ADVICE TO INFORM POST-WAR LISTING IN WALES





Report for Cadw by Edward Holland and Julian Holder *March 2019*



CONTACT:

Edward Holland

Holland Heritage

12 Maes y Llarwydd

Abergavenny

NP7 5LQ

07786 954027

www.hollandheritage.co.uk

front cover images: Cae Bricks (now known as Maes Hyfryd), Beaumaris Bangor University, Zoology Building



CONTENTS

Section		Page
Part	1	3
Introduction		
1.0 2.0 3.0 4.0	Background to the Study Authorship Research Methodology, Scope & Structure of the report Statutory Listing	
Part	2	11
Background to Post-War Architecture in Wales		
5.0 6.0	Economic, social and political context Pre-war legacy and its influence on post-war architecture	
Part	3	16
Principal Building Types & architectural ideas		
8.0 9.0 10.0 11.0 12.0	Public Housing Private Housing Schools Colleges of Art, Technology and Further Education Universities Libraries Major Public Buildings	
Part	4	61
Overview of Post-war Architects in Wales		
Part	5	69
Summary		
Appendices Appendix A - Bibliography Appendix B - Compiled table of Post-war buildings in Wales sourced from the Buildings of Wales volumes – the 'Pevsners' Appendix C - National Eisteddfod Gold Medal for Architecture Appendix D - Civic Trust Awards in Wales post-war Appendix E - RIBA Architecture Awards in Wales 1945-85		82



PART 1 - Introduction

1.0 Background to the Study

1.1 Holland Heritage was commissioned by Cadw in December 2017 to carry out research on post-war buildings in Wales.

1.2 The aim is to provide a research base that deepens the understanding of the buildings of Wales across the whole post-war period 1945 to 1985. This will identify significant themes in the architectural development of a range of building types that have made a strong contribution to the architectural character of Wales in this period.

- 1.3 The Brief sets out the particular focus as being:
 - Public Commissions for local and national government, including civic buildings, schools and colleges;
 - Public and private housing.

1.4 The study emerges from the review of historic environment protection in Wales in association with the Historic Environment (Wales) Act 2016. This ground-breaking piece of legislation set out to address specific challenges in protecting Wales's heritage.

1.5 The study is needed on account of the passage of time and the increasing need to identify what is of a significance. Whilst much architecture of the period still looks contemporary many of the buildings are now 70 years old. Some may have already been demolished whilst others have been the subject of alteration which cumulatively has altered their significance. When the resurvey of Wales was being carried out buildings from this period were generally excluded from consideration for listing unless they satisfied the 30-year rule of being of national significance and under threat. The objective is to provide an authoritative basis for future listing activity.

2.0 Authorship

2.1 This research report is written by Edward Holland (Holland Heritage) and Dr Julian Holder (University of Oxford).

2.2 Illustrations sourced are credited accordingly and other illustrations are copyright Holland Heritage.



3.0 Research Methodology and the Scope and Structure of the Report

3.1 Desk-based and archival research has been carried out to gather data from published and unpublished sources. This has included research in the libraries of Welsh School of Architecture, the Royal Institute of British Architects Library, University College London, University of Bangor, Manchester Metropolitan University and Manchester University. Sources referred are to identified by Endnotes.

3.2 At the outset a register was compiled of the post-war buildings identified in the seven Buildings of Wales volumes (colloquially known as 'Pevsners'). This was supplemented by information gleaned from Cadw's listing records and unpublished listing-related research papers.

3.3 The scope of the report is as set out in the specification of Cadw's Brief (October 2017), namely to focus on public commissions and private housing. This includes all local and national government commissions, e.g. civic buildings, schools and colleges as well as public housing schemes. Public commissions cover a vast range of building types and some, such as courts, hospitals and public monuments were excluded from this report following discussion with Cadw as either having already been separately assessed or are regarded as a separate asset category. Within the focus of the brief the report sets out an understanding of the built environment in Wales from the period 1945 to 1985. Through analysis of key buildings and architectural practices from that period it explains significance and identifies those buildings that best represent the post-war era in Wales.

3.4 The report is divided into five parts:

Part 1 Introduction

This covers the background to the report and the methodology and structure by which the research has been carried out and the report written. It also explains statutory listing and how buildings of this period relate to the published criteria.

Part 2 Background to Post-war architecture in Wales This sets out the economic and social and political context in Wales within which the assessment of post-war architecture is made. It looks at the prewar legacy and its influence on post-war architecture.



Part 3 Principal Building Types and Architectural Ideas

It identifies what are the principal building types and architectural ideas and addresses each in turn through sections on public housing, private housing, schools, colleges of technology and further education, universities, libraries and major public commissions. Within each section buildings are discussed chronologically as they have appeared in the primary sources (chiefly periodical literature) or as dated in secondary sources such as 'Buildings of Wales'. As the brief for this survey was to carry out desk-based research, unverified by fieldwork, no assumptions are made here concerning current existence and some of the buildings may no longer exist.

In some cases, dates were not given or have been vague e.g. '70s', 'completed during the 60s'. In a few cases, chiefly private housing, buildings have not been named or given a precise location. In these instances, where deemed appropriate, they are nonetheless mentioned to encourage further research. Where names are known these are highlighted in bold in the text for clarity. Most buildings mentioned in the primary source material were illustrated but illustrations are not reproduced here and no fieldwork has been undertaken to photograph their current condition, or indeed survival. Survival rates are clearly a matter of concern for buildings of the recent era and already many significant post-war buildings have been demolished e.g. Gwent County Hall, Bettws High School, Newport, Empire Pool, Cardiff etc. Indeed, whole categories, particularly public libraries are under threat of closure, disposal and potential demolition.

It is noted that much of this report is concerned with local authority architecture conceived and built during an era of large public subsidy and confidence but which has now largely been replaced by a new economic model.

Part 4 Post-war Architects in Wales

This part of the report provides a summary of the principal architects in Wales in this period. Many significant architects are not included due to the dearth of material available in some cases. This is especially true of significant local authority architects who, by reason of their public office were, ironically, lacking in a published public profile.

Part 5 Summary and Conclusions

This concludes the report by summarising the results of the research. It identifies specific post-war architecture building types and themes and indicates potential future areas of research.



4.0 Statutory Listing

4.1 Relevant legislation

Welsh Ministers are required, under the provisions of Section 1(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended by the Historic Environment (Wales) Act 2016, to compile lists of buildings of special architectural or historic interest. Section 1(3) states that in considering whether to include a building in such a list it may also be taken into account whether it forms part of a group of buildings or whether there is any structure fixed to the building or comprised within the curtilage that may also be of architectural or historic interest. Section 1(5) states that a 'listed building' means a building which is for the time being included in a list, which, in the case of Wales, is one compiled by or approved by Welsh Ministers.

The legislation makes no distinction between post-war or older buildings and so permits buildings of the 1945-85 period to be listed as long as they are of special architectural or historic interest. It is left to separately published guidance to expand on the criteria for determining such interest e.g. TAN 24.

Assessment of structures for listing is carried out by Cadw's Inspectors of Historic Buildings.

The Historic Environment (Wales) Act 2016 introduces an additional legal requirement which is set out at Section 2A(2) requiring Welsh Ministers to consult with appropriate persons on proposals to add buildings to the statutory list and to seek their written representation about the proposals.

4.2 Listing criteria

The criteria for listing are set out in *Technical Advice Note 24: The Historic Environment, Annex B*. All buildings which meet these criteria must be listed. There are currently approximately 30,000 buildings listed in Wales.

B.3 states that "Age and rarity are relevant, particularly where buildings are proposed for listing on the strength of their historic interest. The older a building is and the fewer the surviving examples of its kind, the more likely it is to have historical importance. Thus, all buildings built before 1700 which survive in anything like their original condition are listed. Most buildings of about 1700 to 1840 are also listed, though some selection is necessary. After about 1840, because of the greatly increased number of buildings erected and the much larger numbers that have survived, greater selection is



necessary to identify the best examples of particular building types and only buildings of definite quality and character are listed. Buildings which are less than 30 years old are normally listed only if they are of exceptional quality and under threat. The approach adopted for twentieth century listing is to identify key examples for each of a range of building types — industrial, educational, hospitals, etc. — and to treat these examples as broadly defining a standard against which to judge proposals for additions to the list."

Key considerations for inclusion in the statutory lists are:

- Architectural interest this includes those that are of interest for their design or decoration as well as important examples of particular building types and techniques;
- Historic interest this includes buildings which illustrate important aspects of the nation's social, economic, cultural or military history;
- Historical associations with people or events of importance to Wales;
- Group value for example terraces or squares.

Buildings can be listed at Grade I, Grade II* or Grade II and this is explained further in Cadw's recent publication *Understanding Listing in Wales*¹. Buildings of exceptional, usually national, interest are listed at Grade I; particularly important buildings of more than special interest are listed at Grade II* and the remainder are Grade II. Grade I makes up fewer than 2% of listed buildings in Wales, Grade II* approximately 7% and therefore the overwhelming majority are Grade II.

In the context of this report it is important to note the reference above to twentieth-century listing. Listing of post-war buildings is often ahead of public appreciation of such buildings and so it can be contentious especially where the decision relates to a major building or redevelopment scheme.

4.3 Summary of 1945 - 1985 buildings that are listed

As at March 2019 there are 79 post-war buildings listed in Wales of which 10 are Grade II^* and the remainder are Grade II.

Many of these are churches or industrial structures and therefore are outside the remit of this research report. Listed post-war buildings that fall directly

¹ Cadw (Welsh Government), <u>Understanding Listing in Wales</u>, (September 2018).



within the Brief, i.e. public, local or national government, commissions and private and public housing include the following 20 entries grouped by building type:

Public Commissions

- St Fagan's Museum, Main building, listed Grade II in 2011
- Welsh Office (CP2), listed Grade II in 1999
- Post Office, Aberdaron, listed Grade II in 2001
- Hafod Elfyn, Bangor, listed Grade II in 2010

Schools

- Ysgol Rhys Helyg, Halkyn, listed Grade II in 2001
- Ysgol Syr Thomas Jones, Amlwch listed Grade II* in 2001
- Ysgol Gynradd Beaumaris Primary School listed Grade II in 2007
- County Primary School, Gaer, Newport, listed Grade II in 1999
- Ardwyn Nursery/Infants School, Welshpool, listed Grade II in 1996
- Ysgol Efyrnwy, Llanwddyn, listed Grade II in 2009

Universities and Colleges

- Pantycelyn, Aberystwyth University, listed Grade II in 2008
- Theatr Ardudwy (part of Coleg Harlech), listed Grade II* in 2001
- Fulton House, Swansea University, listed Grade II in 2004
- Wallace Building, Swansea University, listed Grade II in 2004
- NEWI, Plas Coch, Wrexham, listed Grade II in 1994

Libraries

• Brecon County Library, listed Grade II in 2011

Private Housing

- Carreg Llwyd, Llanfairfechan, listed Grade II in 1992
- The Round House, St David's, listed Grade II in 1992
- Nos 1 to 6 Little Orchard, Dinas Powys, listed Grade II in 2006
- Nos 5,7,9,11 & 15 Pen y Bryn Road, Colwyn Bay listed Grade II, 2018



4.4 Post war listing across the UK

4.4.1 England

As at February 2018 Historic England state that there are 853 sites that include listed post-war buildings and many of the entries represent the work of major architects. This research has identified that:

- 38 entries are public or institutional buildings such as Grade I listed Royal College of Physicians in Regents Park, London, the Grade II* Isle of Dogs Pumping Station and Grade II listed County Hall in Truro.
- 60 entries are for higher education buildings including Grade I and Grade II* buildings at Brighton University, Leicester University and Nottingham Trent University and the Grade II listed Gulbenkian Theatre at Hull University.
- 56 entries are for schools including the Grade II* listed Greenside School, Hammersmith and the Grade II listed Limbrick Wood School, Coventry.
- 111 entries are for private houses including the Grade II* Benjamin's Mount, Windlesham and the Grade II The Pediment, Aynho.
- 18 entries are for private and institutional housing such as the Grade II* Langham House Close, Richmond and the Grade II Duke's Cottages at Alnwick.
- 45 entries are for public housing including the Grade II* Keeling House, Tower Hamlets and the Grade II listed Barbican, London.

4.4.2 Scotland

As at March 2018 Historic Environment Scotland state that there are 284 sites that include listed post-war buildings. This research has identified that:

• 53 entries are Category A including the David Hume Tower Block at Edinburgh University by Robert Matthew, Johnson-Marshall and Partners built in 1960-63 and Easterheughs, Aberdour a tower-house by William Thomas built in 1946-55. The work of Gillespie Kidd and Coia is also recognised in the Category A listing selection including the Roman Catholic Church at Greenock, 1951-54.



- 169 entries are Category B including the Great Glen Hydro Electric Scheme in the Highlands completed in 1955 is listed at Category B as is Elmwood College, Cupar 1966-71 by the Fife Regional Council Architectural Service.
- 62 entries are Category C including Whiting Bay Primary School on Arran by Baron Bercott and Associates built in 1963-67.
- The most recent post-war listing was the Cardinal Newman School at Bellshill, built in 1972-77 by the Lanarkshire Education Authority and listed Category B in December 2017.
- Historic Environment Scotland's records show that 29 buildings have been listed when less than 30 years old demonstrating the flexibility in the 30-year rule. One example is the Studio at Selkirk by Peter Womersley, completed in 1972 and listed Category A in 1994.
- Not all post war listings can be preserved. One example is St Andrew's College Halls of Residence in Glasgow built 1968-69 by Gillespie, Kidd and Coia. It was listed at Category A in 1998 but demolished in 2011.

4.4.3 Northern Ireland

Enquiries were made with Northern Ireland Historic Environment Service but they do not have specific records on what post-war buildings are listed in Northern Ireland so it has been discussed with Cadw and agreed that it has not been possible to obtain comparable data.



PART 2 - Background to Post-War Architecture in Wales

5.0 The economic, social and political context

The immediate post-war period in Wales was dominated by the nationalised industries and the Labour party. The narrow Welsh economy lagged behind England and was supported by substantial public subsidy from Westminster. Decline of the core industries led to the government stimulating investment in manufacturing and service industries to prevent an already high and rising unemployment rate escalating out of control. This included the creation of Development Areas and the adoption of the Barnett formula in 1978 to distribute U.K. wealth to Wales as well as Scotland and Northern Ireland.

Politically the post-war period saw an increasing call for Wales to have greater independence from Westminster and to be seen as a distinct country rather than just a region of England. Labour was not just the majority party in Wales but it dominated Welsh politics electing more than two-thirds of all Welsh MPs. Indeed, it was not until the 1974 elections that Labour's share of the vote in Wales dropped below 50%. In 1948 the unelected Council for Wales and Monmouthshire was created and in 1950 a campaign began to establish an elected Parliament for Wales. This had cross-party support although achieved little. However, with the need to listen to the electorate in Wales, as soon as Harold Wilson came to power in 1964 he created the post of Secretary of State for Wales and appointed Jim Griffiths, MP for Llanelli. At first the Secretary of State's powers were limited to housing, local government and roads but in due course education, health, trade and industry, agriculture and environment were added. Notwithstanding the creation of the Welsh Office its powers and independence were modest in comparison to those of the Scottish Office.

1966-8 saw the resurgence of Plaid Cymru and the nationalist movement, echoed by similar moves in Scotland. It struggled to gain enough support despite success at by-elections such as Carmarthen and despite non-political movements such as the Welsh schools campaign and the Urdd Gobaith Cymru becoming more nationalist. The investiture of the Prince of Wales in 1969 sidelined the nationalists even though for many this event has remained highly divisive. The actions of Cymdeithas yr Iaith Gymraeg further fuelled division and whereas they originally supported Plaid Cymru's responsible constitutional campaign they were, by 1969, acting in an increasingly militant way generating widespread opposition. In the 1970 election Plaid put up



candidates in all 36 seats in Wales but won none despite attaining 11% of the vote. The Crowther Commission in 1973 reported demand for greater administrative devolution and some kind of legislature though the 1979 devolution vote recorded an overwhelming rejection of the government's proposals. Devolution was finally won in 1997 with the narrowest possible margin and the National Assembly for Wales followed in 1999.

In parallel to central government reform there had also been local government reorganisation. In 1974 (following the 1972 Act) the traditional counties were abolished and replaced by eight new two-tier authorities. This was the local government map until 1996 when the 1974 Counties were abolished and replaced with unitary authorities.

Economically over the post-war period the heavy industries have declined significantly. The National Coal Board was created in 1947 and tried to modernise the Welsh coal industry but within a generation there was the closure of a large number of deep mines. By 1981 there were only 34 pits in operation and by the end of the century all bar Tower Colliery had closed. The petrochemical industry had filled some of the gap with installations in Pembrokeshire and the government facilitated a substantial amount of foreign investment into Wales resulting in factories such as that for LG Electronics in Newport. By the 1980s industrial employment had shrunk to record low levels and in its place 60% of jobs in Wales were now in the service sector. This was partly the result of government decisions to move national bodies such as the Royal Mint, Driver and Vehicle Licensing Centre, Patent Office and Companies House to South Wales. Independent measures to stimulate the Welsh economy included Sir Julian Hodge founding the Commercial Bank of Wales in 1971.

Whereas in the second half of the 19th century the population of Wales doubled, in the post-war period population numbers remained relatively stable. Census figures show that the population was barely higher in 1971 than it was in 1921. The significant move of population from the rural to the urban had resulting impacts on the built environment of both.

In the immediate post-war period the government addressed the need for new housing for workers in the remaining industries and housing for those who had lost their homes in the war. As well as rebuilding damaged towns such as Swansea the government also initiated new towns including Cwmbran under the direction of the Cwmbran Development Corporation which aimed to set a standard for what a modern industrial town should be. It was one of



the first places in Wales to be the product of a Masterplan. Other key areas of investment included Newtown where the Mid-Wales Development Corporation and the Development Board for Rural Wales aimed to reverse the rural de-population and to create new opportunities.

Iorwerth Peate wrote that the 20th century "has brought cataclysmic changes to the social order in Wales"² and an increasing move away from rural to urban areas. He was one of the founders of the St Fagan's Welsh Folk Museum which opened in 1948 to preserve evidence of traditional buildings and traditions. In 1971, 76% of the Welsh population lived in Flintshire, Denbighshire, Glamorgan and Monmouthshire. The drift away from the rural areas meant in some parts of Mid-Wales it became increasingly difficult for local authorities to maintain community services with the level of rate income they received. In parallel rural railway lines were being closed and bus services reduced.

A declining population in Wales had an impact on schools. It was reported in 1971 that 50% of Welsh primary school pupils and 29% of Welsh secondary school pupils were housed in buildings built before 1903, many of which were in unacceptably poor condition. As a result, a major programme of investment was initiated to replace these buildings over a six-year period. The 1970s saw a huge increase in the number of people of all ages in Wales receiving education. The Welsh Joint Education Committee which had been formed in 1948 had an increased role following the transfer of responsibility to the Welsh Office. In further education, a College of Advanced Technology had been opened at Cardiff in 1967 and the breadth of University, Polytechnics and other colleges expanded enormously stimulating new buildings such as that at Bangor and Wrexham.

In summary the post-war period involved Wales having to reinvent itself. There was massive social and economic change resulting from the decline of traditional industry and the rise of the service sector. The revival of the Welsh language means that bilingualism is now expected and integral to life in many parts of Wales. Politically the post-war period experienced the shift from Westminster to Cardiff. All of this change is reflected in the buildings, including a programme of rural school building, college building and the demolition of traditional factories and industrial housing.

² Iorwerth C Peate, *Society in Wales*, in <u>The Anatomy of Wales</u>, ed. R Brinley Jones (Gwerin Publications) p.53, 1972.



6.0 Pre-war legacy and influence on post-war architecture

From the early years of the 20th century attempts were made to ameliorate the poor housing conditions associated with Wales' coal mining and heavy industries. The ideas of the Garden City Movement in particular came to influence new types of suburban-seeming housing in places such as Oakdale model village, Wrexham Garden Village and Rhiwbina Garden Village (1912).³ Thomas Alwyn Lloyd became a significant figure in the early history of planning and brought his experience, as one of Unwin's architectural assistants at Hampstead Garden Suburb, to bear on the problems of working class housing and its associated planning problems in Wales, including the design of Barry Garden Suburb. Wrexham and Newport both extended and developed this legacy in significant ways after 1945. A key aspect of Garden City planning principles was to work creatively with a site's topography rather than ignoring it in favour of a short-term economic principle. This ensured a greater sensitivity to the Welsh landscape than had characterised the industrialisation of the previous century.

Beyond these limited schemes though the despoliation of the landscape by industry, and unregulated rural ribbon housing development, led to the creation of pressure bodies such as the C.P.R.W. in 1928 and Civic Trust for Wales in 1964. The C.P.R.W.'s campaigning work in the 1930s was actively supported by figures such as Clough Williams-Ellis and his influential '*Britain and the Beast'* (1937) where arguments first advanced in '*England and the Octopus'* in 1927 were extended to the whole of the British Isles. Such sustained pressure led directly to the post-war creation of the National Parks and Access to the Countryside Act, 1949.

The calls for greater political independence were addressed by the creation of Cardiff's civic, if not national, centre at Cathays Park rightly called 'the finest civic centre in the British Isles' by 'The Buildings of Wales'⁴. Begun in 1901 with the commencement of Lanchester, Stewart & Rickards's City Hall and Law Courts, its swaggering Edwardian Baroque set the tone for the future development of the buildings which followed it. Thus, the new Welsh Office building (CP2) by Alex Gordon and Partners of 1972-79 conforms to the dominance of white Portland stone in its choice of materials despite its New

³ Stephen Kay, <u>Homes for Welsh workers: from Robert Owen to the Garden City</u> <u>Movement</u> (Abergavenny, 325 Press, 2014)

⁴ John Newman, <u>Glamorgan; The Buildings of Wales</u> (Harmondsworth, Penguin, 1995), p. 220.



Brutalist architecture. It lifts what had been created as a site of local government to one of national aspiration.

The inter-war years were ones of high unemployment and increasing reliance on the services supplied by national and local government together with philanthropic organisations. One response was that of land settlement schemes such as those built by the Welsh Land Settlement Society founded in 1936 to assist the unemployed principally in the mining valleys of South Wales. Architect to the Society was Thomas Alwyn Lloyd and small-holdings with Garden City type housing and layouts were established at Boverton and Fferm-Goch, Llangan in Glamorgan, Sealand in Flintshire, and Llanfair-Discoed in Monmouthshire.⁵

Given the dominance of the Labour party resources were found to proclaim their regional power in the form of a series of spectacular civic buildings outside the capital city such as those at Carmarthen, Newport, and most of all, the Swansea Guildhall won in competition by Percy Thomas and Ivor Jones whose practice came to dominate the field of civic and university architecture. Labour politics also ensured the creation of direct labour departments. They built the works designed by city, county, and borough architects who began their rise to post-war dominance in the inter-war period, though Swansea's Ernest Morgan had been appointed Borough Architect as early as 1912. The introduction of a savage new tax on inherited property - death duties - led to the sale, or even wholesale abandonment, of many great estates whose designed grounds became used for housing in the post 1945 period.

Stylistically, despite much excitement in the architectural magazines of the day, Modernist architecture was rare in the inter-war period save for the spectacular Sully Hospital and a few isolated private houses, often more Moderne than Modernist. Generally the historical styles and variations and stripped versions of Georgian, Classical and late Arts and Crafts still dominated. This legacy makes the post-war embrace of Modernist architecture all the more remarkable in coming from such an unpromising background, whilst also explaining the power behind the continuity of the traditional architecture of Wales seen, for example, in the Almshouses at Welshpool designed by Herbert Carr and opened in 1941.

⁵ Alwyn Lloyd, *Land settlement schemes in Wales*, <u>Journal of the Royal Institute of</u> <u>British Architects</u>, 22 May 1939, pp. 719-724.



PART 3 - Principal Building Types and Architectural Ideas

In this section specific buildings referred to are marked in bold type

7.0 Public Housing

7.1 Immediate post-war need for temporary housing

Housing provision was one of, if not the, most important architectural priorities following the end of the 2nd World War in 1945. As early as 1943 local authorities were required to compile one-year housing programmes to come into effect following the cessation of hostilities. In Wales, in preparation for 'winning the peace', a Welsh Reconstruction Advisory Council was established and it issued its first interim report early in 1944 concentrating on major development issues.⁶ In the early years of 1945 Aneurin Bevan, the Minister of Health, visited Monmouth, Glamorgan, Carmarthen, Pembroke, Cardigan, Brecknock and Radnor 'for conferences with local housing authorities' to discuss ways of speeding up housing progress.⁷

The immediate response to the housing shortage took the form of the emergency temporary housing programme. Looking to models provided by American wartime housing, the work of the Tennessee Valley Authority, and adapting the technological advances made during the war, the Ministry of Health together with the Ministry of Works, established a standard design for a pre-fabricated single-storey two-bedroomed house. This was put out to tender to private contractors and eleven variants of the standard design, including one imported from the USA under the Lend-Lease policy, were put into production. Boasting a purpose-designed kitchen and bathroom the emergency temporary housing programme ran for four years and produced over 156,000 housing units during this time. Local housing authorities were invited to examine the show homes exhibited outside the Tate Gallery in June 1944 and bid for the numbers they required in return for providing the necessary land. Despite their innovative design, speed of construction, and high levels of satisfaction reported by residents those erected in Brecon were subsequently attacked as ugly and at odds with the beauty of the Welsh

⁶ Anon., *News*, <u>The Architects' Journal</u>, 14 May, 1942. <u>See also</u> Anon., *Welsh Reconstruction Advisory Council*, <u>The Architects' Journal</u>, 13 April, 1944, p. xxxvii, [n.b. Clough Williams-Ellis also refers to this Council in his autobiography].

⁷ Anon., *News*, <u>The Architects' Journal</u>, 29 November 1945, p. xxxix.



landscape.⁸ Nonetheless examples can be found throughout Wales including the notable **Ridgeway estate**, **Newport** that are still in use many decades after the ten years design life of the 'prefabs' had come to an end.

A smaller separate programme of importing prefabricated factory-made twostorey timber housing, from Sweden, ran alongside the larger 'prefab' programme – in part to counter the attacks on prefabs as ugly - with examples being sited in, for example, **Rossett, Wrexham**, as a means of ameliorating the housing problems (especially for agricultural workers) whilst a permanent housing programme was established.⁹

7.2 Role of Local Authority architects in permanent housing

With temporary needs addressed the attention soon turned to solving the housing problem with more permanent buildings. With materials and labour in short supply and licenses still required to build, the work fell to the major local authorities and their architectural staff. Many, if not most, had appointed City, Borough, or County Architects in the preceding years. However, Cardiff City Council was a glaring anomaly. It became the subject of a sustained campaign led by the South Wales Institute of Architects and supported by the RIBA, and the magazine 'Official Architect', for its failure to replace the Architectural Principal it appointed in 1945 but who resigned in 1948 in favour of a post in Birmingham. A Leader in 'Official Architect', referring to the work to be enabled by the new Town and Country Planning Act (1947) complained that Cardiff had 'returned to the old *status quo* and once more assigned to the art of architecture the humiliating role of hand-maiden to municipal engineering.'¹⁰

7.3 Pioneering North-Wales housing estates

In 1950 the **Queen's Park Estate, Wrexham**, was begun and its first phase took four years to complete. It was designed by J.M. Davies, the Wrexham Borough Engineer and Surveyor, in association with architect/planner Gordon Stephenson of Liverpool. At first sight this appears to be a continuation of the Garden City tradition with two-storey detached houses of traditional design set out according to the examples of Letchworth, Hampstead Garden

⁸ C.M. Kohan, <u>Works and buildings, (London, H.M.S.O., 1952)</u>, p. 377.

⁹ Cyril Sjostrom, *Swedish factory-produced timber houses*, <u>The Architects' Journal</u>, 3 February, 1944.

¹⁰ Anon., *Cardiff's case for a City Architect*, <u>Official Architect</u>, vol. II, January-December 1948, p. 569. <u>See also</u>, Anon., *A capital for Wales without an architect?* <u>The Architects' Journal</u>, 27 January, 1947.



Suburb and, closer to home, Rhiwbina Garden Village. However, in its greater spaciousness and ingenuity in site planning to separate traffic and pedestrians it was the first introduction into Britain, not just Wales, of the principles of so-called 'Radburn Planning' established in Radburn, New Jersey by Clarence Stein. As such Queen's Park Wrexham is rightly called 'a pioneer work' in the Clwyd volume of 'The Buildings of Wales.'¹¹

Contemporary with Queen's Park is Sidney Colwyn Foulkes's **Cae Bricks** (now known as Maes Hyfryd) completed in 1950. It is an exemplary housing development of curved terraces stepping down the hillside. The following illustration is taken from the 1949 Ministry of Health's Housing Manual.



Fig 1 Cae Bricks (Maes Hyfryd) Beaumaris – from 1949 Ministry of Health Housing Manual

This was shortly followed by his **Elwy Road Estate, Llandrillo-yn-Rhos** begun in 1952 and completed four years later in 1956. This is a mixture of two-storey houses and three-storey flats and it is characterised by whimsical details (fig 2). These include unusual glazing patterns and a mixture of classical stone doorcases and playful Regency-esque canopies, not readily

¹¹ Edward Hubbard, <u>Clwyd; The Buildings of Wales</u>, (Harmondsworth, Penguin, 1986), p. 87.



found in local authority housing and which caused Clough Williams Ellis to write in his obituary of Foulkes that:

"...his sense of background and meticulous care for apt materials and appropriate detailing set a standard that has not been without its effect in raising those of others less sensitive than himself."¹²



Fig 2 Elwy Road estate, Rhos on Sea © Judith Alfrey

Three years earlier at Wrexham Colwyn Foulkes had also designed the equally original **Pentre Maelor estate** of semi-detached blocks (1949-52). In 1950 he received the Ministry of Housing bronze medal for 'the best urban housing' at **Cae Tyddyn, Llanrwst** receiving praise for the arrangement of housing on the hilly site. This was laid out in terraced rows rather than pairs with resulting economic, construction, and reduced heating costs. Sadly, the individual quality of his work seen at Elwy Road is absent in the **Maes Canol estate, Abergele** built between 1955 and 1960 - the completed work not following his original design.

7.4 New housing in industrial South Wales

The expansion of post-war industry necessitated large new estates of public housing which were granted building licenses in order to feed industrial expansion. Amongst the best known, by reason of the internationally acclaimed Brynmawr Rubber Factory that it served, was that provided by the

¹² Clough Williams-Ellis, *The Times*, 8 April 1971.



Brynmawr and District Housing Society. Begun in 1948 it was designed by the leading Modernist practice of F.R.S. Yorke, E. Rosenberg and C.S. Mardall (YRM) - Mardell being the adopted name of the Finnish architect Cyril Sjostrom who had designed the Swedish housing referred to above before settling in this country.¹³ Initially Heol Isaf and Heol Ganol, Brynmawr was composed of 91 dwellings consisting of four 4-bedroomed detached houses, forty-six 3-bedroomed terraced houses, eight 3-room, nineteen 2room and ten 1-room flats. Where the 'Wrexham experiment' had used the conventional imagery of the Edwardian Garden City and traditional technology, at Brynmawr YRM employed the language of Modernism in its flat roofs as a suitable complement to the factory's concrete shell roofs, the load bearing brick walls sitting on plinths of local stone. Various other elements also modified the 'machine aesthetic' by reference to an evolving organic tradition employing rugged local stone. Not unsurprisingly (as Yorke was one of the authors) this housing was included in 'The New Small House' published in 1953 by The Architectural Press.¹⁴ Elsewhere in **Brynmawr, Crawshay** House, designed by the Breconshire County Architects Department in 1959 (led by T. Jestyn Williams) was a residential home for the elderly in a traditional pavilion design with light-weight attached metal-windowed conservatories.¹⁵

7.5 Newport in 1950s

Newport Borough Council Architects Department, led by Johnson Blackett, provided some of the most innovative and widely reported public housing of the immediate post-war period. Initially accepting ARCON prefabs these were supplemented by another standard design, BISF (British Iron and Steel Federation) houses designed by Gibberd and Lee, together with Ministry of Works Duplex forms built by apprentices as part of post-war job creation. To supplement these emergency measures Newport's Borough Architect Johnson Blackett, and his staff, designed the **Gaer-Stelvio Estate** to house 3,900 on a 163 acre site.¹⁶ This was one of four large post-war estates planned by the Council to create 1,328 houses. By 1959 they had built over 5,000 houses

¹³ Anon., *Housing at Brynmawr, Breconshire,* <u>The Architects' Journal,</u> 24 June 1948, pp. 579-581. <u>See also</u>, Alan Powers, <u>In the line of development: F.R.S. Yorke, E.</u> <u>Rosenberg and C.S. Mardall to YRM, 1930-1992.</u> (London, RIBA Heinz Gallery,

1992), and, Victoria Perry, [foreword by Andrew Saint], <u>Built for a better future: the</u> <u>Brynmawr Rubber Factory</u>, (Oxford, White Cockade, c.1994).

¹⁵Anon, *Breconshire*, <u>Official Architecture and Planning</u>, June 1959, p. 273.

¹⁴ F.R.S. Yorke and Penelope Whiting, <u>The New Small House</u>, (London, The Architectural Press, 1953), pp. 120-121.

¹⁶ Anon., *Housing*, <u>The Architects' Journal</u>, 16 March, 1950, pp. 339-343.



and flats. Due to the requirements of industry and agriculture for flat land the sites for housing were restricted to the hilly ground around Newport. A mixture of three-bedroomed pairs of houses with pitched roofs and staggered flat-roofed three-bedroomed, sometimes curved, terraces – some of which had colour-washed external walls contrasting with areas of exposed brick.



Fig 3 Gaer Estate, Newport © Judith Alfrey

The Gaer estate (fig 3) won an award in the Festival of Britain's Special Architectural Awards for Civic and Landscape Design in 1951 judged by the Council for Architecture, Town Planning and Building Research alongside now better-known work such as Tayler & Green's housing at Loddon, Norfolk. In the same year it also won a housing medal from the Ministry of Local Government and Planning (alongside, further north, Newtown and Llanidloes Rural District Council's housing by John Brian Cooper of Birmingham). Other members of the department included L.W.D.Wall, the Deputy Borough Architect, and a young Dale Owen later to become a significant figure in the Percy Thomas partnership. On the **St. Julian's Estate, Newport,** the



department designed a pair of 'old people's bungalows'. The other estates included four-bedroomed flat roofed terraces at **Malpas**, and further estates at **Alway** and **Ringland** which weren't expected to be completed until the early 1960s.

As a contemporary journal noted of the Newport estates 'All post-war houses have been planned with open grassed forecourts, which are maintained by the Parks department, who are responsible for the planting of trees and shrubs'.¹⁷

7.6 Cardiff in 1950s

As a result of the pressure placed on Cardiff City Council a City Architects Department was created in February 1957 with John Dryburgh appointed as City Architect. An ambitious building programme ensued for the capital city which included the **Welsh Empire Pool** (demolished), colleges, libraries, clinics and the re-development of large parts of the 44-acre site of **Tiger Bay**, **Butetown**. This was to include the re-housing of occupants in four-storey maisonettes, and six, nine and eleven storey blocks of flats. The eleven storey flats at **Gabalfa** provided 126 flats at a cost of £316,687. Elsewhere in the City the department also designed traditional pitched roof, two storey 'Aged persons' homes' in **Llandaff**.¹⁸

Outside the City Council area the Cardiff Rural District Council also provided high-rise flats at **Beech House, Coryton, Whitchurch** in 1959. Designed by the Council's Architect and Surveyor, S.P. Youldon, (architect in charge T.W. Lawton) Beech House was but a part of the large **Hollybush Estate** to provide high-density housing to meet the requirements of the Glamorgan County Development Plan. The block was composed of 90 two-bedded flats of three different types and magnificently sited at the highest point of the surrounding land. At the opening ceremony, the Minister of Housing and Local Government pointed out that such a scale of development for a rural district council was courageous and that they were 'bold pioneers.'¹⁹ They were built on a T-plan with three flats to each of its three wings, all serviced from a central stair and lift which accesses the flats from open balconies.

¹⁷ Anon., *Official architecture in Newport, Mon.,* <u>Official Architecture and Planning,</u> June 1959, p. 272.

¹⁸ Anon., *Some work by the City Architect of Cardiff,* <u>Official Architecture and</u> <u>Planning</u>, June 1959, p. 266.

¹⁹ Anon., *Ten-storey flats for Cardiff Rural District Council*, <u>Official Architecture and</u> <u>Planning</u>, September 1959, p. 409.



Other comparable examples are **Bolinbroke Heights** and **Richard Heights**, **Flint** (1966), **Queens Park Court**, **Holyhead** (1965) and **Dyfatty**, **Swansea** (1963).

7.7 Awards and recognition for Welsh public housing in 1960s

In 1964 a 'lower density scheme' of housing designed by Lingard and Associates for Caernarvon Borough Council was reported to have been awarded a Good Housing Award by the Ministry of Housing and Local Government. It was illustrated in 'Official Architecture and Planning' in October 1964.

In 1966 to replace the scheme run by the Ministry of Housing and Local Government, the Welsh Office and the RIBA established a new housing design competition specifically for Wales which would consider design, layout, landscaping, workmanship, and (considered unusual at the time) user satisfaction. 'It is to be hoped' wrote 'The Architects' Journal', that '...they also considered those elusive qualities which make a building look indigenous.'²⁰ The first winners – in three categories – were **Camelot Court**, Caerleon; Fairwater II, Cwmbran; Pencraig, Llangefni; Maesyrhandir, Newtown; and residential development at Lewistown, near Bridgend. The Lewistown development of 117 Modernist dwellings in the Ogmore Valley was publicised in 1967 in the pages of 'Architecture Wales' (the Journal of the South Wales Institute of Architects and North Wales Society of Architects) which hoped it was witnessing 'an attempt to stem the population drift.' The architects were F.D. Williamson and Associates together with the Ogmore and Garw Urban District Council's Council's Engineer and Surveyor W.T. Harris. The winners were dominated by entries from Urban District Councils and Development Corporations with the exception of Camelot Court which was a private housing development in a style not dissimilar to Eric Lyons' famous SPAN housing schemes in and around London.²¹

In 1967 entries to the competition rose from twenty-eight to thirty-four and the winners/highly commended included housing for the elderly at **Ferndale**, **Rhondda** and **Llanellian Road**, **Old Colwyn**; **Pwll-y-Waun**, **Porthcawl**, **Maesyderi**, **Rhayader** and **Green Meadow and Coedeva**, **Cwmbran**.

²⁰ Anon., *News; Wales – Housing design competition*, <u>The Architects' Journal</u>, 11 January 1967, pp.56-57.

²¹ Barbara Simms (ed.), <u>Eric Lyons and SPAN</u>, (London, R.I.B.A., 2006).



Contemporary with this, an issue of 'Architecture Wales' illustrated the sixstorey Modernist **Glancefni flats, Llangefni**, designed by the Anglesey County Architect, N. Squire Johnson. It provided accommodation for the elderly – 'each with its own front door' – whilst at **Benllech** a series of staggered old people's bungalows designed by Alex Gordon and Partners provide a smaller scale contrast. Elsewhere, at **Penymynydd**, Johnson restored the Almshouses of a traditional vernacular design keeping this philanthropic housing tradition alive.

By 1968 the scale of ambition for inward investment in Flintshire was of such a level to command an article in 'Architecture Wales'. Written by M. Haydn Rees, Clerk to the County Council, it pointed to the future development of **Golftyn Lane, Connah's Quay** and recent flats at **Holywell** designed by Lingard and Associates. Elsewhere in the issue for March-April a feature looked at **Kennedy Court, Colwyn Bay**, also designed by Lingard and Associates. A complex of thirty-two single bedroomed flats for the elderly over two-storeys it retained a significant number of semi-mature trees on the site to harmonize the design and was given a Civic Trust commendation in 1968.

7.8 1970s and the demand for new housing in rural areas

By the early 1970s, debate was moving away from the urban areas and the servicing of industry by Modernist modes of production and imagery. In its place there was growing concern over the more rural parts of Wales as well as the maintenance of its small post-industrial towns and villages that make up a significant part of its overall character and historical geography. In March 1970 J.R. Gammon wrote a detailed building study of Cefn-coed-y-cymmer near Merthyr Tydfil for 'The Architects' Journal'.²² Designed by Gammon's Swansea practice for the Vaynor and Penderyn Council a new estate was proposed to replace a large area of substandard housing related to now redundant iron workings. On a steeply sloping (and therefore expensive) site, a characteristic of much housing in Wales, Gammon and his associates designed thirty-four dwellings for ninety-six occupants ranging from two to five-person flats in two separate blocks linked by three footbridges. One block is three storeys, the other five storeys and partially steps into the hillside to take full advantage of the site. Unexpected challenges were faced in the form of sheep.

Gammon commented that:

²² J.R. Gammon, *Building study: Welsh village housing*, <u>The Architects' Journal</u>, 25 March, 1970, pp. 737-752.



"One design factor little met elsewhere is the serious incursion of sheep into buildings. Sheep are freely left to roam in the village....It was at first difficult to convince tenants that the walkways and bridges were in fact equivalent to normal pavements, and not enclosed corridors as in multistoried flats.' In other respects, the choice of materials complements the grey and black stone outcrops of the nearby Brecon Beacons and the planting was designed to make it look 'as though the building came afterwards."

Overall the development represents the introduction of a neo-vernacular element back into the architectural landscape of welsh housing. As Roger Thompson commented in the same issue of 'The Architects' Journal' the 'Ideals of the early post-war years had turned sour among the bleak acres of eclectic modernism and cut price *unites d'habitation* shorn of the community facilities central to the original concept.' And he continued by arguing that the architectural achievement of South Wales '...since the nineteenth century and until quite recently has been unremarkable; now the situation appears to be changing.' This was attributed partly to the smaller scale of Wales compared to England and the impact of a Welsh Office that took responsibility now rather than the Ministry of Housing and Local Government.

7.9 The Duffryn estate at Newport

In 1976 the Newport suburb of **Duffryn**, largely a development of parkland associated with Tredegar House, became home to the Borough Council's last major housing estate. Together with other celebrated twentieth century buildings Newport has good reason to have been described by John Newman in the 'Buildings of Wales' volume as having `...the most remarkable concentration of late C20 architecture in the whole of Wales.' ²³

The housing estate at Duffryn was designed not by the Borough Architect but the private practice of MacCormac & Jamieson who, with others in a consortium headed by Mouchel & Partners, won a limited architectural competition in 1974. The result, intended to be the first part of a (unrealised) plan for 4,000 new houses, is the largest attempt at what was known as 'perimeter planning' in the U.K. Constructed between 1976 and 1979 it accounted for 977 houses on a 96-acre site and achieved considerable attention for its ability to combine low-rise housing with a high-density. Composed of two-storey terraces arranged on plan as an almost continuous

²³ John Newman, Gwent/Monmouthshire<u>; The Buildings of Wales</u> (Penguin, 2000), p. 217.



series of irregular octagonal courtyards, or cul-de-sacs, around woodland. 'Almost' because the terraces are punctured by pedestrian footpaths to the back gardens and open land beyond. The separation of pedestrian and vehicles is one of the principles of Radburn planning. It was introduced in the 'Wrexham experiment' in Queen's Park, in the light of the Buchanan Report ('Traffic in Towns'), and the development of Milton Keynes as the most highprofile of the New Towns, notwithstanding the creation of Cwmbran.

The materiality of the housing is three different shades of brick to the ground floor, surmounted by cream-coloured cement render to the first floor and brown tile-hanging to the top storey to the more formal service road façade hiding the mono-pitch roof to the rear. The prefabricated timber-frame is expressed externally and allowed to form a trellis for planting to soften and vary the uniformity of the architecture. The result is a formal Modernist looking outward facing façade with gentler, low pitched intimate domestic scale and neo-vernacular character to inward facing facades in their closes and courtyards, each with individual garden, framed by the woodland beyond.

The perimeter plan is a development of an earlier scheme by MacCormac for the London Borough of Merton at Pollards Hill begun in 1974 and based on influential ideas developed at Cambridge University School of Architecture by Sir Leslie Martin and Lionel March. Commenting on the scheme in August 1977 'The Architects' Journal' judged it 'Humane Housing' and claimed it was '...a success with the only reservation being one that is directed more towards the local politicians who have wanted too much from the site. Can any housing design really stand being repeated for 5 km virtually without a break?' ²⁴

Although the full-extent of the Duffryn estate was never fully realised the enormous experiment with a prefabricated timber-frame was modestly developed by Newport in 1980 for the development of 140 flats at **The Marches Estate** designed by its own Technical Services department (project leader D.H. Shackleton) on land with poor bearing capacity.²⁵

7.10 Integrating the modern and the traditional

Until the financial year 1977-78 the thirty-seven Welsh housing authorities received a block grant allocation from central government which had to be used for new housing only. The settlement for 1977-78, whilst still declining in value, introduced a change allowing the authorities to use the grant for

²⁴ Anon., *Humane housing*, <u>The Architects' Journal</u>, 10 August 1977, p. 248.

²⁵ Anon., *Home grown*, <u>The Architects' Journal</u>, 27 August, 1980, pp.402-411.



both new housing <u>and</u> the improvement of existing. It was recognised that the older stock – many still without a bath or inside toilet – required attention. This was a timely policy decision as the Welsh Housing Association reported in the same year that Wales had a higher number of unfit houses per head of population than any English region. The result was a concern for traditional housing stock as well as a desire to create new housing. A trail blazer in fitting new development almost seamlessly into the existing streetscape was Brian Lingard Associates **Is-Craig housing** in **Tremadoc** in 1974 in pursuit of what he termed 'studied anonymity'.²⁶ This created seventy-four houses of four and five beds, eighteen flats together with eighteen old people's units, all fitted within the existing townscape.

²⁶Anon, *Brian Hallwood Lingard DA (Manc) FRIBA, Colwyn Bay Civic Society,* February 2007, [p.6].



8.0 Private Housing

8.1 The private housing sector immediately after the war

War-time restrictions on materials and labour particularly affected the private housing sector and, in the face of the urgent political need to address mass housing problems, private sector housing was small scale in the years immediately following the war. Therefore, the construction of a small development of six bungalows at **Penyfai, Bridgend** (1949), designed by Katz and Vaughan for managers at the Bridgend Paper Mills is significant and was included in Yorke and Whiting's 'The New Small House' published by the Architectural Press of 1953.

8.2 Portmeirion

A notable exception to this was the ongoing development of Portmeirion. Begun at William-Ellis's personal expense in 1925 and based on the coastal villages of the Amalfi coast such as Portofino, this holiday village was planned to demonstrate how new development could be built into the landscape without compromising it. As he wrote of it's 'perfectly serious purpose' in 1966 and his three objectives:-

'First to try and show that the things I so passionately care about – architecture, landscape design, planning, colour and the rest – could be readily understood and appreciated by almost everyone, given a little attention, caught by a gay informal, "light-opera" approach. Secondly, to demonstrate that even a very beautiful site COULD be developed and exploited without offence – could even be thereby enhanced, granted sufficient loving care. Thirdly, that architectural good manners were in fact good business.'²⁷

Not always taken seriously due to its diminutive size and incorporation of architectural salvage it nonetheless came to influence post-war developments such as South Snowdon Wharf, Porthmadoc. In more important respects 'Cloughie', as he was popularly known, was the architectural conscience of Wales promoting the beauty of its landscape, the continued need for craftsmanship, and evoking the 'spirit of place' in the teeth of Modernism.

²⁷ Clough Williams-Ellis, *Sense and sensibility*, <u>Architecture Wales</u>, no. 3, May-June 1966, p.7. <u>See also</u> Clough Williams-Ellis, *Architect errant (The autobiography of Clough Williams-Ellis)*. (London, Constable, 1971).



8.3 Sydney Colwyn Foulkes

Sydney Colwyn Foulkes, who was greatly admired by Clough, has been discussed above (7.3) with reference to public housing estates but he also had some notable private commissions. He designed **23**, **Ebberston Road West, Llandrillo-yn-Rhos** as an interesting take on classicism employing the same wit displayed in so much of his work. His own house, **'Morwyn', Cayley Promenade, Rhos on Sea** is of 1937-38 so falls outwith the remit of this report. Also, technically outside the remit of this report, is Foulkes's Neo-Georgian villa, **'Brynhyfryd'** of 1956, the nurses home for the North Wales Hospital at Denbigh.

8.4 Fashionable design in new private housing of this period

A rare entry for Wales in the pages of 'Ideal Home and Gardening' magazine for August 1957 was a small two-bed 'un-named' bungalow, incorporating a photographic studio, overlooking Cardigan Bay designed by McKewan & McKewan. Employing the fashionable 'Contemporary Style' derived from the Festival of Britain, Californian Case-Study houses by Charles and Ray Eames, and the 'New Empiricism' coming from Scandinavia the bungalow boasted glazing along the full-length of its seaward facing facade which could be opened up by a combination of sliding and folding doors. Sited for its views at over 200 feet above sea level the roughly hewn stone of the garden terrace retaining walls, and garage built into the hillside, is mirrored in the chimney stack which brings the material into the living room as a principle feature in a way established by the Prairie-style houses of Frank Lloyd Wright. As the magazine commented 'Its interest relies partly on the variety of materials used: sheet copper roof, painted brick walls, stonework garage with terrace over it.' Elsewhere in the same issue this modest bungalow kept company with Harry Seidler's more famous house at Turramurra, New South Wales with which it shares the same characteristics of transparency and delight in vernacular materials.

'Classic' International style modernism is perhaps best represented in private housing such as a 'house near Cowbridge' by Keith J. Evans, and another '...at Llanfrechfa, Cwmbran' by Niall Rhys-Davies illustrated in 'The Architects' Journal' for 11th June 1959. This edition was on the occasion of the R.I.B.A. Annual Conference held in Cardiff in association with the South Wales Institute of Architects. Better still is **'Bryn Aberoedd', Aberystwyth** (1968), by Ifan Prys Edwards (fig 4) which is described by the 'Buildings of Wales' as having 'spare elegance in glass, brick and white aluminium'.





Fig 4 Bryn Aberoedd, Aberystwyth © *Crown copyright: Royal Commission on the Ancient and Historical Monuments of Wales*

In contrast to such International Style purity the North Wales firm of Garnett & Coughley designed a striking series of private houses in **Rhyl** between 1960 and 1966. Despite their early date they have been regarded by some as early examples of post-modernism in Wales in their playful attitude to Modernism rather than through the incorporation of any self-referential historicism. Examples include Patrick Garnett's own house at **1**, **The Boulevard** (1962) which followed that at **7**, **The Boulevard** (1960) for his mother. Also **'New House' Maes-y-Don Avenue**, (1961) and a house for Patrick Garnett's brother at **150**, **Rhuddlan Road**. Other houses by this interesting practice included their first house of 1960 **'Mount Hey'**, **Mount Road**, **St. Asaph** and their work in the area around Rhyl at **11**, **Clayton Drive**, **Prestatyn** (1962) for another of Patrick's brothers. Other examples of architects designing housing for themselves include Stewart Powell Bowen's house at **Pen y Bryn Road**, **Colwyn Bay** (1966).

Another example of a small post-war private housing development is **Four Ash Court, Usk** c.1970 designed by Arthur Beer, architect of Newport. It is of a restrained inward-facing design but interestingly Beer later merged his practice with Owen Luder who is well known for his Brutalist designs such as the controversial Tricorn Centre, Portsmouth.



8.5 Private flats

Luxury private flats were something of a rarity if built on any sizeable scale. However, St. Nicholas Close, St. Nicholas Road, Barry, by Powell & Alport of 1964, and especially Glyn Garth Court, Menai Bridge, (1971) are good examples of the type. Glyn Garth (fig 5) is an eleven-storey slab block of flats magnificently sited overlooking the Menai Straits designed by Sir Percy Thomas and Son. Located in the grounds of the former Bishop of Bangor's Palace, Glyn Garth Court has two double-rows of diagonally projecting balconies adding a facetted interest to the otherwise sheer cliff of its wide front elevation. Bush-hammered concrete is employed to encase the rear lift towers and the scale of the development can only be seen from the seaward side, thick woodland enclosing views of the flats from the road to Beaumaris. In 1967 it featured in an issue of 'Architecture Wales' devoted to Anglesey which also illustrated a large chalet bungalow to a traditional design by Lingard and Associates at Menai Bridge in contrast to a modernist house by Brettell and Harries (location unidentified) in Beaumaris - described by 'Architecture Wales' as '...a happy marriage between modern architecture and the grain of the environment.'.



Fig 5 Glyn Garth Court, Menai Bridge © Crown Copyright (2019) Cadw Welsh Government



8.6 The impact of tourism and the building of second homes

Elsewhere in the same issue of 'Architecture Wales' the Anglesey County Architect, N. Squire Johnson, outlined the issues surrounding the expansion of the tourism industry in Anglesey. Amongst these issues was that of the growth of second-homes – a cottage at Penmon beyond Beaumaris being shown before and after its conversion by, and for, G.D. Thomas, together with a stable conversion at Dwyran near the southern tip of the island by Lingard and Associates. Second homes were not always the usual conversions of older properties such as this, or **Fron Deg, Mynytho**, by Keith Ingham of Building Design Partnership for himself and his family and which received a Civic Trust commendation in 1968.²⁸ A university study in the 'Town Planning Review' on 'Second Homes in North Wales' by Ashby, Birch and Haslett in 1975 opened with the balanced but controversial argument that:

'Those who favour second homes point to the salvation of depopulated villages, the renewed support given to declining local services, and to the benefits brought by the new owners in refurbishing old, derelict cottages. Those who oppose second home ownership encroaching on to existing communities claim that the trend undermines the social and economic foundations of those communities, and that the result is the eventual collapse and destruction of true rural life.'²⁹

In 1961 a new seaside resort, **Bron-y-Mor, near Tywyn**, Meirioneth was reported as having begun its preliminary stages. Designed by John H.D. Madin of Birmingham (of Birmingham Central Library fame) for Bishton Holdings Ltd of Bromsgrove. It was intended to provide around 1,000 dwellings of various sizes for both permanent and holiday use and included a sizeable twelve-storey hotel. It does not seem to have progressed to planning approval and given the statement that it was '...designed to give the intimate character of a Cornish fishing village' this is perhaps not surprising.³⁰ Four years later, in 1965, Madin designed the Aberdovey Hillside Village with a layout of flats and houses in pairs or short terraces. The first pair, Eastward and Westward were built by Madin for himself.

²⁸ See Appendix for a complete list of Civic Trust winners.

²⁹ Peter Ashby, Graham Birch, and Martin Haslett, *Second homes in North Wales*, <u>Town Planning Review</u>, July 1973, p.323.

³⁰ Anon., *New seaside resort for mid-Wales,* <u>Official Architecture and Planning</u>, August 1961, p. 365.



However, the development of 'Second Homes for Sailing' near Porthmadog by the Porthmadog Holiday Development Company, to designs by Phillips Cutler Phillips Troy was realised in the early 1970s with the creation of **South Snowdon Wharf**. A compact village of flats for yacht-owners spread out around a courtyard for cars with blocks of varying heights of two and three storeys. The flats are colour-washed with reference to nearby Portmeirion. Clough Williams-Ellis described the finished scheme as 'fidgety' whilst 'Buildings of Wales' describes it as 'The best of the firm's housing schemes in NW Wales.'³¹ These included **Oberon Wood in Beddgelert** in 'a sensible modern vernacular', and an estate at Port Dinorwic in 1979.

A strange, perhaps eccentric, anomaly in the post-war private housing of Wales is the building of a castle as a holiday home on the slopes of Gyrn in the Clwydian range. **Castell Gyrn, Llanasa** was designed by, and for, John Taylor of Chapman Taylor Partners. Initial planning approval in this area of 'great landscape value' as defined in the County Development Plan was rejected but an appeal, supported by Sir Clough Williams-Ellis, Lord Esher, and the North Wales Society of Architects resulted in permission being granted. Completed in 1977 the Gothic 'folly' was illustrated in 'House and Garden' magazine in 1979 – although it was not really a house and had no garden but had presence aplenty and was not out of character with the landscape. Composed of four storeys, it contains three bedrooms, two bathrooms and the two-foot thick walls were built of locally salvaged stone.

Perhaps equally peculiar is the reinstatement of 1930s Modernism thirty years later in the 1960s in the shape of James Gowan's **Round House, St. David's** (1964-68), (fig 6) designed as a holiday home for Leicester University's Professor of Engineering, E.W. Parkes, where Gowan and his partner James Stirling had just completed their seminal Engineering Building (1959-63).

³¹ Richard Haslam, Julian Orbach and Adam Voelcker, <u>Gwynedd; The Buildings of</u> <u>Wales</u>, (London, Yale University Press, 2009), p. 501





Fig 6 Round House, St David's © Crown copyright: Royal Commission on the Ancient and Historical Monuments of Wales

8.7 Design awards and the work of Hird and Brooks

A notable winner of the Gold Medal for Architecture at the National Eisteddfod of Wales in 1968 was 'The Gore', Llandaf (1966) designed by Graham Brooks of Hird and Brooks. This was the first time since 1960 that the Gold Medal had been awarded and it came on the back of the house having already won a commendation in the Civic Trust Awards of 1966. The practice went on to establish themselves with the design of new estates in Mill Close, Dinas Powys (1969), and Elm Grove Lane, Dinas Powys (1973) (fig 7) and the Danish-inspired idiom seen in Court Drive, Llansannor (1972). The Mount, Dinas Powys, (1975), composed of 18 single-storey houses in the grounds of the demolished Mount House, continues and develops this earlier work, whilst the 11 single-storey patio houses at Merevale, Dinas Powys (1976) are hidden discreetly in the grounds of a fine Georgian house. There is also the house (fig 8) that Graham Brooks designed for himself at West Lodge, St Andrew's Major (1968). Their Danish architectural language of an exposed timber structure, flat roofs, expansive sheet glazing and large areas of white painted brickwork mark Dinas Powys out as retaining a series of unique sophisticated designs. Critic and historian Richard Weston noted:



'As one-off designs these would be impressive, but as speculative development they seem little short of miraculous.' ³²



Fig 7 Elm Grove Lane, Dinas Powys



Fig 8 West Lodge, St Andrew's Major (Graham Brooks's own house)

As Jonathan Vining has also accurately commented of their **Courtyard House** at **Howells Crescent, Llandaff** (1980) (fig 9):

³² Richard Weston, *The extraordinary ordinariness*, <u>Touchstone</u>, November 2003, p.5.


'...fits well into the street scene of Victorian villas in terms of its scale and materiality. It continues Brooks's idiosyncratic evocation of Nordic modernism as a distinct post-war housing theme in Wales.' ³³



Fig 9 Courtyard House, Llandaff

8.8 Design awards and the work of Jones & Evans

Contemporary with the work of Hird & Brooks is that by Thomas Glyn Jones and John R. Evans at **1-6, Little Orchard, Dinas Powys** (fig 10). Constructed in two phases between 1966 and 1973 were six houses of concrete construction on a small private estate in Dinas Powys. If Hird and Brooks looked to Scandinavia then Jones and Evans looked to the United States drawing on the treatment of concrete in the work of Paul Rudolf, especially his Art and Architecture building at Yale University. Rudolf in turn was looking to the later sculptural phase of Le Corbusier's work in buildings such as Maison Jaoul, and the monastery at La Tourette. Published in the U.K. in 'Progressive Architecture' in 1964 Rudolph's work was a major influence on British architecture at this time – an influence seen in buildings as diverse as Casson and Condor's Elephant house (1965) at London Zoo, and Keith Ingham's Preston Bus station (1969). Not only were the individual houses harsh in terms of their external aesthetic but so was the hard landscaping they sit in in the specially created cul-de-sac. Interior and exterior flow into

³³ Jonathan Vining, *Modernism in Wales* [MSc, University of Bath, 2014], p. 50.



each other – via large full height glazing - as a result and the layout of the small estate is uncompromising in its attention to detail and consistency of approach. Not unsurprisingly they received a Concrete Society Award in 1969, having previously won a Welsh Office Housing Medal in 1968, and in 1972 the scheme won the gold medal in architecture at the Haverfordwest Eisteddfod.



Fig 10 Little Orchard, Dinas Powys

8.9 Design awards and the work of Bowen Dann Davies

Alongside Hird and Brooks, and Jones and Evans, the practice of Bowen Dann Davies, and perhaps particularly the contribution of Bill Davies, also stands out for having developed their own language of modern housing. The R.I.B.A. Journal in 1982 heralding them as having created `a regional style for North Wales.'³⁴ Writing only a little later in 1986 Edward Hubbard confirmed that `The best work being done in the county [of Clwyd] today is by Bowen Dann Davies Partnership of Colwyn Bay.'³⁵ This is apparent across their work but in housing mention should be made of the group of twenty-four single storey homes for older people at **Hafan Elan, Llanrug** (1980) (fig 11) which won a

 ³⁴ George Perkin, *Bowen Dann Davies Partnership: a regional style for North Wales,* Journal of the Royal Institute of British Architects, May 1982, pp. 4-5.
³⁵ Edward Hubbard, <u>Clwyd; The Buildings of Wales</u>, (Harmondsworth, Penguin,

^{1986),} p.88.



number of awards including the Welsh Office Housing Medal, and a Civic Trust Award in 1980 together with a R.I.B.A. commendation in 1980 and the Gold Medal for Architecture at the National Eisteddfod in the same year. Previously award-winning work included **Trinity Court, Rhyl** (1978) – a complex of flats for the elderly and, in 1980, **Llain Deiniol, Bangor** which incorporated new housing for a housing trust into the retained wall of the Victorian St. Mary's Church School.



Fig 11 Hafan Elan, Llanrug

Recognition should also be given to the work of Stewart Powell Bowen whose work before forming the practice of Bowen Dann Davies is of note. In particular his private housing at **Pen y Bryn Road, Colwyn Bay** (1966-80) has recently been listed as representing an outstanding example of progressive post war housing design heralding some of the ideas on materials and setting that would be further developed by Bowen Dann Davies. Each of the houses was developed separately in accordance with a design guide and Bowen chose No 9 as his own.



9.0 Schools

9.1 School building in the immediate post-war period

The 1944 Education Act, colloquially known as the Butler Act, anticipated the increased provision for schools required on the cessation of hostilities. As Judith Alfrey (Cadw) has written 'systems of organizing educational provision were various, and views on delivery fluid. However, close collaboration between architects and educationalists in establishing what building forms were appropriate for new schools resulted in some more-or-less radical redefinitions of what architecture in the period could be, challenging some of the assumptions which had previously governed practice.'³⁶

The expansion of the population at the end of the war, partially fostered by better housing, resulted in an urgent need for new state schools in urban areas. Many of these were planned as an integrated part of the post-war housing schemes discussed above, employing the notion of 'area schools' promoted as a result of the Gittins Report of 1967 - '*Primary Education in Wales: A report of the Central Advisory Council for Education (Wales).'* The new housing schemes were conceived of as 'neighbourhood units' (rather than new housing merely replacing slums) following American practice and were also a means to ameliorate the worst aspects of state housing provision of the inter-war period, based on slum clearance. That policy had seen the creation of very large planned estates, especially by the London Country Council, with insufficient thought given to services such as schools, libraries, medical facilities, shopping centres, etc which were necessary to support a successful community. In January 1949 it was reported that the new Ministry of Education was concerned to meet:

'...the essential minimum needs or places for children of statutory school age arising from new housing and the increase in the birthrate in recent years. Birthrate figures show that between the beginning of 1947 and the end of 1953 the school population of England and Wales will have increased by nearly a million by this cause alone.'

Improved school design was also anticipated by the Wood Committee established in 1943 by the new Ministry which considered standardised construction as a means to address the post-war expansion programme. Already by 1951 J.M. Richards, in 'The Architects' Journal' was commenting that the:

³⁶ Judith Alfrey, *School building in Wales since the War (c1945-1970)* [unpublished paper for Cadw, 1995], [p.1].



'....average standard is now remarkably high, which is all the more gratifying seeing that a high proportion of school buildings come from public offices.'³⁷

One of the consequences of the urgent need for new schools was, as with state housing, a willingness to consider new experimental methods of building which could speed up construction and, perhaps, lower the cost of construction. Hence it is noticeable in the literature how a distinction is made between traditional, and non-traditional forms of construction. However, practice in Wales differed from that of England with regard to the speed necessary outwith the major urban areas and traditional construction methods continued to hold sway unless there were issues of building on areas of mining subsidence. Therefore, prefabricated methods were not as common as they were in England (as a result of the creation of CLASP, and the pioneering work of C.H. Aslin and the Hertfordshire school building programme). In Wales, with the exception of Glamorgan, which was a member of CLASP, there was a different type of standardised and rationalised modernist building component production. It was known as CLAW (Consortium of Local Authorities in Wales) and was established in 1963. Its first prototype building was the Caerleon Primary School.

9.2 Anglesey's early schools

Anglesey County Council under its initial County Architect J. Elfed Rees, and subsequently N. Squire Johnson, moved quickly in constructing the new county secondary school at **Amlwch** in July 1948. It was for a mixed entry of 700 boys and girls and was the U.K.'s first comprehensive school. It was one of five new secondary schools planned for the island - which included Holyhead, Valley, Llangefni and Beaumaris. Designed on the 'internal staircase-type' principle of three classrooms opening off each staircase the lighting levels at Amlwch were reported to be in excess of those required thanks to a planned dual aspect. Two-storey corridor plans, interrupted by the staircases, were laid out to take full advantage of the elevated site chosen and constructed in three phases. It was of traditional construction - loadbearing walls, filler joists and pre-cast Truscon concrete slabs to both the floors and roof. It 'sought to harmonize with the surroundings and in accordance with the local building tradition, local stone from the Moelfre Quarries has been used for the ground floor and the gables.³⁸ This treatment of using roughly squared rubble walling was also used on the most striking

³⁷ J.M. Richards, *Buildings of the year; 1950, <u>The Architects' Journal</u>, 18 January, 1951, p. 78.*

³⁸ Anon., *New county secondary school for Anglesey County Council,* <u>Official</u> <u>Architect</u>, October 1949, p.543.



aspect of the design, the school's prominent tower. The brickwork was rendered in roughcast to blend with the stone. Elsewhere on Anglesey further primary schools were planned – the first being that which is now **Ysgol Gynradd, Beaumaris** (fig 12).



Fig 12 Ysgol Gynradd, Beaumaris

9.3 Montgomeryshire's schools

Montgomeryshire as a county is notable for the quality of its post-war schools that emerged from its school-building programme. This was initiated by the County Architect, Herbert Carr, from the early 1930s until his death in 1965. His work includes area schools at Abermule, Dolfor and Trewern and high schools at Llanfyllin, Llanidloes and Welshpool. Herbert Carr's buildings are distinctive for their accomplished mix of Neo-Georgian and Modernist.

9.4 Recognition in the press for Wales's post-war schools

'The Architects' Journal' for June 1959 showed the progress made across the country in the ten subsequent years and reported, with illustrations, on the new **Infant school** at **Pyle, Glamorgan** designed for the county by H.M.R. Burgess and Partners to form part of the centre of an associated housing



estate, using a patent prefabricated system. Although containing only four classrooms the scheme also entailed a new dining room and kitchen to be shared with the existing junior school. Elsewhere in Glamorgan H.M.R. Burgess was also responsible for a modernist extension to the **County Grammar school** in **Ystalyfera** composed of a kitchen assembly and dining halls, and two laboratories in steel-framed construction with curtain wall cladding.

Also at Pyle, the architect Denis Clarke Hall (1910-2006) designed the Pyle Secondary School for the county education authority. Hall was a notable architect of his day who specialized in school architecture, and at the time of completion was President of the influential Architectural Association in London. Ultimately, he designed twenty-seven schools for eleven local education authorities during his long career. Shortly before the outbreak of the war he had won a competition for the design of an 'Ideal Secondary School' which anticipated many of the reforms which came in by the 1944 Education Act both in the design and in its accompanying report for the progressive newspaper 'The Daily Chronicle' that sponsored the competition. These included the use of natural daylight from both sides of a classroom subsequently used in Amlwch, but also issues of building science involving consideration of lighting, heating ventilation and acoustics. Despite progressive work done in the North Riding of Yorkshire he eventually recognized that prefabrication was unlikely to be successful in post-war schools and returned to traditional construction, or a mixture of traditional and modern. At Pyle the architect in charge was Sam Scorer and the design was for a large comprehensive school for 1,440 pupils on a twenty-eight acre sloping site. This was constructed of a concrete ground floor frame with a light steel frame to the first floor with decorative end panels. The incorporation of art works pioneered by the Hertfordshire schools programme was to be a major influence.





Fig. 13. Part of a special issue of 'The Architects' Journal', 11 June, 1959.

In 1959 the journal 'Official Architecture and Planning' also reported on new work in Breconshire by the County Architect T. Jestyn Williams which included two new grammar schools – **Maesydderwen, Ystradgynlais** (constructed of a steel frame with brick infill panels) and **Penlan Boys Grammar, Brecon** of traditional load-bearing brick construction. Elsewhere in its pages an infant, primary and two secondary schools were shown having been completed in the Borough of **Swansea** under H.T. Wykes. These were the **Clwyd County Primary, Trallwyn County Infants, Mynyddbach County Secondary for Girls,** and **Penlan County Secondary for Boys** respectively. Although the



County Primary school was noteworthy for its use of a prefabricated steelframe (allowing a cantilevered block to project out over encased columns) and the others were of traditional construction, the school at Penlan is striking in the accompanying illustration for the size, scale, pattern of fenestration and daring cantilevered fifth-floor block which animates the design.³⁹

The literature examined in this research reports little more on school building in Wales – primary or secondary – until October 1962 when 'Official Architecture and Planning' reported on the new **secondary school** at **Llanrwst**, Denbighshire, designed under its county architect R.A. Macfarlane. Built in the grounds of a former country estate the design re-modelled some of its better nineteenth century buildings for the offices of the Head, secretary, staff common room, school library and caretakers flat. The actual teaching accommodation was non-traditional and in the spirit of the Hertfordshire Schools/CLASP system. However, the system used here is not steel but pre-fabricated timber glazed panels, some made 'blind' and clad in hung Welsh slate, erected on concrete rafts with bases and retaining walls in blue engineering bricks. The same journal re-visited this school in its May/June issue of 1966 placing particular emphasis on its landscape setting and the care taken by the architects' department to preserve it.

With a few exceptions the literature gives the impression that by the mid-1970s school provision was sufficient for the baby-boomer generation and future work was either re-furbishment, extension, or specialist provision. Notable amongst the latter is the **Nant y Cwm Steiner school, Llanycefn** by Chris Day, completed in 1982.

9.5 New schools in Cardiff and Newport

Cardiff's new **County Secondary school, Fairwater** was designed by the practice of Smith, Wilson and Cox at a time when the City still lacked its own architect. Designed for 600 pupils (boys and girls) on a large 14.5 acre site the modernist block contained sixteen general teaching rooms, library, gym, and halls on the fringe of the Cardiff suburb of Fairwater. It had an innovative plan, its teaching block having a staircase at either end to allow double period accommodation to be placed in the centre running across the width of the building to reduce circulation areas and noise disruption.⁴⁰

³⁹ Anon., *Official architecture at Swansea*, <u>Official Architecture and Planning</u>, June 1959, p. 267.

⁴⁰ Anon., *New buildings in Wales,* <u>The Architects' Journal</u>, 11 June, 1959, p.885.



In Newport the ambitious Borough Architects department designed county **primary schools** for the four **Duffryn estate neighbourhood units**, including **Malpas County Primary**, together with secondary schools elsewhere in the borough. The **Gaer County Primary school** had been completed by 1953.

One significant loss is the **Bettws High School** (1969-72) which is described in the Buildings of Wales as "the first major work of Evans and Shalev" and "a brilliant exposition of concrete construction, modular design and orderly planning".⁴¹ It was the result of an architectural competition run by Newport Education Authority. This was considered for listing following a request by the Twentieth Century Society but regrettably was demolished in 2010 and its loss draws attention to the need for this research.

9.6 New schools in rural Wales

New schools in Pembrokeshire designed under County Architect Lt. Col. Barrett included **Crymych** (1953-57), **Fishguard** (1954) and **Milford** (1962-64) whilst Cardiganshire's county primary school at **Aberporth** was completed in 1957 to designs by G.R. Bruce.

Amongst the Civic Trust awards made to school buildings was one in 1962 for **Clyro Court Secondary Modern** in **Radnorshire** designed by its county architect G.L. Edwards. In 1967 Radnorshire again came in for praise for the new **County Primary** at **Presteigne** to replace two older primary schools. It was an ingenious design in terms of planning as all the classrooms were grouped around the assembly hall to minimize circulation and give direct access to external paved courtyards. By 1968 Flintshire had re-modelled and extended the traditional **Lixwm County Primary school** to designs by its County Architect.

⁴¹ John Newman, Gwent/Monmouthshire<u>; The Buildings of Wales</u> (Penguin, 2000), p. 119.



10.0 Colleges of Art, Technology & Further Education

Alongside school provision the 1944 Education Act allowed for nursery schools and the expansion of technical education in the form of technical colleges, and colleges of further education. Notable amongst the latter was the College of Further Education at Ystrad Mynach, Glamorgan, credited to Thomas Alwyn Lloyd and Alex Gordon in 1959 for Glamorgan County Council. This was composed of six workshops for teaching building, mining and engineering in a four-storey teaching block which also contained traditional teaching class rooms and laboratories for classes in various crafts, domestic science and needlework. Due to mining subsidence the college was constructed of prestressed hollow box sections to reduce weight and the methods expressed externally to present a striking wishbone-like construction to the front elevation. As 'The Architects' Journal' reported in 1960 'previous practice here was to design single-storey buildings on extensive foundations: here a frame of in-situ reinforced concrete columns is supported by pre-stressed concrete foundation beams resting on mass concrete piers, with provision for jacking-up should any settlement take place.⁴²



Fig 14 Former Technical College, Wrexham © Crown Copyright (2018) Cadw

Denbighshire's new **Technical College** at **Wrexham** (fig 14, designed for the county by Saxon, Smith and partners of Chester) won an RIBA regional Bronze medal in 1953, two years after Gollins, Melvin, Ward and Partners **Aberdare College of Further Education** was begun. Aberdare, completed

⁴² Anon., *College in Glamorgan*, <u>The Architects' Journal</u>, 21 April, 1960, p. 633.



in 1953, sat on disused mine workings and was designed to be only twostoreys. Gollins, Melvin Ward and partners were also responsible for the new **College of Technology** at **Gorseinon** completed in 1955 on a twelve-acre site which suffered from subsidence. A well-known practice specializing in schools and technical colleges they became best known for the development of the University of Sheffield from 1953.

Caernarvonshire's Technical College at **Bangor**, by the County Architect Westbury Lloyd Jones, was completed in 1957 on a five-acre site overlooking the city. It is of four storeys with a single-storey administrative wing, and separate workshop. The main building contained three classrooms, two drawing offices, seven workshops and four laboratories for an anticipated daily attendance of 75 students. Taking full advantage of the change in levels, to hide its bulk in a residential area, it also included a large mural in slate on the wall of the administration block illustrating some of the trades taught at the college.

Built around the same time as Denbighshire's technical college was the **Flintshire Technical College, Connah's Quay** (1952-54). Designed by the county architect, but with Sir Howard Robertson as a consultant, the 'Buildings of Wales' described it (and its 'matchbox clock tower') in 1986 as '...typical of the degeneration of the International Style between the end of the war and the Festival of Britain'.⁴³ Equally damning was its description of the **Welsh College of Advanced Technology in Cardiff** ('Undifferentiated three-storey block') by Sir Percy Thomas & Son of 1960-61. Its vast relief sculpture by Bainbridge Copnall is described as 'an awkward attempt to modernize the emblematic tradition.' Also sited in Cathays Park is the original **Welsh College of Music and Drama** building (1976-77) by City Architect John Dryburgh, who was also responsible for the new **Cardiff College of Art in Howard Gardens** (1966 – now demolished).

An unusual building, in terms of its commissioning body, was the **Apprentices' Training school for Girlings Ltd.** in **Cwmbran**. Designed by Clifford Tee & Gale for Girlings car component factory it comprised a machine shop, administration area, lecture room and games rooms all of which fed off the company's factory. 'The Architects' Journal', in an extensive and not uncritical article, found that it '...serves its purpose with economy of structure and honesty of expression' despite expensive slate finishes.⁴⁴

⁴³ Edward Hubbard, <u>Clwyd; The Buildings of Wales</u>, (Harmondsworth, Penguin, 1986), p. 340.

⁴⁴ Anon., *Building study: training schools*, <u>The Architects' Journal</u>, 16 May, 1962,



11.0 Universities

One of the consequences of the 1944 Education Act was an increase in university admissions which trebled from 1% to 3% of the population. University expansion during the period is exemplified by new buildings at Cardiff, Swansea, Aberystwyth and Bangor reflecting both this demographic shift and the recommendations of the influential Robbins Report.

11.1 Cardiff University

Cardiff University's post-war expansion began with a masterplan of 1958 by Sir Percy Thomas of which only the fifteen-bay wide **Faculty of Arts building** was completed by 1962 before a new masterplan of 1960 had been adopted. This plan was to a higher density with extensive parking provision under the new buildings. Largely the work of Dale Owen of the Percy Thomas Partnership, continuity with the University's earlier buildings in Cathays Park was maintained by the use of Portland stone but the language had changed from a late Edwardian Revivalism, mediated by inter-war stripped classicism to one that fully embraced modernism in the post-1960 plan. New buildings included a twelve-storey tower for the **Faculty of Economics and Social Studies** (1967), the **School of Medicine** (1968-70), buildings for **Biochemistry, Anatomy, and Physiology** -the latter including a projecting top storey to house animals.

Outwith the campus of Cathays Park the hegemony of stone gave way to different materials, and different architectural practices. Most notable here is the work of Alex Gordon & Partners which begins with the **Music Department** (1970), **Sherman Theatre** (1970-71), **Mathematics block** (1971-72), and finally the **Students Union** completed in 1973. The language of the buildings leans towards a brick Brutalism modified by neo-vernacular as also found in H.M.R. Burgess & Partners **Aberconway Building** completed in 1982. The new **Arts and Social Sciences Library** of 1972-76 was designed by Williamson, Faulkner Brown & Partners.

11.2 Swansea University

The University of Swansea began the post-war expansion of its campus in 1957, also to a masterplan by Sir Percy Thomas & Son, and once again led by partner Dale Owen (`...in the undemonstrative modern idiom of the period' according to `The Buildings of Wales').⁴⁵ Beginning with the **Natural Science**

p.1082.

⁴⁵ John Newman, <u>Glamorgan; the buildings of Wales</u> (Harmondsworth, Penguin,



Building, then Fulton House (1958-62, design partner Norman Thomas), the **School of Social Sciences** (1961-62), **Engineering Department** (1967-73) and finally its `...most distinguished building...', the **Library extension** of 1963-64 by Owen. Three thirteen-storey **halls of residence** were constructed to Owen's design 1960-68 to the rear of the campus site. In 1984 the **Taliesin Theatre and Art Gallery** designed by the Peter Moro Partnership was opened. Peter Moro (1911-1998) had already achieved fame in this area of work at the Nottingham Playhouse and established his reputation with the design of the interiors for the Royal Festival Hall, London (1948-51).

11.3 Bangor University

The University of Bangor's tight-knit group of buildings centred on Henry Hare's 1906 competition winning buildings were extended by the Percy Thomas Partnership with a new **Library** and an **Arts Building** completed in 1974. This was subsequent to their earlier work which included the **Thoday Building** (1954), and then the **Refectory and Students Union** of 1963. Beyond this group the same practice designed the prepossessingly Brutalist **Zoology Building** on Deiniol Road (fig 15), completed in 1969.⁴⁶ Local practice Sidney Colwyn Foulkes challenged the dominance of Bangor by the Thomas practice with **Neuadd Rathbone** on College Road, designed as a women's hall of residence in 1965 ('Swedish in feel' says 'Buildings of Wales').

1995), p. 600.

⁴⁶ Anon., *Education: Zoology Laboratories, Bangor, Wales,* <u>The Architectural Review,</u> 1 January, 1968, p. 47.





Fig 15 Bangor University Zoology Building

11.4 Aberystwyth University

Despite the significance of their university work at Cardiff, as the capital city, the work done by the Percy Thomas Partnership, chiefly Dale Owen, at the University of Aberystwyth achieved most notice in the literature of the day and amongst the architectural profession. Post-war expansion began with the construction of the Neo-Georgian Pantycelyn Hall in 1951 by Percy Thomas on the significant new site he had master-planned as early as 1935 at Penglais. Thereafter the development changed from gentle Georgian historicism to outright modernism in the new buildings erected in the 1960s. These included new buildings for **Biology**, **Physical Sciences**, the Faculty of Economics and Socials Studies, and the Faculty of Law, Geography, Geology and Rural Studies. Its Great Hall, sitting on a concourse which also holds the bell tower completed in 1970, was the crowning achievement of the university's new site, and arguably of the Percy Thomas practice's contribution to the architecture of higher education in Wales. In 1972 it was awarded the RIBA Gold Medal for Architecture in Wales. The original landscape design for Penglais by Brenda Colvin has also achieved considerable recognition. In 1976 the Hugh Owen Library was completed and in 1979 won a commendation from the RIBA and a Design Award from SCONUL (Standing Conference on University Libraries).



11.5 Halls of Residence

Reference should also be made to some of the more noteworthy halls of residence associated with Universities. Those that attracted attention tended to be new tower-block additions to an earlier settled campus such as the **Men's Hostel, Trinity College Carmarthen** of 1965 designed by the Architects Co-Partnership, and the striking **Coleg Harlech Hall of Residence** of 1973 designed by, surprisingly given its strong unabashed Brutalism, Colwyn Foulkes & Partners.



Fig 16 Trinity College Carmarthen © Crown Copyright (2019) Cadw Welsh Government

12.0 Libraries

Closely allied to the development of a well-educated, technologically advanced population was the provision of public libraries. As early as 1942 post-war needs were anticipated by the Library Association in a report commissioned from L.R. McColvin entitled 'The public library system of Great Britain; a report on its present condition with proposals for post-war reorganisation'.⁴⁷ These proposals were taken on board in the Ministry of Education's 1959 report 'The structure of the public library service in England and Wales' which set a series of bench-marks for post-war library provision

⁴⁷ L.R. McColvin, <u>The public library system of Great Britain; a report on its present</u> <u>condition with proposals for post-war re-organisation</u>, (London, Library Association, 1942).



and therefore the buildings to house them. These were followed by a further series of reports by the Ministry of Education which made way for the new Public Libraries and Museums Act of 1964 which made it a statutory responsibility for local authorities to provide these services.

The new generation of post-war libraries, both before and after the Act, was no less significant than the experiments in post-war school building. New designs provided light, bright, airy colourful buildings often incorporating contemporary art works. They were either located at the heart of the new housing developments that they served or intended to animate older town centres by introducing what was variously called 'The New Empiricism', or 'The Contemporary style'. In either case there was an emphasis on the speed of construction provided by light-weight portal frames and Scandinavian influences on an open layout and colourful decoration, which were promoted in the 1965 edition of 'Library Buildings'. Particular emphasis on post-war libraries was placed on removing potential barriers for young children and on incorporating children's areas with appropriately scaled fittings, all designed as a means of encouraging library use. There was also a desire for the internal planning to be flexible and to allow for the reader to pass without notice from light to serious reading material. As such it was judged important that the architect of a library understood its requirements and had close cooperation with the librarian.

Libraries noted in the contemporary literature included **Rhosllannerchrugog** library, Denbighshire (1961-62) designed under the County Architect R.A.MacFarlane. It was unusual in being a branch library as the initial provision was for new County Libraries at Monmouthshire (1963), Pembrokeshire, Breconshire and Flintshire all of 1972. The following year a series of branch libraries opened in the seemingly ever-resourceful Anglesey at **Llangefni** and **Amlwch** together with **Tywyn** in Gwynedd.

Montgomeryshire's **County Library in Newtown** (1963) was designed by County Architect Herbert Carr with a concrete ribbed vault to its reading room lit by inset glass block. That for Breconshire in **Brecon** (1969) by County Architect J.A. McRobbie was celebrated for both its presence and sensitivity to its context, despite involving some regrettable demolition, as much as for the quality of its architecture which breaks up its principle façade with the use of angled saw-toothed fenestration. This animates the white brick that surmounts the darker brick used for the plinth and is top-lit by stylish setback pitched roofs with skylights.

Pembrokeshire County Library at Haverfordwest (1967-69) designed



under County Architect Gilbert Ray is composed of a flat-roofed central block of three-storeys with a single-storey range to the rear (fig 17). It also houses a circular exhibition hall which is articulated externally by a bold screen wall and incorporates public sculpture by David Tinker.



Fig 17 Haverfordwest Library

Wrexham's new brick, **Public Library** by James Roberts (1971-2) is notable as part of a good group of post-war public buildings (fig 18). At **Fishguard** an imaginative new library was completed in the 1970s behind an existing stone outbuilding which formed its entrance lobby with a Richardsonian giant arched doorway. Similarly imaginative is the **Public Library, Caernarfon**, designed by Gwynedd County Architects (project architect Terry Potter) of 1982. This group of three limestone pavilions step up a hillside and sit on what was the platform of the 1877 Eisteddfod Pavilion.





Fig 18 Wrexham Library

The Library Association provides a good overview in its annual 'Library Buildings' - that for 1972 covering the new libraries referred to above in, for example, Aberdare, Mold, Brecon, and Haverfordwest.

13.0 Major Public Buildings

Carmarthen's County Hall (1938-56) designed by Percy Thomas bridges pre-and post-war practice and is a surprising adaptation of the form of a French chateau dominating this part of the town. An early post-war instance of municipal architecture was the new county council offices for Merionethshire at **Dolgellau** designed by County Architect Norman L. Jones and completed in 1953. Originally designed by Giles Gilbert Scott in the better-endowed years preceding the outbreak of war (as seen in Carmarthen) the new offices were of greatly reduced ambition, design, and cost, but had the technological interest of being largely constructed of prefabricated aluminum units. This was a technique which first achieved notice for the AIROH temporary prefabricated houses that were part of the emergency housing programme. Intended as a method of diversifying the enormous wartime aircraft industry and maintaining jobs, the Bristol Airplane Company



(BAC) was one of the consortia and developed prefabricated school buildings in aluminium. None were reported as having been erected in Wales. The offices at Dolgellau combined a two-storey central block in local stone as the centre of an H-plan building, the wings being single-storey aluminium with further local stone used minimally to the gable ends of the lower set of wings.⁴⁸



Fig 19 Wrexham Guildhall

Wrexham's Guildhall (1959-61) designed by Stephenson, Young & Partners is of a calmly sophisticated late Neo-Georgian character but enlivened, and enlightened, by a strong Scandinavian influence in its detailing. 'Cautiously modern' as 'Buildings of Wales' rightly says, it is of three storeys, of brick and sash-windows, framed by attractive grounds to the front and relates well to the centre of Wrexham to the rear.⁴⁹

Indeed, Wrexham is a town of particular interest for its post-war public

⁴⁸ J.B. Hilling, *Dolgellau*, <u>Journal of the South Wales Institute of Architects</u>, January 1964, pp.11-12.

⁴⁹ Edward Hubbard, <u>Clwyd; The Buildings of Wales</u>, (Harmondsworth, Penguin, 1986), p. 304.



buildings given that in addition to the Guildhall there is Colwyn Foulkes's **Magistrates Court** (1975-7), Eric Langford Lewis's **Police Headquarters** (1973-5), F.D. Williamson and Associates' **Swimming Baths** (1965-7) and James Roberts's **Public Library** (1971-2) referred to at 12.0 above and its **Arts Centre** added in 1973. **Newtown's Town Hall** (1965-68), designed by Colwyn Foulkes & Partners, is low-key and un-urban, which is appropriate, as the Buildings of Wales states that it stands on the site of Newtown Hall.

In complete contrast to Merioneth's modest offices are those of **Flintshire County Council at Mold** begun in 1966 (fig 20). Designed under the County Architect R.W. Harvey it is a sophisticated take on American commercial offices, and particularly of the influential work of Gordon Bunshaft, Skidmore Owing Merrell (S.O.M.) and seen elsewhere in the U.K. particularly in the influential design for the American Embassy in Grosvenor Square, London, by Eero Saarinen.



Fig 20 Flintshire County Council offices, Mold

Forming a striking contrast with Mold and Swansea is the re-construction of the **Town Hall** at **Aberystwyth** by S. Colwyn Foulkes which seems to superimpose an ill-proportioned Palladian portico onto an otherwise unremarkable neo-Georgian three-storey set of offices as illustrated in 1963.⁵⁰

⁵⁰ Anon., <u>Official Architecture and Planning</u>, May 1963, p.431.



As the scale of local authority responsibilities had increased during the interwar period the concept of the Civic Centre had become established. More than merely a town hall and offices these complexes varied in the services they offered and the grandeur of their architecture but had become more common by the post-war period. The **Neath Civic Centre** (1966) was won in competition by K.H. Hathaway and contained a fifty-foot square galleried council chamber supported on four sets of raking reinforced concrete columns linking two self-contained five-storey high wings. It provided accommodation for both the Neath Borough Council and the Neath Urban District Council.

The establishment of **Cwmbran** by the New Towns Act of 1946 necessarily led to the creation of a whole raft of new municipal buildings by the Cwmbran Development Corporation architects department, initially led by Gordon Redfern, (including housing). Chief amongst these was the new **Civic Centre** unveiled in a model in 'The Architects' Journal' in February 1963.⁵¹ This was designed to form an enclosed square by extending the existing shopping centre which it linked to by a wide pedestrian bridge. Composed of swimming baths with offices for the urban district council, magistrates court, multistorey car-park and a twenty-two storey block of flats, police station and further offices. Based on an inter-war model of civic centres (as opposed to merely town halls) the scale and ambition of Cwmbran's Civic Centre links it resolutely to the contemporary discussion of megastructures then being debated in the architectural profession and increasingly used in New Towns, most famously at Cumbernauld in Scotland.

Outwith the new towns **Gwent's County Hall, Cwmbran** (1968-1977), designed by Gwent County Architect K.P. Jones (in consultation with Robert Matthew, Johnson-Marshall & Partners) took eight years to build at a cost of nearly £9 million. **Pembrokeshire's County Hall** (1964-67) in Haverfordwest was designed by Geens, Cross & Kellaway, and an equally uncompromising Brutalist design. Both civic buildings have been demolished.

The **Civic Centre in Barry** (1980) by David Preece & Associates is a stark red-brick exercise in the type of new Civic Centre ushered in by that for the London Borough of Hillingdon (1970-79) albeit more monolithic in its massing than the quasi-domesticity of Hillingdon's series of pitched roofs.

The Welsh Government Offices, Caernarvon (built in 1974) designed by

⁵¹ Anon., *Civic centre for Cwmbran*, <u>The Architects' Journal</u>, 13 February, 1963, pp.328-329.



the PSA with Brian Lingard & Partners present an oddly contextual design which combines pre-cast concrete units with bespoke full-height rubble stair towers in deference to Caernarvon Castle and the town walls. It featured in an exhibition at the Royal Academy entitled 'Everyday Architecture' on the work of the Association of Consultant Architects which included the National Theatre in London.⁵² Other noted Crown Offices included the **New Crown Building, Carmarthen** of 1974 designed by the Welsh School of Architecture Project Office.

Perhaps the most well-known post-war government building is the **Welsh Office (a.k.a. CP2), Cathays Park** (built 1972-9) designed by Alex Gordon and Partners. It is a powerfully monumental addition to Cathays Park. Apart from the contextualism supplied by the use of stone and its consistent height with its neighbours it is otherwise anything but contextual being more of a homage to the massing and outline of contemporary American architecture such as Boston City Hall (1972). Its defensive character was interpreted by some critics as being partly a response to the threats at that time from Welsh Nationalists.



Fig 21 Welsh Office, CP2, Cathays Park, Cardiff © Crown copyright (2018) Cadw, Welsh Government

⁵² Anon., *The hit parade*, <u>The Architects' Journal</u>, 11 July 1979, p.66.



West Glamorgan's sprawling concrete-framed **County Hall in Swansea**, by the West Glamorgan County Architects Department (director J. Webb) was constructed between 1979-and 1984 including murals by Ceri Richards.



Fig 22 West Glamorgan County Hall, Swansea

Finally note should be taken of the new **Pencadlys, Gwynedd County Hall** in Caernarvon (1982-85). Designed by the County Architects, Merfyn H. Roberts and Terry Potter in association with Wyn Thomas & Partners (including the significant employment of Dewi-Prys Thomas). Its contextualism and employment of the 'culture of quotations' of Post-Modernism single it out as an important example of this major shift in architectural thinking for the construction of such major building projects. In the way that it opens up courtyards, creates public colonnades and generally has fun with materials and context, it forms a delightful neighbour to the Castle which it never challenges but entertains in contrast to the defensiveness of CP2. With Pencadlys Welsh public architecture entered a new era (fig 23).





Fig 23 Pencadlys, Caernarfon



PART 4 – Overview of Post-War Architects in Wales

14.0 Principal Architects and Architectural Practices

Given the small size of Wales relative to England and the concentration of its major cities in the south, the geographical spread of architectural practices is similarly uneven.

This section of the report highlights some of the principal practices and figures responsible either for significant numbers of post-war buildings, buildings found to be noteworthy in the literature of the period, or to have made contributions in other ways to the culture of post-war architecture in Wales.

It is arranged in chronological order by date of birth. In the case of local authority architecture departments, both pre and post local government reorganisation in 1974, only the Chief or Principal architect of each, is included here where biographical information has been found.

14.1 Thomas Alwyn Lloyd (1881-1960)

Recognised as much for his work as a town-planner as an architect, T Alwyn Lloyd was a prominent presence in Welsh architectural culture in the first half of the twentieth century. Born and bred in Liverpool, where he attended both Liverpool College and Liverpool University, his earliest notable work was with Raymond Unwin at Hampstead Garden Suburb. Building on this pioneering work for the Garden City Movement he was appointed Architect to the Welsh Town Planning and Housing Trust and the Welsh Land Settlement Society Ltd. subsequently planned several small-scale 'Garden He City type' developments from the practice he established in Cardiff. In 1932 he wrote a pamphlet for Council for the Protection of Rural Wales (C.P.R.W.) entitled 'Brighter Welsh Villages'. In 1933/4 he became, reputedly, then the only Welsh speaking President of the R.T.P.I. As the era of larger scale masterplanning for reconstruction became established towards the end of the war, and under the influence of the Welsh Reconstruction Advisory Council, together with Herbert Jackson he wrote the 'South Wales Outline Plan' published in 1949. Alex Gordon became his partner in the same year to form T.Alwyn Lloyd and Gordon, and at a time when Dewi-Prys Thomas was working for Lloyd as an assistant.

Obituary; The Builder, July 1960; RIBA Journal, August 1960; RIBA Biographical Files.



14.2 Sir Bertram Clough Williams-Ellis (1883-1978)

Williams-Ellis began his practice in 1903 in London, and both through his work and his writings, must be considered a major figure of Welsh, and indeed British, architecture of the last century. His post WWII work is perhaps of less significance than his earlier work but it nevertheless created a particularly powerful bench-mark for Welsh architecture which is hard to dismiss. He was unconventional and atypical and was unfashionable with modernists notwithstanding a close friendship with Max Fry. In many respects his work epitomises the regard for the preservation of the landscape which emerges as a major theme of this study.

Having been born in 1883 his architectural training took place under the twin influences of Beaux-Arts classicism and the Arts and Crafts Movement. The son of a Welsh rector his father handed over the family estate at Plas Brondanw, Llanfrothen to him in 1908. It was from here that he developed his practice which was chiefly for domestic work and predominantly built in Wales such as Voelas (Denbighshire) and Llangoed (Breconshire).

His chief work remains the creation of Portmeirion which he began in 1925 and completed in two major phases by 1976. Here, over nearly fifty years and inspired by the example of northern Italian coastal towns and villages – such as Portofino – he demonstrated (often at a reduced Lilliputian scale) – how new development could be fitted into the landscape without compromising its natural beauty. It was dismissed, and even ridiculed, as an irrelevance due to its stylistic adherence to the values of the Arts and Crafts Movement and incorporation of elements of demolished buildings from elsewhere in Wales. The development has nonetheless achieved recognition for its approach to creating townscape and connects with the concerns of the later generation of architects who shaped post-war architecture. A strong advocate for national parks he was also involved in the creation of Britain's first post-war New Town, Stevenage.

14.3 Sir Percy Thomas (1883-1969)

A contemporary of Clough's, being born in the same year, Percy Thomas established the most dominate, and sizeable, practice in Wales for the period under review. Born in South Shields as the son of a sea captain from Narberth he received his training as an architect in Wales by serving his articles under E.H. Banyon in Cardiff. He subsequently worked for practices in Leigh-on-Sea and Bath before successfully winning the architectural competition for the Cardiff Technical College in 1912 in an Edwardian Baroque style. One of the cluster of buildings which forms Cardiff's Civic Centre, Cathay's Park, it was



the first of many competitions he went on to win either on his own or in partnership with others. His first significant partnership was with Cardiff based architect Ivor Jones following the technical college competition win. Interrupted by war service between 1915-1919 he returned to the practice in 1919 and, together Jones, Thomas went on to win a succession of competitions (including the Guildhall Swansea) until their partnership ended in 1934.

Now with a well-established reputation Thomas subsequently established his own practice in Cardiff which went on to become the largest in Wales. Amongst his better-known works of the post-war period are the new buildings for the universities of Swansea and Aberystwyth. Amongst his many honours were a knighthood bestowed in 1946, and the Royal Gold Medal for Architecture of the R.I.B.A. in 1939. Together with that awarded to Sir Percy Scott Worthington in 1930 it is noteworthy that this was one of the few Gold medals awarded to a so-called provincial architect. In 1935 he was elected president of the R.I.B.A. and went on to serve a second term from 1943-46.

14.4 Sidney Colwyn Foulkes (1884-1971)

A near contemporary of both Williams-Ellis and Percy Thomas, Sidney Colwyn Foulkes established a dynastic practice which dominated architectural production in North Wales for most of the twentieth century. However, unlike his better-known colleagues Foulkes received a formal training, as opposed to serving articles, at the Liverpool School of Architecture. Then under the leadership of Sir Charles Reilly, and in thrall to American Beaux Arts Classicism and the emerging discipline of Civic Design he graduated in 1915 and began practicing in 1924. In 1968 the practice expanded to become Colwyn Foulkes and Partners. He is said to have 'redefined public housing' and on his death in 1971 Clough Williams-Ellis wrote:

'Whenever I could I would take distinguished visiting architects and critics (Frank Lloyd Wright and Lewis Mumford amongst them) to see both him and examples of his work – sure of their warm approval and admiration of both, in support of my own.'

Obituary; Building, vol.220, 9 April 1971; The Times, 8 April 1971.



14.5 Herbert Carr (1889-1966). F.R.I.B.A.

Herbert Carr was the son of a Leicester building contractor and moved to Montgomeryshire in 1909/10 aged twenty becoming County Architect in 1924. Carr is especially known for leading Wales's most distinctive programme of primary and secondary school building from the 1930s to 1960s including Ardwyn, Welshpool (1951), Llanweddyn, Abertridwr (1950), and Llanfechan (1951) and is credited with the Almshouses Welshpool of 1941. He was awarded an O.B.E. in 1952. One of his final works before his retirement was the County Library for Montgomeryshire (1963) in Newtown. He was superseded by Colin Jones. One of his two sons, Hugh Henry Carr, also became an architect working in Cardiff.

Obituaries; Building, 12 August 1966; Liverpool Post, 9th August 1966

14.6 Westbury Lloyd Jones (1894/5-1962)

Trained in his father's, Rowland Lloyd Jones, office in Caernarvon he later succeeded to the practice on his father's death. After military service in the First World War in the Royal Engineers he was appointed part-time Architect to the Caernarvonshire Education Committee in 1925 and in 1931 became the first full-time County Architect, and arguably the youngest. In this role his work included the Caernarvonshire Technical College at Bangor, and the Gwynedd Police H.Q. in Caernarvon. He retired in 1958.

Obituary; RIBA Journal, April 1962; RIBA biographical file.

14.7 Lt Col Walter Barrett, M.B.E., (born 1898/9)

Born in Manchester, Barrett was appointed Pembrokeshire County Architect in 1946 following military service in India with the Royal Engineers, for which he received an M.B.E. He was responsible for much of the county's early school building programme including those at Crymych (1953-57), Fishguard (1954) and Milford (1962-64). A sometime Chairman of the Pembrokeshire Conservative Association, in 1963 he was a member of Haverfordwest Borough Council. In March 1963 it was reported that, although due to retire in March 1964, he was suspended from his post by the Council pending an investigation. He was replaced by his deputy Gilbert Ray who is credited with the design of the Pembrokeshire County Library in Haverfordwest.

14.8 Herbert T. Wykes (born 1902 – D.O.D unknown) F.R.I.B.A.

Herbert Wykes was born in Staffordshire in 1902, became an Associate of the RIBA in 1927 and a Fellow in 1937. He was appointed Swansea Borough



Architect in 1946 and on his retirement in 1966 claimed to have been responsible for 11,196 new dwellings in the Borough, together with thirty post-war schools, award winning old people's bungalows in Toronto Place (1952) and saw the College of Technology on Mount Pleasant Hill as 'probably his greatest achievement'.

14.9 Dewi-Prys Thomas (1916-85)

Dewi-Prys Thomas was a significant figure in Welsh architectural education, his influence coming to affect several generations of practitioners and whose pronouncements therefore carried the weight of the 'academie'. Born and raised in Liverpool he stayed in the city to study architecture and town planning at Liverpool University School of Architecture. Following graduation he was appointed a senior lecturer in the School of Architecture in 1947 and also established his own architectural practice from where he designed several houses in both England and Wales – most notably early in his career was 'Cedarwood', Woolton, Liverpool. In 1960 he was appointed head of the Welsh School of Architecture from which position he established various live projects in an almost unique manner for the time. He retired due to ill health in 1981 but continued to work until his death in 1985, notably on the design for Pencadlys, the new Gwynedd County Council offices in Caernarfon. With little published by him, or on him, his career has recently been the subject of re-evaluation by Jonathan Vining.

14.10 Sir Alex Gordon (1917-1999)

By birth a Scot, Alex Gordon and his family moved from Ayr to Swansea in 1925 when he was eight years old. Following war-service he returned to Wales and attended the Welsh School of Architecture at Cardiff University where he graduated with a special distinction in his Diploma year. He joined the practice of Thomas Alwyn Lloyd (now aged 68) in 1949 at the time of the publication of the latter's 'South Wales Outline Plan'. On Lloyd's death in 1960 the practice continued as Alex Gordon and Partners and by 1972 had grown to be one of the largest in Wales - rivalled only by that of Sir Percy Thomas. By this date the practice had four offices, two of which were in England, and Gordon had become a significant national voice. Outlining his approach in an address to his colleagues in 1968 he said 'When 'originality at all costs' assumes unbalanced proportions, it tends to produce symptoms in individuals where they show a complete disrespect for anything which has been done by anyone other than themselves.' Such views led to his election as President of the RIBA in 1971 from where he gave a lead to the architectural profession in the development of his 'Long Life/Loose fit/Low Energy' design philosophy which anticipated many of today's concerns with sustainability.



Obituary; The Guardian, 29th July 1999.

Archives; As President of the RIBA the Institute has retained papers relating to his term of office. Additionally, as part of the 'Sir Alex Gordon papers', the RIBA cares for press-cuttings on his practice from 1959-84.

14.11 John Dryburgh (1918-91), Cardiff City Architect.

Born in Berwick-upon-Tweed John Dryburgh was the first City Architect appointed by Cardiff City Council in 1957 as the result of a concerted campaign by the RIBA, the South Wales Institute of Architects and in the pages of 'Official Architecture and Planning,' for the creation of the post. The RIBA Annual conference held in Cardiff in 1959 was a form of belated 'coronation' of Dryburgh and professional encouragement and support for the Council by the RIBA. As City Architect he was responsible for much of Cardiff's post-war re-development.

Obituary; RIBA Journal, vol. 99, no. 5, May 1992.

14.12 Dale Owen (1924-1997)

Born in Merthyr Tydfil Dale Owen began his studies at the Welsh School of Architecture in 1941 but these were soon interrupted by the war. He served as an officer in the Royal Artillery from 1943 until 1946 after which he resumed his course at the Welsh School before going on to study planning at University College London where William Holford taught planning. In 1949 he joined the Cwmbran Development Corporation as an architect until 1954 when his increasing interest in planning, and success in winning a Fulbright Scholarship, took him to the USA to study at both MIT and Harvard University. At Harvard he met Walter Gropius and worked in his practice, The Architects' Collaborative (TAC), for over a year before returning to England to work for Holford on post-war plans for London. In 1958 he returned to Wales joining the practice of Sir Percy Thomas and Son in Cardiff as an associate and was subsequently made partner in 1964. Often credited with bringing new ideas into the Thomas practice he acted very much as his principal's personal assistant and designer and brought his new ideas to bear on major projects such as the University of Aberystwyth.

Obituary; The Architects' Journal, 27 November, 1997. [There is also an unidentified M.Sc. on Owen's work by Vining referred to in Vining, 2014, p. 62, n. 167]



14.13 Brian Hallwood Lingard (1926-)

Brian Lingard was born in 1926 and studied at Manchester University School of Architecture. This study was interrupted by the war - during which he served in the Royal Navy - after which he resumed his studies and became A.R.I.B.A. On graduation he worked first for William George and then, in 1949, for Anglesey County Council. In 1950, in Llangefni, he formed Lingard and Williams (which later became Brian Hallwood Lingard & Associates, Lingard Associates and finally Brian Lingard & Partners). In 1955 he relocated to Colwyn Bay, and with a large office boasting four secretaries was an early user of telephone radio to dictate letters from his car. According to one of a trilogy of books ('Special houses for special people') during the first fifteen years the practice designed over one hundred private houses. At the height of his practice Lingard had offices in Llangefni, Bangor, Newtown, and London, and designed the colour scheme for the processional route through Caernarvon for the investiture of the Prince of Wales in 1969. He appears to have retired to Guernsey. Amongst his works are (1951) Menai Bridge Roman Catholic church; (1953) house at Brynsiencyn; (1959) House, Glanaethwy, Bangor; (1961) two houses Llanrwst Road, Colwyn Bay; (1963) Tanymur housing, Church Street, Caernarfon; (1964) Terraced cottages, Mountain Street, Caernarfon; (1965) Tanybwlch Cottages, Maentwrog; (1965), holiday cottages for J.G. Bibby; (1966), Kennedy Court, Old Colwyn; (1967) Cae Berllan (36 houses), Bethel Road, Caernarfon; (1967) layout Hendre estate, Caernarfon; (1968) conversion Panton Place, Holywell to old people's homes; (1970), Convent of Mercy Chapel; (1970) house overlooking Menai Straits; (1974) Is Craig housing, Tremadoc; (1974) Government Offices, Penrallt, Caernarfon - with Property Services Agency; (1974) Treowen estate, Newtown; (1977) Ael-y-ffynnon housing, Whitford Street, Holywell; (1983) Bryn Euryn (now Hanover Court).

Sources; Colwyn Bay Civic Society journal, February 2007, and UK Modern House Index at http://www.ukmoho.co.uk/

14.14 Patrick Garnett (1932-2006)

Together with Tony Cloughley (photographed for 'Cosmopolitan' magazine in 1975) he established an innovative practice in Rhyl in the late 1950s designing their first house in St. Asaph. The practice went on to become Garnett, Cloughley, Blackmore & Associates and found international fame as the designers of the Chelsea Drug Store in London where the practice had relocated to by 1965.



14.15 William ('Bill') Ross Davies (1934-)

Born in Old Colwyn on 27 March 1934 but moved to Abergele within a year. Davies left Abergele Grammar School aged fifteen to become articled to W.J. Bowen in Colwyn Bay where he stayed for about two and a half years - the practice being run by Stewart Powell Bowen shortly after Davies joined. He left to study at the University of Manchester, 1952-57, where R.J. Cordingley was establishing the serious academic study of vernacular architecture later consolidated in the same school by Ronald Brunskill. Davies's thesis on the vernacular architecture of Gwynedd was no surprise then but as an architect he later developed an equally serious commitment to Modernism. On leaving Manchester he worked at the Architects' Co-operative Partnership (ACP), 1957-59, in London, during which time he married Maureen Owen. ACP had achieved fame through the design of Brynmawr Rubber Factory (1946-51). Between 1959 and 1961 he worked first for Denbighshire County Council and then Chester City Council before re-locating to Cumbernauld, Lanarkshire, to work on the design of the new town being built there. In 1963 he returned to Old Colwyn to work with Stewart Bowen again - including the design of Our Lady of Lourdes, Benllech (1967) – leaving after four years having not been made a partner to emigrate to Canada where he worked for the Government of Alberta's Department of Public Works. In 1970 he returned to North Wales to establish the Bowen Dann Davies Partnership (BDDP). Amongst their better-known work is Cefndy Hostel, Rhyl (1975), Christ the King, Towyn (1974), St. Illtyd, Rhuddlan (1976), Trinity Court, Rhyl (1978), Llain Deiniol, Bangor (1980), Hafan Elan, Llanrug (1980), Capel y Groes, Wrexham (1982), and Plas Menai (1984). On completion of Plas Menai Davies left BDDP in 1985 to work for Wyn Thomas & Partners in Cardiff and was lead designer on three new university buildings before joining Holder Mathias Alcock in 1989 as design director. This he combined with teaching at the Welsh School of Architecture where he had been made Honorary Professor before completing his career with a string of consultancy's in his own name from 1991 until retirement in 2011.

(biography based on that in Vining, 2014)



PART 5 - SUMMARY and CONCLUSION

15.0 Summary of architecture in Wales 1945-85

This section of the report offers some conclusions that emerge from the research base. It starts by attempting to formulate an overview of the specific architectural characteristics (such as layout, plan-form, construction, decoration, etc.) of each of the group of building types considered. However, it is important to underline that this is within the confines of a desk-based research project and therefore is likely to be limited in its accuracy about the current existence or condition of places referred to in the text. The vagaries of the coverage of the post-war architecture of Wales in national periodicals, and other printed sources has already been commented on. Even where coverage has been good it rarely extends to plans, elevations, or sufficient illustrations to make comparisons between the published examples meaningful apart from reporting potential journalistic bias. This bias, although it may well accurately report the development of the building types, must be validated by fieldwork for the following observations to have greater status. Major public buildings, being so few, are left out of this analysis. It then concludes by considering a number of themes that have emerged across the buildings of Wales at this period.

In researching and discussing a range of building types characteristic of the post-war period this report has identified a number of buildings or groups of buildings of particular significance. Within each group there are good representative examples of architectural styles, the work of specific architects and public and private building types. It is also noted that in this period Wales developed a number of innovative housing estates and schools, many of which are known to have survived.

It is notable that there are no examples of public housing yet listed and this perhaps reflects the difficulties of listing on such a scale. In such cases Conservation Area designation is arguably better as it aims to protect the character and appearance of the area as a whole rather than specifically of each individual house or apartment within it. This research has identified that none of the housing estates discussed in this report are included in conservation areas.



15.1 Overview of Building Types

15.1.1 Public Housing

Post-war housing came in a variety of forms and in the initial period, when Aneurin Bevan was Minister of Health and Housing, was of a very highstandard until the first of a series of successive economic cutbacks began in 1947. Nonetheless in the Ministry of Health's 'Housing Manual 1949' a number of council housing schemes in Wales were offered as examples including those supplied by borough councils in Montgomery, Beaumaris, and Newport, and the urban district councils in Caerphilly and Llangefni.

The manual usefully outlines six predominate type-forms as 1. Kitchen-living room house (2-4 bed), 2. Working-kitchen house (2-4 bed), 3. dining-kitchen house (2-3 bed), 4. Bungalows and flats for the elderly 5. Three-storey terraced house (3-4 bed) and 6. Flats and maisonettes (in either high-rise tower blocks or three-storey blocks).

Initially public housing was temporary emergency housing ('Prefabs') which were detached, two-bedroomed, bungalows of either traditional load-bearing construction (quasi-balloon frame), or light-weight framed structures with a variety of cladding materials to a standard design supplied by the government. Roofs were either flat or built to a shallow pitch depending on the variety of manufacturer. Cladding was either asbestos, concrete, aluminium, or timber. Those imported from the United States (flat-roofed) under 'Lease lend' can be identified by their kitchen units (if intact) as they were supplied without cupboard doors. There were also small-scale production runs of various experimental houses during the immediate reconstruction period.

By 1951 Harold Macmillan, the new Minister, pushed for an urgent increase in the provision of permanent public housing but compromised on space standards to achieve his ambitious goals. The move to permanent housing saw two standard forms of steel and concrete construction for large housing estates - cross-wall or box-frame. Cross-wall is a lighter form of construction above allowing in maximum daylight and more innovative standardised building envelopes. Box-frame is the more sophisticated in allowing greater innovation and variety in façade design and patterns of fenestration. The reinforced concrete or steel frame is designed as a sort of 'egg-crate' as it was sometimes called with a great load-bearing ability. Depending on the chosen aesthetic the method of construction may be exposed, to show form following function, or disguised behind external cladding.



Council estates in the major cities tended to be of mixed-development to the edge of town. They created a variety of expensive and innovative tall highrise tower blocks, offset by low-rise blocks, terraces of houses and groups of bungalows as at Gabalfa. They were often laid-out in an open 'parkland' setting distinct from the standard model of nineteenth century monotonous terraced housing which, in plan, were deeper than they were wide. Such mixed-use spread the cost, as well as the social divisions, to make them economically viable for government, and repositioned the idea of workingclass housing as a greater benefit for all as public housing. In many parts of Wales however a sense of traditional communities was maintained by subtly altered layouts and arrangements of terraced housing to a traditional design but with wider frontages, shallower plan-forms and greater access to open spaces. This is especially evident in the work of Colwyn Foulkes in North Wales.

The Parker-Morris Report of 1961 increased Macmillan's space-standards with the result that three-bedded council housing units became the standard. This coincided with the more wide-spread adoption of prefabricated systems of concrete construction supplied by major construction companies that became household names such as Wimpey, Taylor-Woodrow etc.

The reaction against high-rise tower blocks, and therefore new post-war housing estates generally (especially following the collapse of Ronan Point in London in 1968) led to the search for 'low-rise high-density' housing solution often employing more familiar vernacular materials in innovative layouts. In Wales, with its tradition of 'hill-villages' due to the country's topography, the search was easier in many respects and such small-scale varied public housing schemes may almost be considered a nationally distinct type as at Lewistown.

15.1.2 Private Housing

Unique 'one-off' commissions were a rarity in the immediate post-war years due to restrictions on materials and labour. Those that were constructed tended to follow fashionable models adopted from California and Scandinavia. Sometimes they followed ideas at the influential 'Ideal Homes' exhibitions, or in contemporary magazines such as 'House and Garden'. Open, rather than cellular, plans were fashionable employing a variety of expensive cladding materials and internal finishes. They often had wide shallow-pitched roofs, cantilevered elements later in the period allowing for balconies and integral garages. Many were set in open-plan gardens which merge with the house interiors. Indeed, the gardens of such houses are often as strong a design


element as the house itself with garden walls, gates, seating areas, pools and sculpture tying the design of the house and the garden together in such a way as to create an integrated 'total environment'. The manipulation of internal spaces and light is a significant feature of private houses of this period. It typically created spaces that were double-height, multi-use, sunken areas and merged the indoor and outdoor.

To this day many examples of private housing remain unpublished and private in both their commissioning and their character making assessment and identification particularly difficult. Houses designed by architects for themselves become a particular genre of post-war architecture. Later in the period under review, small-scale exclusive estates, rather than unique 'oneoff' commissions, became more common to oppose the high standard of postwar public housing. A useful compendium of private houses, albeit by one hand, is provided by Brian Lingard's *Special houses for special people; mid-20th century dwellings by their architect* (Stanhope, Memoir Club, 2005).

Private flats were a considerable rarity in post-war Wales and tended to be aimed at the upper end of the market and the holiday/second home buyer with accordingly high design standards and finishes.

15.1.3 Schools

Significant analysis of post-war schools has already been provided by Cadw (Alfrey, 1995) and it is not intended to reproduce that here. As has already been discussed above, school building in Wales followed a significantly different pattern, especially in the rural areas, to that of England where modernist methods of pre-fabricated production were employed to speed up construction and lower costs. Such economies of scale were not possible in Wales in areas other than the major conurbations so Glamorgan was the only local authority area to belong to CLASP. However, the model CLASP provided was eventually adapted by Wales in 1963 for its own version know as CLAW with the first prototype being Caerleon Primary School. Such prefabricated systems of building did not necessarily produce identical schools due to the use of standardisation and rationalisation of building components. Rather the design of each school was developed from the individual needs and the components combined accordingly and distributed on the site according to local conditions. Therefore, each pre-fabricated school is different and its characteristics unique to the site.

Outwith the major urban areas traditional load-bearing construction remained the norm, and in many cases a mixture of both traditional load-bearing, and



non-traditional construction methods were employed as appropriate to particular needs e.g. portal or space-frames for assembly and sports halls, traditional for administration blocks etc.

Planforms, whether for prefabricated or traditional load-bearing construction, followed certain standard types depending on requirements and educational philosophy at the time with early system-built schools being restricted to a single-storey.

In primary schools the inherited pattern from the inter-war period was of socalled 'finger planning' – that is to say a corridor with classrooms feeding off it but this was gradually replaced with an assembly hall at the centre of the school and a series of self-contained class-rooms organised in relation to it rather than to a corridor. This layout was, to continue the anatomical analogy, sometimes called the 'heart and lungs' model. By the early 1950s a more flexible approach to classroom design and organisation was introduced in favour of 'spaces' and 'areas' which could be linked.

The same pattern of plan-form can be observed in secondary schools – whether grammar or comprehensive - but, given the ages involved, and often larger size especially in urban areas, greater prominence is given to elements such as the library and private study areas.

Policy with regard to the countryside and the cultural importance of the Welsh landscape was often the reason, as much as the cost of land, for the location of many schools on the edge of towns. In such locations, stylistically, a neovernacular idiom was sometimes preferred over the more forthright machineaesthetic of modernism appropriate for more urban areas.

An interesting development in rural areas was the use of schools as dualpurpose buildings with the school hall being also effectively a village or community hall outside of educational usage. Montgomery used this approach as a supplement to the design of new housing estates as at Llanwddyn school.

15.1.4 Colleges of Art, Technology and Further Education

In many respects the characteristics of this group of kindred buildings for further education share the same characteristics as schools but with important distinctions due to the more specialist requirements of their functions. Hence all colleges may have a small number of lecture theatres but as the teaching was predominantly vocational, as opposed to academic, character workshops, laboratories, studios, and other areas for demonstration and practice were



uppermost. Many of these buildings also tend to be located in the centre of towns and take on a civic character in the overall design and decoration.

15.1.5 Universities

Although Universities expanded considerably in the post-war period there were no completely new foundations like in England which saw the creation of Keele, Sussex, Essex, York, Lancaster, and East Anglia. Such new buildings as there were in Wales tended to be prestigious and were either additions to the existing civic presence of universities, such as at Cardiff, or were new satellite campuses with careful consideration given to overall layout and landscaping, such as at Aberystwyth. Nonetheless in an era of expansion and generous funding for universities many universities commissioned significant additions to their estate which reflect not only this expansion but an increasing diversity of subjects, and teaching methods. Leading architects of the day vied for such commissions and post-war university architecture generally was of a high standard, reflected the dominant Modernist aesthetic of the day, and were accordingly some of the most exciting and innovative buildings of their day in Wales. With a few exceptions, such as Alex Gordon's Music department at Cardiff University, the Percy Thomas Partnership dominated the post-war University architecture of Wales and any assessment of significance will need to take on board the development of this major practice.

15.1.6 Libraries

Post-war libraries continued the policy of increasing literacy developed in the inter-war period. Libraries, along with schools, tended to be regarded as beacons of reform in the new post-war world. Traditional historicist designs are therefore rarely employed. Instead post-war libraries were socially aspirational, light, airy spaces where the social divisions found in earlier eras were challenged and overthrown. In plan-form they were open spacious places with lightly-toned furniture and fittings often reflecting a post 'Festival of Britain' style to encourage usage especially by younger children and teenagers. The plan-form itself was often playful as a means of attracting readers. As with private housing the influence of contemporary Scandinavian design was of great importance. As part of this increased remit additional services, such as record libraries, provision for story-telling, theatre spaces, room for art exhibitions, and study spaces for older children for doing homework became common parts of the new public libraries conceived of as part of an expanded national education provision under the 1944 Education Act and the Robbins Report. Art works were also sometimes integrated into Many libraries were also conceived of as part of wider building design. planning schemes to serve local public housing estates, or new civic centres



or precincts. However, government controls ensured provision of new libraries did not become firmly established until the late 1950s/early 1960s. With the passing of the Libraries Act in 1964 a wave of new small Branch Libraries were conceived which animated many Welsh towns in addition to new County Libraries which discharged a more reference-based provision and more study spaces as opposed to lending and 'leisure' facilities.

15.2 Overview of emerging themes

15.2.1 New Materials and Methods of Construction

It is clear that Wales shared in the general adoption of new methods of construction that came in after, and partly as a consequence of, the Second World War. Many of its architects (see chapter 14) had served in the war, several in the Royal Engineers where they encountered the merits of standard designs, prefabrication, and rationalised industrial construction as had been advocated by the protagonists of Modernism between the wars. These included light-weight steel, and wooden, frames such as used in the school building programmes at Pyle Infants School and Penlan County Primary and, for timber, Llanrwst Secondary. Larger concrete frames such as employed in Cefn-coed-y-cymmer and larger steel frames and forms of system-building were used in the few high-rise buildings identified such as the three pairs of tower blocks at Gabalfa, Cardiff, and Beech House, Whitchurch, Cardiff.

However, as the work of Denis Clarke Hall at Pyle Secondary School argued, the scale of production necessary to make significant cost savings by employing the new industrialised methods of construction was rarely found in Wales. As such, traditional load-bearing construction methods were as much, if not more, appropriate. The schools of Herbert Carr in Montgomeryshire serve to make this point.

15.2.2 The changing architectural styles of the period

Architecturally the period witnessed the move from `...the degeneration of the International style between the end of the war and the Festival of Britain' (1951) via `...the undemonstrative modern idiom' of the 1950s, the lightness of `The New Empiricism' and the 'Contemporary style', to the uncritical importation of the so-called `heroic period' of Modernism aping the modern masters such as Le Corbusier and Mies van der Rohe from the late 1950s. At its best this initial period produced buildings such as the Gabalfa tower blocks, Cardiff, and, in terms of private housing, Bryn Aberoedd, Aberystwyth. Too often the reduction of council budgets resulted in `...bleak acres of eclectic modernism and cut price *unites d'habitation'*. Conceived of as a reposte to the



gentility of 'The New Empiricism' the so-called 'New Brutalism' was largely seen in structures of a suitable scale such as Civic Centres and University buildings although as a style-label it is largely absent in the literature studied. Nevertheless, the work of Alex Gordon comes close to a brick version in buildings such as the Music Department at Cardiff University, and most obviously in the Zoology building of the University of Bangor by the Percy Thomas Partnership. There was also Evans and Shalev's Bettws High School the demolition of which leaves a regrettable loss. Perhaps pre-eminent as examples of Brutalism though are the six-houses designed by T.G. Jones & J.R. Evans at Little Orchard, Dinas Powys, between 1968 and 1973. Their interest is both in the purity of the materials used, and in their handling, set these houses apart. This is especially seen in the bush-hammered concrete which creates a roughness the architects saw as particularly Welsh.

As was common throughout much of the industrialised world mainstream Modernism was soon being modified in the early post-war years by reference to a local vernacular and many of the buildings discussed here, across all buildings types, incorporated elements, often quite extensive, of rough rubble walling from the Brynmawr housing to the stair turrets of the Crown Office in Caernarvon.



Fig 24 Crown Office, Caernarfon



Such an organic approach, whilst grounded in the work in Scandinavia, often has a more robust and un-tempered character that is particularly Welsh. The influence of Danish architecture in particular is apparent in the work of Hird and Brooks whilst similarly the moment of 'Swedish grace' seems to be the animating force that gives individuality to the work of Sidney Colwyn Foulkes. Further exploration of this Scandinavian influence, combined with the effect of the 1970s oil crisis, led to a more sensitive Neo-Vernacular element being introduced as seen in new housing developments in Lewistown and elsewhere. Stylistically the work of Garnett & Coughley seems to be a Pop Architecture forerunner of the outright Post-modernism represented by Pencadlys and catches the mood of the period perfectly - and briefly.

Outwith housing the significant development in public commissions was the move from the grand, or even grandiloquent town halls of the interwar period such as Swansea Guildhall, or Carmarthen (both by Percy Thomas) to the mega-structural Civic Centres such as Cwmbran, Gwent, and West Glamorgan.

15.2.3 Relationship between housing and industry

There would appear to be a close relationship between innovative masshousing and innovative industrial architecture. Enclaves of post-war modernity were created in places such as Brynmawr and in the work of Newport Borough Council. However, in the case of Penyfai at Bridgend modernity was not seen as appropriate and single-storey bungalows of traditional construction, not so dissimilar from the one-off commission by McKewan & McKewan overlooking Cardigan Bay, were provided for managers. Generally, it seems clear that the more industrial south was also more architecturally progressive and exciting, as one journal noted of the south `...since the nineteenth century and until quite recently [it] has been unremarkable; now the situation appears to be changing.'

15.2.4 The Architect's contribution to post-war Wales

Related to this, in terms of a new scale of architectural production, was the increased importance in the post-war era, particularly until the economic downturn of the 1970s, of the Official Architect. As the case of John Dryburgh powerfully illustrates the nation's major, and in many cases minor, towns and cities required the services of trained architects and planners to mastermind and oversee major schemes of town centre re-construction, mass housing, and other forms of welfare provision such as the new generation of schools and libraries considered in the main body of this report. The City, Borough,



and County Architects and their staff (and those of the Development Corporations for Cwmbran and Mid-Wales) were of seminal importance in the re-building of post-war Wales. Often written out of standard histories of architecture and the built environment they had a disproportionate impact in housing, schools and libraries as this report has demonstrated. Few private practices, except perhaps the likes of the Percy Thomas Partnership, had either the opportunity, or capacity, to rival their achievements.

15.2.5 Major schemes of reconstruction and new housing

This report has discussed the major housing estates, in particular along the North Wales coast and in Newport, and the creation of Cwmbran, one of the first places to be the product of a masterplan. Most emblematic of these major schemes are the high-rise flats – tower blocks - synonymous for many with the post-war architecture of the Welfare State. At Gabalfa Dryburgh's work illustrates the introduction of high-rise building into the Welsh landscape, albeit on the edge of the city. As noted at 7.6 above other examples include Flint, Swansea and Holyhead.

A significant factor of the post-war economy was the rise in car ownership. Responses to the challenges and opportunities represented by this ranged from the Radburn principle of separating pedestrians and road users to the expansion of the concept of Civic Centres to bring various services together in one complex (often incorporating integral car-parks). At Cardiff University there was the complete re-design of new buildings in a revised masterplan to allow for car parking beneath new developments. On a more modest scale, at Dinas Powys, double-garages were created to form the plinths of private houses.

In contrast to the pattern of slum clearance and new suburban cottage estates developed during the inter-war period the larger councils were able to adopt a pattern of 'mixed development' of both low-rise and high-rise set in a designed landscape. As the period developed and problems emerged with high-rise local authority provision the holy grail for social housing became the search for low-rise high-density. Here the Duffryn estates, and the notion of perimeter planning came to the fore in attempts to create 'Humane housing'. An allied architectural idea was that of the 'neighbourhood unit', and with it the allied concept of 'area planning' to ensure the unit held all the facilities necessary to create a successful community in its area.



15.2.6 Housing for the Elderly

Housing for the elderly in post-war Wales emerges as a significant specialism within housing from this study – both public and private. In Brynmawr, despite the modernity of the housing designed by YRM for workers in the rubber factory a residential home for the elderly, Crawshay House, was also built to designs by the County Architect in 1959. In Cardiff the City Architects Department designed traditional two-storey homes in Llandaff, in the Rhondda is the example of 'Ferndale', bungalows at Benllech, by Alex Gordon, the work of Brian Lingard at Kennedy Court, Colwyn Bay, Tremadoc and Caernarvon all address this need, whilst in Llangefni the elderly were housed in six-storey modernist flats designed by the County Architect. The more recent work by Bowen Dann Davies in Llanrug and Rhyl clearly develops this category of housing as a means of giving greater dignity to its users than previously. The prominence given to housing for the elderly may merely reflect the literature rather than having a greater statistical and cultural significance. Nevertheless, it is a notable and consistent finding.



Fig 25 Tan-y-Mur flats for the elderly, Caernarvon, by Brian Lingard & partners, 1963.



15.2.7 Welsh Identity

Welsh identity was clearly an issue for some despite the attractions of an International style. The very establishment of an annual housing competition run by the Welsh Office from 1966 is sufficient evidence, more so the annual Gold Medals awarded by the National Eisteddfod. What 'The Architects' Journal' saw as the desire for an 'indigenous' architecture was clearly very real. However, as John B. Hilling wrote in 1978 'In Wales, perhaps one looks more for a national style than a regional style, although at first glance there is little evidence of either.'⁵³

Housing, given its ubiquity and its introduction of a Modernist aesthetic into the landscape, became an issue for national identity, as it did everywhere. Mass-produced serial housing, exhibiting a machine-aesthetic, could, and in places did, have an adverse effect on perceptions of the natural environment. As was rhetorically asked of the scale of Duffryn 'Can any housing design really stand being repeated for 5k virtually without a break?'

15.2.8 Landscaping and Beauty

Reference has already been made to the complaint about the ugliness of temporary prefabs in Brecon and elsewhere but generally contemporary journal articles are at pains to stress the success of planting schemes and working with nature to modify the modernity, or rather the scale, new materiality and repetition of much post-war housing.

In the case of the new secondary school at Llanrwst a contemporary journal returned after four years to assess the now matured planting scheme. Once again this was not merely a question of design (as is clearly the case with Linda Colvin's landscaping of the campus at Aberystwyth University) but an issue of local authority provision in the shape of the work of the council's Parks Department. In the case of Cefn-coed-y-cymmer in Breconshire, as has already been noted, it was also a question of the choice of materials complementing the landscape.

15.2.9 Depopulation and the rise of buildings for tourism

Problems of rural depopulation, and declining village life, are apparent at various points in this survey and the issue of new towns, tourism, holiday villages and second homes as tactics to reverse this trend are apparent in the work at Tremadoc, Glyn Garth Court (Menai Bridge), South Snowdon Wharf (Porthmadoc), Castell Gyrn (Llanasa) and, most famously, Portmeirion. It is

⁵³ Anon., *Architecture in Britain today; 5: Wales,* <u>Journal of the Royal Institute of</u> <u>British Architects</u>, October 1978, p. 429.



interesting to note that all these developments display a level of fantasy not generally available in public housing, although there is a Lilliputian delight in the work of Bowen Dann Davies for the elderly. At Lewistown (Ogmore and Garw Urban District Council) we get the first inclines of a neo-vernacular modifying the modernist schemes by reference to nature and context.

15.2.10 Incorporation of art commissions into public buildings

The incorporation of new art works in public buildings, such as is found in West Glamorgan County Hall, is a notable, if easily overlooked, development. Other key examples include Newport Civic Centre, which although started in the 1930s was not completed until 1964, Caernarvonshire Technical College, the Welsh College of Advanced Technology and Pembrokeshire County Library to name but a few. These works are usually of a modernist character to relate to the architecture which housed them. Unlike representational sculpture fitting seamlessly into sculpture niches these usually abstract works are of a different character and profess their own integrity and often separateness from the buildings aesthetically but not symbolically. They may be considered to add significance in a way which challenges traditional concepts of architectural sculpture and decoration.

16.0 Conclusion and potential for further research

There can be little doubt that the architecture of the period, particularly that created by the public sector, is under threat. Much of its still falls into the 'no-man's land' (despite the 'thirty-year rule') of being too young to be taken seriously by many but old enough (especially given some of the non-traditional construction methods used) to be in a poor condition if not adequately maintained and subject to cumulative adaptations which will have eroded its significance.

This has been a general desk-based survey of primary published sources backed up by secondary, more interpretive, sources. Accordingly, to validate its findings a programme of fieldwork would be helpful to locate and assess the current condition of the buildings identified. This can be combined with a further assessment of their significance as a prelude to consideration for statutory listing. This could be achieved by a variety of methodologies thematic, authorial, temporal, or geographic.



APPENDIX A

Bibliography

Primary sources

ACP, Architects Lives [British Library National Life Story collection – series of interviews at an event with surviving members of ACP] available at https://sounds.bl.uk/Oral-history/Architects-Lives

Anon., A country builds, <u>RIBA Journal</u>, 7 May, 1959.

Anon., *Almshouses, Welshpool*, <u>The Builder</u>,4th April, 1941.

Anon., *Architecture in Britain today; No. 5, Wales,* <u>RIBA Journal,</u> October 1978.

Anon., *An architect's brand-new castle on a hillside in North Wales...,* <u>House</u> <u>and Garden</u>, October, 1979.

Anon., *Award-winning housing schemes*, <u>Official Architecture and Planning</u>, October 1964.

Anon., Breconshire, Official Architecture and Planning, June 1959.

Anon., *Cardiff's case for a City Architect,* <u>Official Architect,</u> vol. 11, 1948, p. 569.

Anon., *Civic Trust Awards for 1962*, <u>Official Architecture and Planning</u>, May 1963.

Anon., *Festival of Britain special architectural awards for Civic and Landscape design*, <u>The Architects' Journal</u>, 12 July, 1951.

Anon., Gold medal '68, Architecture Wales, Nov-Dec, 1968.

Anon., *Great Hall, Aberystwyth University*, <u>Architecture Wales</u>, March-April, 1967.

Anon., *Home grown; timber-frame flats, The Marshes, Newport,* <u>The</u> <u>Architects' Journal,</u> 27 August, 1980.

Anon., *Housing at Beaumaris, Anglesey*, <u>The Architects' Journal</u>,13 April, 1950.

Anon., *Housing at Brynmawr, Breconshire,* <u>The Architects' Journal</u>, 24 June, 1948.

Anon., *Housing, Duffryn, Newport,* <u>The Architectural Review,</u> 1st January, 1976.

Anon., *Housing at Gaer-Stelvio, Newport,* <u>The Architects' Journal,</u> 16 March, 1960.

Anon., Humane housing, The Architects' Journal, 10 August, 1977.

Anon., Kennedy Court, Colwyn Bay, Architecture Wales, March-April, 1968.

Anon., MOH medal awarded for Welsh housing, <u>The Architects' Journal</u>, 17 August, 1950.



Anon., New buildings in Wales, The Architects' Journal, 11 June, 1959.

Anon., *New county secondary school for Anglesey County Council,* <u>Official</u> <u>Architect,</u> July 1949.

Anon., *New secondary school, Llanrwst, Denbighshire,* Official Architecture and Planning, October 1962.

Anon., *News: Architects win medals for Welsh housing*, <u>The Architects'</u> <u>Journal</u>, 11 October 1967.

Anon., *News: Wales – housing design competition*, <u>The Architects' Journal</u>, 11 January 1967.

Anon., *Official architecture at Swansea*, <u>Official Architecture and Planning</u>, June 1959.

Anon., Ogmore Valley housing, Architecture Wales, March-April, 1967.

Anon., On the coast of Wales..., Ideal Home and Gardening, August 1957.

Anon., Perimeter: Duffryn, The Architectural Review, 1 April, 1980.

Anon., *Redevelopment at Butetown North Cardiff*, <u>Journal of the South</u> <u>Wales Institute of Architects</u>, July 1957.

Anon., *Some work by the City Architect of Cardiff*, <u>Official Architecture and</u> <u>Planning</u>, June 1959.

Anon., *Ten-storey flats for Cardiff Rural District Council*, Official Architecture and Planning, June 1959.

Anon., *Three schools by Gollins Melvin Ward and Partners*, <u>The Architectural</u> <u>Review</u>, October 1958.

Anon., *Th'improver improved*, <u>The Architects' Journal</u>, 11 April, 1973.

Anon., *The week: Welsh housing crisis*, <u>The Architects' Journal</u>, 8 February 1978.

Ashby, Peter, Birch, Graham, and Haslett, Martin, *Second homes in North Wales*, <u>Town Planning Review</u>, July 1973.

Beazley, Elizabeth, *University College of Wales: development plan*, <u>The</u> <u>Architects' Journal</u>, 13 April, 1966.

Birkhead, Morfa L., *Impressions of Anglesey*, <u>Architecture Wales</u>, May-June, 1967.

Clifford, H. Dalton, *New houses for moderate means*, (London, Country Life, 1957).

Gammon, J.R., *Building study: Welsh village housing*, <u>The Architects'</u> <u>Journal</u>, 25 March, 1970.

Gordon, Alex, *Architects' approach to architecture...'*, <u>RIBA journal</u>, 4 April, 1968.

Gordon Joseph, S., *Swansea and Cardiff: industry and amenity*, <u>Official</u> <u>Architecture</u>, June 1959.



Hayden Rees, M., *Flintshire – a county with a future,* <u>Architecture Wales,</u> March-April, 1968.

Health, G.B., Ministry of, Housing Manual 1949, (London, H.M.S.O., 1949)

Hurley, Louis F., *Building in the Brecon Beacons National Park: a study of precedents and trends,* (Brecknock, C.P.R.W., n.d.)

Jellicoe, G.A., Housing in rural areas, RIBA Journal, 9 July, 1948.

Knight, Christopher, *Building Study: housing at Duffryn*, <u>The Architects'</u> <u>Journal</u>, 13 February, 1980.

Kohan, C.M., *Works and buildings,* (London, H.M.S.O., 1952).

Lingard, Brian Hallwood, *Domestic architecture in Anglesey*, <u>Architecture</u> <u>Wales</u>, May-June, 1967.

Lipman, Alan, *The fortress in the park; an inept symbol,* <u>The Architects'</u> <u>Journal</u>, 4 June 1980.

Moss, Graham, *Hotel and holiday accommodation: farm building conversion*, <u>The Architects' Journal</u>, 20 July 1983.

Park, June, Houses for today (London, Batsford, 1958)

Richards, J.M., *Buildings of the year: 1950, <u>The Architects' Journal,</u> 18 January, 1951.*

Rosser, A.J., *The Crown Offices, Cardiff,* <u>Royal Institute of British Architects</u> (Wales Region). Year Book 1(Cardiff, RIBA, 1980).

Sjostrom, Cyril, *Swedish factory-produced timber houses*, <u>The Architects'</u> <u>Journal</u>, 3 February, 1944.

Society of Architects in Wales, Year Books [1980-85] (Cardiff, SAW)

Society of Architects in Wales, *National Eisteddfod Exhibition of Architecture 1980,* [Year Book 2], (Cardiff, SAW, 1981)

Stephenson, Gordon, *The Wrexham experiment; the Queen's Park South estate,* <u>Town Planning Review</u>, January 1954.

Squire Johnson, N., *Planning and the tourist industry*, <u>Architecture Wales</u>, May-June, 1967.

Thomas, Sir Percy, *Pupil to President (memoirs of an architect),* (Leigh-on-Sea, F. Lewis, 1963).

Williams-Ellis, Clough, *Architect errant (The autobiography of Clough Williams-Ellis).* (London, Constable, 1971).

Williams-Ellis, Clough, *The picturesque at Portmadoc*, <u>The Architects'</u> <u>Journal</u>, 18 September 1974.

Wright, John, A Carmarthenshire house, Architecture Wales, March-April, 1967.

Yorke, Francis Reginald Stevens and Whiting, Penelope, *The new small house*. (London, The Architectural, 1953)



Secondary sources

Alfrey, Judith, *Award winning houses: 1-6 Little Orchard, in,* Wakelin, Peter and Griffiths, Ralph A. (eds.), <u>Hidden histories: discovering the heritage of</u> <u>Wales,</u> (Aberystwyth, RCAHMW, 2008).

Alfrey, Judith, *Themes and sources for public housing in Wales,* in, Harwood, Elain and Powers, Alan (eds.), <u>Twentieth century architecture 9: Housing in</u> <u>the twentieth century nation</u> (London, Twentieth Century Society, 2008).

Black, Alistair, Pepper, Simon, and Bagshaw, Kaye, *Books, buildings and social engineering: early public libraries in Britain from past to present.* (London, Routledge, 2017)

Bullock, Nicholas, *Building the post-war world: modern architecture and reconstruction in Britain.* (London, Routledge, 2002).

Cherry, Monica, Building Wales (Adeiladau Cymru). (Treforest, RSAW, 2005)

Clawley, Alan, John Madin (Swindon, English Heritage, 2011)

Esher, Lionel, *A broken wave: the rebuilding of England 1940-1980* (Harmondsworth, Penguin, 1983).

Fraser, Murray (with Kerr, Joe), *Architecture and the "special relationship": the American influence on British architecture since 1945*. (London, Routledge, 2007).

Glendinning, Miles and Muthesius, Stefan, *Tower block: modern public housing in England, Scotland, Wales, and Northern Ireland.* (New Haven, published for the Paul Mellon Centre for Studies in British Art by Yale University Press, 1994).

Hall, Denis Clarke, *Architects Lives* [British Library National Life Story collection – series of interviews with the architect] available at https://sounds.bl.uk/Oral-history/Architects-Lives

Harwood, Elain, *England's schools: history, architecture and adaptation* (Swindon, English Heritage, 2010)

Harwood, Elain, *Space, Hope, and Brutalism; English architecture 1945-1975* (London, Yale, 2015)

Harwood, Elain, *The English Public Library*, 1945-88; introduction to heritage assets, (Swindon, Historic England, 2016)

Kay, Stephen, *Homes for Welsh workers: from Robert Owen to the Garden City Movement* (Abergavenny, 325 Press, 2014)

Lingard, Brian Hallwood, *Special houses for special people; mid-20th century dwellings by their architect* (Stanhope, Memoir Club, 2005).

Lingard, Brian Hallwood, *Thrifty homes for thrifty people; late 20th century dwellings by their architect* (Stanhope, Memoir Club, 2009).

Newman, John, Suggett, Richard and Wright, Iain, *Post-war housing: The Newport prefabs,* in, Wakelin, Peter and Griffiths, Ralph A. (eds.), <u>Hidden</u>



histories: discovering the heritage of Wales, (Aberystwyth, RCAHMW, 2008).

Perkin, George, *Bowen Dann Davies Partnership: a regional style for North Wales,* <u>RIBA Journal,</u> May 1982.

Perry, Victoria [foreword by Andrew Saint], *Built for a better future: the Brynmawr Rubber Factory*, (Oxford, White Cockade, c.1994)

Powell, Christopher, *The Welsh School of Architecture*, 1920-2008, (Cardiff, Cardiff University Pres, 2009).

Powers, Alan, *In the line of development: F.R.S. Yorke, E. Rosenberg and C.S. Mardall to YRM, 1930-1992.* (London, RIBA Heinz Gallery, 1992)

Rosenberg, Eugene [compiler – text by Richard Cork], *Architect's choice: art in architecture in Great Britain since 1945*. (London, Thames and Hudson, 1992)

Saint, Andrew, *Towards a social architecture: the role of school-building in post-war England.* (London, Yale University Press 1987)

Swanson, Neil, *Cedarwood: 'Woman's Journal' house of the year 1960,* in, Harwood, Elain and Powers, Alan (eds.), <u>Twentieth century architecture 12:</u> <u>Houses: regional practice and local character</u> (London, Twentieth Century Society, 2015).

Weston, Richard, *The extraordinary ordinariness*, <u>Touchstone</u>, November 2003

Whyte, William, Red brick (Oxford, Oxford University Press, 2015)

Grey literature

Alfrey, Judith, *Public housing in the 1950's* [unpublished paper for CADW, n.d.].

Alfrey, Judith, *School building in Wales since the War (c1945-1970)* [unpublished paper for CADW, October 1995]

Cherry, Monica, *Post-Second World War architecture in Wales: the search for a national architecture.* [MPhil, Welsh School of Architecture, University of Wales, 2006].

Davey, Elaine, A national architect? The Percy Thomas Partnership and Welsh national identity [PhD, University of Cardiff, 2013].

Vining, Jonathan, Modernism in Wales [MSc, University of Bath, 2014].

Wardle, Simon, *Twentieth century libraries: assessment of significance* [unpublished paper for CADW, n.d.] – contains extensive list of new libraries 1961-1994 as a two-page appendix.



APPENDIX B

Compiled table of Post-war buildings in Wales (primarily sourced from Buildings of Wales volumes – the 'Pevsners')

The register is compiled under the counties adopted by the Buildings of Wales Series – Clwyd, Carmarthenshire, Ceredigion, Pembrokeshire, Gwynedd, Powys, Glamorgan and Gwent.

The first list for each county includes all the post-1945 buildings referenced in the Buildings of Wales volumes. The table extracts those directly relevant to this research project or of sufficiently close interest to be merit inclusion.

NB some of these buildings may have been altered, demolished or are under threat following closure - fieldwork is needed to establish their current condition and status.

Clwyd (1945 onwards)

- Conwy Falls Restaurant 1955-6, Betws y Coed Clough William-Ellis
- Llanelidan Clough WE 1950s onwards
- Rydal School Colwyn Ffoulkes up to 1958
- No 23 Ebbertson Road West Llandrillo yn Rhos 1960-1
- Flintshire Technical College 1952-4 by R W Harvey with Sir Howard Robertson
- Wrexham Queens Park Housing estate begun 1950 by J M Davies (Borough Engineer and Surveyor) and Gordon Stephenson of Liverpool- the first British attempt at Radburn planning
- Wrexham Guildhall 1959 -61 by Stephenson Young and Partners
- LLanrwst Ysgol Dyffryn Conwy 1960-5 by R A MacFarlane then Denbighshire county architect
- Rhosllanerchrugog Public Library 1961-2
- Wrexham Police Headquarters by E Langford Lewis 1973-5
- Llandrillo yn Rhos Elwy Road housing by Colwyn Ffoulkes 1952-6
- Mold County Civic Centre Shire Hall by R W Harvey 1966-75
- Mold Theatr Clwyd 1973-6
- Wrexham Swimming Baths by F D Williamson & Associates 1965 -7
- Rhyl housing by Garnett and Cloughley 1960 -66
- Wrexham Fibreglass Ltd Charles Andrews and Sons 1970-1
- Wrexham Public Library 1971-3 by James Roberts
- Cefn Meiriadog Maes Robert 1973-4 by Bowen Dann Davies (BDD)
- Towyn Roman Catholic church 1973-4 by BDD
- Rhuddlan RC church 1975-6 by BDD
- Rhyl Cefndy Hostel 1973-5 by BDD
- Wrexham Capel y Groes Chapel 1981-2 by BDD



PLACE	BUILDING NAME	ARCHITECT	DATE	LISTED
Abergele	Maes Canol Estate	Colwyn Foulkes	1955- 60	
Bangor is y Coed	Hole in the Wall	J B Davies	1973	II
Cefn Meiriadog	Maes housing	Bowen Dann Davies	1973-4	
Colwyn Bay	Rydal School Memorial Hall	S Colwyn Foulkes	1957	II
Colwyn Bay	Pen y Bryn Road Nos. 5,7,9,11 & 15	Stewart Powell Bowen	1966- 80	II
Connahs Quay	Flintshire Technical College (now Deeside College)	R W Harvey	1952-4	
Connahs Quay	Flintshire Council Offices	John Poulson ?		rejected
Halkyn	Ysgol Rhos Helyg	William Griffiths	1953	II
Holywell	Library		1974	
Llandrillo yn Rhos	23 Ebbertson Road West	Colwyn Ffoulkes	1960-1	
Llandrillo yn Rhos	Elwy Road housing	Colwyn Ffoulkes	1952–6	
Llandrillo yn Rhos	Technical College		1964- 73	
Llanelidan	Nantclwyd Hall 9 separate entries	Clough Williams - Ellis	1963- 66	II
Llanelidan	Cwm Farmhouse	Clough Williams - Ellis	c.1960	
Llanrwst	Ysgol Dyffryn Conwy	R A MacFarlane	1960-5	
Llanrwst	Cae'r Felin Housing	Colwyn Foulkes	1945-9	



Mold	Civic Centre	R W Harvey	1966-	rejected
	Shire Hall	R W Haivey	75	rejected
Mold	Theatr Clwyd	R W Harvey	1973-6	proposed
Mold	County Library		1972	
Rhos- llanerchrugog	Public Library	R A MacFarlane	1961–2	
Rhos on Sea	Elwy Estate	Colwyn Foulkes	c.1956	
Rhyl	housing	Garnett and Cloughley	1960- 66	
Rhyl	Little Theatre		1963	proposed
Sealand	Former Office buildings Shotton Steelworks		1950	II
Wrexham	Queens Park Housing Estate	J M Davies & Gordon Stephenson	1950– 1954	
Wrexham	Plas Isaf, Rhos y Medre		Comple ted by 1952	
Wrexham	Pentre Maelor	Colwyn Foulkes	1949- 52	
Wrexham	Guildhall	Stephenson Young	1959- 61	
Wrexham	Public Library	James Roberts	1971-3	
Wrexham	Police HQ	E Langford Lewis	1973-5	
Wrexham	Swimming Baths	F D Williamson	1965-7	
Wrexham	NEWI (now Glyndwr University)	Saxon Smith and Partners	1950	II



CARMARTHENSHIRE and CEREDIGION (1945 onwards)

- Pantycelyn Halls
- Aberporth School 1957
- Newcastle Emlyn school
- Carmarthen school
- Aberystwyth Penglais additions 1973 5
- Richmond Park Primary school Carmarthen 1987-8 by Alex Gordon
- Graig Tertiary College Llanelli 1992 5 by Dyfed County architects
- Bro Myrddin School Cwmffrwd nr. Carmarthen 1993-6 by Dyfed CC
- Ysgol y Bedol Garnant 2000-5 by Carmarthenshire Co. Architects
- Glangwili Hospital 1958 by Percy Thomas
- Bronglais Hospital 1966
- Prince Philip Hospital Llanelli 1989
- Aberystwyth Town Hall by Colwyn Ffoulkes 1961 -2
- Carmarthenshire District Council offices 1970s
- Ty Elwyn Llanelli 1981
- Neuadd Ceredigion Aberaeron 1989 90
- Llanelli magistrates court by J M Harries 1971
- Cardiganshire Water company, Aberaeron by J L Ceri Jones 1971
- Retail developments Llanelli Carmarthen and Cardigan
- Aberystwyth University by Percy Thomas/William Holford 1937-57
- University Science block by Bill Marsden 1958 60
- University Dale Owen 1964-5 and main piazza 1967-70 and 1973-6
- University Cwrt Mawr halls of residence 1967
- Aberystwyth Media Studies centre 1999 by Patel Taylor
- Aberystwyth Student village 1992-4 by James and Jenkins
- Rebuilding of seafront housing 1999
- National Library addition 1992
- National Library Drwm lecture theatre 2004 James and Jenkins
- National Botanic Gardens conservatory by Norman Foster
- Visitor centre at Llanelli 2004 by Powell Dobson
- Aberystwyth Arts Centre by Peter Roberts 1998-9
- Cardigan Theatr Mwldan enlargement by Lawray 2004
- Llanelli Theatr Elli refurbishment 1978
- Cardigan slaughter house theatre 1985
- New Quay housing 1953
- Aberystwyth Bryn Aberoedd by Prys Edwards for himself 1967 -8
- Gorsfach, Pennant 1974 by Alexander and Margaret Potter
- Blaencarmel Ciliau Aeron 1998 by David Lea
- No 4 to 5 Quay Parade Aberaeron 1999
- Burry Port 2003 sheltered housing



PLACE	BUILDING NAME	ARCHITECT	DATE	LISTED
Aberaeron	Cardiganshire Water Company	J L Ceri Jones	1971	
Aberporth	School	G R Bruce	1957	
Aberystwyth	Pantycelyn Halls	Percy Thomas	1948 - 60	II
	Penglais additions	Percy Thomas & William Holford	1973-5	
	Science Block	Bill Marsden	1958 - 60	
	Main Piazza etc	Percy Thomas (Dale Owen)	1967-70 and 1973-6	
	Halls of Residence	Dale Owen	1967	
	Town Hall	Colwyn Ffoulkes	1961 -2	
	Bryn Aberoedd	Prys Edwards	1967 -8	
Cardigan	Theatr Mwldan	Lawray Architects	1985	
Carmarthen	County Hall	Percy Thomas	1938-56	
	District Offices		1970s	
	School		??	
	Lychgate to St Mary's Church		1945	II
	Ex-service Men's Club		1958	II
Llanelli	Ty Elwyn		1981	
	Magistrates Court	J M Harries	1971	
	Theatr Elli	Harry Weedon	1978	
New Quay	Housing		1953	
Newcastle Emlyn	School		??	
Pennant	Gorsfach	Alexander and Margaret Potter	1974- 1992	



PEMBROKESHIRE (1945 onwards)

- Esso terminal Haverfordwest 1960
- Texaco Rhoscrowther 1962-4
- Gulf Llanstadwell 1966-8
- Amoco Robeston Wathen 1971-3
- Pembroke Power Plant Pwllcochran 1964-73
- Cleddau Bridge 1965-75
- Crymych school 1953-7 by Lt Col Barrett
- Fishguard school 1954 by Barrett
- Milford school 1962-4 by Barrett
- Haverfordwest Cambria House 1964-7
- Haverfordwest county library
- Round House at St David's by James Gowan 1960s
- Pontfaen Chris Day's Ty Cwrdd Bach 1974
- Llanycefn Nant y Cwm Steiner School 1982 and kindergarten 1989
- Ffald y Brenin retreat Pontfaen 1985-6
- Spittal visitor centre Scolton Manor 1993 Peter Holden
- Treginnis Isaf St David's by Peter Roberts 1990-2
- Cilgerran Welsh Wildlife centre 1993-4
- Meline Visitor centre at Castell Henllys 1993-4
- St David's Tourist info centre by Roberts
- Goodwick Sail training centre 1996-7 by Tim Colquhoun
- Haverfordwest County Hall 1998-9
- Newport school by Roy Howell 1991
- St David's primary school 2002 by Pembroke Design
- Nolton, Malator 1998 by Future Systems

PLACE	BUILDING NAME	ARCHITECT	DATE	LISTED
Crymych	School	Lt.Col Barrett	1953-7	
Fishguard	School	Lt.Col Barrett	1954	
Haverfordwest	Cambria House		1964-7	demolished
Haverfordwest	County Library		1972	
Llanycefn	Nant y Cwm Steiner School	Chris Day	1982	
Milford	School	Lt.Col Barrett	1962-4	
Pontfaen	Ty Cwrdd Bach	Chris Day	1974	proposed
St David's	Round House	James Gowan	1960s	II



GWYNEDD (1945 onwards)

- Dolgellau County Offices 1953
- Penrhyn Bay Church by Rosier and Whitestone 1963
- Bangor Penrhosgarnedd church 1956
- Benllech church 1964 by North and Padmore
- Bethesda RC church by Weightman and Bullen
- Llandudno Junction RC church by Weightman and Bullen
- Tywyn RC church by Weightman and Bullen
- Benllech RC church by S Powell Bowen, 1967
- Dolgellau RC church by M T Prichard and the parish priest 1963-6
- Norman Squire Johnson Anglesey County Architect 1940s 50s
- Amlwch Comprehensive School (first in Britain)
- Llangefni school
- Beaumaris Primary School
- Bangor University 1950s 60s by Percy Thomas etc plus David Roberts's Plas Gwyn 1962 (now demolished)
- Harlech Coleg Harlech Colwyn Foulkes student accommodation 1968 and Theatr Harlech 1973
- Beaumaris housing estate S Colwyn Foulkes 1950
- Portmeirion 2nd phase 1954 completed 1975 Clough Williams Ellis
- Criccieth Moranedd Café 1948 by Clough Williams Ellis
- Trawsfynydd Nuclear Power Station 1963 by Basil Spence and Sylvia Crowe
- Wylfa Nuclear Power Station 1971 Farmer and Dick
- Tan y Grisiau Blaenau Ffestiniog Pumped storage station 1957-63 by Colwyn Foulkes for CEGB (first in world)
- Dinorwic pumped storage by James Wilkinson 1982 (second largest in world)
- Caernarfon Pencadlys by Dewi Prys Thomas and Gwynedd County Architects 1980s
- Caernarfon Library 1982 Gwynedd County Architects
- Penrhyndeudraeth National Park Office by Dylan Roberts 1995
- Conwy Castle ticket office by Bowen Dann Davies 1989
- Caernarfon the Galeri by Richard Murphy 2005
- Tremadog hospital by Nightingale Associates 2008
- Llanfor Rural Life Centre by Dobson Owen 2008
- Snowdon summit building by Ray Hole 2008
- Mostyn Art Gallery extension by Ellis Williams 2009
- Llanfaelog conversion of church by Adam & Frances Voelcker 2000
- Bala conversion of church by Roy Olsen 2006-7



- Gwynedd schools by Graeme Hughes Bangor, Caernarfon, Penygroes and Penrhyn Bay
- Penisa'r waun primary school by Dilwyn Gray Williams
- Bangor University Nicholas Hare additions
- Llanrug housing by Bowen Dann Davies 1981
- Conwy Twr Llewelyn 1985 by Bowen Dann Davies
- Llanfairisgaer Plas Menai Outdoor Pursuits Centre 1982 Bowen Dann Davies
- Llanbedr house for Gruffydd Price architect 1995
- Caernarfon house for Maredudd ab Iestyn 2000
- Nantmor house for David Wilkinson 2006
- Llanegryn, Cynefin, house by Christopher Day & John Bishop 2001-3
- Pwllheli house 1982
- Parc Menai TACP 2004
- Minffordd Business Park by Edmund Kirby
- Waunfawr, Cibyn Industrial estate, Antur by Selwyn Jones 2005
- Bowen Dann Davies supermarkets at Porthmadog and Caernarfon
- Conwy Tunnel 1991 (first immersed tube tunnel in Britain)
- Millenium Bridges at Holyhead and Corris



PLACE	BUILDING NAME	ARCHITECT	DATE	LISTED
Aberdaron	Post Office	Clough Williams-Ellis	1950	II
Amlwch	Ysgol Syr Thomas Jones Comprehensive School	Norman Squire	1948	II*
Amlwch	Library		1973	
Bangor	University (e.g. Plas Gwyn)	Percy Thomas and David Roberts	1950s / 60s	
Bangor	Hafod Elfyn	S Colwyn Foulkes	1959	II
Bangor	Coleg Normal Library		1973	
Beaumaris	Ysgol Gynradd Primary School	N Squire Johnson	1950-51	II
Beaumaris	Cae Bricks now known as Bryn Hyfryd	S Colwyn Foulkes	1949-54	
Blaenau Ffestiniog	Tanygrisiau pumped storage station	Colwyn Foulkes	1963	
Caernarfon	Pencadlys	Dewi Prys Thomas and Gwynedd County Architects	1980s	
Caernarfon	Library	Gwynedd County Architects	1982	
Colwyn Bay	Rydal School Memorial Hall	S Colwyn Foulkes	1957	II
Colwyn Bay	Pen y Bryn Road Nos 5, 7, 9, 11 and 15	Stewart Powell Bowen	1966- 1980	II Pending
Conwy	Housing Twr Llewellyn	Bowen Dann Davies	1985	
Dinorwic	Pumped storage station	James Wilkinson	1982	



Dolgellau	County Offices		1953	
Foelas	Summer House	Clough Williams-Ellis	1960	II
Harlech	Coleg Harlech Student Accommodation	S Colwyn Foulkes	1968	rejected
Harlech	Theatr Ardudwy	S Colwyn Foulkes	1973	II*
Llanfairfechan	Carreg Llwyd	Herbert North	1945	II
Llangefni	School	Norman Squire	??	
Llangefni	Library		1973	
Llanrug	Housing	Bowen Dann Davies	1981	
Portmeirion	2 nd phase	Clough Williams-Ellis	1954 - 75	
Pwllheli	House		1982	
Trawsfynydd	Nuclear Power Station	Basil Spence	1963	
Tywyn	Library		1973	
Wylfa	Nuclear Power Station	Farmer and Dick	1971	



POWYS (1945 onwards)

- Abermule School by Herbert Carr 1951
- Dolfor school by Herbert Carr 1953
- Trewern school by Herbert Carr 1955
- Llanfyllin High School by Herbert Carr 1955
- Llanidloes High School by Herbert Carr 1955
- Welshpool school by Herbert Carr
- Machynlleth school by Herbert Carr c.1950
- Builth Wells School enlargement by Peter Davies 1986-9
- Newtown Town Hall by Colwyn Foulkes 1965-8
- Llanilltyd Mountain Centre by Colwyn Foulkes 1966
- Brecon Library 1969 by J A McRobbie
- Machynlleth, C.A.T. by Pat Borer and David Lea 2010
- Presteigne RC Church 1954 by Francis Pollen
- Bleddfa church George Pace 1977
- Pool Quay church redesign 2004
- Llanstephan House by N Johnston 1974-6
- Coed Mawr Bettws Disserth by Craig Hamilton 2010
- Boughrood Housing by Co2 developments 2006-7
- Lower Chapel housing by Co2 developments 2008
- Pontfaen Ty Hedfan by Featherstone Associates 2009
- Newtown New Town housing 1968–1988 by J L Russell e.g. Trehafren
- Clywedog Dam 1964 by Halcrow (tallest mass of concrete in Britain at time)
- Claerwen Dam 1946 -52 by Halcrow
- Dyfi Eco Park Machynlleth by Peter Holden 1994 and after (the first purpose built environmentally friendly business park in Wales)
- Newtown Emerson Control Techniques Factory by Arup 1996



PLACE	BUILDING NAME	ARCHITECT	DATE	LISTED
Abermule	School	Herbert Carr	1951	
Brecon	Library	J A McRobbie	1969	II
Criggion	Radio Station		Said to be Pre and post war	Proposed
Dolfor	School	Herbert Carr	1953	
Llanfyllin	High School	Herbert Carr	1950s	
Llanidloes	High School	Herbert Carr	1950s	
Llanstephan (Radnorshire)	Private House	N Johnston	1974-6	
Llanwddyn	Ysgol Efyrnwy	Herbert Carr	1950	II
Llanwddyn	14 house and 6 bungalows	Herbert Carr	1948	
Machynlleth	School	Herbert Carr	1950	
Newtown	Town Hall	Colwyn Foulkes	1966	
Newtown	New Town housing	J L Russell	1968 - 1988	
Newtown	Library		1963	
Trewern	School	Herbert Carr		
Welshpool	Ardwyn Nursery and Infant School	Herbert Carr	1951	II
Welshpool	Library		1983	



GLAMORGAN (1945 onwards)

- Llandaff Cathedral George Pace work 1950s
- Llandaff St Michaels Theological College Chapel 1957-9
- Cockett St Teilo George Pace 1961-3
- Cardiff St Mark Gabalfa 1967-8
- Margam Crematorium 1969 by F D Williamson
- Llwydcoed Crematorium 1970-1 by H M R Burgess
- Coychurch Crematorium 1969-70 by Fry Drew Knight and Creamer
- Merthyr Tydfil College of Further Education 1950-2 by Yorke Rosenberg and Mardall
- Aberdare College of FE by Gollins Melvin Ward & Partners 1954-5
- Gorseinion College of FE by Gollins Melvin Ward & Partners 1954-5
- Kenfig Hill school by Denis Clarke Hall 1950s
- Cardiff Fairwater Cantonian High School 1961-3 John Dryburgh
- Cardiff Fitzalan High School 1962-3 and 1966-8
- Barry Girls Comprehensive by Percy Thomas 1969-73
- Cardiff University of Wales Cathays Park additions e.g. Redwood Building – Percy Thomas late 1950s / 1960s and Alex Gordon e.g. Music Dept 1970
- Cardiff Cathays Park Central Police Station John Dryburgh 1966-8
- Cardiff Sherman Theatre 1970-1
- Cardiff Students Union 1973
- Cardiff BBC building by Percy Thomas 1963-7
- St Fagans Welsh Folk Museum building 1968-74 Percy Thomas
- Cardiff Butetown Welsh Maritime Museum 1975-7 by H M R Burgess
- Cardiff University Arts and Social Sciences Building by Williamson Faulkner Brown & Partners 1972-6
- Cardiff Heath Hospital 1960s by S W Milburn and Partners
- Cowbridge Library and Health Centre 1973-4 by Welsh School of Architecture
- Bridgend Primary School 1974-5
- Penarth School 1975-6
- Merthyr Tydfil Prince Charles Hospital 1965-75 by Percy Thomas
- Swansea University Fulton House 1958-62
- Swansea University Library 1963-4
- Atlantic College staff housing by Alex Gordon 1960s
- Dinas Powys group of houses by T G Jones and J R Evans
- Dinas Powys groups of houses by Hird and Brooks early 1970s
- Llansannor houses by Hird and Brooks
- Llandaff house by Hird and Brooks
- Port Talbot Abbey Steelworks 1948-52



- Llangyfelach Velindre tinplate works 1952-6 Percy Thomas
- Amersham International Radiochemical Factory Percy Thomas 1974 -87
- Merthyr Tydfil Hoover Factory Wallis Gilbert & Partners 1946-8
- Pencoed Sony Factory
- Miskin Bosch Factory 1989-90 by A D Shepherd
- Cardiff St David's Hall 1978 -82 by J Seymour Harris
- Swansea University Taliesin Theatre 1984 by Peter Moro Partnership
- Swansea West Glamorgan County Hall 1979-84 by West Glam County Architects
- Cardiff South Glamorgan County Hall 1986-7 by J R C Bethell
- Bridgend Princess of Wales Hospital 1981 5 by Alex Gordon
- Cardiff University Engineering Dept extension by Wyn Thomas including Trevithick Building 1987-9
- Swansea Grand Theatre additions by McColl Associates 1985-8
- Cardiff National Museum additions Alex Gordon 1993
- Neath shopping centre by Moxley Jenner 1990-1
- St Mellons Business Park c.1990 by Wigley Fox
- Swansea Crown Court 1985-8 by Alex Gordon
- Cardiff Bay Crickhowell House Holder Mathias 1993
- Ely Branch Library by Welsh School of Architecture 1985-6
- Llantwit Fardre Surgery by Welsh School of Architecture 1986-7
- Cardiff Canton sheltered housing 1986-7
- Tonyrefail Day centre 1992-3 by Welsh School of Architecture
- Cardiff University Hospital Medical Centre 1991-2 by Powell Alport
- Cardiff Butetown Science Exhibition Centre by Ahrends Burton Koralek 1993-5
- Penarth Portway Marina by Chamberlin Powell Bon and Woods 1984 onwards
- Swansea Maritime Quarter 1984-7 by Burgess Partnership and Holliday Meecham Partnership 1985-8
- Cardiff Bay housing and offices by Holder Mathias



PLACE	BUILDING NAME	ARCHITECT	DATE	LISTED
Aberdare	College of FE	Gollins Melvin Ward	1954-5	
Aberdare	Library			
Barry	Girls Comprehensive	Percy Thomas	1969- 73	
Bridgend (Brackla)	Primary School	Welsh School of Architecture	1974-5	
Cardiff	Fairwater Cantonian High	John Dryburgh	1961-3	
Cardiff	Fitzalan High School		1962-3 & 66-8	
Cardiff	Empire Pool	D M Davies & John Dryburgh	1958	rejected
Cardiff	Sherman Theatre	Alex Gordon enlarged by Jonathan Adams	1970-1	
Cardiff	Central Police Station	John Dryburgh	1966-8	
Cardiff	BBC building	Percy Thomas	1963-7	Demolished
Cardiff	Butetown Welsh Maritime Museum	H M R Burgess	1975-7	Demolished
Cardiff	St David's Hall	Seymour Harris	1978- 82	
Cardiff	Welsh Office CP2	Alex Gordon	1972- 79	II
Cardiff	Cathays Park additions e.g. Redwood Building	Percy Thomas	Late 1950s / 1960s	
Cardiff	Music Dept	Alex Gordon	1970	
Cardiff	Students Union	Alex Gordon	1973	
Cardiff	Arts and Social Sciences building	Williamson Faulkner Brown	1972-6	



		1		1
Cardiff (Cyncoed)	Modernist house	Powell Allport	1966	Proposed
Cardiff (Llandaf)	Capel House (The Gore)	Hird and Brooks	1966	
Cardiff (Llandaf)	2,3 and 4 Fordwell	Hird and Brooks	1960s	
Cardiff (Llandaf)	Courtyard House	Hird and Brooks	c.1980	
Cardiff (Splott)	College		Pre and post war	rejected
Cardiff	Wenallt Bunker		2 nd WW and 1970s	
Cowbridge	Library and Health Centre	Welsh School of Architecture	1973-4	
Coychurch	Crematorium Chapel of Remembrance	Fry Drew Knight and Creamer	1969- 70	II*
Coychurch	Crematorium entrance walls, gates and piers	ditto	ditto	II
Coychurch	Crematorium Capel Crallo and Capel Coity	ditto	ditto	II*
Dinas Powys	Little Orchard Nos 1 to 6	Jones and Evans	1968- 73	II
Dinas Powys	Housing in Elm Grove, Merevale, Mill Close, Park Road and The Mount	Hird and Brooks	1960s (Elm Grove and Mill Close) and the rest 1970s	
Kenfig Hill	Cynfrig Comprehensive School	Denis Clarke Hall	1957- 61	
Llansannor	1 to 9 Court Drive	Hird and Brooks	1972	



			1070	
Llwydcoed	Crematorium	H M R Burgess	1970-1	
Margam	Crematorium	F D Williamson	1969	II*
Merthyr Tydfil	College of FE	Yorke Rosenberg and Mardall	1950-2	
Neath	Sandfields Comp. Great Hall		1957-8	rejected
Penarth	Ysgol Gynradd	Welsh school of architecture	1975-6	
Penarth	Marina	Chamberlin Powell Bon and Woods	1984	
Penarth	12 St Marks Road	Hird and Brooks	c.1980	
St Andrew's Major	West Lodge	Hird and Brooks	1968	
St Fagans	Welsh Folk Museum main building	Percy Thomas	1968- 74	II
Swansea	University Library	Enlarged by Dale Owen	1963-4	
Swansea	University Fulton House	Norman Thomas	1958- 62	II
Swansea	University Wallace Building	? Percy Thomas - then remodelled by Ainsley Gommon	1953	II
Swansea	University Taliesin Theatre	Peter Moro	1984	rejected
Swansea	West Glamorgan County Hall	West Glam County Architects	1979- 84	
Swansea	Maritime Quarter	Burgess Partnership	1984-7	
Swansea	Civic Buildings	Percy Thomas	1984	rejected



GWENT (1945 onwards)

- Christchurch church 1953-5 by George Pace
- Newport St Woolo's extension by A D R Caroe 1960-4
- Newport St David's RC by F R Bates 1963
- Llantarnam Abbey chapel 1957 by F R Bates
- Troy House chapel 1963-4 by Kenneth Smithies
- Rogerstone Baptist church by Biscoe Craig Hall 1995-6
- Newport housing estates St Julian's, Always, Ringland, Malpas and Gaer Stelvio 1946-51
- Newport Dyffryn Housing estate 1976-9 by MacCormac and Jamieson
- Newport Technical College by Percy Thomas 1956-8
- Bettws High School by Evans and Shalev 1969-72
- Cwmbran New Town housing by J C P West 1950 62
- Cwmbran high rise block by Gordon Redfern 1960s
- Cwmbran Monmouth House 1965-7
- Cwmbran Fairwater Comprehensive School 1969-71
- Forgeside housing by MacCormac Jamieson Prichard 1985
- Langstone Primary School 1951-2 by Gollins, Melvin & Partners
- Llantarnam School 1950-4
- Croesyceiliog Comprehensive School 1955-9
- Caldicot School 1957-8
- Trevethin school
- Risca Tertiary College 1956-61
- Abergavenny Childrens Assessment Centre 1975-7 by Kenneth Jones
- Abersychan Comp. School 1977-80 by John Postill & Norman Robson-Smith
- Caerleon Gwent College of FE 1983-8 by Robson-Smith
- Bassaleg Pentrepoeth school 1985-6 by Robson –Smith
- Newport Eveswell School 1990 by Robson-Smith
- Brynmawr Blaen y Cwm school 1988-91
- Pontnewynydd Cwmffrwdoer School 1982-3 by John Postill
- Cross Ash school 1989-91
- Overmonnow Primary School addition by Charles Parry
- Risca Primary School 1991-3 designed by Kim Cooper
- Abertillery Comprehensive School 1984-6 by John Postill
- Panteg Crematorium by Percy Thomas 1958-60
- Abergavenny Nevill Hall Hospital by Percy Thomas 1965-74
- Cwmbran County Hall 1969-77 by Robert Matthew, Johnson Marshall
- Cwmbran Gwent Police HQ 1971-7
- Duffryn Central Statistical Office by Percy Thomas 1973
- Tredegar Public Library 1974-5 by Powell Alport and Partners



- Duffryn Patent Office 1989 -90
- Newport Crown Court 1989-91
- Newport Central Police Station 1993
- Newport town centre sculptures
- Newport George Street bridge 1962-4 by Mott Hay and Anderson (earliest of its kind in Britain)
- M48 bridge over River Wye by same firm as above
- Second Severn Crossing by Halcrow 1992-6
- Brynmawr Rubber Factory 1947-53 Architects Co-Partnership
- Crumlin Hafodyrynys Colliery washery mid 1950s
- Mamhilad Nylon Spinners 1947-8 by Percy Thomas
- Mamhilad Parke Davis 1971-3 by Percy Thomas
- Cwmbran Alfa-Laval 1973 by Percy Thomas
- Magor Whitbread Brewery by Frederick Gibberd 1979
- Duffryn Inmos Factory by Richard Rogers 1982
- Coedkernew LG complex 1996-8

PLACE	BUILDING NAME	ARCHITECT	DATE	LISTED
Abergavenny	Childrens Assessment Centre	Kenneth Jones	1975- 7	demolished
Abersychan	Comprehensive School	John Postill and Norman Robson-Smith	1977- 80	
Abertillery	Comprehensive School	John Postill	1984- 6	
Bassaleg	Pentrepoeth School	Norman Robson-Smith	1985- 6	
Bettws	High School	Evans and Shalev	1969- 72	demolished
Brynmawr	Dunlop Semtex Factory and Boiler House	Architects Co- partnership	1947- 53	II* Factory demolished – boiler house remains
Brynmawr	Dunlop Semtex Pump House	Architects Co- Partnership	1947- 53	II
Brynmawr	Housing	Yorke Rosenberg and Mardell		



Caerleon	Gwent College of Further Education	Norman Robson-Smith	1983- 8	
Caldicot	School	Monmouthshire County Architects	1957- 8	
Croesyceiliog	Comprehensive School	Monmouthshire County Architect Colin Jones	1955- 59	
Cwmbran	Housing	J C P West	1950- 62	
Cwmbran	Tower block	Gordon Redfern	1960s	
Cwmbran	Monmouth House (flats)	Gordon Redfern	1965- 7	
Cwmbran	Fairwater Comprehensive School	Monmouthshire County Architects Sydney Leyshon	1969- 71	
Cwmbran	County Hall	R Matthew / J Marshall	1969- 77	demolished
Cwmbran	Gwent Police HQ	R Matthew / J Marshall	1971- 7	
Forgeside	Housing	MacCormac Jamieson Prichard	1985	
Langstone	Primary School	Gollins Melvin and Partners	1951- 2	
Llantarnam	School	Monmouthshire County Architects – Colin Jones	1950- 4	
Newport Housing estates	St Julian's / Always / Ringland / Malpas / Gaer Stelvio	Much by Johnson Blackett	1946- 51	



		1	1	1
Newport	Dyffryn estate	MacCormac and Jamieson	1976- 9	
Newport	Technical College	Percy Thomas	1956- 8	
Newport	George Street Bridge	Mott Hay and Anderson	1962- 4	II*
Newport (Duffryn)	Central Statistical Office	Percy Thomas	1973	
Newport (Gaer)	Junior School	Johnson Blackett	1950- 51	II
Newport	Dolman Theatre		1967	Proposed
Panteg	Crematorium	Percy Thomas	1958- 60	
Pontnewynydd	Cwmffrwdoer School	John Postill	1982- 3	
Risca	Tertiary College	Monmouthshire County Architects	1956- 61	
Tredegar	Public Library	Powell Alport	1974- 5	
Trevethin	School	Monmouthshire County Architects	1962- 3	
M48	Bridge over Wye	Mott Hay and Anderson	1961	II



APPENDIX C

National Eisteddfod Gold Medal for Architecture up to 1985

Compiled from information kindly provided by Eisteddfod Genedlaethol Cymru

Year	Winner	Building	Notes
1954-59	Medal Withheld		
1960	Grenfell Baines and Hargreaves, Preston	H J Heinz Offices, Cardiff	Demolished
1961-66	Medal not proffered		
1967	Medal withheld		
1968	Hird and Brooks, Cardiff	The Gore (dwelling and swimming pool), Llantrisant Road, Cardiff	?
1969	Ormrod Partnership, Liverpool	Pilkington Perkin- Elmer Building, St Asaph	demolished
1970	Sir Percy Thomas and Son, Cardiff	Physics & Mathematics Building, University College, Swansea	?
1971	Percy Thomas Partnership, Cardiff	Great Hall, Students Union and central concourse University College, Aberystwyth	Survives
1972	T G Jones and J R Evans	Little Orchard, Dinas Powys	Grade II
1973	Medal Withheld		
1974	Percy Thomas Partnership, Cardiff	Albert Edward, Prince of Wales Court for the Elderly, Porthcawl	survives



1975	John Sam Williams, Pwllheli	Ysgol Arbennig y Ffor, Pwllheli	?
1976	Percy Thomas Partnership, Cardiff	Parke Davie Pharmaceutical Plant, Pontypool	Being demolished or stripped 2018
1977	Bowen Dann Davies	Cefndy Road Hostel, Rhyl	survives
1978	Percy Thomas Partnership, Cardiff	Welsh Folk Museum, St Fagan's Cardiff	Grade II
1979	Percy Thomas Partnership, Cardiff	Hugh Owen Building, University College, Aberystwyth	survives
1980	Medal Withheld		
1981	Medal Withheld		
1982	Bowen Dann Davies Partnership, Colwyn Bay	Hafan Elen, Llanrug, Caernarfon	Appears to survive
1983	Percy Thomas Partnership, Cardiff	Amersham International Laboratories, Cardiff	survives
1984	Bowen Dann Davies Partnership, Colwyn Bay	Capel y Groes Wrexham	survives
1985	Bowen Dann Davies Partnership, Colwyn Bay	Plas Menai National Watersports Centre Caernarfon	survives



APPENDIX D

Civic Trust Awards post-war

Given the number of Awards and Commendations, the following table is restricted to those buildings that are the core subject of this report, namely public buildings and public and private housing. This table is drawn from information kindly provided by Civic Trust Awards (NB this list below excludes as far as possible alterations to pre-existing buildings)

Year	Building / Place		
i cai			
1959	Bangor, House at Glan Aethwy		
1959	Knighton, Old People's Home, The Cottage		
1959	Cwmbran, Town centre north housing scheme		
1960	Mumbles, chalets at Southend		
1962	Crickhowell, Brynant, Housing scheme (stage II)		
1962	Bangor, Nature Conservancy Headquarters		
1962	Llandrindod Wells, Police Houses		
1965	Menai Bridge, Houses for Mrs Wands, Green Bank		
1965	Penarth, International House of South Wales		
1965	Maentwrog, Tan y Bwlch Cottages		
1965	Caernarfon, Tan y Mur Flats, Church Street		
1965	Caernarfon, Terraced cottages Mountain Street		
1965	Llansantffraid, Village Housing Development		
1966	Cardiff, House in Llantrisant Road, Llandaff		
1966	Swansea, School of Social Studies, Singleton Park		
1966	Cardiff, Temporary Science Laboratories Cathays Park		
1968	Caernarfon, Cefn Hendre		
1968	Rhondda, Ferndale House and Ferndale Court		
1968	Caernarfon, Glan Cadnant		



1968	Pontsticill, Housing
1968	Colwyn Bay, Kennedy Court, Llanellian Road
1968	Aberystwyth University, Llandinam Building
1968	Brynsiencyn, Menaifron
1968	Aberystwyth University, Neuadd Cwrt Mawr
1968	Holyhead, Newry Fields housing
1968	Holywell, Plas Dewi
1968	Trevine, Ty Gwyn
1971	Beaumaris, Community Centre
1971	Aberystwyth University, Great Hall, Bell Tower and Concourse
1971	Rogerstone, housing development Oak Road
1971	Llanelli, Magistrates Court
1971	Margam, Crematorium
1978	Porthmadoc Harbour development
1978	Dinas Powys, Elm Grove Lane
1980	Newport, Dyffryn Housing
1980	Llanrug, Hafan Elan
1980	Dinas Powys, Merevale
1982	Abersychan, Comprehensive School, Manor Road
1982	Bangor Llain Deiniol
1982	Howey, Millview Close
1984	Caernarfon Library
1984	Cwmffrwdoer, Primary School, Waunddu
1984	Llanbedr, Private House, Tyddyn Sian
1984	Newport, Sheltered Housing, Crocker Street



APPENDIX E

R.I.B.A. Architecture Awards 1945-85

Information kindly provided by Mary Wrenn and compiled by her and Jonathan Vining

Year	Winner	Building	Notes		
Bronz	Bronze Medals				
1946	Percy Thomas	Cardiff, Cathays Park - Temple of Peace and Health	Grade II		
1953	Saxon Smith and Partners	Wrexham - Denbighshire Technical College	Grade II		
1955	T Alwyn Lloyd and Gordon	Llanrumney - Sports Pavilion University College of South Wales and Monmouthshire			
1958	Smith, Wilson and Cox	Swansea – Ystrad Road, Fforestfach, Kardov depot and office			
1961	T Alwyn Lloyd and Gordon	Cardiff, Fairwater – St David's Lutheran Church	Grade II		
1964	Sir Percy Thomas and Son	Swansea University College – School of Social Studies			
RIBA	Commendations				
1974	S W Milburn and Partners	Cardiff, University Hospital of Wales			
1974	Alex Gordon and Partners	Cardiff, Sherman Theatre			
1975	Percy Thomas Partnership	Porthcawl, Albert Edward Prince of Wales Court			
1976	Faulkner-Brown, Hendy, Watkinson,	Cardiff University, Arts and Social Sciences			



	Stonor	Library	
1977	Percy Thomas Partnership	Aberystwyth University Hugh Owen Library	
1978	Bowen Dann Davies	Rhuddlan, Roman Catholic Church of St Illtyd	
1978	Holder & Mathias Partnership	Cardiff, Llandaf – Office Cleaning Services offices	
1979	Architects Design Group	Amlwch and Rhosgoch – Marine Terminal	
1979	Bowen Dann Davies Partnership	Shotton, Melrose Centre	
1982	Bowen Dann Davies Partnership	Rhyl, Trinity Court housing	
1982	Bowen Dann Davies Partnership	Llanrug, Hafan Elan housing for older people	
1983	Frederick Gibberd, Coombes and Partners	Magor, Whitbread Brewery	
1984	Ralphs and Mansell	Holiday Cottages at North Rogeston near Haverfordwest	
1984	Bowen Dann Davies Partnership	Wrexham – Capel y Groes	
RIBA	Awards for Architectur	e	
1966	Alex Gordon & Partners	Llandarcy, E M Edwards works	
1967	Alex Gordon & Partners	Cathays Park, Cardiff - Temporary laboratories at University College of South Wales and Monmouthshire	
1970	Percy Thomas Partnership	Aberystwyth University Great Hall, Bell Tower and Students Union	



1971	H M R Burgess and Partners	Llwydcoed Crematorium	
1973	Percy Thomas Partnership	Parke Davis & Co research and manufacturing centre, Pontypool	
1976	Bowen Dann Davies Partnership	Rhyl, Cefndy Hostel	
1982	Percy Thomas Partnership	Cardiff, Amersham International radiochemical centre	