest surviving point and about 8 metres wide, with relatively slight ditches on either side. No dates have been obtained but it is judged to belong to the early medieval period.



Maen Achwyfan, the early medieval cross near Whitford, was visited by the Cambrians on the afternoon of Tuesday 5 July, where Professor Howard Williams spoke about its history and significance. The enigmatic figures on the east side of the monument showed up clearly in the brilliant sunshine and led to a lively debate about the iconography. *Photographs: Marie-Thérèse Castay.*

The next stop was at the great cross, **Maen Achwyfan**, near Whitford. The name suggests a link with Dyserth and the carving is very similar. This is one of the very few crosses still at its original site though unfortunately Richard Mostyn dug quite deeply around it in 1693. The 3.5-metre high cross is intact, though the decoration is worn and weathered. Amongst the plaitwork, frets and interlace there are animal and human figures, including a naked man attacking a serpent, a motif from Viking myth. It was probably erected between AD 925 and 1000. On a most perfect sunny afternoon the weathered decoration was looking very clear which led to a most stimulating and exciting seminar. Although it is clearly a cross, the

iconography seems to be more pagan than Christian. Most of the decoration is abstract patterning, but the narrow east side has enigmatic figures which have defied convincing identification. But on that day, in the brilliant light, Professor Williams received several new suggestions, from Cain and Abel to the Flight into Egypt, which might remedy this imbalance.

Cambrians have several reasons to visit **Whitford Parish Church**, dedicated to both St Mary and St Beuno. It is mentioned in Domesday Book of 1086 and contains a grave marker of the eleventh or twelfth century. The antiquary Thomas Pennant and his artist Moses Griffith, are buried here. The Revd Ellis Davies, author of *Prehistoric and Roman Remains of Denbighshire* (1929) and *Prehistoric and Roman Remains of Flintshire* (1949) was vicar here between 1913–51. He was also joint editor and subsequently sole editor of *Archaeologia Cambrensis* in the years between 1925–48. The church shows little trace of its early foundation but has fine fittings and features of many periods. There are many monuments to the Pennant and Mostyn families, nearby landowners and joint patrons of the church. We were welcomed to the church by Mrs Frances Taylor, one of the churchwardens, and Professor Williams spoke about the early memorials.

On our return to Ruthin we passed through **Caerwys**, noting the gridiron of streets here, laid out in 1290 when Edward I granted a royal charter to this tiny town. It has no town defences since it was a



Dr John Kenyon (right), the incoming President of the Cambrian Archaeological Association, being welcomed by the outgoing President, Professor David Austin, on the evening of Tuesday 5 July. *Photograph: Marie-Thérèse Castay.*

commercial town, but it has a defensible setting on a plateau between two deep valleys. There is evidence of prehistoric and early medieval occupation nearby and there is a tradition that the later court house was on the site of a *llys* of the Welsh princes. If this is true its history is similar to that of Newborough, Anglesey. The town never grew, but the first quasi-national *eisteddfodau* were held in Caerwys in 1523 and 1567/68, organised by the Mostyn family, notably Richard ap Hywel of Mostyn (d. 1539/40).

Later that evening members assembled in **Nant Clywd y Dre** to hear Dr John Kenyon's Presidential Address (published at the front of this volume) in which he reviewed the recent development of castle studies. It was also the occasion of the presentation of the Blodwen Jerman prize for university dissertations. The prize was won by James Exall and the runner up was Mrs Una Tregaskis.

WEDNESDAY 6 JULY

The journeys on the Wednesday were in three minibuses because of the very narrow roads in the Henllan area. But the day began in **Denbigh** where the castle and the town walls were the chief attraction. The party was divided into two, with John Kenyon leading members on the walls while Chris Jones-Jenkins took the others into the castle where he explained a particularly fascinating survey that he had carried out for Cadw on the original plumbing system of the domestic quarters in the multi-storied triple towers



On the morning of Wednesday 6 July the Cambrians were shown around Denbigh Castle by Chris Jones-Jenkins (centre) and the new President, Dr John Kenyon. *Photograph: Marie-Thérèse Castay.*

of the great Gatehouse, and it's even more complex modification. Like Chirk and Ruthin, Denbigh was a lordship castle. It was built on or near the site of a *llys* of the Welsh princes, during the second Welsh war, after King Edward I granted the district to one of his leading commanders, Henry de Lacy, earl of Lincoln. In October 1282 earl and king met, together with Master James of St George, the architect, to discuss the construction of the new castle. The initial phase, from the end of 1282, saw the construction of a large, walled circuit with some D-shaped or half-round towers and gatehouses that formed both the outer wall of the castle and the town defences. That section of the castle that largely sits within the medieval town is very different in style to the initial phase, with massive polygonal towers. Like Caernarfon, Denbigh fell to the Welsh in the uprising of 1294, and this may have been because, again like Caernarfon, the frontage of the castle that faced into the town had not been completed to any great height. So, when the castle was recaptured at the end of 1294, work resumed on the northern and eastern defences. Although the town below the castle was damaged during the Glyndŵr rebellion of the early 1400s, the castle appears to have held out. It again saw military service in the Civil War during the 1640s, when it was held by the Royalists. Unlike many castles, it was not dismantled following its capture, as the castle was used to imprison Royalist supporters. The entrance to the castle is particularly imposing and well defended. It was originally reached via a drawbridge. Then one proceeded through a very heavily defended passage to an octagonal vaulted hall framed by the three towers. There was a further portcullis before you reached the courtyard. The statue above the gateway is probably Edward II (1307–27). It is set on a chequered wall of different coloured sandstone.

Denbigh Town Walls run from the Red Tower, soon meeting the Exchequer Gate, (whose foundations are visible) from where it continues without towers, and largely hidden by houses, to the Burgess Gate, the upper part of which shows the same marvellous chequerboard stonework seen at the castle. The gate originally had a drawbridge, a portcullis, a doorway, murder holes and arrowslits. The eastern section of the town wall is the best preserved. A gate below Leicester's Church leads to a tower at the north-eastern corner, and on to the Countess Tower whence the 1280s wall runs back up to the castle. However, the defences were enlarged to the south after 1294 to create a salient that incorporated an important supply of water, augmenting the well in the castle. The focal point of this stretch is the Goblin Tower in which the well is situated. It was against this section of the town's defences that Parliamentary artillery was directed in 1646 in order to deprive the Royalists of water. Just outside the castle are the remains of two churches. The surviving fourteenth-century tower belonged to **St Hilary's Church**, the garrison and town church, built in 1300 but demolished in 1923. The large roofless church is **Leicester's Church**, begun by Robert Dudley, 1st earl of Leicester in 1578 when he was made governor of the castle (which had by that date reverted to the Crown) but never finished. This is a rare example of a new Elizabethan church and one in a particularly Protestant idiom: a 'preaching church' designed for sermons rather than ritual.

After the tours, the Cambrians explored the market town which had moved beyond its protective walls in the sixteenth century when many of the fine buildings along the market square were built. After lunch the buses delivered the party to Henllan to visit some of the finest sixteenth-century houses of the region and to look at the cliffs of the Elwy Valley, the focus of intense geological debates throughout the nineteenth century.

The first visit was to **Foxhall** where we were greeted by Mrs Linda Jones and her daughter and were joined by Peter Welford who would be our guide to the houses. Foxhall was the home of Humphrey Llwyd after he retired from Oxford in 1563, which we looked at from the outside. The late medieval hall-house survives at its centre but occupation over the centuries has led to many changes. Foxhall Newydd, now a ruin, is a more astonishing building and a supreme example of late sixteenth-century pride before a fall. John Panton, Recorder of Denbigh and chief Secretary to the Lord Keeper, planned a monument to his

success and new-found wealth in his native county. It would have been one of the most ambitious and sophisticated projects of Elizabethan house building in Wales. Only one wing of an H-plan house, begun in 1592, was actually erected, however, and further building stopped after 1608. John Panton died in 1619, having also over-reached himself in other projects, and the house was sold. Wire fencing keeps one out of the rather perilous ruin, but fine plasterwork and date stones can still be seen, and its scale is still overwhelming.

Berain is a fifteenth-century hall-house enlarged and modified in the sixteenth century and later centuries, famous as the home of Catrin of Berain, the much married Tudor lady known as the 'Mother of Wales'. Three minibuses of Cambrians could not all be accommodated at once so the party was divided into two and alternated visits to the house and to the Elwy valley where Frances Lynch described the importance of the excavated caves in the opposite cliffs to the understanding of glaciation and of the earliest human occupation of Wales. Mrs Eirian Jones, the owner, and Peter Welford spoke to the party at Berain. The core of Berain is a large hall, originally open to the roof of which two hammerbeam trusses and the damaged dais beam survive to demonstrate the quality of the original house. That house was enlarged, probably in about 1530, with the building of a separate, but linked, lodging block, like that at Gwydir, of three floors to the south. In the early seventeenth century the open hall was floored over and several new windows were made in the upper walls. In the eighteenth century (perhaps 1736) the east end of the hall was rebuilt in brick for use as a barn. The house was restored in 1924 by



On the afternoon of Wednesday 6 July the party met at Berain, Henllan, where Peter Welford described to the party the history of this fifteenth-century hall-house, enlarged and modified in the sixteenth century. *Photograph: Marie-Thérèse Castay.*

Harold Hughes, a noted Bangor architect and editor of *Archaeologia Cambrensis* between 1926–1940. Catrin of Berain was born about 1535, the only child of Tudur ap Robert Vychan and Jane Velville who was the daughter of Sir Roland de Velville, reputedly an illegitimate son of Henry VII. She had royal connections, therefore, and was the heiress of both Berain and Penymynydd in Anglesey. She was first married *c.* 1562 to John Salusbury eldest son of the powerful Lleweli family. When he died in 1566 she very soon contracted (on the day of the funeral) to marry Sir Richard Clough, a self-made Denbigh man who became a powerful merchant in London and Antwerp. When Sir Richard died in 1572 she married Maurice Wynn of Gwydir and later Edward Thelwall of Plas y Ward. She died in 1591, leaving six children and many descendants.

The south-facing limestone cliffs with many caves above the river Elwy have been noted since the sixteenth century. In scientific circles the two caves at Cefn and those above Pontnewydd became famous in the nineteenth century when many notable geologists and antiquaries visited the area including Richard Fenton, Charles Darwin and Adam Sedgwick, Edward Stanley, Williams Buckland, and Joshua Trimmer. In the 1870s Sir William Boyd Dawkins excavated at Pontnewydd. All these visits fed into seminal debates in the Geological Society of London regarding the nature and effects of glaciations, resolved by Sir Andrew Ramsey in 1860. In the second half of the century debates were still intense, but they centred on the relationship of human bone and stone tools to the animal bone and the dating of the human occupation. The question of dating led to considerable controversy between the excavators at Ffynnon Beuno on the east of the Clwyd and those at Pontnewydd. The Cambrians visited Ffynnon Beuno and Cae Gwyn in 1887 when it was ‘the battle ground of vigorous controversy’ which ‘has been so far strongly decided in favour of Dr. Hicks F.R.S.’ who advocated the presence of extinct pre-glacial fauna. During the twentieth century a major series of excavations took place between 1978–95, directed by Professor Stephen Aldhouse-Green on behalf of the National Museum of Wales. Work concentrated on Pontnewydd, but there was also work in Cae Gronw above it, and in the upper of the two Cefn Caves. The fourteen seasons of work has recently been published as *Neanderthals in Wales* which has established Pontnewydd as the earliest human presence in Wales at 225,000 BC and the furthest north-westerly appearance by *Homo neanderthalensis* in Europe. The excavations produced over 1200 stone tools (biface hand axes, cores, scrapers and blades) and 17 human teeth. Alongside the few human bones there were almost 5000 animal. This is a very rich haul of material for any Palaeolithic site, but the context within this cave is difficult: none of these finds is *in situ*, they have all been carried into the cave passages in a series of debris flows. They have been swept away from the actual living site but the consistency of the finds suggest that that site had been close by, perhaps the now lost western entrance. The uranium isotope dating of 225,000 BC comes from the remnants of a stalagmite floor which developed over the Lower Breccia debris flow which contains the majority of the tools and bones. This flow probably blocked the entrance to the cave for some 145,000 years when a more silty flood reopened it and a different group of animals came to live in its shelter. Their bones and those of their prey were covered by another stalagmite layer which gave a date of 32,000–13,000 BC, belonging to the height of the last glaciation. As the temperature rose, modern humans (*Homo sapiens*) returned to the area, evidence of whom can be found in unstratified deposits in Pontnewydd. There are also late Upper Palaeolithic blades, a microlith and a possible Neolithic burial in the Cefn Caves to the south, and another possible Neolithic burial in Cae Gronw just above Pontnewydd cave. These tantalising finds indicate the attraction of this valley for early hunters and eventually for farmers.

After dinner, Emeritus Professor Prys Morgan gave the Public Lecture in Nant Clwyd y Dre, ‘A Welsh Tuscany: the Renaissance in Clwyd’ which looked at the education, culture and business acumen of so many of the Denbighshire families in the sixteenth and seventeenth centuries. They formed effective networks in London, Europe and Asia and brought ideas and wealth back to their native valley.

THURSDAY 7 JULY

Most of Thursday was to be spent in Holywell, but everyone was so prompt in getting to the bus and the roads were so free that we were ahead of time, on a morning that threatened cloud and drizzle. So it was decided to revisit Maen Achwyfan to see the main face, which had been scarcely visible in the bright sun of Monday afternoon. This face was now well lit and in fact the whole monument had a different impact, emphasising the importance of time and season in the understanding of these outdoor ritual sites.

Despite this detour, the party was on time at **Basingwerk Abbey** where Dr Sian Rees, who had played such a crucial part in the restoration and cleaning of the monuments at Holywell, was our guide for the day. Set in a disputed borderland, the abbey, founded in 1131–32 by the Norman, Ranulf earl of Chester, was granted land in England and in Wales by kings of England and by princes of Wales. Dafydd ap Llywelyn granted the church and its shine at Holywell to the abbey before his death in 1246. The abbey and its lands suffered damage in Edward I's Welsh Wars but after 1285 Edward extended his patronage and reconfirmed the charters and it remained prosperous until the later fourteenth century when economic and



On the morning of Thursday 7 July, Dr Sian Rees guided the Cambrians around Basingwerk Abby, a Cistercian house founded in 1131–32 by Ranulf, the Norman earl of Chester. *Photograph: Marie-Thérèse Castay.*

political problems beset a diminishing and rather unruly community of monks. The economic situation improved under abbot Thomas Pennant, a generous patron of the bards, but he resigned in 1522 and by 1537 the abbey was dissolved. Little remains of the abbey church beyond the south transept. The cloisters and the lay brothers' wing have gone but the chapter house, the monks' day room and the monks' refectory still stand to some height. Very little from the twelfth century survives, most of what can be still be seen belonging to the thirteenth century when the monastery was receiving patronage from both Welsh and English kings. A large room at the south-east corner displays evidence of some of the improvements made by the abbot Thomas Pennant, including a large fireplace and new windows. Standing in the refectory, Lady Carys Davies and Sian read in Welsh and in English the poem *Moliant i Wenfrewy* ('In Praise of Gwenfrewy' [St Winifred]) by the Welsh poet Tudur Aled (c. 1465–1525), who was born in Llansannan, Denbighshire. It was a newly edited and translated version by Eurig Salisbury who kindly permitted this performance before its publication. The poem was written more or less at the time when the present well structure at Holywell was built, at the beginning of the sixteenth century.

The party then walked up the valley, through the, **Greenfield Valley Heritage Park**, past all the ruins of eighteenth-century industry which had utilised the abundant water from the sacred spring. Mining for lead on Halkyn Mountain, for copper in Anglesey and the rise of the port of Liverpool gave the Flintshire coast a nodal position in the growing trade with India, Africa and the Americas. Dr Samuel Johnson who visited in 1774 counted as many as 19 industrial works within two miles of the well. Today, the most readily recognised remains are the six millponds which controlled the water supply to the machinery for each manufactory. The lowest and the latest of these was the Parys Mine Company's copperworks, Above this is the Abbey Wire Mill. Above again is the Lower Cotton Mill, a six-storey building built in ten weeks in 1785 and still standing. Further up the valley are Meadow Mill, another copper rolling mill for Thomas Williams, and Greenfield Mills, with huge tilt hammers which produced brass pots and pans.

The Cambrians next visited **St Winefride's Chapel and Holy Well**, Holywell. The foundation legend of the shrine goes back to the seventh century and tells of St Winefride (Gwenfrewi) who refused the advances of a local prince, Caradoc, who then attacked her and cut off her head. Where it fell a stream of pure water sprang up and her uncle, St Beuno restored her to life. The first documentary record of pilgrimage to this healing spot is in 1115; King Richard I is known to have come in 1189 and Henry V is recorded as walking from Shrewsbury to Holywell in 1416 in gratitude for his victory at Agincourt. Henry VIII's inspectors closed Basingwerk Abbey, but failed to stop the pilgrimages, which continue to this day. In the seventeenth century the shrine became a symbol of the survival of Catholicism in the north and the church was served by the Jesuits who lived in accepted disguise as landlords of the nearby inn under the protection of Catholic families in north east Wales and in Lancashire. There is a legend that the conspirators involved in the Gunpowder Plot visited in 1605. James II and his wife, Mary of Modena, certainly visited in 1686 to pray for a son (James III —the Old Pretender—being born the following year). Princess Victoria and her uncle Leopold visited in 1828. Graffiti, carefully preserved in Cadw's recent cleaning programme, record visits and cures of many lesser persons throughout the eighteenth and nineteenth centuries. Medieval pilgrims would have approached the well and shrine from the parish church and this is what we did, though the medieval building was rebuilt in 1769 as a galleried classical church, further remodelled in 1884 with an Italianate apse. From here the party stepped down to the well chapel and then to the well chamber below. These buildings are part of the extensive renewal of religious buildings after the Wars of the Roses and up to the first decade or so of the sixteenth century. These particularly beautiful and richly decorated Perpendicular chapels are believed to have been built at the expense of Lady Margaret Beaufort, a major patron and controller of the Stanley lands in north-east Wales: the fine churches at Mold and Northrop carry the same Stanley emblems. The well basin at Ffynnon Fair, which was not visited due to lack of time, is clearly part of the same series. The waters of the well flow out into a rectangular bathing pool overlooked

by the fine red-tinged façade of the well chamber and chapel. This red tinge, noted as early as the twelfth century and interpreted then as a miraculous stain from the blood of St Winefride, is in fact due to harmless algae which Cadw was careful to preserve. These outer buildings—the pool and rooms to the left and the Caretaker's Cottage to the right—belong to the nineteenth century. During this part of the visit Cambrians were free to visit the Well, the visitor centre, the cafe and the museum and most people managed to do all four. The Museum is a recent development set up in the Caretaker's Cottage. It displays relics, artefacts and documents from the post-Reformation life of the shrine, but also the surviving fragments of the possible twelfth-century casket of St Winefride from her convent at Gwytherin, fragments of which have been rediscovered in recent years. The casket had survived in the church until the seventeenth century, when it was recorded by Edward Lhuud, but had then disappeared.

From Holywell the Cambrians then drove over the mineral rich uplands of **Halkyn Mountain** and **Holywell Common**. Mining is assumed to have started in Roman times because of the discovery of Roman lead pigs and medieval mining is also known from documentary evidence though any traces of these earlier workings has been all but obliterated by the extensive post-medieval workings. Pioneered by the Quaker Company in the late seventeenth century, mining intensified during the eighteenth and nineteenth centuries and by 1850 accounted for about 12 per cent of the total British production of lead. By the 1960s all mines were closed, however, leaving a distinctive orefield landscape of mine bell pits, waste heaps and leats and now returned to rough grazing.

The cloud, which had persisted all day, rose as we approached the Iron Age hillfort at **Moel y Gaer**, Rhosemor, revealing wide views of the estuary and the Clwydian hills. The excavator, Graeme Guilbert, could not be with us but he provided a detailed commentary on his work and the interpretation of the site which is well known from the large-scale excavations undertaken in the 1970s in advance of the construction of the storage reservoir which now occupies the south-western sector. This well-preserved contour fort stands within an extensive unenclosed common at about 300 metres above sea level, occupying the highest point of Halkyn Mountain. The defences are relatively modest, with a main inner bank, accompanied intermittently by an external ditch and a partial second circuit of rampart. In addition to evidence of Neolithic activity and two possible Bronze Age burial mounds on the hilltop there is with good evidence for three discrete phases of enclosed settlement during the final millennium BC. The first phase was enclosed by a palisade fence and belongs in the transitional period from Late Bronze Age to Early Iron Age and represented internally by roundhouses of double-ring form, with internal roof-supporting posts, of which 26 were excavated. Possibly after a hiatus in occupation, the second phase seems to have been implanted upon the hilltop in a single episode, perhaps around 500 BC, when the inner bank (Rampart A) was first constructed. This is 6 metres wide and up to 2 metres high, and had a vertical outer face constructed of drystone walling alternating with posts tied into a timber framework. Within this enclosure, circular and rectangular buildings were set out in orderly groups. The roundhouses, 5–8 metres in diameter, were of single-ring construction, with walls of thin, driven stakes; each had a doorway framed by upright posts, some with a short porch. The rectangular buildings were four-posters, which are commonly interpreted as raised granaries. After a brief period, it seems that the hill was deliberately abandoned, many timbers of the four-posters being removed, while the stake-wall roundhouses were probably left to decay. Later in the first millennium BC, a final phase of occupation seems to have involved numerous examples of a different form of building, rectangular and apparently fully framed, possibly constructed upon sill-beams set directly on the ground-surface and thus requiring no earth-cut foundations—hence the rough metalling of their floors was all that survived. It was presumably at this time that the inner bank was heightened and widened (Rampart B). The unfinished scheme to add a second line of defence may also have been devised at that time. The postholes of a pair of wooden towers constructed for a Napoleonic fire-beacon were also identified.

On returning to Ruthin the party passed **Penbedw Stone Circle** and barrow. The undoubted Bronze Age barrow lies in the bottom of the valley. Close by is the stone circle about which there is some doubt, firstly because Penbedw was the home of a friend of Edward Lhuud who made no mention of it in his frequent correspondence with the antiquary and secondly because although Flintshire has many barrows the only stone circle in the region. At present there are five stones in the circle, completed by six oak trees set on the same circumference. A short way away is a large stone which might have been an 'outlier' to the circle.

FRIDAY 8 JULY

On this day the party was divided into two, the first of which explored the churches and houses in the hills on the eastern side of the valley and the second of which went to the same hills to climb hillforts and then pursued the river to the south-west to see more hillforts and the church at Derwen.

The first party's first visit was to **Tomen y Rhodwydd** motte and bailey castle, one of the finest earthen castles in Wales. Originally built by Owain Gwynedd, lord of north Wales, in 1149. It was strengthened and its ditches redug by the English in 1212 at the time of King John's second campaign in north Wales. The party was guided round the site by Ian Grant of Clwyd-Powys Archaeological Trust who had directed a community archaeology project at the site involving the clearance of gorse and brambles which had enabled a more detailed survey of the bailey area to be made.

The party then proceeded rather circuitously because of the narrow roads to visit **St Garmon's Church**, Llanarmon-yn-Iâl, a double-naved church of medieval origin which underwent considerable change in the mid eighteenth century and in the nineteenth century by the architect John Douglas of Chester. The party admired the fourteenth-century monument to Gruffudd ap Llywelyn ap Ynyr of Bodidris and the unusual seventeenth-century effigy of Efan Llwyd of the same family with a rare Welsh inscription. The family of Bodidris, like many from this region, had connections with the Low Countries and the fine brass chandelier in the church from Flanders is likely to be their gift. There is the shaft of a churchyard cross in the churchyard. The core of the village around the church is very attractive and a centre of considerable voluntary enterprise—both the village shop and the pub are run by and for the community.

The first party then went to **Rhual**, a seventeenth-century house, notable for having been in the ownership of the same family ever since, except for a brief interval from between 1816–32 after the death of the heir at Waterloo. It was then bought back by an American member of the family. The party was magnificently entertained to lunch of coronation chicken and Eton mess, prepared by the present family. The Renaissance house is very fine and our lunch was served in the dining room, once the hall with beautiful Rococo fireplaces added as the house was modernised in the eighteenth century. Particularly interesting are the forecourt in front of the entrance, virtually unchanged from the late seventeenth-century arrangement, with two pavilions with seats and vases in the flanking walls and bowling alley on the slope above the house which is also thought to date to the seventeenth century, a very rare survival. Evan Edwards, who built the house in 1634, was a staunch Royalist, but later generations became Dissenters and leaders of the Wrexham Baptists until the late eighteenth century. A small obelisk commemorating the victory of the Britons over the Picts and Saxons in AD 420 and a baptismal tank in the grounds are evidence of this religious allegiance.

From Rhual the party went on to **St Mary's Church**, Cilcain with its magnificent Late Gothic roof of hammerbeam trusses and large angels. It had been believed that the roof had come from another, taller church but analysis by the Royal Commission programme during conservation work several years ago concluded that it was designed and made for its present position. The church also contains some fine sixteenth-century glass and some fragmentary medieval stone sculpture in a corner near the door.



On Friday 8 July the party split into two. The first party visited Rhual, a fine seventeenth-century house, where they had lunch. *Photograph: Marie-Thérèse Castay.*

From Cilcain the party went to visit the gardens of **Brynbellia**, Tremeirchion, by courtesy of Mr and Mrs Peter Neumark. The house at Brynbellia is notable for its elegance and for the romantic and literary associations of its history. It is a small but beautiful Palladian villa built in 1792–95 by Hester Salusbury (Mrs Thrale) and her second husband Gabriel Piozzi when they returned from self-imposed exile in Italy and retreated to Wales to avoid the disapproval of London literary society. Hester Thrale was a member of the notable Denbighshire Salusbury family who had married a wealthy London brewer and became an admired bluestocking and friend of Dr Johnson. Her estate was inherited by a Piozzi nephew and declined gently during the nineteenth and twentieth centuries until rescued in 1994 by the present owners. Mrs Neumark herself showed us around the nine acres of modern gardens which are their creation.

The first party next visited **Tremeirchion Parish Church**, an old foundation in a circular churchyard, the building itself showing features of several periods, from the fourteenth to the nineteenth centuries, with some fragments of medieval and seventeenth-century glass in the southern windows. The most notable features are several fourteenth- and fifteenth-century sepulchral slabs and monuments, including the very fine canopied tomb believed to be that of Dafydd Ddu Hiraethog, the poet and grammarian. The fourteenth-century churchyard cross has been recently returned from St Beuno's College.

Meanwhile, the second party began their day at **Tandderwen**, just to the south of Denbigh where a raised glacial moraine, which like Rhuddlan, had been attractive to settlement at many periods. It had once been on the northern edge of the proglacial lake called Lake Clwyd (formed from the damming up of glacial meltwater) which had once filled much of the Vale. An Early Bronze Age and early medieval



After lunch on the Friday the first party visited the gardens of Brynbella, Tremeirchion, by courtesy of Mr and Mrs Peter Neumark who have created the gardens since the 1990s. The house is a small Palladian villa built in 1792–95 by Hester Salusbury (Mrs Thrale) and her second husband Gabriel Piozzi. *Photograph: Marie-Thérèse Castay.*

cemetery which had been identified here by cropmarks was excavated by the Clwyd-Powys Archaeological Trust between 1985–88. The Early Bronze Age cemetery consisted of one large palisade barrow covering a central grave containing an inhumation with a Long Necked Beaker. This barrow had had eight more burials added on various occasions through the Early Bronze Age. Another smaller barrow covered an Early Bronze Age grave and there were five contemporary cremation burials nearby without covering mounds. Most of these burials were in wooden coffin or boxes and several were accompanied by pottery. The Bronze Age barrows had become the focus for an early Christian cemetery of graves aligned east–west, dating to the sixth to tenth centuries. The cemetery consisting of nine graves enclosed by shallow squared ditches arranged in four rows to the north of the large Bronze Age barrow which may have been redefined at this time by digging a square ditch around it. A further 28 graves, some of which retained evidence of their coffins, were scattered amongst the enclosed graves.

The second party moved on to the **Ffynnon Beuno** caves, visited by the Cambrians in 1886 during the original excavations by Henry Hicks and E. Bouverie Luxmoore who worked in both the easily accessible Ffynnon Beuno cave and the now inaccessible Cae Gwyn cave. Beneath a stalagmite floor in Ffynnon Beuno they found rhinoceros and mammoth bones in association with six leaf points (now recognised as Late Upper Palaeolithic with a date range 30,000–28,000 BC). In Cae Gwyn above, they found a very deep boulder clay deposit overlying broken stalagmite with hyena and reindeer teeth and bones and another flint flake. Hicks' view that his evidence showed men and animals sharing these caves before the

final glaciation was contested, but proved correct. The party was welcomed to the narrow valley below the caves by the present owners who are collaborating with the University of Edinburgh in some further investigations in the lower cave.

The next visit was to the hillfort of **Moel Arthur**. On its north eastern side it has substantial defences, two massive banks and ditches, but to the south and west there is only a very slight bank. It is much smaller than most of the Clwydian forts and only two or three house platforms are visible, clustering around the single long inturned entranceway on the north-east which has hints of guard chambers. Recent survey work has demonstrated that the outer rampart was constructed before the inner. Excavations in the 1840s by William Wynne Ffoulkes found Roman pottery and traces of stone walls, and in the 1960s three Bronze Age copper flat axes were found close outside the ramparts and Mesolithic worked flint has been found in the vicinity. In 2010 and 2011 an area outside the hillfort underwent geophysical survey; anomalies were noted and excavations carried out by a local group, developed through the Denbighshire County Council's Heather and Hillforts Project. The excavations located a trackway, as well as a fine, possibly late Neolithic worked flint. Palaeobotanical work has shown that by the Bronze Age the area had been opened up and there was evidence of cereal pollens as well as grasses. This situation continued through the Iron Age, reverting back to scrubby woodland in the Roman period with the heather which dominates today not becoming established until the post-Roman period. The ramparts have recently suffered from visitor erosion and extensive repair work has taken place providing a pitched stone path set in a wooden frame which (as at Moel Fenlli) sits entirely above the archaeology.

After lunch at Denbighshire's Loggerheads Country Park we were joined by Fiona Gale, Denbighshire County Archaeologist, who guided us to **Moel Fenlli**, the largest of the Clwydian hillforts. It is essentially a contour-work, strongly defensible on all sides. There are steep hillsides around much of the circuit, generally surmounted by two banks and a ditch. Crossing the higher, eastern end, extends the defences to a total width of up to 35 metres. Only by excavating in various parts of the circuit would it be possible to determine whether these earthworks represent more than one phase of construction (as seems likely), and how they might have developed. The only certain entrance, approached by a terraced trackway which is probably prehistoric in origin, is located at the lower, western end, with short inturned arms but no clear evidence of guard chambers. A spring perched high within the hillfort is a rare instance of an internal water supply. Much of the enclosed area, almost 10 hectares in extent is steeply sloping and hence the need for artificially-levelled house platforms of which maybe fifty or more, can be traced in the dense heather. Some of the platforms could have carried a building 10 metres or so across, while others are smaller. In addition, in some parts of a shelving quarry-ditch immediately behind the inner bank there are similar platforms, especially along the northern side. These various features are characteristic of a hillfort created during the final millennium BC. But the full story of Moel Fenlli is evidently more complex, for some scattered 'diggings' undertaken over 'about eight days' in 1849 by W. Wynne Ffoulkes and J. Williams, opening 'trench after trench . . . wherever the ground appeared inviting', yielded a variety of Roman artefacts. Earlier, in 1816, a fire had exposed a hoard of late Roman coins. Further, by tradition the name of the hill derives from Benlli, a tyrannical giant who stood in opposition to St Germanus in the fifth century. All this is suggestive of continued or renewed activity at some time in the second to fifth centuries AD. Further excavations by Peter Hayes took place in anticipation of a visit by the Cambrians in 1959, but little is known of the results. A cairn on the very summit, which may be assumed to antedate the hillfort, has suffered disturbance in recent years, presumably inflicted by some of the numerous walkers who pass through this hillfort.

Going south to Pwllglas the party passed through the rocky gorge before emerging into a much narrower, steeper, darker valley. Interestingly, the junction is marked by two intervisible hillforts—Craig Adwy Wynt, defending the top of a narrow barren rock ridge on the south, and Pen y Gaer about 1600

metres to the north. Effective control of the gorge could not be exercised from either, but in conjunction they command a very wide view of this route through from the Clwyd to the Dee. The party drove to **Pen y Gaer**, a little-known, conventional contour fort, and spent some time discussing how much of the rampart was artificial and where the original entrance might have been.

We then drove down to **Derwen**, the main village of this upper section of the valley. The redundant St Mary's Church is set within a circular churchyard with an almost intact fifteenth-century cross. The rood screen retains its loft and the setting for the rood itself survives.

In the evening Dr Rachel Pope of the University of Liverpool spoke about her excavations at the Penycloddiau hillfort. She usefully reviewed the history of interpretations of these forts as defensive centres, as elite residences, as agricultural settlements. All these hold some truth but it varies by time and region. Her own excavations at a very large, possible cattle enclosure and Dr Gary Lock's at Moel y Gaer, Bodfari, a smaller domestic settlement are complementary and together they hope to provide a Welsh narrative for the two types of enclosures.

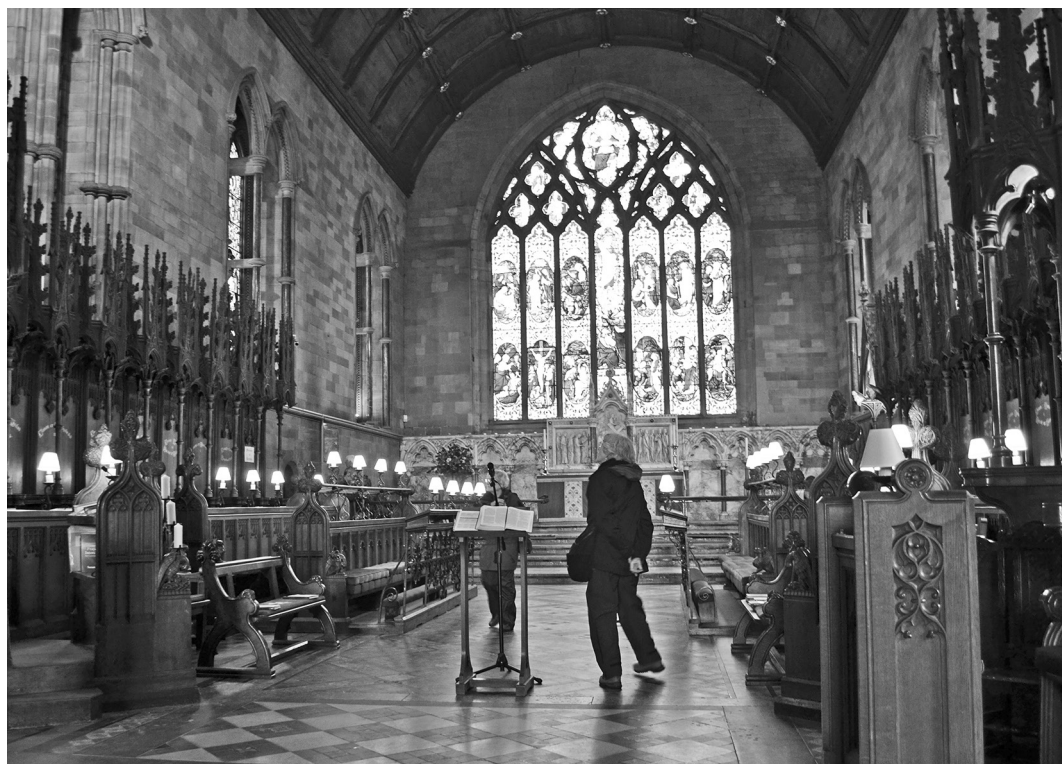
SATURDAY 9 JULY

The last day of the meeting occupied only the morning, when the Cambrians visited some of the finest churches in this region of splendid churches.

The village of Llanrhaeadr-yng-Nghinmeirch is dominated by **St Dyfnog's Church** and its complex of ecclesiastical buildings—the eighteenth-century almshouses at the western end of the churchyard, and a holy well in the woodland beyond. The exterior of the church is modest but the interior is interesting for its furnishings and fittings. Pride of place goes to the Jesse Window in the east wall, dated 1533, only three years later than the one at Dyserth. The glass was reputedly stored during the Commonwealth era in the massive dugout chest below the window. Then there are the angels in the roof, different types in the body of the south nave and above its sanctuary, and an altogether more rustic version in the north nave, examples of which bear similarities to some eighteenth-century funerary carving. In the south-west corner is the somewhat overpowering memorial to Maurice Jones of Llanrhaeadr Hall who died in 1702 and whose widow built the almshouses in 1729. The sculptor is Robert Wynne of Ruthin, several of whose memorials were seen during the week and during our Easter Conference in 2015.

The party then moved up the valley to **St Marcella's Church**, Llanfarchell, where we were greeted by the vicar, Canon Pauline Walker. St Marcella's was the parish church for Denbigh throughout the medieval period. It occupies what is now an elongated churchyard, but in the eighteenth century it was smaller and more curvilinear in outline, indicative of an early medieval foundation. Despite its early origins most of St Marcella is Perpendicular, with its double nave, a feature of a number of churches around the Vale of Clwyd and its west tower. Inside it is the arcade and the fine roofs that we had come to expect in this region, enhanced here by decorated corbels, carvings on the cornices, and some trusses also embellished with carvings. Although any hammerbeam angels have long gone, portions of the medieval rood screen have been incorporated into its successors in the early twentieth century. Much seventeenth-century furniture survives, including an altar table dated to 1623, altar rails, a pulpit 1683, a chest of 1676, as well as a plaque 1754 and board of 1720 denoting benefactions. The funerary monuments draw most attention. Amongst others are those to the antiquary Humphrey Llwyd who died in 1568, to Richard Myddelton, governor of Denbigh Castle who died in 1575 (a fine brass with his wife, nine sons and seven daughters) and in the south nave the painted alabaster effigy of Sir John Salusbury of Llewenni and his wife.

The Cambrians then went to **St Asaph Cathedral**, dedicated to St Kentigern, originally a monastery founded here in about AD 560. The bishopric was refounded in 1143 during a general reorganisation of



One of the visits on the morning of Saturday 9 July was to St Asaph Cathedral. Originally founded as a monastery in about AD 560, the bishopric was refounded in 1143. Extensive restoration work was undertaken by Sir Gilbert Scott in 1867–73. *Photograph: Marie-Thérèse Castay.*

the Welsh church, but there has been pressure to move the diocesan see to more politically important sites—Rhuddlan in 1282 and Denbigh in the reign of Elizabeth I. It is the smallest cathedral in England and Wales but even Dr Johnson thought it had ‘something of dignity and grandeur’. Little medieval stonework remains. It suffered badly at the hands of Edward I, during the Glyndŵr rebellion and again during the Commonwealth. Through the eighteenth and early nineteenth centuries there were several campaigns of repair and restoration, most of which were disapproved of and removed by Sir Gilbert Scott who carried out a more scholarly restoration in 1867–73. Most of the building bears his stamp but he retained the plain austerity of the thirteenth-century military architects who are believed to have had a hand in the Edwardian rebuilding. Much of the good woodwork in the interior is due to Scott, but the choir stalls are all original late fifteenth-century work and are the only remaining medieval canopied stalls in Wales. They have been moved around within the choir and the crossing several times without damage. There is a fine thirteenth-century effigy of a bishop, possibly Anian II (d. 1293), in the south aisle. Colin Gresham and others judge that this, the finest of the medieval effigies in Wales, was not Welsh in style or workmanship. Nearby there is a fourteenth-century slab with a running hare which is very like the local series from Valle Crucis abbey, Denbighshire. In the churchyard there is the late nineteenth-century Translators Memorial, celebrating the tercentenary of William Morgan, bishop of St Asaph between 1601–04, and his collaborators on the Welsh Bible.



The last visit of the Summer Meeting, on the morning of Saturday 9 July, was to St Saeran's Church, Llanynys, whose many points of interest includes this hexagonal slab, now recognised as the fourteenth-century head of a churchyard cross. *Photograph: Marie-Thérèse Castay.*

Leaving St Asaph for Llanynys we drove through Trefnant, Aberwheeler and Llandyrnog to approach this church in the marshes between the two rivers by the only road from the east which could be used by a coach. This area was well known for the survival of medieval field systems, described to the Cambrians by Professor Glanville Jones in 1959, but now difficult to recognise. **St Saeran's Church**, Llanynys has an august history, for in the pre-Conquest era it was the mother church for this area of the Vale with a *clas* community whose descendants were documented as late as 1402. This church was part of the diocese of Bangor until 1859, having become part of the kingdom of Gwynedd in 1123. Its architectural history—the enlargement of the north nave eastwards, the heightening of the nave wall and consequent raising of the roof, and the insertion of the Georgian windows into the external wall of the south nave—could once all be identified in changes in the stonework, but these are now covered by lime rendering undertaken as part of a recent refurbishment. The church is accessed through a south porch, which is a replacement for the thirteenth-century west entrance. The south entrance to the church is interesting for its fifteenth-century doorway, its original iron-studded wooden door with early graffiti and an inscription on the tie-beam providing a date of 1544 for the porch's construction. Inside is the large image of St Christopher painted on the north wall which was only uncovered in 1967. Also to be noted are the following: a hexagonal slab with the Crucifixion and a bishop on its opposing faces, formerly thought to be a sepulchral marker, but now recognised as the fourteenth-century head of a churchyard cross (brought into the church at the instigation of the Cambrians after their 1959 visit); the much damaged fourteenth-century effigy of a priest; an altar table of 1637 given by Sir William Salusbury of Rûg (the builder of the famously decorated

chapel); a series of non-religious carved panels (dated 1570) from Bachymbyd (also associated with the Salusburys) incorporated into the stalls; Royal arms of 1661 on canvas; a wooden chandelier of 1749; nineteenth-century hatchments; wooden dog tongs; and finally the hammerbeam roof without its angels, but compensated for by the carvings on the truss terminals. After our visit to this 'hidden gem' the party returned to Ruthin for lunch and to collect cars for the return home.

FRANCES LYNCH

AUTUMN MEETING, 2016

The City and Cathedral of Exeter

The Meeting was held in the Mercure Southgate Hotel in the centre of Exeter, where the Seymour Suite provided the venue for our lectures, coffee and evening dining. The excellent buffet lunch on Saturday was in the main dining room. The organisers were Heather James and Frances Griffith. Thirty-three members attended.

* * *

FRIDAY 23 SEPTEMBER

At mid-afternoon members set off on foot to walk the short distance through the Cathedral Close and then to the High Street to meet up with those who had arrived earlier and visited the Royal Albert Memorial Museum. We were welcomed at the **Guildhall** by the Mace Sergeants and introduced to the long civic history of what has been the centre of Exeter's government for at least 800 years. They explained that the Guildhall is still very much at the heart of the city's civic life with the Lord Mayor hosting a variety of functions. Heather James then introduced John Allan who began what was a remarkable series of talks, lectures and guided tours for the Cambrians over the course of the weekend. During his long career at Exeter City Museums and with the former Exeter Archaeology Unit, and now serving as Cathedral Archaeologist, John has built up an unrivalled knowledge of the historical sources, archaeology, architecture and artefacts of the city. He outlined the development sequence and dates of build of the surviving components of the Guildhall. He then pointed out to members the fifteenth-century oak roof of the medieval hall in which we were seated. It is one of a small surviving group of high-quality roofs built by local carpenters in and around Exeter with some distinctive characteristics, most notably a coved apex along the length of the roof and the alternate use of main trusses supported by arch braces with stone corbels in the form of grotesque animals at their feet and slighter trusses that have slight cusped bases. Equally impressive, the late sixteenth-century oak panelling of the hall with the coats of arms of the city guilds has been reset and repainted in later centuries. Despite its medieval appearance, the gallery at the entrance end of the hall was only added in 1863. John pointed out the subjects of the series of large oil paintings in the hall, the most notable of which is the portrait, commissioned by her brother King Charles II, of Princess Henrietta Anne, who was born in Exeter. Cambrians were then free to explore the rooms to the rear of the main hall and ascend the staircases to the Mayor's Parlour above the Elizabethan portico through which we had entered. John and the Mace Sergeants were on hand to describe the many items of civic regalia and the displays of silver given by past mayors and sheriffs to the city. The Cap of

Maintenance and Ceremonial Sword presented to the city by Henry VII were of particular note. Leaving the hall through its magnificent sixteenth-century oak door to view the exterior, John explained how recent detailed study has thrown light on the building stone and decoration of the once brightly coloured façade of the Elizabethan mayor's chamber above its porticoed ground floor. The antiquity of the medieval buildings in the High Street opposite the Guildhall was described. Despite what is in some cases their unprepossessing modern exteriors, detailed building recording by the Exeter Archaeology Unit has shown that nearly all of these are late medieval or early modern in origin and are one of the best such groups in any English town. (This part of our visit was given added poignancy by the fact that these houses only narrowly escaped destruction when the buildings backing onto them from the Cathedral Close were lost in the major fire at the Royal Clarence Hotel only a few weeks after our visit.)

After dinner, John Salvatore gave the first of the weekend's lectures, entitled '*Isca Dumnoniorum*: the Roman fortress and city of Exeter'. He explained how he had 'cut his archaeological teeth' and developed an absorbing interest in Roman legionary fortresses when working for Paul Bidwell and the late Chris Henderson, the Director of the Exeter Archaeology Unit, on the major excavations of the legionary bath-house in the Cathedral Green between 1971–76 and many subsequent excavations in and around the city. He had decided to concentrate for this lecture on the legionary fortress itself but pointed out that there continue to be exciting new discoveries on the Roman port at Topsham and complex military installations along the Roman road from the port to the fortress and later city. He began by describing the strategic advantages of the site of the fortress and later Roman town and medieval city commanding the lowest crossing point of the river Exe and defended on two sides by steep-sided valleys. The name chosen by the Second Augustan legion in the early AD 50s for their new campaign base in south-west Britain was *Isca Dumnoniorum*, which like *Isca Silurum* (Caerleon), to which the legion moved in AD 75, is formed of the local tribal name to preceded by the word derived from the Brythonic word *uisc* denoting a river abounding in fish, in this instance the river Exe. Undoubtedly the most important and impressive remains discovered in Roman Exeter are those of the legionary bath-house excavated between 1971–76 on a large scale occasioned by the demolition of the church of St Mary Major on the Cathedral Green for an underground carpark. This was never built and the bath-house remains are covered over but preserved *in situ*. Constructed *c.* AD 60, the bath-house is the best preserved in northern Europe and as the earliest stone building in the South West, with every Mediterranean refinement of marble, window glass and polychrome mosaics, its impact on native sensibilities must have been startling. It is estimated that the hypocaust system was capable of heating 70,000 gallons of water a day. By studying units of measurement in the surviving texts of the Roman *agrimensores* ('land surveyors') and the plans of bath-houses across the empire, the late Chris Henderson was able to extend the likely plan and scale of the whole bath-house beyond the areas excavated and his reconstruction has been confirmed by more recent excavations. When the legion moved to South Wales, the bath-house was converted into a forum and basilica for the successor Roman town now under civilian administration. Excavations in other parts of the city had produced the remains of several barrack blocks. Another partly excavated building on the site of the Guildhall Shopping Centre—whose function could be identified from its location within the fortress and its structure and associated finds—was a *fabrica* ('military workshop'). There was much evidence of metalworking, particularly in bronze, and fragments of military fittings were recovered, some for cavalry units. The earth and timber rampart of the fortress, fronted by a deep ditch, has been explored at several points. John pointed out that the city walls that we now see are of Roman origin but they enclosed the later Roman city which covered a greater area than the fortress. Of particular interest to an audience of Cambrians was John's illustration of fragments of ceramic antefixes from roof eaves featuring a pair of dolphins. In the 1970s the late George Boon recognised that antefixes from the same mould have been found at Caerleon demonstrating for the first time that the same legion was stationed at Exeter and subsequently at Caerleon.

SATURDAY 24 SEPTEMBER

Saturday morning was devoted to three excellent lectures on Exeter's history and archaeology. Introducing Dr Robert (Bob) Higham, Frances Lynch Llewellyn said that he would probably be best known to Welsh audiences as the co-excavator with the late Philip Barker at the medieval motte and bailey castle at Hen Domen in Montgomeryshire, but that he has a distinguished record in castle, historic landscape and historical studies in the South West. Bob's lecture, 'The City of Exeter, 900–1200' would focus on the archaeological evidence and physical remains although there were also valuable documentary sources for the latter part of the period. The principal legacy of the Roman city were the city walls, which enclosed a larger area than the defences of the legionary fortress. Very little is known of the city between the fifth and seventh centuries and large parts may have been unoccupied. Although its extent could not be established due to later graves and Victorian building, a Christian cemetery, with an apparent long date range between the fifth and eighth centuries, was discovered overlying the long abandoned forum and basilica in the 1971–76 excavations in the Cathedral Green. Noting that the north-west to south-east alignment of six graves reflected that of the Roman buildings, the excavators had argued that the graves were associated with a late Roman structure, possibly a church. In addition radiocarbon date of the eighth century from one of the graves suggested that this cemetery had continued in use after the establishment of Anglo-Saxon rule in Devon, indicating a degree of continuity in the city under British and Saxon rule. The *Vita* of St Boniface ('the Apostle of the Germans') records the saint's boyhood education at Wulfhard's monastery in Exeter in the 680s. Conceivably, this monastery may have been one and the same as the late or sub-Roman church. The monastery or minster of St Peter given by Alfred *c.* 887–892 to Asser (recruited by the king from St Davids) was probably a new building of ninth-century date associated with a later cemetery on an east–west alignment whose principal dimensions were established from fragmentary remains in the 1971–76 excavations.

A more continuous narrative is possible from the ninth century onwards due to the detail of Alfred's campaigns against the Danes in Asser's *Life of Alfred* and in the *Anglo-Saxon Chronicle* and from archaeological evidence. In the 870s the Danes had occupied Exeter, described as a 'fastness' in the *Chronicle*, but they were expelled by Alfred in 893 who repaired the Roman walls to defend his newly organised *burh*. Although more research is needed on the Anglo-Saxon street pattern, it is clear that it did not respect the Roman grid but was more irregular in form, comparable with the Winchester model. Regression analysis from late medieval property boundaries can only be taken so far in trying to establish Anglo-Saxon urban properties but the place-name element 'hay' from the Old English, *haga* ('enclosure') probably indicates the location of some larger pre-Conquest units. By the tenth century Exeter was well established as a royal administrative centre as well as containing an important minster church. The mint established by Alfred flourished into the tenth and eleventh centuries. A number of medieval city churches are known to have Anglo-Saxon origins, some even having Saxon architectural features which further allows reconstruction of the plan of Anglo-Saxon city in the ninth to eleventh centuries. Archaeological evidence indicates a range of crafts and industries in the late Anglo-Saxon city. The eleventh century was a period of upheaval and destruction as well as growth. In 1003 the city was sacked and burnt by the Danes and came under the rule of King Cnut. The powerful Godwin family had strong economic interests in the city and after the Norman Conquest in 1066, Gytha Thorkelsdóttir, mother of the defeated King Harold Godwinson, was living in the city. The citizens defied William the Conqueror in his demands for increased taxes and he besieged and captured the city in 1068. William consolidated his conquest by the construction of a castle in the north-west corner of the walled city, known as Rougemont from the reddish rock of the area. During the Anarchy Baldwin de Redvers, sheriff of Devon, seized the city in defiance of King Stephen who in turn besieged the castle from a siege-castle (known as Danes' Castle)

outside the walls on high ground to the north, but despite such excitements the city prospered. Dr Higham concluded by briefly listing the streets, additional churches, hospitals, guild buildings and probably the early guildhall in existence by 1200 as evidence of the city's growth.

After coffee, Professor Mark Stoye of Southampton University spoke on, 'The Civil War in Exeter 1642–1646', combining historical and archaeological evidence in a narrative of events that brought home the perhaps often underestimated scale of violence and destruction of the Civil War. He began by exploring how a radical puritan preacher, Ignatius Jurdain, undermined the allegiances of the hitherto staunchly royalist city and the power of the Anglican cathedral's clergy in the years leading up to the Civil War. Jurdain was made mayor and dominated the 24-member ruling council. A staunch anti-Catholic he (and many other puritans) suspected Charles I of Catholic sympathies especially after his marriage to the French Henrietta Maria. Although Jurdain died in 1640, his cause was taken up an equally extreme puritan, John Bond, resident in the suburb of St Sidwells, who increased tensions and prejudices by a series of inflammatory sermons. Exeter can be seen as an exemplar of the escalation of tensions and divisions that led to civic disorder and finally open warfare between king and parliament. Drawing on his extensive work on contemporary propaganda and political stereotypes, Mark showed a contemporary woodcut showing two long-haired Cavaliers with an equally long-haired dog (modelled on Prince Rupert's dog called Boy) taunting a group of Roundheads and their short-haired mastiff—a subject explored in his book *The Black Legend of Prince Rupert's Dog: Witchcraft and Propaganda during the English Civil War*, published in 2011. He also drew on the extensive work by the Exeter Archaeology Unit and his own studies on the use of Exeter city walls and the construction of extensive outer defences in the Civil War. In 1642 the puritan-dominated city council repaired the city walls and gates in the Northernhay, Southernhay and castle areas and prepared earthen platforms behind the walls to mount artillery pieces, many within the shell of the old medieval interval towers. Strengthened by the arrival in the city of the Parliamentary forces led by John Pym, the puritan Council actively harassed prominent Royalists and continued its military preparations. Despite a series of attacks and for a time control of Topsham, the Royalist general, Sir Ralph Hopton, failed to quell the city, retreating back to Cornwall in early 1643. Exeter's Parliamentary garrison was strengthened by the arrival of 1000 London Greycoats. Within the city intimidation and violence against any suspected Royalists and the cathedral clergy escalated and the Cathedral itself was vandalised by iconoclasts. Archaeological excavations near Eastgate showed how the city defences were strengthened by so-called external 'dikes' and areas outside cleared of buildings for better lines of fire. Later, in 1643 the Royalists besieged the city and, despite a temporary check by the defenders, a renewed assault led by Prince Maurice, younger brother of Prince Rupert, forced its surrender. The Royalists rapidly repaired the city's defences, their work visible today through the use of distinctive stone in parts of the city walls. During 1644–45 defensive preparations intensified as the likelihood of an assault by Cromwell's New Model Army increased. The destructive scale of this siege warfare was graphically explained by Mark when he showed how large areas of houses in the suburbs were razed to the ground by the defenders to deny their occupation by the advancing Parliamentarians. Finally, in March 1646 the Royalist garrison under Sir John Berkely marched out of the city, safeguarded by the terms of surrender, and Cromwell marched in at the head of the New Model Army.

The final lecture of the morning, 'An Introduction to Exeter Cathedral', was given by John Allan, Cathedral Archaeologist. He took up his narrative where Dr Bob Higham had left off in the mid eleventh century when Leofric persuaded Edward the Confessor to move the seat of his bishopric from Crediton to the minster in Exeter, uniting the dioceses of Cornwall and Devon. The 'diploma' recording this is preserved in the Cathedral archives. The minster church had been built under the patronage of Athelstan and its traces partially underlay the demolished St Mary Major church. It continued in use during the episcopate of the first Norman bishop, Osbern fitzOsbern, but a new cathedral was begun in 1114 by

Bishop William Warelwast sited to the east of the minster. The main survivors of this cathedral in the later medieval fabric are the two Norman towers and parts of the nave walls. During Scott's restoration of the choir the foundation of what was identified as a polygonal apse of the Norman church was observed. If this is indeed the correct interpretation Exeter's Romanesque cathedral would have had an apsidal design unique in Britain. The construction of the Norman cathedral was begun at the east end where the main liturgical offices took place. As with all cathedrals, building took time and work by John and colleagues closely examining the transeptal South Tower shows that it was stylistically more elaborate and later than the North Tower. Not until 1133 could the Annals of Tavistock record that 'the canons went out of the old church and entered the new one'; even so this could have pre-dated completion of the nave. In 1258 Bishop Walter Branscombe (Bronescombe), together with many others, was present at the consecration of Salisbury Cathedral—the first to be built in the new Early English style. However, by the time building got under way at Exeter architectural styles had evolved and the eastern half of the cathedral (1270–1328) is in an Early Decorated style. The nave is of Late Decorated style and together they make Exeter the exemplar of the English Decorated with the richest decoration of any cathedral in this style. John Allan gave examples of the detailed recording and analysis of surviving features of this late thirteenth- and fourteenth-century interior and exterior decoration, work aided by the documentary information provided by the remarkable sequence of Fabric Rolls, which are another glory of the Cathedral. He gave examples of the varied roof bosses and their stylistic development and original colour schemes and briefly described the dendrochronological work that has been carried out on the roof timbers. Exeter now has 400 dated tree-ring samples, second only to Lincoln, and these indicate, in the main, a late thirteenth-century felling



The Cambrians admiring the magnificent West Front of Exeter Cathedral on Saturday 24 September 2016, where the complexities of the stonework with its three registers of figures was explained by the Cathedral Archaeologist, John Allan. *Photograph: Heather James.*

date for the timbers and an indication that these were stockpiled for ongoing and repair work. As a result of the stone-by-stone recording carried out by himself and his colleagues in advance of repairs to the Cathedral fabric (now much aided by computer software), he explained that he can now recognise at least 20 different kinds of stone used by the cathedral masons. Stone came from quarries on the episcopal manors some close by, others from a distance such as Salcombe, Beer and Portland. After a buffet lunch, members proceeded on foot into the Cathedral Close where John Allan continued his description and analysis of the fabric of the Cathedral. The party paused to examine the variations in the tracery of the sequence of Decorated windows of the east end of the Cathedral, the work of master mason Thomas Witney. We then paused outside the magnificent West Front where our understanding of the complexities of the design and phasing of the screen with its three registers of figures was greatly helped by the reproduction of John Allan and Stuart Blaylock's detailed analysis shown in a coloured elevation drawing in the Programme Booklet.

The Cambrians then divided into two groups as they entered the Cathedral, to be taken around by the knowledgeable Cathedral guides who concentrated on the numerous, interesting interior fittings. Many members attended choral evensong at which it was the turn of the girls' choir to celebrate. Then after a break members reconvened outside the West Front to walk the short distance to the **Cathedral Library**, is housed in the newly renovated west wing of the Bishop's Palace. This was an award-winning project managed by Canon Librarian Ann Barwood who welcomed us and had with her staff who had prepared a special exhibition with several items of Welsh interest. The greatest treasure which drew members like a magnet was of course *The Exeter Book*, one of the books given by Bishop Leofric in the tenth century which contains several famous Anglo-Saxon poems surviving only in this manuscript, such as 'The Wanderer' and 'The Seafarer', together with other religious poetry and a number of riddles. A new exhibition in the entrance corridors to the main reading room was also studied in depth as we had to divide into two groups for the visit.

Members walked back to the hotel and some managed to find time to look into the former Law Library in the Close, now the textile shop called Chandhni Chowk, which has another fine fifteenth-century timber roof.

After dinner, the evening concluded with a lavishly illustrated lecture by John Allan on 'The Golden Age of Exeter 1450–1780'. One of the features of the city's long history has been dramatic rises and falls in population and prosperity. The second half of the fifteenth century saw a sharp improvement in both which was due to the export of wool to France—particularly Rouen, Morlaix and La Rochelle—and a burgeoning textile trade, again mainly for export. It is possible from documentary sources, such as the Lay Subsidy Rolls, to chart a sharp rise in the number of Breton immigrants to Exeter and this can be observed in the architectural details of various buildings in Exeter. Not only was cloth produced in the city but large quantities of cloth produced in its rural hinterland came into the city for finishing. A type of blue serge was especially valued and measures were put in place to maintain its quality. The surviving evidence of prosperity is to be seen in churches in late Perpendicular style and the elaborate oak roofs of buildings such as in the Guildhall or the Tuckers Hall. An impressive quantity of finds from numerous excavations have given a detailed picture of the wide range of luxury goods including textiles, metal-wares and ceramics that became available particularly to the mercantile classes in the city. Archaeological evidence is complemented by the detailed lists of possessions in contemporary probate inventories and wills. The 'china' referred of some inventories is probably the Ming Dynasty porcelain of the late sixteenth- to early seventeenth-century date which has been found in surprising quantities in Exeter.

Exeter had been a river port from the early medieval period and a stone bridge, the Exe Bridge, built by 1214 and undergoing many later repairs and additions, remained the only crossing point until, at the second attempt, a new three-arched bridge was completed in 1778. The medieval bridge required a



Canon Librarian Ann Barwood welcomed the party to the Cathedral Library, housed in the newly renovated west wing of the Bishop's Palace where she and her staff had prepared a special exhibition with several items of Welsh interest at their visit on Saturday 24 September 2016. *Photograph: Eileen Wilkes.*

remarkable 18 arches and a total length of some 180 metres in order to cross safely the wide floodplain of the river at this point. Using a series of maps, beginning with the coloured bird's-eye view of the city by the Flemish engraver Remigius Hogenberg, drawn in 1587, John Allan showed how this low-lying area was slowly reclaimed (although always subject to flooding) for industrial production with mills and in other areas row upon row of cloth-drying racks on Shilhay, for example, shown on Roque's map of 1774. There have been a series of excavations on the riverside showing that stone-built houses were being constructed on a sandbank near the bridge as early as the 1240s.

There was constant pressure to improve the navigation of the Exe and at the remarkably early date of 1570, a ship canal was constructed to bypass the weirs, narrows and shallows of the river to allow ships with deeper draught to load and unload at the quay, instead of near the mouth of the estuary at Topsham. Exeter was still a booming port in the late seventeenth century. Again, using a combination of maps, topographical drawings and excavation, together with close analysis of standing buildings a clear picture has emerged of the continuing improvements put in place by the city's merchants. In 1680 a handsome brick Custom House was built and at the same time the quay was extended and a small dock constructed to allow the loading and unloading from barges of cargoes from deeper draught ships in the river. With the decline of the port in the late eighteenth century many of these seventeenth century features were preserved, unlike most other ports in Britain. Remarkably, the dock and associated structures survived

within later buildings, to be recognised by the Exeter Archaeological Unit in the 1980s. They have been restored and are publically accessible on the quay.

SUNDAY 25 SEPTEMBER

A series of perambulations were planned in order to see some of the sites and buildings highlighted in Saturday's lectures. With no distance to traverse in order to view part at least of the **City Walls**, since the hotel abuts them, we began by looking at a stretch of wall behind Trinity Street under the guidance of John Allan and Frances Griffith. Here immediately we could see very clear differences in use of different types of stone, previously pointed out to us by John Allan in the fabric of the Cathedral. A substantial length of Roman masonry in the purplish 'volcanic trap' was noted in close proximity to the crenellated parapet constructed above in the Civil War. A warning that the normal rules of archaeological stratigraphy do not always apply was observed when traces of possible Alfredan work could be seen below Roman masonry—the result of repairs to the eroded base of the Roman walls. With time at a premium our examination of the walls concluded at Princesshay and we moved rapidly across to see the Castle Gatehouse—all that survives of the medieval castle since the interior was swept away with the construction of the Law Courts in 1774. Bob Higham had drawn our attention to the combination of Norman and Anglo-Saxon work in this construction by William I, raising the question of whether this was due simply to the availability of



A stretch of the Roman city walls behind Trinity Street visited by the Cambrians on Sunday 25 September 2016 under the guidance of John Allan and Frances Griffith. *Photograph: Eileen Wilkes.*

Anglo-Saxon masons or whether it represented a more subtle attempt at reconciliation after William's subjugation of the hitherto staunchly pro-Godwinson city? There was time for a brief look in the interior courtyard of the former Law Courts where antiquarian record and, more recently, small-scale excavations have revealed part of a cemetery with a radiocarbon date of the ninth-century. Its date and location at a distance from the minster cemeteries is puzzling. Bob Higham and John Allan suggested that William's castle may have been constructed on a previous royal precinct, an *arx regia*, within the Anglo-Saxon city, the presence of a cemetery being strongly suggestive of a royal church within this enclosure.

The Cambrians returned to the hotel for coffee and then set off again towards the historic quayside. En route we paused at the site of the medieval **South Gate**, demolished in 1819, where Frances Griffith pointed out the outline marked out in the modern pavement of the foundations of the Roman city gate, revealed by excavation in 1989. The excavations had revealed the Roman road leading to Topsham lying beneath Holloway Street and the hitherto unknown earth and timber defences which preceded the Roman stone-built city walls. Enough information had been recovered to allow a reconstruction drawing of the third-century Roman city gate with its twin towers. Proceeding down towards the Quayside we walked alongside one of the best preserved sections of the Roman city wall.

The principal focus of our visit to the Quayside was the **Custom House** which had been introduced to us the previous evening in John Allan's lecture. A handsome brick building designed by Richard Allen, a



The Custom House visitor centre on Exeter's historic quayside, visited by the Cambrians on Sunday 25 September 2016, the last day of the Autumn Meeting. It was built in 1680 by the Barnstable builder, Richard Allen. *Photograph: Eileen Wilkes.*

builder from Barnstaple, it must have seemed a stylish novelty in a city still dominated by timber-framed buildings. Inside, members examined the displays on the history of the customs and the building but few were prepared for the first sight of the magnificent plaster ceiling of the Long Room on the upper floor made by John Abbott in 1680, the scion of a celebrated family of Devon plasterers and one of a series of remarkable ceilings in the building. John Allan explained the details of the ornamentation and drew the party's attention to the reproductions of John Abbott's notebook with over 300 designs, which is an unusual survival. Several of the motifs in the notebook could be seen in the ceiling.

The formal part of the Autumn Meeting then concluded with sincere thanks expressed to our local organisers and speakers. Members were at leisure to examine the other historic buildings on the Quayside and have lunch. Heather James then led some members back into the city for an optional tour of Exeter's unusual **Underground Passages**. Beginning in the Middle Ages the 'tunnels' were trenches dug and then covered over to take a piped water supply, initially from St Sidwell's Well to the Cathedral Close but extended in later centuries to bring a water supply to the Great Conduit in High Street. They finally went out of use after the great cholera outbreak of 1832.

HEATHER JAMES AND FRANCES GRIFFITH

Darlith yr Eisteddfod 2016 • Eisteddfod Lecture 2016

Traddodwyd Darlith Cymdeithas Hynafiaethau Cymru yn yr Eisteddfod Genedlaethol, Y Fenni, Awst 3 2016 gan Frank Olding, FSA. Mae'r testun a ganlyn wedi'i seilio'n rhannol ar y ddarlith ac yn rhannol ar Bennod 5 ei gyfrol *Archaeoleg Ucheldir Gwent* a gyhoeddwyd gan y Comisiwn Brenhinol ar Henebion Cymru ym mis Medi 2016, sydd wedi rhoi caniatâd caredig iddo ymddangos yma. Dylid nodi hefyd fod y testun Cymraeg yn seiliedig ar gyfieithiad a gomisiynwyd gan y Comisiwn.

The Cambrian Archaeological Association Lecture at the National Eisteddfod, Abergavenny, 3 August 2016, was delivered by Frank Olding. The following text is based partly on the lecture and partly on Chapter 5 of his volume *The Archaeology of Upland Gwent* published by the Royal Commission on the Ancient and Historical Monuments of Wales in September 2016, who have kindly granted permission for it to be reproduced here. The Welsh text is also based on the translation arranged by the Commission.

* * *

“Y CYMOEDD A NEWIDIODD Y BYD” – DIWYDIANT CYNNAR YN UCHELDIR GWENT

Ym 1779, yn ei lyfr hynod o ddifyr *A Geographical, Historical and Religious Account of the Parish of Aberystwith*, rhoes y Parchedig Edmund Jones ddarlun byw i ni o'r boblogaeth wledig, gan mwyaf, a grafi fywoliaeth fain ar eu ffermydd a'u pentrefi bach diarffordd ym mlaenau Gwent. Ond dechreuwyd datblygu'r pyllau glo a'r gweithfeydd haearn hyd yn oed mor gynnar â 1779, ac yr oeddent eisoes yn gwneud drwg i'r amgylchedd lleol. Dyma sylw Edmund Jones ynghylch cyflwr Afon Ebwy Fawr (Jones 1779, 19):

Higher up, the water is not very clear, being often troubled with the Pond waters scouring the Coal works; which is also unfriendly to the Fishes, and makes them more scarce.

Yn sicr, yr oedd ffwrneisi haearn bach yn bod yn yr ardal ers yr unfed ganrif ar bymtheg. Defnyddid siarcol yn danwydd am nad oedd neb bryd hynny wedi dyfeisio dull o ddefnyddio glo'n danwydd heb iddo ddifetha'r haearn. Er bod cerddi cyfoes fel 'Coed Glyn Cynon' yn gresynu at golli coed i'r diwydiant newydd a'i feistri Seisnig, gall effaith diwydiant ar y dirwedd leol fod wedi'i gorliwio am ei bod hi'n debygol y câi'r coetiroedd eu trin a'u rheoli'n ofalus iddynt allu dal i gynhyrchu coed am gyfnod maith. Ym Mhont-y-pŵl ym 1578, prynodd Richard Hanbury waith haearn bach er mwyn defnyddio dull a elwid yn broses 'Osmund' i gynhyrchu haearn. Ym 1700, yno y codwyd y felin rollo gyntaf yn y byd i gael ei gyrru gan ddŵr, a bu honno'n fodd i gynhyrchu haearn plât o safon yn rhad. Erbyn canol y ddeunawfed ganrif, ac yn sgil datblygu platio tun, Gwaith Haearn Pont-y-pŵl oedd un o'r pwysicaf yn Ewrop. Cangen bwysig o'r broses oedd datblygu japanio, sef proses lacro a fu'n fodd i Bont-y-pŵl gynhyrchu llestri japaneaidd ac efelychu, mewn metel, waith lacro cain o Japan. Fe'u cynhyrchwyd o 1730 tan 1820 yma a hefyd ym Mrynbuga (AIA 2003, 44).

Teulu Hanbury fu hefyd yn gyfrifol am sefydlu Ffwrnais Llanelli yng Nghlydach yn yr ail ganrif ar bymtheg. Yn sicr, yr oedd hi wrthi'n cynhyrchu erbyn 1684 ac erbyn 1704 fe gynhyrchai 300 tonnell o haearn y flwyddyn. Bryd hynny, gweithgarwch tymhorol iawn oedd cynhyrchu haearn. Câi'r deunyddiau crai eu paratoi a'u casglu yn ystod y gwanwyn a'r haf pan oedd y ffyrdd yn sych a hwylus a chynhyrchid yr haearn rhwng Medi ac Ionawr am fod digon o ddŵr i'w gael i yrru meginau'r ffwrneisiau (van Laun 2008, 56–7).

Un arall o'r ffwrneisiau cynnar hynny oedd Pont Gwaith yr Haearn, ryw ddwy filltir i'r de o Dredegar. Fe'i sefydlwyd yn oes Elisabeth I yn wreiddiol ac yna'i hailagor yn gynnar yn y ddeunawfed ganrif. Yn ei draethawd ar hanes Tredegar, a gyhoeddwyd ym 1868, cynhwysodd Eiddil Gwent lawer o wybodaeth ddefnyddiol amdani. Ailgodwyd y gwaith gan 'Gymry o Ffrainc' (h.y. Llydäwyr) tua 1738 neu 1739. Siarcol a ddefnyddid yn y ffwrnais ac mae'n debyg i'r perchnogion newydd ddychwelyd i Ffrainc tua 1748 gan fynd â rhai o'u gweithwyr o Gymru gyda hwy (Morris 1868, 20–4).

Y CHWYLDRO DIWYDIANNOL

Haearn a gwneud haearn

Yn sgil darganfod bod troi glo'n olog yn cynhyrchu tanwydd addas ar gyfer gwneud haearn, gwelwyd twf enfawr yn y diwydiant haearn ar draws Blaenau'r Cymoedd. Rhwng 1779 a 1839, trawsnewidiwyd tirwedd, poblogaeth a ffordd o fyw blaenau Gwent yn llwyr. Am fod y prif ddefnyddiau crai (mwyn haearn, carreg galch a glo) wrth law'n hwylus, sefydlwyd gweithfeydd haearn yn Sirhywi (1778), Cendl (1779), Blaenafon (1789), Glynebwy (1791), Clydach (1793), Nant-y-glo (1794), Tredegar (1800), Rhymni (1800), Glyn Nant-y-glo (1818), Blaenau (1823), Gwaith Haearn Bute (1825), Victoria (1836) a Chwm Celyn (1839). Erbyn 1841, y gornel fach hon o Gymru oedd y rhanbarth mwyaf diwydiannol yn y byd. O fewn ychydig flynyddoedd, tyrrai pobl yn eu miloedd i sicrhau gwaith yn y diwydiant newydd a chynyddodd y boblogaeth leol yn aruthrol.

Gan y de-ddwyrain, o ganlyniad, y mae peth o archaeoleg ddiwydiannol bwysica'r byd, a safle Treftadaeth Byd Blaenafon yw un o'r tirweddau diwydiannol sydd wedi'u diogelu orau o bob un yn y byd. Er bod gweddillion Gwaith Haearn Blaenafon wedi'u diogelu'n wych ac yn haeddu diogelu'n wych ac yn haeddu bod yn enwog, mae'n werth ymweld â safleoedd eraill hefyd. Mae Gwaith Haearn Sirhywi'n agored i'r cyhoedd a rhaid bod Gwaith Haearn Clydach yn sefyll ar un o'r safleoedd hyfrytaf ym myd archaeoleg ddiwydiannol.

Un o'r gweithfeydd prin eraill yng Ngwent sy'n dal lle yr arferai fod yw Gwaith Haearn y British ger Pont-y-pŵl. Bu ar waith o 1827 tan 1883 a dilynwyd cynllun Decimus Burton wrth ei godi. Yr oedd

yno bedair ffwrnais chwyth, ond gwaelodion yn unig sydd wedi goroesi. Goroesi hefyd wna'r bloc o swyddfeydd, sy'n drawiadol er iddo golli ei do, a chwt injan drawst Pwll Glo'r British Ironworks a godwyd ym 1845. Deuir at y safle drwy'r Bwa Mawr', twnnel trawiadol sy'n 46m (50 lath) o hyd ac yn 14.5 metr (48 troedfedd) o led, o dan yr arglawdd a godwyd gan Gwmni Rheilffordd a Chamlas Sir Fynwy ym 1879.

Ni ellir ond gresynu at y ffaith i'r mwyafrif o safleoedd y gweithfeydd gael eu dymchwel yn llwyr, ond efallai mai'r drasiedi fwyaf oedd colli Gwaith Haearn Bute, a godwyd gan Ardalydd Bute ym mhen uchaf cwm Rhymni ym 1825. Fe'i cynlluniwyd gan John MacCulloch mewn arddull Eifftaidd a addaswyd o adfeilion Dendera yn yr Aifft Uchaf. Arddangoswyd lluniadau pin ac inc o'r cynllun yn Arddangosfeydd yr Academi Frenhinol yn haf 1827 a haf 1828. Ymhlith nodweddion eraill, dangosai'r lluniadau 'Engine blast house and regulators' a gall hynny'n hawdd gyfeirio at y sffêr a osodwyd ar y podiwm yn yr arddull Eifftaidd a bortreadwyd mor wych mewn peintiad gan John Petherick tua 1830. Dynwardai un o'r peiriandai deml Eifftaidd, a pheth digon anghydnaws oedd peri i un simnai edrych fel minaré!

Codwyd y Drenewydd gerllaw i gynnig cartrefi i'r gweithwyr haearn, a hynny yn yr arddull glasurol ac i safon uchel. Mae'n debyg i'r cynllun gael ei seilio ar gynlluniau James Adams ar gyfer pentref yn Lowther yn Cumbria ym 1765. Gan mai'r bwriad gwreiddiol oedd iddo fod yn batrwm o bentref mwy o faint, gosodwyd sylfeini pedwaredd res iddo tua'r de. Ond wrth i weithio haearn ddod i ben ni ellid cyfiawnhau codi'r rhes honno. Ym 1838 y Drenewydd (New Town) oedd enw'r anheddiad, ac ni ddechreuwyd ei alw'n Bute Town yn Saesneg tan yn ddiweddarach.

Carreg galch

Cyn hir, ymledodd diwydiannau eraill, yn ogystal â'r gweithfeydd haearn, ar draws y cymoedd hyn i gyflenwi defnyddiau crai. Datblygwyd cwarrau carreg galch ar hyd ymyl ogleddol y fro mewn mannau fel Trefil (1794), Darren Disgwylfa—a elwid hefyd yn Garreg Bica (1816)—a Llangatwg (1829). Efallai mai'r rhai sydd fwyaf annisgwyl i'r ymwelydd heddiw yw'r gweddillion helaeth ar Fynydd Llangatwg, uwchlaw pentref Llangatwg. Yma, mae'r cwarrau carreg galch yn rhedeg am ryw 3 milltir (5 cilometr) ar hyd sgarp gogleddol y mynydd mor uchel â 304–396 metr (1,100–1,300 o droedfeddi) uwchlaw lefel y môr. Drwy gyfuno archaeoleg maes ac astudio dogfennau, mae ymchwil fanwl John van Laun wedi bod yn fodd i ddyddio'r cwarrau'n fanwl a nodi trefn eu hagog (van Laun 2001, 119). Yma, dechreuodd y datblygu tua 1799 yn sgil agor Camlas Brycheiniog a'r Fenni, ond o 1815 ymlaen aeth Cwmni Cychod Aberhonddu ati o ddifrif i ddechrau gweithio'r cwarrau. Ar lawr y cwm ym 1816 adeiladwyd tramffordd a gysylltai'r cwarrau â'r gamlas. Y syndod yw i'r garreg galch gael ei rholio i lawr cafn 200 metr o hyd (a elwid yn 'Chute') i'r dramffordd islaw.

Ym 1829, cymerodd y brodyr Bailey, meistri Gwaith Haearn Nant-y-glo, brydles ar y cwarrau ac adeiladu tramffordd newydd a ddilynai'r gyfuchlin 396 metr (1300 troedfedd) am fwy na 7 cilometr yn ôl i weithfeydd haearn Nant-y-glo (AIA 2003: 42). Fe godasant hefyd inclein dwbl yn lle'r 'Chute' dychrynlyd (van Laun 2001, 119). Buont yn gweithio'r cwarrau tan 1875. Rhwng 1816 a 1829, cawsant eu carreg galch o gyfres o gwarrau ger Darren Disgwylfa lle mae golygfeydd godidog dros Ddyffryn Wysg. Dim ond wedi i'r garreg galch yno ddod i ben yr aethant ati i gymryd y brydles yn Llangatwg (ibid. 87–91).

Cynhyrchu glo a haearn

Defnyddiwyd amryw ffurfiau ar fwyngloddio i gynhyrchu glo a haearn. Yn y dyddiau cynnar ac, yn wir, am ganrifoedd cyn y Chwyldro Diwydiannol, câi glo ei gloddio oddi ar wyneb y ddaear, yn enwedig ar hyd ymyl ogleddol y maes glo. Yr enw lleol ar y math hwnnw o fwyngloddio oedd 'patshio' ac enwid pob 'patsh' yn ôl y dyn a'i gweithiai—'Patsh Defi Siôn' ac yn y blaen. Yn ddiweddarach, suddwyd pyllau bas ar ffurf cloch. Defnyddid wins neu 'chwimsi', a yrrid gan geffyl, i fynd â'r dynion i lawr ac i godi'r

mwynau gwerthfawr i'r wyneb. Dyna darddiad enw pentref Winchestown ger Nant-y-glo. Erbyn 1779 yr oedd pyllau glo bas o'r fath eisoes ar waith i fodloni anghenion pobl leol a châr'r glo ohonynt hefyd ei werthu mewn trefi marchnad cyfagos fel y Fenni ac Aberhonddu.

Er hynny, golygodd twf y diwydiant haearn fod angen sicrhau mwy a mwy o lo a haearn ac fe ddyfeisiwyd dulliau eraill a mwy effeithiol. Os oedd yr haenau o lo'n weddol agos at yr wyneb, defnyddid dŵr i glirio'r pridd a'r gorlwyth a oedd drosto. Codwyd argaeau ar nentydd bach i greu 'pownd' digon mawr o ddŵr. Yna, câi'r dŵr ei ryddhau i sgwrio'r tyweirch, y pridd a'r gro oddi ar y glo neu'r mwyn haearn fel bod modd ei gloddio â llaw. Yr enwau lleol ar y math hwnnw o fwyngloddio oedd rasio a sgwrio, a dyna darddiad enwau pentrefi Rasa ger Cendl a Scwrfa yn Sirhywi. Bydd rasio a sgwrio'n gadael nodwedd archaeolegol bendant yn y dirwedd, a honno fel rheol yn geunant mawr dolennog ac ynddo nant druenus o fach yn treiglo ar draws ei waelod. Ceir llawer o enghreifftiau gwych o hynny ym mlaenau Gwent. Yn y Ras Uchaf ger Pont-y-pŵl ceir darn helaeth o dir lle defnyddiwyd y dull hwnnw i gloddio'r mwyn haearn, ac uwchlaw iddo ceir sianeli a phyllau dŵr mewn cyflwr da.

Dull arall o gloddio am lo a mwyn haearn oedd gyrru lefel, neu agor cloddfa ddrifft, i ochr y bryn gan ddilyn yr haen o fwyn gwerthfawr i mewn i'r bryn hwnnw. Codai'r lefel ychydig wrth fynd yn ddyfnach er mwyn i ddŵr ac ati lifo ohoni. Cloddiwyd hefyd fwyngloddiau dyfnach na'r rhai cynnar ar ffurf debyg i gloch, a datblygwyd amrywiol fathau o offer weindio i'r dynion gael mynd i lawr ac i'r glo ddod i fyny. Maes o law, dechreuwyd defnyddio peiriannau trawst. Ym Mhwll Glo Glyn Pits ger Pont-y-pŵl ceir olion rhyfeddol dau beiriandy—a'r peiriannau'n dal ynddynt. Ar y peiriandy cynharaf ceir y dyddiad 1845 ac ynddo mae peiriant trawst a wnaed, mae'n debyg, gan waith haearn Abaty Nedd. I bob golwg, defnyddiwyd y peiriant yn wreiddiol i bwmpio a weindio ac mae ef bron yn gyflawn.

Codwyd y peiriandy arall rhwng 1859 a 1865 (AIA 2003: 45) ac ynddo mae peiriant weindio fertigol o fath adeilad tŷ, sef bod y peiriant wedi'i ymgorffori yn yr adeiladwaith fel uned. Mae 'Patshys Bryn-mawr' (a elwir hefyd yn Clydach Terraces) yn enghreifftiau gwych o'r amrywiaeth o ddulliau a ddefnyddiwyd yn niwedd y ddeunawfed ganrif a dechrau'r ganrif ddilynol i godi glo a mwyn haearn ar ymyl ogleddol y maes glo.

Datblygu'r cysylltiadau cludiant

Rhaid oedd dyfeisio system i gludo'r holl ddefnyddiau crai hynny i'r gweithfeydd a chludo'r haearn gorffenedig at y cwsmeriaid. Crëwyd rhwydwaith o reilffyrdd cynnar ('platffyrdd' fydd archaeolegwyr yn eu galw fel rheol) er mwyn i ferlod cydnerth y fro allu tynnu cyfresi o dramiau ar hyd-ddynt. Am na allai'r merlod ddygymod yn dda â'u tynnu ar lethrau—hyd yn oed rai eithaf gwastad—y duedd oedd adeiladu'r tramffyrdd mor wastad â phosibl ar hyd ochrau'r mynyddoedd ac mae llawer ohonynt i'w gweld o hyd yn uchel uwchlaw trefi a phentrefi diwydiannol blaenau Gwent. Yr oedd dau fath o blatffordd, sef tramffordd a rheilffordd. Y prif wahaniaeth rhyngddynt oedd cynllun y cledrau (neu'r 'platiau') a'r olwynion. Ar reilffordd, ceid cledrau solet a sgwâr a chantel ar olwynion y tramiau i'w cadw 'ar y cledrau'. Ar dramffordd, yr oedd y cantel ar y cledrau eu hunain (a oedd felly ar siâp 'L') a'r olwynion yn rhai plaen. Yn y naill achos a'r llall defnyddid blociau mawr o garreg yn sliperi, ond yn achos y rheilffordd defnyddid pin mawr i gydio'r cledrau wrth y sliperi. Gellir dal i weld blociau a thyllau ynddynt ar hyd llwybrau'r hen reilffyrdd diflanedig.

Datblygwyd rhwydwaith o gamlesi'n gyflym er mwyn anfon y cynnyrch allan i'r byd mawr. Ym 1792 cynlluniodd Thomas Dadford yr Ieuengaf lwybr camlas Brycheiniog a'r Fenni i redeg y 33 milltir o Aberhonddu i Lanfihangel Pont-y-moel. Dechreuwyd gweithio wrth Lanfa Gilwern ym 1797 drwy godi dyfrbont enfawr ar draws Afon Clydach (van Laun 2008, 65). Erbyn 1799, yr oedd y gamlas wedi cyrraedd Tal-y-bont ac fe gyrhaeddodd Aberhonddu ym 1800.

Gan weithio tua'r de o bentref Gilwern, cyrhaeddodd y gamlas Lanfa Gofilon erbyn 1805. Erbyn hynny, cawsai Dadford ei ddisodli gan Thomas Cartwright. Ym 1810, dechreuwyd gweithio yn Llanfihangel

Pont-y-moel tua'r gogledd i gyfeiriad Gofilon a chwblhawyd y gamlas ym 1812 (Stevens 1974, 23). Chwe loc yn unig sydd i'r gamlas mewn 33 milltir.

Adeiladwyd y cyfan o Gamlas Sir Fynwy gan Thomas Dadford yr Ieuengaf rhwng 1792 a 1799. Rhedai'r brif adran ohoni am 11 o filltiroedd o Gasnewydd i Bontnewynydd. O Malpas, rhedai cangen ohoni am 12 milltir i Grymlyn. Yr oedd gan brif adran Camlas Sir Fynwy 41 o lociau ac mae 32 o lociau ar y gangen i Grymlyn, gan gynnwys y Pedwar Loc ar Ddeg sy'n codi 82 o fetrau (268 o droedfeddi) mewn 800 metr (rhyw hanner milltir). Dyna un o'r campau peiranyddol mwyaf ar y gamlas.

Tân a haearn

Er bod haearn bwrw'n ddefnydd rhagorol at rai dibenion, yr oedd gofyn ei droi'n haearn gyr gan amlaf. Gwneid hynny yn yr efail neu, a defnyddio term y gweithwyr haearn eu hunain, yn y 'coethdy'. Cyn y Chwyldro Diwydiannol, y dull arferol oedd aildwymo a morthwyllo'r haearn dro ar ôl tro i dynnu'r amhureddau ohono a thrawsnewid yr haearn bwrw'n haearn gyr. Ond ym Merthyr Tudful ym 1784 perffeithiwyd dull mwy effeithlon, sef proses 'pwdlo', a'r enw ar y dull hwnnw cyn hir oedd 'y dull Cymreig'. Hanfod y broses oedd ail-doddi'r haearn bwrw mewn ffwrnais arbennig ac yna'i droi â pholyn hir o ddr neu bren glasod i losgi'r amhureddau ohono. Y pwdler a wnâi'r gwaith dychrynlyd hwnnw. Pan fyddai'r haearn tawdd yn barod ar gyfer cam nesaf y broses, câi ei ffurfio'n belen fawr o fetel eirias a oedd wedi'i led-doddi ac yna'i gludo draw at forthwylion a melinau rholio anferth yr efail i'w rollo'n farrau neu'n ddalennau o haearn gyr. Mae'r hen dripan diennw'n cofnodi'r broses:

Mi fûm i sbel yn pwdlo
Cyn dechrau gyda'r moldio,
Yn cadw tân i'r injan flast,
A thrin harn cast, a'i lwytho.

O'r holl efeiliau a arferai weithio ar draws y de-ddwyrain, yr unig weddillion sy'n bod o hyd yw'r rhai yng Ngarn Ddyrys a wasanaethai Waith Haearn Blaenafon.

Twf y llafurlu

Gweithiai'r gweithwyr dan amodau garw. Ar ben hynny, chaent mo'u talu ond unwaith y mis neu bob chwe wythnos. Yn y cyfamser, wrth gwrs, yr oedd rhaid iddynt fyw a byddai'r gweithwyr yn tynnu eu cyflog ymlaen llaw—'the draw' oedd eu henw ar y drefn honno. Erbyn i'w gyflog gyrraedd, yr oedd hi'n berffaith bosibl i weithiwr fod mewn dyled i'r cwmni ac felly wedi'i glymu'n dynn wrth ei gyflogwr. Dwysawyd y broblem gan drefn a elwir yn 'trwco', sef talu'r gweithwyr mewn tocynnau pres neu gopr yn hytrach nag arian go-iawn. Ni chaent wario'r tocynnau ond yn y siop a oedd yn eiddo i'r cwmni—y Siop Trwco—lle'r oedd prisiau'r nwyddau yn aml yn uwch a'u hansawdd yn salach. Serch i'r gyntaf o'r deddfau gwrth-drwco gael ei phasio ym 1831, daliwyd i ddefnyddio'r system honno mewn rhai manau tan y 1870au.

Ar ben hynny i gyd, yr oedd gofyn i fenywod a phlant weithio yn y gweithfeydd haearn a'r mwyngloddiau. Yn ôl Evan Powell (a ysgrifennodd hanes Tredegar ym 1884), gweithiai'r dynion a'r menywod yn gydradd dan ddaear, a byddai'r rhyw deg yn aml yn rhagori ar eu gwŷr fel coliers neu lowyr. Cofiai'n arbennig am fenyw o'r enw Betty Wilkes a weithiai fel 'ail law' i'w gwŷr, dyn a oedd yn bwdler yng ngweithfeydd Tredegar. Defnyddiai hi declyn a elwid yn 'doli', tebyg i ordd bren fawr ac iddi ddolen hir o haearn, i helpu i ffurfio pêl o'r haearn tawdd a ddeuai o'r ffwrnais bwdlo (Powell 1902, 102).

Ym 1841, sefydlwyd Comisiwn Brenhinol i ymchwilio i'r sefyllfa. Gwelwyd bod plant mor ifanc â phump oed yn gweithio dan ddaear am 12 awr y dydd gan agor a chau'r drysau a awyrai'r pyllau.

Gweithiai plant yn y gweithfeydd haearn i helpu'r pwdlers a phasio haearn barrau drwy roliau'r efail. Bwydai eraill y ffwrneisiau neu wthio llond ceirt o ludw i'r tomenni gwastraff. Er i ddeddf gael ei phasio ym 1842 i wahardd menywod a phlant rhag gweithio dan ddaear, ni sefydlwyd trefn i'w gweithredu tan y 1850au (van Laun 2008, 25–6).

Gan i'r trefi diwydiannol dyfu mor gyflym, ac mor ddi-drefn gan amlaf, prin yr ystyriwyd materion fel cyflenwi dŵr glân a gwaredu carthffosiaeth. Byddai clefydau fel teiffoid a difftheria'n ymledu fel tân gwyllt drwy'r cymunedau poblog. Y clefyd gwaethaf o lawer oedd colera, 'Brenin y Dychryniadau', ac un o'r manau yn y de-ddwyrain sy'n cyffroi'r meddyliau dwysaf yw mynwent colera Cefn Golau ar y gweundir llwm i'r gorllewin o Dredegar.

Gwrthryfel y Siartwyr

O gofio hynny i gyd, go brin ei bod hi'n syndod bod rhai o elfennau mwy penboeth y gymdeithas wedi ceisio cymryd camau uniongyrchol i wrthdystio yn erbyn amodau garw eu bywyd a'u gwaith. Y mwyaf difrifol, o lawer, o'r ymgyrchoedd gwleidyddol a chymdeithasol oedd Gwrthryfel y Siartwyr ym 1839. Cyhoeddwyd Siarter y Bobl ym mis Mai 1838 gan fynnu chwe hawl radical:

- Yr hawl i bob dyn dros 21 gael pleidlais
- Ethol drwy bleidlais gyfrinachol
- Yr un nifer o bobl mewn dosbarthau etholiadol
- Etholiadau blynyddol
- Dim cyfyngiad o ran perchnogaeth eiddo na chymhwyster i sefyll fel Aelod Seneddol
- Aelodau Seneddol i gael cyflog

Yn aml, byddai gwahaniaeth barn ymhlith Siartwyr ynghylch cynnal ymgyrch gwbl heddychlon (a elwid yn gyffredin yn Siartiaeth 'grym moesol') neu alw ar gyrff mawr o gefnogwyr i gyfleu'r farn gyhoeddus yn glir iawn i'w llywodraethwyr. O fynd â'r olaf i'w ben draw, a allai droi'n wrthryfel, gellid ei alw'n Siartiaeth 'grym corfforol'. Erbyn hydref 1839, yr elfennau chwyldroadol a âi â hi yn y de-ddwyrain. Ar noson Tachwedd 3ydd 1839, felly, cychwynnodd 4,000 o ddynion arfog ar eu gorymdaith hir i Gasnewydd o dan arweinyddiaeth Zephaniah Williams, John Frost a William Jones.

Erbyn hanner awr wedi naw fore Llun, 4ydd Tachwedd, safai'r llu o Siartwyr y tu allan i Westy'r Westgate lle'r oedd yr awdurdodau yng Nghasnewydd wedi sefydlu pencadlys. Yno i amddiffyn y rheiny yr oedd rhyw 60 o gwnstabiliaid arbennig a 30 o filwyr y 45fed Catrawd o Filwyr Troed. O dan amgylchiadau dryslyd, y Siartwyr a daniodd yr ergydion cyntaf. Ffoi ar unwaith wnaeth llawer o'r cwnstabiliaid arbennig, ond ymateb y milwyr oedd tanio at y dyrfa ar y stryd. Bu brwydro ffyrnig yn y gwesty rhwng y milwyr ac amryw o'r Siartwyr ac, er na pharodd 'Brwydr Gwesty'r Westgate' ond 25 munud, gorweddai 22 o bobl yn farw neu ar fin marw ac anafwyd dros 50.

Gadawodd y gwrthryfel ei farc ar lèn gwerin blaenau Gwent. Mae Ogorf y Siartwyr ar gnwc amlwg ar weundir agored i'r gogledd o Drefil. Mor gynnar â 1884, cofnododd Evan Powell draddodiad lleol cyson i'r ogorf gael ei defnyddio'n fan cyfarfod cyfrinachol ac yn ffatri arfau cyn i'r gwrthryfel gychwyn (Powell 1902, 57). Pan gloddiodd aelodau o Glwb Ogofeuo Dyffryn Hafren i mewn i'r ogorf ym 1970, cafwyd hyd i olion dynol ynghyd â phibell glai, darnau o lo, a llechfaen rhyfedd â thyllau wedi'u drilio iddo. Cynhaliwyd cwest ynghlŷn â'r esgyrn dynol a barn y patholegydd enwog o'r Swyddfa Gartref, Dr Bernard Knight, oedd bod y dystiolaeth yn awgrymu eu bod yn gymharol ddiweddar ac yn rhyw 50–100 oed. Credai fod yno esgyrn o leiaf dri unigolyn, a chawsai asgwrn clun ei ddryllio. Y posibilrwydd, felly, yw i'r esgyrn gael eu claddu ar ôl rhyw helbul yn y fro (CBHC 1997, 13). Ai'r rheiny oedd cyrff y Siartwyr a gludwyd adref ar ôl y lladdfa a'u claddu'n ddistaw bach? Ai dyna wir arwyddocâd Ogorf y Siartwyr?

Gan fod helbulon o'r fath yn digwydd mor aml, nid yw'n fawr o syndod i'r meistri haearn geisio'u hamddiffyn eu hunain a'u heiddo. Efallai mai'r enghraifft orau o'u hymateb i'r anniddigrwydd cymdeithasol parhaus yw stori ryfeddol Tai Crwn Nant-y-glo. Codwyd y tyrrau amddiffynnol yno gan Joseph a Crawshay Bailey, meistri haearn Nant-y-glo, i wrthsefyll unrhyw ymgais gan eu gweithwyr eu hunain i ymosod arnynt. Bu'n rhaid wrthynt cyn hir. Yn sgil trechu Napoleon fe esgorodd y newyn a'r tlodi a achoswyd gan y dirwasgiad yn y diwydiant haearn ar derfysgoedd difrifol yn Nant-y-glo ym 1816 a thrachefn ym 1822. Bu'n rhaid galw ar y fyddin i'w tawelu ac am bron i bythefnos bu milwyr y Scots Greys (a oedd yn enwog am eu hymosodiad yn Waterloo) yn byw yn stablau'r Tai Crwn.

Adferwyd y tŵr gogledd-ddwyreiniol ym 1990. Mae iddo ddrws o haearn bwrw wedi'i osod mewn cyntedd o gerrig y bu arno, ar un adeg, sbigogau crwm i rwystro unrhyw un rhag dringo i'r lloriau uwchben. Mae i'r drws ei hun ddwy agen i fwsgeidi, a chloriau mewnol o haearn bwrw iddynt. Mae'r muriau'n bedair troedfedd o drwch a'r ffenestri'n culhau tuag i mewn er mwyn amddiffyn y sawl a oedd y tu mewn. Mae holl adeiladweithiau mewnol y ffenestri a'r lloriau wedi'i wneud o haearn bwrw, ac o haearn y gwnaed popeth a fyddai fel arfer wedi'i wneud o bren.

Ryw 100 metr o'r tyrau saif gweddillion Tŷ Mawr, y plasty gwych a godwyd gan Joseph Bailey ym 1816. O'i amgylch yr oedd gerddi mawr a llwybrau drwy'r coed, a llifai nant o'r mynydd drwyddynt. Yn nhu blaen y tŷ, yr oedd rhes o chwe cholofn haearn (a gastwyd yn y gweithfeydd, wrth gwrs) yn cynnal feranda a thrwy ddrysau dwbl mawr yr eid i mewn i'r adeilad. Yn y cyntedd, arweiniai rhes o risiau marmor i fyny i'r ail lawr. Yn y cefn, ceid adeiladau gwasanaethu wedi'u clystyru o amgylch cwrt bach. Rhaid bod y gweithwyr lleol yn boenus o ymwybodol o'r gwahaniaeth enfawr rhwng eu hamodau byw hwy a rhai eu meistri.

Erbyn canol y bedwaredd ganrif ar bymtheg, yr oedd newidiadau cymdeithasol mawr ar waith yn y 'Deyrnas Ddu', a gwelwyd ymfudo sylweddol iawn wrth i'r diwydiant haearn ddirywio'n gyflym. Roedd cyfnod cyntaf y Chwyldro Diwydiannol wedi dod i ben.

FRANK OLDING

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“THE VALLEYS THAT CHANGED THE WORLD” – EARLY INDUSTRY IN UPLAND GWENT

In 1779, in his fascinating book, *A Geographical, Historical and Religious Account of the Parish of Aberystroth*, Revd Edmund Jones gives us a vivid picture of an overwhelmingly rural population eking out a living in their remote farms and hamlets in the uplands of Blaenau Gwent. However, even as early as 1779, the coal pits and ironworks were beginning to develop and were already having a damaging effect on the local environment. This is what Edmund Jones has to say about the condition of the Ebbw Fawr river (Jones 1779, 19):

Higher up, the water is not very clear, being often troubled with the Pond waters scouring the Coal works; which is also unfriendly to the Fishes, and makes them more scarce.

Small iron furnaces had certainly existed in the area since the sixteenth century. Charcoal was the fuel used—a method for using coal as a fuel without ruining the iron had not yet been devised. Contemporary poems such as ‘Coed Glyn Cynon’ bewail the loss of woodland to the new industry and its English masters. However, in order to sustain production over many years, it seems likely that the woodlands would have been carefully managed and conserved, so the impact of industry on the local landscape may have been overstated. At Pontypool in 1578, Richard Hanbury acquired a small existing ironworks for the production of iron using the so-called ‘Osmund process’. In 1700, the site saw the construction of the world’s first water-powered rolling mill, enabling the production of cheap, high-quality plate iron. By the mid-eighteenth century, with the development of tinsplating, the Pontypool Ironworks became one of the most important in Europe. An important off-shoot of this process was the development of japanning. This was a lacquering process that allowed the production of Pontypool Japanware—an emulation in metal of fine Japanese lacquer work. Production lasted from 1730 to 1820 and was also carried out at Usk (AIA 2003, 44).

The Hanbury family was also responsible for the establishment of Llanelly Furnace at Clydach in the seventeenth century. It was certainly in production by 1684 and, by 1704, was producing 300 tons of iron per year. At this period, iron-making was very much a seasonal activity—raw materials were prepared and gathered during the spring and summer when the roads were dry and passable and the iron was produced between September and January when there was ample water to drive bellows for the furnaces (van Laun 2008, 56–7).

Another of these early furnaces was Pont Gwaith yr Haearn, some two miles south of Tredegar. It was originally established in the time of Elizabeth I and then reopened early in the eighteenth century. In his essay on the history of Tredegar, published in 1868, Eiddil Gwent includes much useful information. The works were rebuilt by ‘Cymry o Ffrainc’ (‘Welshmen from France’, i.e. Bretons) in about 1738 or 1739. The furnace was powered by charcoal and the new owners seem to have returned to France in about 1748, taking some of their Welsh workers with them (Morris 1868, 20–4).

THE INDUSTRIAL REVOLUTION

Iron and ironworking

With the discovery that turning coal into coke produced a suitable fuel for iron-making came a massive growth in the iron industry across the Heads of the Valleys. Between 1779 and 1839, the landscape, population and way of life of the Gwent uplands were transformed beyond recognition. Drawn by ready access to the main raw materials (namely iron ore, limestone and coal), ironworks were established at

Sirhowy (1778), Beaufort (1779), Blaenavon (1789), Ebbw Vale (1791), Clydach (1793), Nantyglo (1794), Tredegar (1800), Rhymney (1800), Coalbrookvale (1818), Blaina (1823), Bute Ironworks (1825), Victoria (1836) and Cwm Celyn (1839). By 1841, this small corner of Wales was the most heavily industrialised region in the world. Within a few years, people flocked in their thousands to secure employment in the new industry and the local population exploded.

As a consequence, south-east Wales boasts some of the most important industrial archaeology in the world. The Blaenavon World Heritage site represents one of the best preserved industrial landscapes in the world. The wonderfully preserved remains of Blaenavon Ironworks are justly famous, but other sites offer rewarding places to visit. Sirhowy Ironworks is open to the public and Clydach Ironworks must occupy one of the most picturesque sites in the world of industrial archaeology.

One of the few other Gwent ironworks with remains *in situ*, the British Ironworks near Pontypool, operated from 1827 to 1883 and was originally built to the design of Decimus Burton. There were four blast furnaces, of which only the bases survive. The office block, roofless but nonetheless impressive, survives, as does the beam engine house of the British Ironworks Colliery built in 1845. The site is approached through ‘Big Arch’, an impressive 46m (50 yard) long, 14.5 metres (48 feet) wide tunnel beneath the Monmouthshire Railway and Canal Company embankment of 1879.

The total destruction of the majority of the ironworks sites themselves can only be lamented, but perhaps the greatest tragedy was the loss of the Bute Ironworks built by the Marquis of Bute at the head of the Rhymney valley in 1825. The works were designed by John MacCulloch in an Egyptian style adapted from the ruins of Dendera in Upper Egypt. Pen and ink drawings were exhibited at the Royal Academy Summer Exhibitions of 1827 and 1828. Among other features, the entry showed “Engine blast house and regulators” which might well refer to the sphere placed on the Egyptian-style podium spectacularly portrayed in a painting by John Petherick in about 1830. One of the engine houses mimicked an Egyptian temple with a chimney disguised as a rather incongruous minaret!

Bute Town was built nearby to house the ironworkers. The settlement was constructed to a high standard in a classical style. The plan was probably based on James Adams’ planned village at Lowther in Cumbria of 1765. It was originally conceived as a larger model village and the foundations of a fourth row were laid to the south, but the exhaustion of the iron-workings did not justify further development. In 1838, the settlement was called New Town (it is still called *Drenewydd* in Welsh); only later did it become known as Bute Town.

Limestone

As well as the ironworks themselves, other industries soon spread across these valleys in order to supply raw materials. Limestone quarries developed along the northern ridge of the area at places like Trefil (1794), Darren Disgwylfa, also known as the Lonely Shepherd (1816), and at Llangattock (1829). Perhaps the most unexpected to the modern visitor are the extensive remains on Mynydd Llangatwg, above Llangattock village. Here, limestone quarries run for about 3 miles (5 kilometres) along the north-facing escarpment of the mountain at a dizzying height of between 304 metres (1,100 feet) and 396 metres (1,300 feet) above sea level. Detailed research by John van Laun combining field archaeology with documentary studies has enabled the quarries to be closely dated and sequenced (van Laun 2001, 119). Development began here in about 1799 with the opening of the Brecknock & Abergavenny Canal, though the quarries were first worked seriously by the Brecon Boat Company from 1815 onwards. A tramroad linking the quarries to the canal was built in the bottom of the valley in 1816. Amazingly, limestone was literally rolled down a 200 metres gully (known as the ‘Chute’) to the tramroad below.

In 1829, the Bailey brothers—the masters of the Nantyglo Ironworks—took out a lease on the quarries and built a new tramroad following the 396 metres (1300 feet) contour for over 7 kilometres back to

Nantyglo ironworks (AIA 2003, 42). They also built a double incline to replace the infamous Chute (van Laun 2001, 119). They continued to work the quarries until 1875. Between 1816 and 1829, the Baileys had obtained their limestone from the complex of quarries surrounding the Lonely Shepherd with its spectacular views over the Usk valley. It was the exhaustion of the useable limestone here that led them to take out the lease at Llangattock (ibid. 87–91).

Coal and iron extraction

Coal and iron were won through various forms of mining. In the early days, and indeed for centuries before the Industrial Revolution, coal was dug straight from the surface, especially along the northern rim of the coalfield. The local name for this style of mining was ‘patching’ and each patch was named for the man who worked it—‘Patch Defi Siôn’ (‘David Jones’ Patch’) and so on. Later, deeper workings were made by sinking shallow bell pits. A horse driven winch or ‘whim’ was used to take men down and bring the precious minerals to the surface. This is the origin of the name of the village of Winchestown near Nantyglo. Such shallow coal pits were already in use by 1779 to supply the needs of local people and also to be sold in the nearby market towns like Abergavenny and Brecon.

However, the growth of the iron industry saw the need to secure larger and larger quantities of coal and iron and other, more efficient methods were devised. Where the seams lay relatively close to the surface, water was used to clear the soil and overburden that overlay them. Small streams were dammed to allow a ‘pound’ of water of sufficient size to gather. The water was then released to scour away the turf, soil and gravel from the coal or iron ore, which could then be dug out manually. The local names for this type of mining were racing or scouring and this gave rise to the Welsh terms ‘*rhas*’ and ‘*sgwrfa*’—here again is the origin of the names of the villages of Rhasa near Beaufort and Scwrfa in Sirhowy. Racing and scouring leave distinctive archaeological features in the landscape—a large meandering canyon with a pathetically small stream trickling across the bottom. The Gwent uplands boast many fine examples. At Upper Race, near Pontypool, is a vast area of iron ore mined by this method, also known as hushing, with well-preserved water channels and ponds above it.

Another method of winning coal and iron ore was by driving a level or drift mine into the side of the hill following the seam of precious mineral into the hill, rising slightly as they went. The gentle upward incline allowed the levels to be self-draining. Mines deeper than the early bell-pits were also sunk and various types of headgear were developed to get men down and coal up. Eventually, beam engines were used. At Glyn Pits Colliery near Pontypool, are the remarkable remains of two engine houses, with engines *in situ*. The earlier bears a date of 1845 and contains a beam engine, probably made by the Neath Abbey ironworks. The engine appears to have been used originally for both pumping and winding and is almost complete. The other engine house dates to between 1859 and 1865 (AIA 2003, 45). It contains a vertical winding engine of the house-built type; that is with the engine incorporated into the structure of the building as a single build. The Brynmawr Patches (also known as the Clydach Terraces) offer fine examples of the range of methods used in the late eighteenth and early nineteenth centuries for winning coal and iron ore on the northern fringe of the coalfield.

The developing transport infrastructure

In order to bring all these raw materials to the works and carry the finished iron out to its customers, a transport system had to be devised. A network of early railways (usually known to archaeologists as ‘plateways’) was laid with journeys of trams (or ‘drams’ as they are known locally) drawn along them by the sturdy native ponies of the region. The ponies could not cope well with ascending or descending a slope—even relatively gentle slopes—and so the tramroads tended to be built as level as possible along the hillsides following the contours and there many of them may still be seen, high above the industrial

settlements of upland Gwent. There were two types of plateway—tramroads and railroads. The principal difference between them was the design of the rails (or ‘plates’) and the wheels. On a railroad, the rails were solid and square in section with a flange on the tram wheels to keep them ‘on the rails’. On a tramroad, the flange was on the rail itself (that was therefore L-shaped in section) and the wheels were plain. In either case, large blocks of stone were used as sleepers, except that in the case of the railroad, a large pin was needed to secure the rail to the sleeper. One can still see holed blocks along the courses of former railroads.

Connections to the wider world were effected via the rapidly developing canal network. The line of the Brecknock & Abergavenny canal was surveyed in 1792 by Thomas Dadford Junior and ran for 33 miles from Brecon to Pontymoel. Work began at Gilwern Wharf in 1797 with the construction of a massive aqueduct across the River Clydach (van Laun 2008, 65). By 1799, the canal had reached Talybont and the line to Brecon was completed in 1800. Working southwards from Gilwern, the canal reached Govilon Wharf in 1805. By this time, Dadford had been replaced by Thomas Cartwright. In 1810, work began at Pontymoel working northwards towards Govilon and the canal was completed in 1812 (Stevens 1974, 23). The canal has only six locks in 33 miles.

The Monmouthshire Canal was built entirely by Thomas Dadford Junior between 1792 and 1799. There was a main line of 11 miles from Newport to Pontnewynydd and a branch of 12 miles to Crumlin, which left the main line at Malpas. The Monmouthshire Canal had 41 locks on the main line and 32 on the Crumlin branch, including the Fourteen Locks, which achieve a rise of 82 metres (268 feet) in 800 metres (about half a mile) and represent one of the great engineering feats on the canal.

Fire and iron

Although cast iron was an excellent material for some purposes, for most practical applications it had to be turned into wrought iron. This was done in the forge or, to adopt the term of the Welsh-speaking ironworkers themselves, the ‘*coethdy*’ (‘finery’). Prior to the Industrial Revolution, the usual method was by repeatedly reheating and hammering the iron in order to force impurities out of it and so transform cast iron into wrought iron. In Merthyr in 1784 a more efficient method was perfected by a process known as ‘puddling’. This method soon became thought of as the ‘Welsh method’. The heart of the process was remelting the cast iron in a special furnace and then stirring it with a long pole of steel or green wood so that the impurities were burned out of it. The man responsible for this hellish work was the puddler. When the molten iron was ready for the next stage in the process, it would be formed into a large ball of white-hot, semi-molten metal and then carried over to enormous forge hammers and rolling mills to be rolled into bars or sheets of wrought iron. The old anonymous *triban* records the process:

*Mi fûm i sbel yn pwdlo
Cyn dechrau gyda'r moldio,
Yn cadw tân i'r injan flast,
A thrin harn cast, a'i lwytho.*

(‘I had a spell at puddling
Before starting with the moulding,
Kept fire for the engine’s blast,
And handled cast for loading.’)

Of all the forges that once operated across south-east Wales, the only extant remains are those at Garnddyrys that served the Blaenavon Ironworks.

The growing labour force

Working conditions were harsh. In addition, workers were only paid once a month or once every six weeks. In the meantime, of course, they had to live and the workers would draw on their pay in advance—known as ‘the draw’. By pay day, it was perfectly possible for an employee actually to be in debt to the company and so tied irrevocably to his employer. The problem was exacerbated by the system known as ‘truck’—paying the workers in brass or copper tokens rather than coin of the realm. They could only spend the tokens in the shop owned by the company—the Truck Shop—where prices were often inflated and the goods of poorer quality. Despite the fact that the first of the anti-Truck acts was passed in 1831, the system was still in use in some places until the 1870s.

In addition to all this, women and children were also obliged to work in the ironworks and mines. According to Evan Powell (who wrote a history of Tredegar in 1884) men and women worked underground on equal terms and in many cases the fairer sex often eclipsed their men-folk as colliers or miners. He particularly remembered a woman by the name of Betty Wilkes working as ‘second hand’ to her husband who was a puddler in Tredegar works. She would assist in forming the molten iron from the puddling furnace into a ball with an implement called a dolly that was similar to a large mallet with a long, iron handle (Powell 1902, 102).

In 1841, a Royal Commission was established to look into the situation. They found that children as young as five were working underground for 12 hours a day closing and opening the air doors that ventilated the pits. Children worked in the ironworks helping the puddlers and passing bar iron through the rolls in the forge. Others charged the furnaces or pushed ash carts to the spoil heaps. Despite the passing of an act in 1842 banning women and children from working underground, there was no system in place to enforce the law until the 1850s (van Laun 2008, 25–6).

The industrial towns grew so rapidly and on the whole so haphazardly that little thought was given to issues such as clean water supplies and sewage. As a consequence, outbreaks of diseases such as typhoid and diphtheria would spread through these densely-packed communities with alarming rapidity. The worst by far was the ‘King of Terrors’—cholera—and the Cefn Golau cholera cemetery, on the bleak moorland to the west of Tredegar, is one of the most evocative places in southeast Wales.

The Chartist Uprising

Bearing all this in mind, it is hardly surprising that some of the more hot-headed elements in this society should seek to take direct action against these harsh living and working conditions. By far the most serious of these political and social campaigns was the Chartist Uprising of 1839. In May 1838, the People’s Charter was published with its six radical demands:

- The right to vote for all men over 21
- Election by secret ballot
- Electoral districts of equal population
- Annual elections
- No requirement for the ownership of property or land to qualify to stand as an MP
- Salaries for MPs

Chartism and Chartists were often divided over whether to pursue a purely peaceful campaign of persuasion (commonly known as ‘moral force’ Chartism), or to suggest that the mobilisation of large bodies of supporters might be necessary to impress the establishment with the force of public opinion. Carried to a potentially insurrectionary extreme, this could be represented as ‘physical force’ Chartism. By the autumn of 1839, revolutionary elements were in the ascendant in south-east Wales, and so on the

night of 3 November 1839, 4,000 armed men set off on their long march to Newport under the leadership of Zephaniah Williams, John Frost and William Jones.

By half past nine in the morning of Monday 4 November, the Chartist force stood outside the Westgate Hotel where the authorities in Newport had set up their headquarters under the protection of about 60 special constables and 30 soldiers of the 45th Regiment of Foot. In confused circumstances Chartists fired the first shots. Many special constables immediately fled, but the regular soldiers responded by firing volleys into the crowd in the street, while inside the hotel a fierce battle raged between the soldiers and a number of Chartist intruders. The 'Battle of the Westgate' lasted only 25 minutes, but 22 people lay dead or dying and more than 50 were injured.

The uprising left its mark on the folklore of upland Gwent. The Chartists' Cave is set in a prominent knoll on the open moorland to the north of Trefil. As early as 1884, Evan Powell recorded a persistent local tradition that the cave had been used as a secret meeting place and arms factory leading up to the uprising (Powell 1902, 57). When the cave was dug into in 1970 by members of the Severn Valley Caving Club, human remains were found together with a clay pipe, fragments of coal and a strange slab of rock with holes drilled through it. An inquest was held on the human bones and testimony presented by the famous Home Office pathologist, Dr Bernard Knight, suggested that they were fairly recent, about 50 to 100 years old. In his opinion, the bones came from at least three individuals and one thigh bone was shattered, leaving the possibility that the bones were buried after some disturbance in the local area (RCAHMW 1997, 13). Were these the bodies of Chartists carried home from the slaughter and buried in secret? Is this the true significance of the Chartists' Cave?

With such disturbances flaring up so frequently, it causes little surprise that the ironmasters sought to protect themselves and their property. Perhaps the best example of their response to this endemic social unrest is the remarkable story of the Nantyglo Roundhouses. These defensive towers were built by Joseph and Crawshay Bailey, the Nantyglo ironmasters, as a defence against potential attack by their own workers. The defences soon proved a dire necessity. The hunger and poverty caused by the depression in the iron industry that followed the end of the Napoleonic Wars led to serious rioting in Nantyglo in 1816 and again in 1822. The army had to be called for to suppress the disorder and for almost a fortnight soldiers of the Scots Greys (famous for their gallant charge at Waterloo) were billeted in the stables at the Roundhouses.

The north-eastern tower was restored in 1990. It has a cast-iron door set in a stone porch that once had curved spikes to prevent anyone climbing to the upper floors. The door itself has two musket loops with internal cast-iron covers. The walls are four feet thick and the windows narrow towards the interior so as to defend those inside. All the internal structures of the windows and floors are made of cast iron—indeed, everything that would normally be made of wood is made of iron.

About 100 metres from the towers stand the remains of Tŷ Mawr, the splendid mansion that Joseph Bailey built in 1816. It was surrounded by large gardens with woodland walks and a mountain stream running through. At the front of the house, a colonnade of six iron pillars (cast in the works, of course) supported a veranda and one entered the building via large double doors. In the lobby, a flight of marble stairs led up to the second floor. At the back, service buildings clustered around a small courtyard. Local workers must have been painfully aware of the vast contrast between their own living conditions and those of their masters.

By the mid-nineteenth century, great social changes were at work in the 'Black Kingdom'. The iron industry had gone into a steep decline and this led to emigration on a substantial scale. The first phase of the Industrial Revolution was over.

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Grants and Awards

RESEARCH FUND

William Britnell was awarded £1,890 towards the cost of obtaining AMS dates from Neolithic cereal grains from Gwernvale chambered tomb, Powys.

Oliver Davis was awarded £1,680 towards the cost of obtaining AMS dates for the Caer Heritage Dating Project, following on from community based excavations at Caerau, Ely, Cardiff.

Robert Johnson was awarded £960 towards the costs of excavation by the SkALE project on Skomer Island, Pembrokeshire.

Gary Lock was awarded £700 towards obtaining radio-carbon dates from samples recovered in the previous season's excavations at Moel y Gaer, Bodfari hillfort, Clwyd.

Neil Ludlow was awarded £1,350 for documentary research into fifteenth century accounts of building work at Pembroke Castle, part of a new programme of investigation of the castle.

Katharina Moeller was awarded £500 towards the costs of excavation at Rhiw, Aberdaron, part of the continuing Meilionydd project, Gwynedd.

Rhiannon Philp was awarded £1,000 to obtain AMS dates for the Footprints in Time project, Port Eynon, Gower.

THE BLODWEN JERMAN PRIZES

The Association offers two prizes in memory of Mrs Blodwen Jerman, to raise the profile of the Association and to encourage young people to become members.

University Prize. This will be awarded annually for the best dissertation on the history or archaeology of Wales or the Marches, submitted during the previous two years in any higher education institution, whether in Wales or elsewhere, in successful fulfilment of the requirements of an undergraduate or master's degree. The first prize shall be a cheque for £150 and three year's free membership of the Association, which includes its journal *Archaeologia Cambrensis*. At the discretion of the judges, runners-up may be offered one or two year's free membership of the Association, including the journal. Entry forms may be downloaded from the Association's website (www.cambrians.org.uk) and entries should be submitted by the 31 December each year. All entries will be returned to candidates after the judging. The Trustees will appoint a panel of three suitably qualified judges each year.

School Prize. This is aimed at a secondary school age-group is now being awarded as one of a number of sponsored prizes within the Welsh Heritage Schools Initiative. Further information and application forms can be gained from the WHSI website (www.whsi.org.uk). The Heritage Initiative involves a nationwide annual competition and entries should be submitted by 31 January each year. Heritage is interpreted in its widest sense and competition entries can be presented as written material, or in photographic or video form, or as an exhibition, or a model. Computer-based projects such as databases, or web sites or CDs or DVDs are also welcomed.

REPORT ON THE BLODWEN JERMAN COMPETITION IN 2016

University Prize

A total of six dissertations were submitted this year, three MAs and three BAs. The three MA dissertations were as follows: Kirsten Havanagh (Lampeter), 'Of Myth and Man: Essaying the space-between in geomythological theory'; Lynne H. Stumpe (Bangor), 'To what extent can we reconstruct the early medieval pilgrimage landscape relating to St Cybi on Ynys Gybi, Ynys Mon?'; and Una Tregaskis (Bangor), 'The Ty'r Dewin Bucket'. The three BA dissertations were as follows: Samuel Birchall (Bangor), 'A study of prehistoric upland field systems in Gwynedd: Cwm Ffrydlas and Mynydd Du'; James Exall (University of South Wales, Pontypridd), 'Charting the decline of the Welsh Language, 1891–1911: a case study of Mold'; and William Tregaskes (Cardiff), 'A discussion and comparison of the development of native Welsh masonry castles and the impact of Anglo-Norman architecture in Deheubarth and Gwynedd'.

The three judges did not come to a unanimous decision. One wished to commend Una Tregaskis, 'The Ty'r Dewin Bucket', while the two others wished to commend James Exall 'Charting the decline of the Welsh Language 1891–1911', but they felt that the dissertation of Una Tregaskis was runner up. By a majority decision, therefore, the judges recommended that the prize for 2016 go to James Exall and that Una Tregaskis should be runner up.

School Prize

The winner of the schools competition for 2015 was Caldicot School, Monmouthshire for their project 'Hidden Histories: how settlement has changed in and around Caldicot and why'. The pupils' researches were presented through displays, a timeline, a model of the area, information panels and a PowerPoint presentation.

Abbreviated Financial Statements 2016

The following abbreviated financial statements are taken from the published *Trustees Report and Financial Statements for the Year Ended 31 December 2016*.

STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR ENDED 31 DECEMBER 2016

	Restricted funds 2016 £	Unrestricted funds 2016 £	Total funds 2016 £	Total funds 2015 £
Income from:				
Donations and legacies	–	13,729	13,729	20,602
Other trading activities	–	19,339	19,339	32,694
Investments	2	11,396	11,398	12,074
Total income	<u>64</u>	<u>44,464</u>	<u>44,466</u>	<u>65,370</u>
Expenditure on:				
Charitable activities	–	33,206	33,206	53,250
Governance	–	3,662	3,662	2,899
Total expenditure	<u>–</u>	<u>36,868</u>	<u>36,868</u>	<u>56,149</u>
Net income before investment gains/(losses)	2	7,596	7,598	9,221
Net gains/(losses) on investments	129	22,630	22,759	(8,110)
Net income before other recognised gains and losses	131	30,226	30,357	1,111
Net movement in funds	131	30,226	30,357	1,111
Reconciliation of funds:				
Total funds brought forward	4,593	358,040	362,633	361,522
Total funds carried forward	<u>4,724</u>	<u>388,266</u>	<u>392,990</u>	<u>362,633</u>

BALANCE SHEET AS AT 31 DECEMBER 2016

	2016 £	2015 £
Fixed assets		
Investments	338,163	315,404
Current assets		
Debtors	2,152	300
Cash in hand	52,675	46,929
	<u>54,827</u>	<u>47,229</u>
Net assets	<u>392,990</u>	<u>362,633</u>
Charity funds		
Restricted funds	4,724	4,593
Unrestricted funds	388,266	358,040
Total funds	<u>392,990</u>	<u>362,633</u>

The Cambrian Archaeological Association, 2016–17

Cymdeithas Hynafiathau Cymru, 2016–17

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Current annual subscription rates are as follows: Individual Members £15; Joint Members (two members of a household) £20; Student Members £5; Institutional Members £25 plus postage and packing. Subscriptions are due on 1 January. Members wishing to withdraw from the Association must give six months' notice and must pay any arrears. Members whose subscriptions are two years in arrears are automatically removed from the membership list. Application forms may be obtained from the current Membership Secretary (name and address given opposite Contents page) or may be printed out from the Association's website (www.cambrians.org.uk).

The Association's Library

The library of exchange transactions from corresponding societies is housed at the National Library and Gallery of Wales, Cardiff, by kind permission of the Director. (A list of corresponding societies is given towards the end of the List of Members.) These are available for consultation (Tuesday to Friday, closed on public holidays), or can be borrowed by post for a period of one month, on the understanding that the borrower will refund the museum for the outward postage and pay the return postage. Requests for access to the exchange transactions should be addressed to: The Hon. Librarian, CAA Library, National Museum and Gallery of Wales, Cathays Park, Cardiff, CF10 3NP.

Publications for Sale

The Association holds currently holds stock of the publications listed below. Further details of availability and costs including postage and packing can be obtained from the current Membership Secretary (name and address given opposite Contents page). The Association publishes a Newsletter which is distributed to members at the beginning of each year. Additional copies may be obtained from the Membership Secretary. Members possessing unwanted copies of the Associations publications in good condition are invited to donate them to the book stock, to be included in items offered for sale. Out-of-print volumes may thus become available to others seeking to obtain them.

Archaeologia Cambrensis ISSN 0306-6924

Copies of recent volumes are available but the Association now holds few copies of the journal before 1964. Volumes for 1846–99 are accessible online (see below).

Indexes

The *Index to Archaeologia Cambrensis 1847–1900* is out of print but is available for consultation in many libraries. The index is also accessible online (see below).

Index to Archaeologia Cambrensis 1901–1960, compiled by T. Rowland Powell, with lists and notes by Donald Moore, 1976. Pp. xxi + 313. Soft cover £6, bound in blue cloth £9 + £3.50 p&p.

Index to Archaeologia Cambrensis 1961–1980, compiled by Helen Emanuel Davies, with lists and notes by Donald Moore, 2004. Pp. xxxviii + 1753. ISBN 0-947846-06-9. Soft cover £15 + £3.50 p&p.

Index to Archaeologia Cambrensis 1981–2000, compiled by Elizabeth Cook, with lists and notes by Donald Moore and a contribution by H. P. Gwynne Morgan, 2008. Pp. L + 330. ISBN 0-947846-09-3. Price: soft cover £18.50 + £3.50 p&p, bound £22 + p&p.

Programme booklets of Annual Summer Meetings

Glasgow (1968); Vale of Usk (1970); South Brecknock (1974); Winchester (1975); South Pembrokeshire (1976); Aberystwyth, South Montgomeryshire and North Radnorshire (1977); Gwent and the Forest of Dean (1978); Lleyn and Snowdonia (1979); Swansea, Gower and West Glamorgan (1980); Chester (1981); Cumbria and the Lake District (1982); Vale of Glamorgan (1983); Anglesey (1984); Old Carmarthenshire (1985); Avon (1986); Hereford (1987); Llandudno: The Cantref of Rhos (1989); North and West Brecknock (1990); Dolgellau (1991); Gwent (1994); North-West Brittany (1996); Jersey (1997); Aberystwyth (1997); York (1998); Galway (1999); Swansea (2000); Forest of Dean (2001); Caernarfon and Lleyn (2002); Milton Keynes (2003); Rouen (2004); Bala (2005); Chester (2006); Carmarthen (2007); Conwy Valley (2008); South Wales Valleys (2009); Canterbury (2010); Vale of Glamorgan (2010), Gascony (2011); Tenby (2011); Anglesey (2012); Birmingham (2012); Brittany (2013); Cwmbran (2013); Dumfries and Galloway (2014); Lampeter (2015); Vale of Clwyd (2016).

Reflections on the Past: essays in honour of Frances Lynch, edited by W. J. Britnell and R. J. Silvester. Softback, 245 × 175mm, viii + 520 pages, with approx. 300 drawings and photos, some in colour, ISBN 978 0 947846 08 4. £20.00 + £5.00 p&p. Copies of this Festschrift, published by the Cambrian Archaeological Association in July 2012 in honour of Frances Lynch Llywellyn, are available from the Treasurer (Mrs J. E. Britnell, 75 Abbey Foregate, Shrewsbury, SY2 6BE. Tel. 01743 369724, email jennyb@cpat.org.uk).

Online Resources

The following volumes of *Archaeologia Cambrensis* and other publications of the Cambrian Archaeological Association are accessible online on the Llyfrygell Genedlaethol Cymru – National Library of Wales, ‘Welsh Journals’ website <<https://journals.library.wales>>. As noted in the Editorial, the website is currently undergoing beta testing and readers are encouraged to submit comments or suggestions on the feedback form on the website. The Cambrian Archaeological Association is currently considering the options for making more recent volumes available online.

Archaeologia Cambrensis, volumes for 1846–1899.

Archaeologia Cambrensis volumes for 1900–1999.

An Alphabetical Index to the Fifth Series, 1884–1900, with a list of papers and articles, by Francis Green (1902).

Index to Archaeologia Cambrensis 1847–1900, compiled by Lily F. Chitty, revised and abridged by Elizabeth H. Edwards (1964).

Baronia de Kemeys from the original documents at Bronydd, transcribed by Thomas Davies Lloyd (1862).

Brut y Tywysogion: the Gwentian Chronicle of Caradoc of Llancarvan, with translation by Aneurin Owen (1863).

Surveys of Gower and Kilvey and the several mesne manors within that seignory, edited by Charles Baker and G. G. Francis (1870).

Ten Days’ Tour through the Isle of Anglesea, December, 1802, by Rev. John Skinner (1908).

Parochialia. Being a summary of answers to “Parochial Queries in order to a geographical dictionary, etc., of Wales” by Edward Lhwyd, edited by Rupert H. Morris, Parts 1–3 (1909–11).

Tours in Wales (1804–1813) by Richard Fenton, by John Fisher (1917).

Index to Archaeologia Cambrensis 1901–1960, compiled by T. Rowland Powell, with lists and notes by Donald Moore (1976).