

WELSH ARCHITECTURE - ARCHITECTURE IN WALES

Week 6

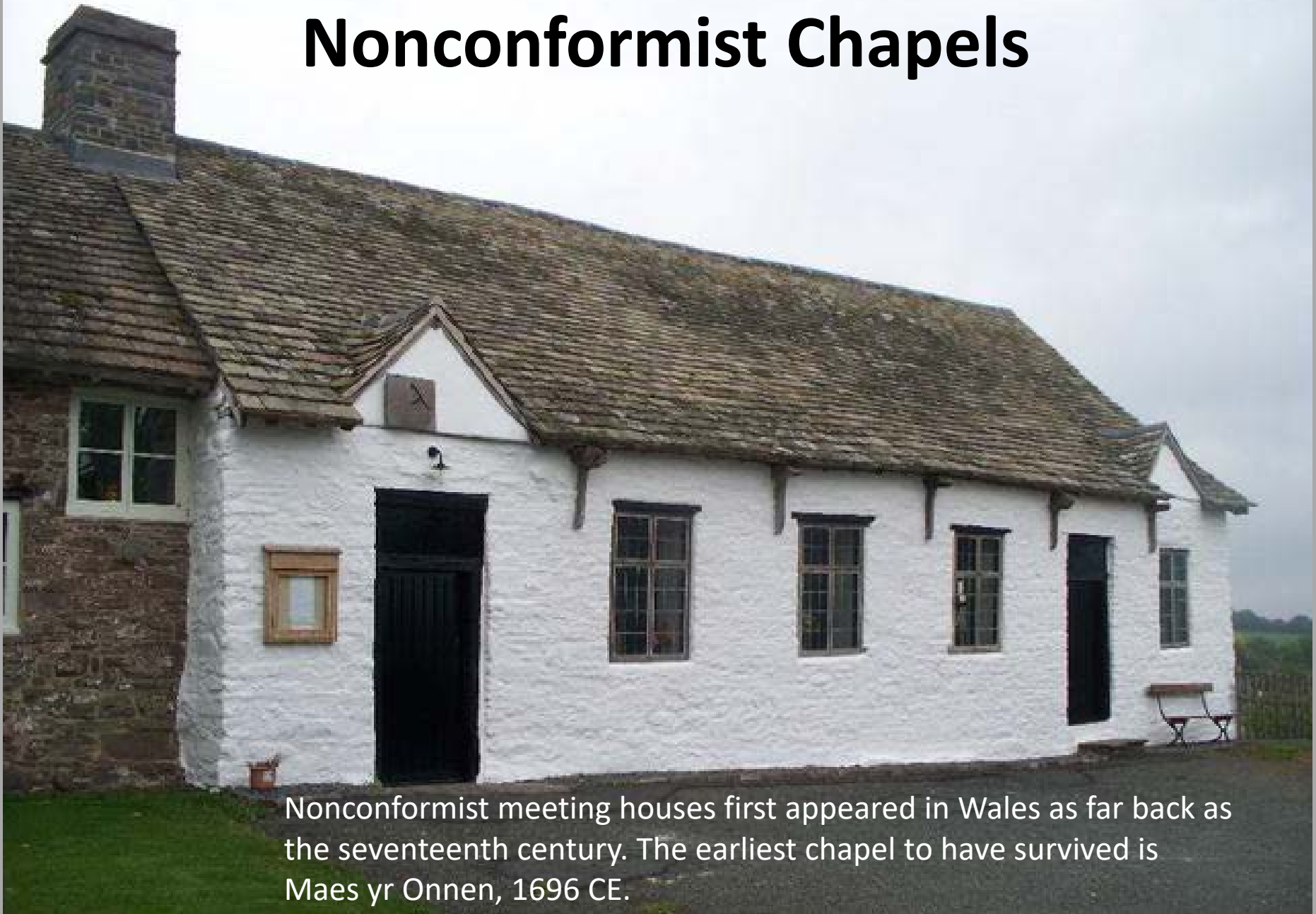
From Chapels to late Modern

Ian Standen

Week 6 – Chapels to late Modern

- Aims – To describe the key features and characteristics of **Chapels to late Modern**
- - Architecture in Wales; how they are related and subsequently influenced in terms of architectural 'style' in Welsh Architecture.
- Objectives- By the end of the sessions students should be able to identify the basic features of each style and appreciate how these have developed, adapted over a period of time.

18th -20th Century **Nonconformist Chapels**



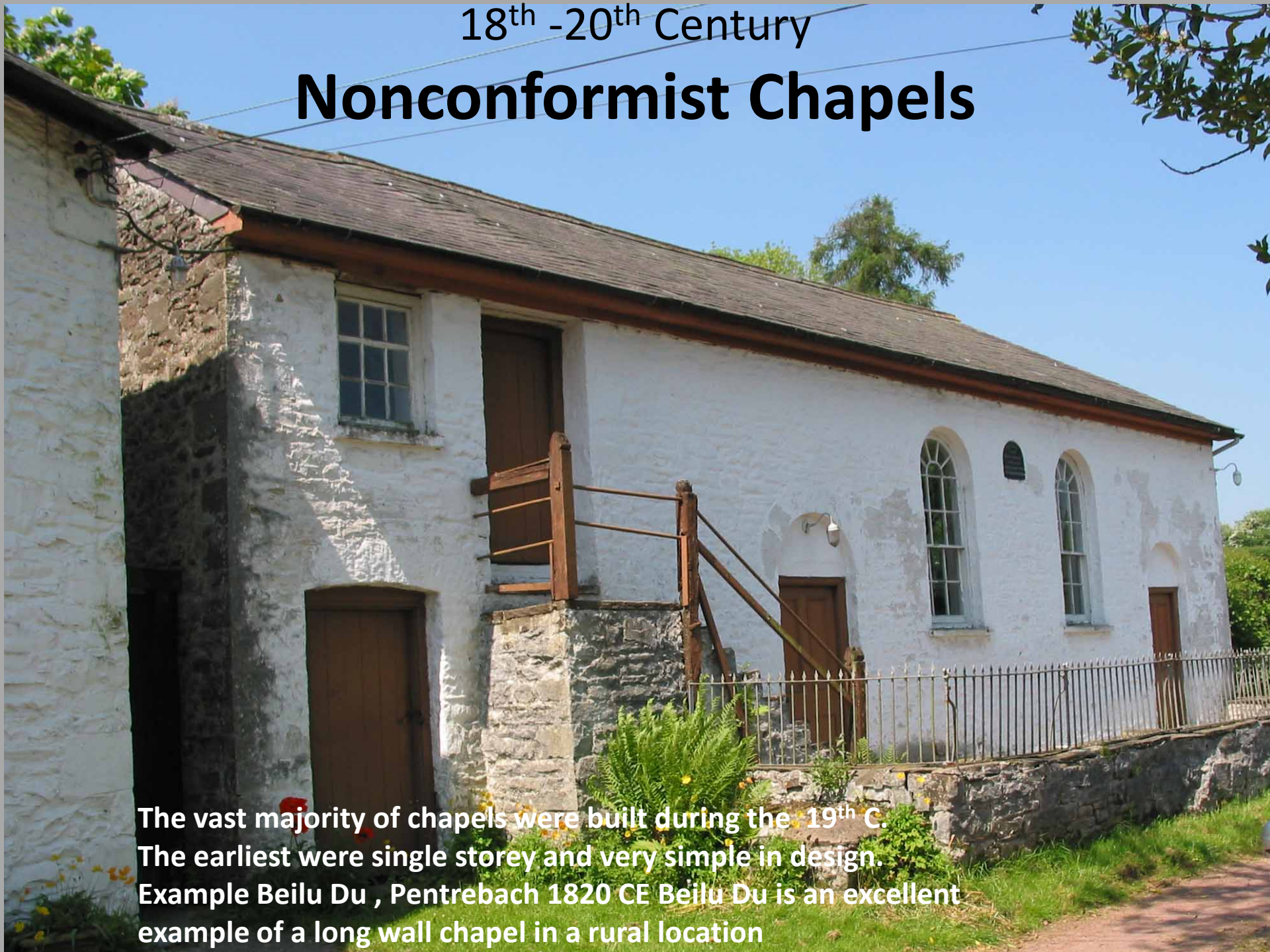
Nonconformist meeting houses first appeared in Wales as far back as the seventeenth century. The earliest chapel to have survived is Maes yr Onnen, 1696 CE.

A black and white photograph of the interior of a Nonconformist chapel. The room is characterized by its high, vaulted ceiling with exposed wooden beams and white-painted structural supports. The floor is made of large, dark stone tiles. In the foreground, a long, dark wooden table stands on the floor, with a small potted plant on top. Behind the table, there are several rows of dark wooden benches. To the left, a large, dark wooden door is partially open, revealing a glimpse of the outside. In the background, a brick wall features a sign that reads "PRAISE GOD IN HIS SANCTUARY". The overall atmosphere is simple and functional, typical of Nonconformist chapels.

18th -20th Century Nonconformist Chapels

- During the eighteenth century, the Nonconformist movement gathered strength and new chapels - often converted farmyard barns like
- Maes yr Onnen - were established in many parts of Wales.

18th -20th Century Nonconformist Chapels



The vast majority of chapels were built during the 19th C. The earliest were single storey and very simple in design. Example Beilu Du , Pentrebach 1820 CE Beilu Du is an excellent example of a long wall chapel in a rural location

18th -20th Century

Nonconformist Chapels

- Typically, the main facade was on one of the long walls. Internally the pulpit was placed at the centre of the long wall symmetrically between two tall windows.
- Often chapels were rebuilt once, twice, or even three times during the nineteenth century to accommodate growing congregations.

18th -20th Century

Nonconformist Chapels

- Sometimes a first floor gallery was added to provide additional accommodation.
- The main facade was still a long wall; two separate entrances one for men and the other for the women and children were retained.

18th -20th Century

Nonconformist Chapels



Tabernacle: Pontypridd 1861 CE

18th -20th Century

Nonconformist Chapels

- In the last growing towns space was at a premium, so chapels were sited at right angles to the road with the entrance at the pine end.
- Typically, a single entrance, tall round headed windows and a circular central window were incorporated in the design to emphasise the importance of the gable elevation.

18th -20th Century

Nonconformist Chapels

- As more and more chapels were built or rebuilt they became larger and more elaborate.
- Most were built in the classical rather than Gothic Style.
- Windows on the main elevation were normally round headed and the triangular upper part of the gable gradually took the form of a classical pediment.

18th -20th Century

Nonconformist Chapels

When funds allowed, full blown classical features were used to emphasise the dignity and importance of the chapel.

In the larger towns wealthier congregations were able to erect thoroughly classical buildings, complete with projecting porticos and Corinthian columns.



Carmarthen English Baptist Chapel 1872 CE

18th -20th Century **Nonconformist Chapels**

- During the latter part of the nineteenth century the external designs of the chapels became more decadent and mannerist, although interiors often became more elaborate and remarkable.
- Chapel building continued unabated until the First World War.



18th -20th Century Nonconformist Chapels



Ebenezer Chapel Llandudno 1909 CE

One of the principal chapel architects of the period was Beddow Rees (died 1931). At Ebenezer he experimented with a neo-Renaissance design for a circular chapel.

Early 20th Century

Arts and Crafts to Neo-classicism

- Even before the twentieth century the character and purpose of architecture was undergoing a reappraisal.
- The early years of the new century were, consequently, a period of both hopeful experimentation and wistful looking backwards.

Early 20th Century

Arts and Crafts to Neo-classicism

- The Arts and Crafts movement, which arose in the late nineteenth century emphasized craftsmanship and traditional methods but rejected historicism and was thus a precursor of the modern movement.
- St Mark's church, Brithdir, was intended to look 'as though it had sprung of the soil, instead of being planted on it'.

Early 20th Century
Arts and Crafts to Neo-classicism



St Marks Church, Brithdir 1896 CE

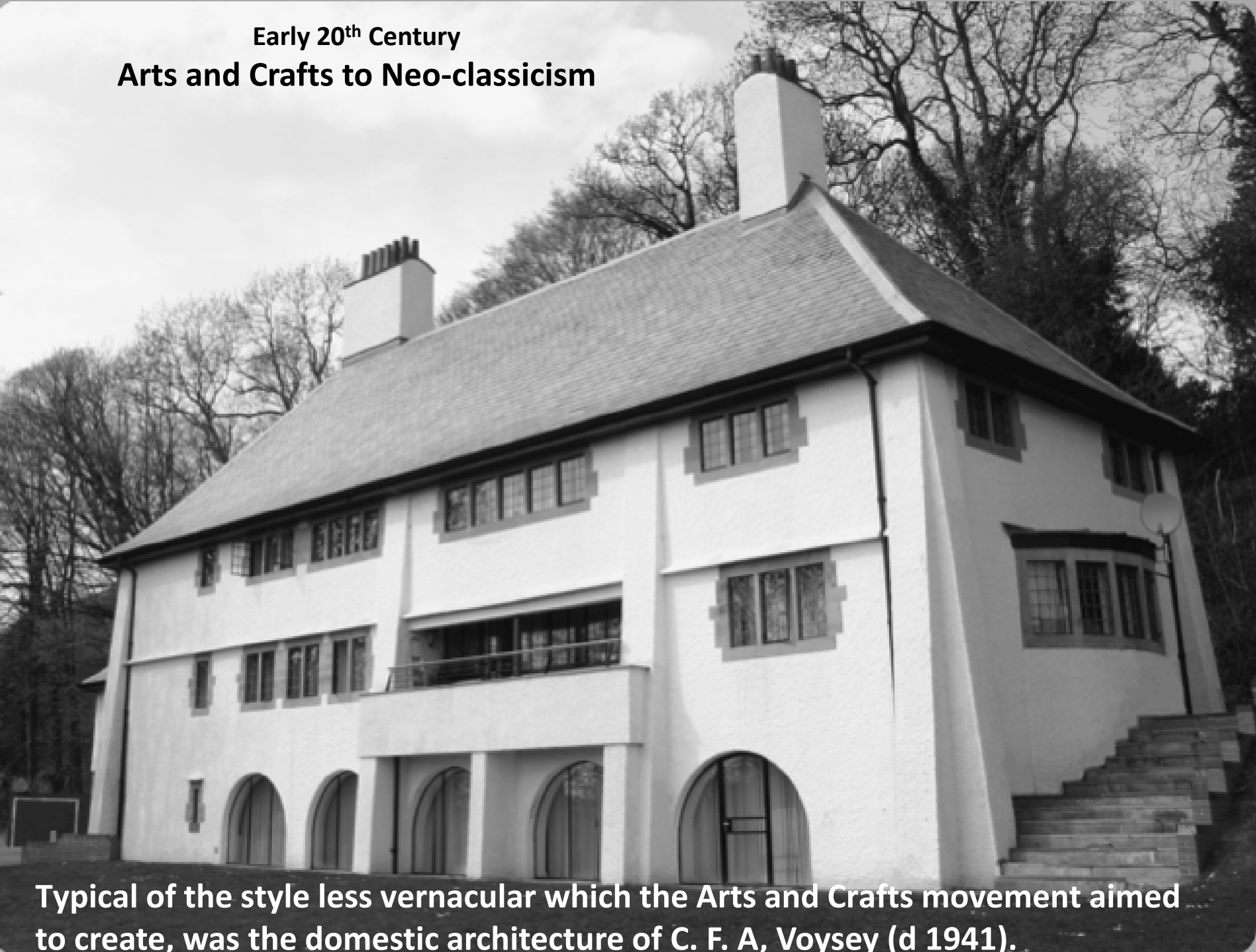
Early 20th Century
Arts and Crafts to Neo-classicism



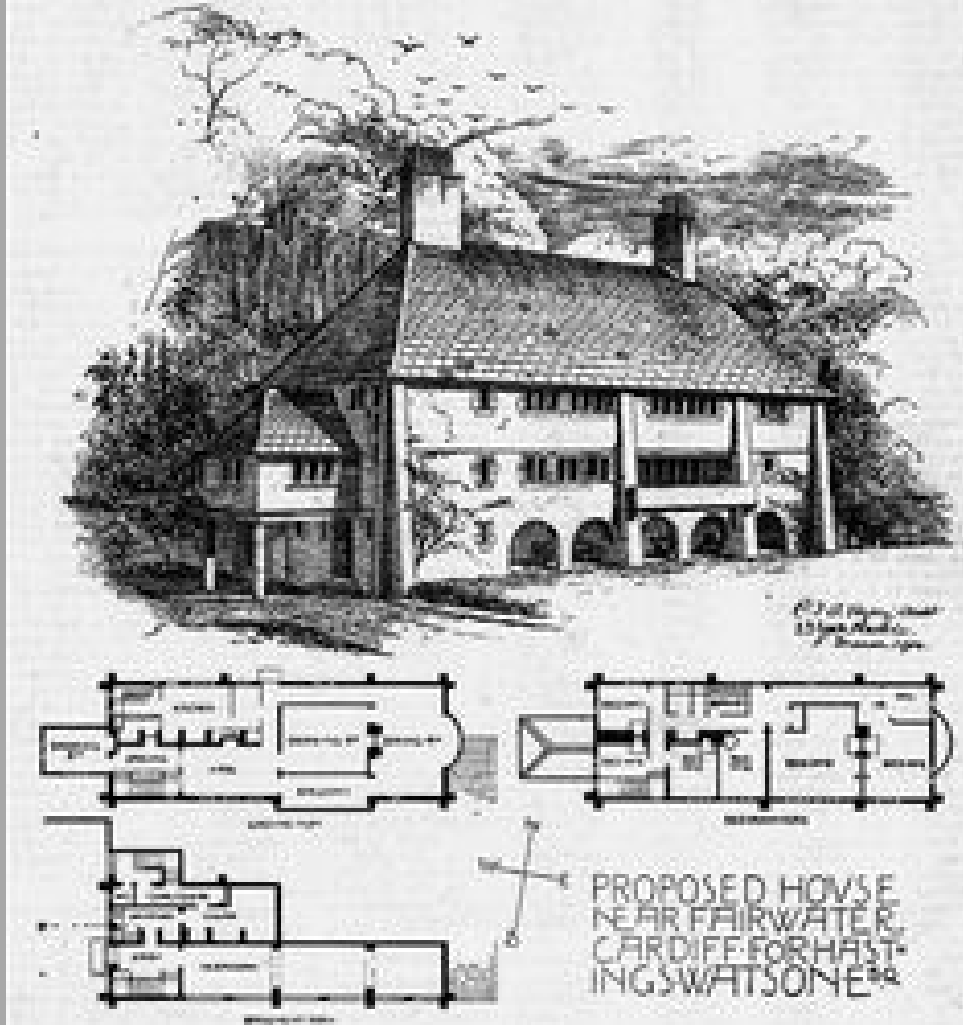
St Marks Church, Brithdir 1896 CE



**Early 20th Century
Arts and Crafts to Neo-classicism**



Typical of the style less vernacular which the Arts and Crafts movement aimed to create, was the domestic architecture of C. F. A. Voysey (d 1941).



- At Ty Bronna in Cardiff free planning with bold but free cut elevations endowed the house with a fresh simplicity and naturalness.

Early 20th Century

Arts and Crafts to Neo-classicism

- Another transient, influence on non-traditional architecture was the attenuated and flowing lines of art nouveau.
- Both Arts and Crafts and art nouveau influences are apparent in the work of J. C. Carter.

Early 20th Century
Arts and Crafts to Neo-classicism



In the monastery at Caldey, Carter was also influenced by the German Romanesque style. Indeed historicism was not dead and traditional styles continued to be revived well in to the 20th Century.

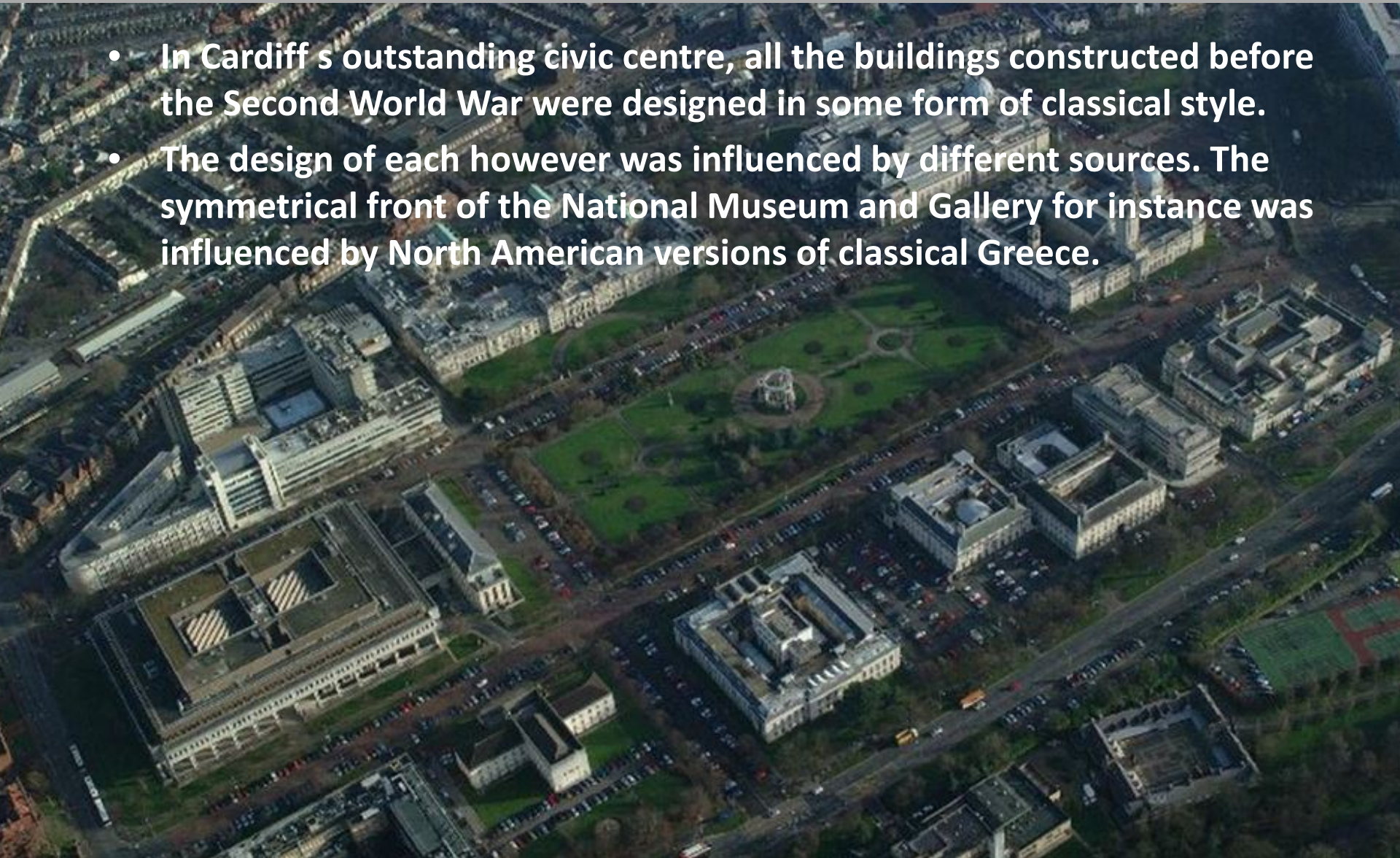
Early 20th Century
Arts and Crafts to Neo-classicism



- Thus the University College at Bangor 1911CE was designed in the romantic spirit of Gothic revival although with Jacobean detailing so that it looks from a distance like a great medieval monastery than a modern educational institution.

Early 20th Century Neo-classicism

- In Cardiff's outstanding civic centre, all the buildings constructed before the Second World War were designed in some form of classical style.
- The design of each however was influenced by different sources. The symmetrical front of the National Museum and Gallery for instance was influenced by North American versions of classical Greece.



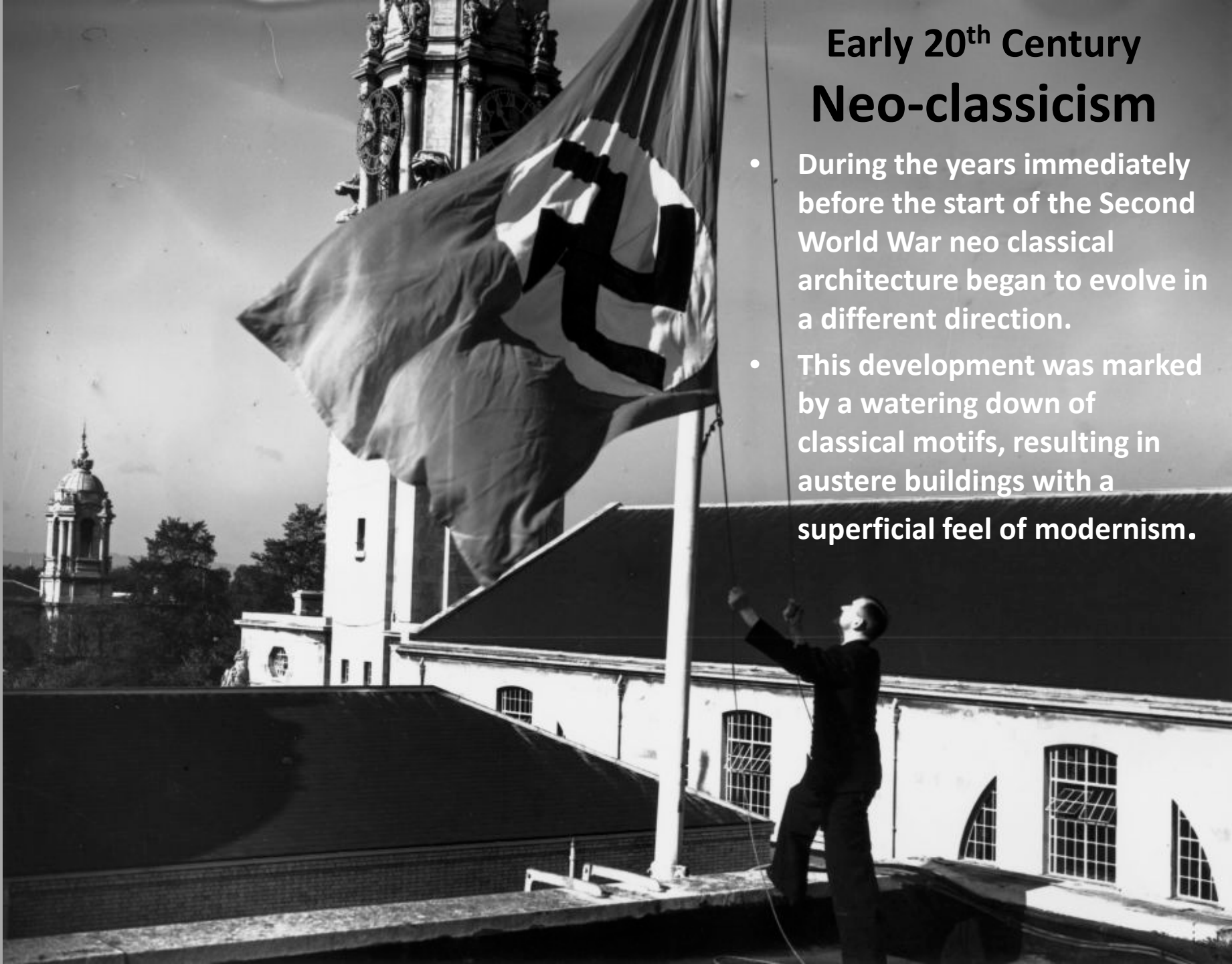
Early 20th Century Neo-classicism



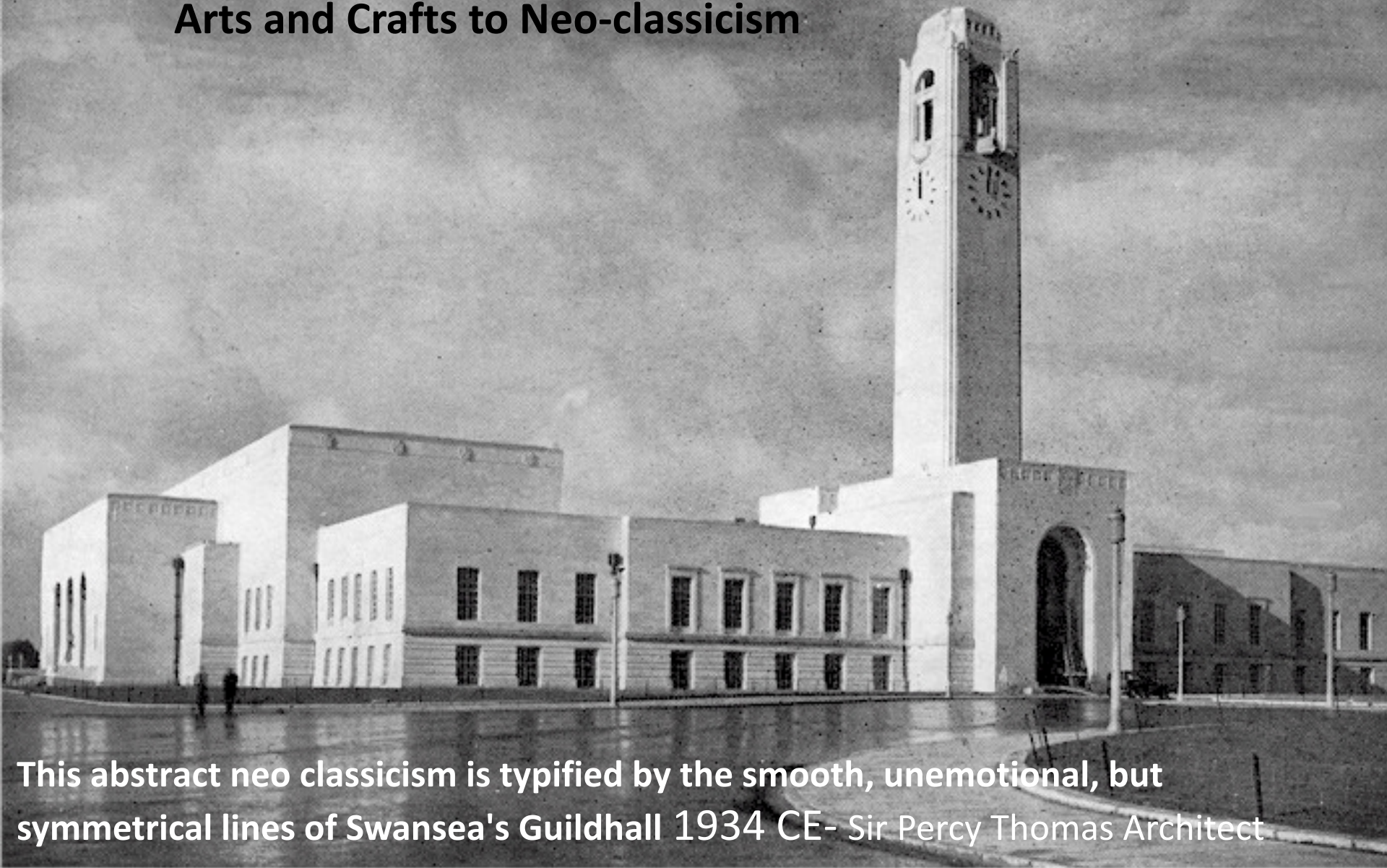
Registry Building, Cathays Park 1903 CE Willis Anderson Architect

Early 20th Century Neo-classicism

- During the years immediately before the start of the Second World War neo classical architecture began to evolve in a different direction.
- This development was marked by a watering down of classical motifs, resulting in austere buildings with a superficial feel of modernism.



Early 20th Century
Arts and Crafts to Neo-classicism



This abstract neo classicism is typified by the smooth, unemotional, but symmetrical lines of Swansea's Guildhall 1934 CE- Sir Percy Thomas Architect

Mid 20th Century

Early Modern

- The essence of modernism is the rejection of historicism. One of the principal ingredients of modernism is functionalism.
- This design philosophy held that the functional aspects of a building were of paramount importance and should be reflected in its appearance.

Mid 20th Century Early Modern



- Modern functionalist architecture, in the sense that 'form follows function', first appeared in Wales early in the twentieth century, prior to the First World War, with some unadorned concrete structures associated with coal mining, such as coal preparation plants and coking plants (all demolished).
- Weaver Building Swansea 1897CE – Francois Hennibique Engineer

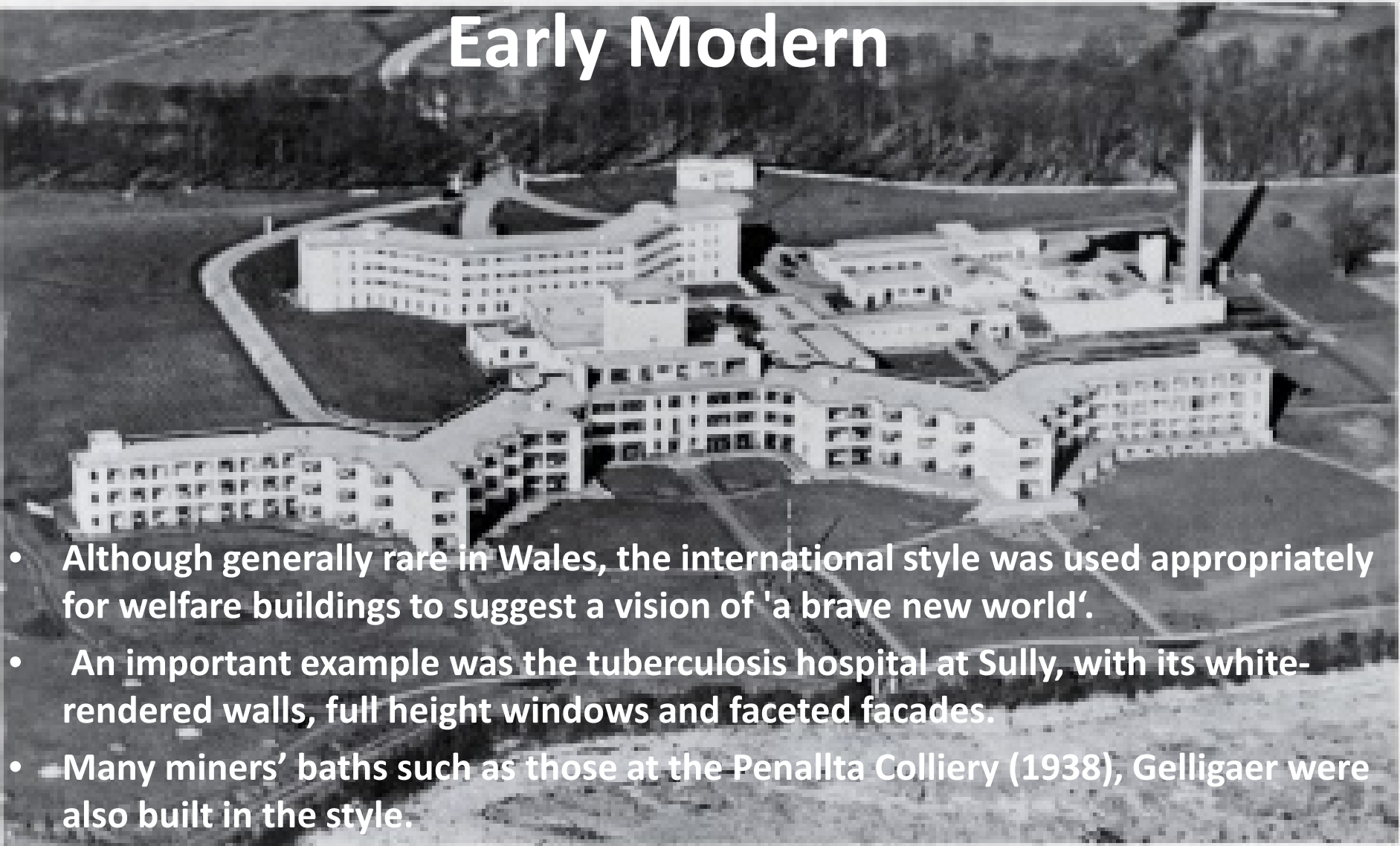
Mid 20th Century

Early Modern

- They were the precursors of what later came to be known as the 'international style'.
Although the term was not coined until 1932, the first examples of the international style had appeared on the Continent soon after the First World War.
- The style was characterized by sleek lines and smooth geometrical forms, emphasized by flat roofs and large glazed areas.

Mid 20th Century

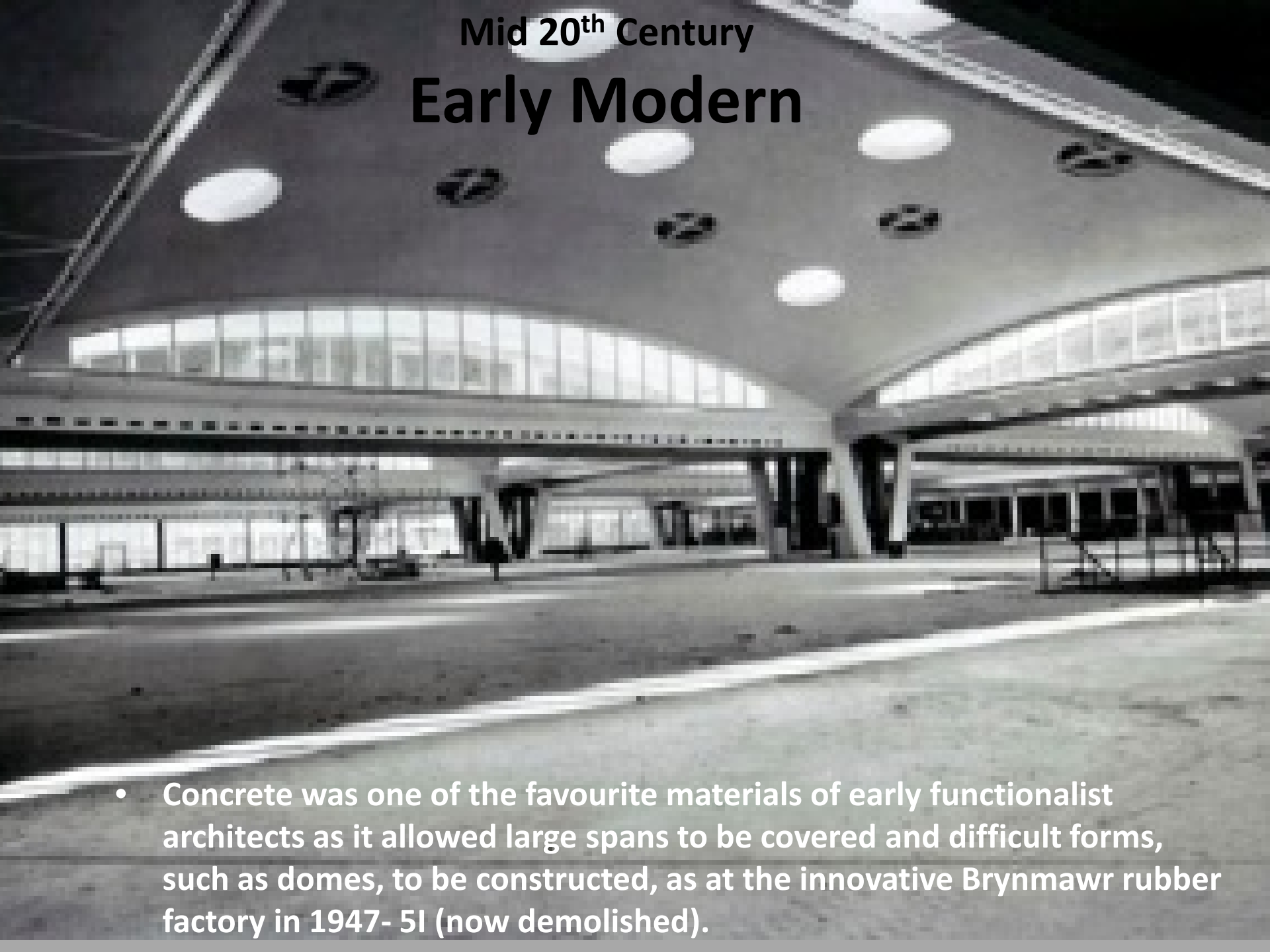
Early Modern



- Although generally rare in Wales, the international style was used appropriately for welfare buildings to suggest a vision of 'a brave new world'.
- An important example was the tuberculosis hospital at Sully, with its white-rendered walls, full height windows and faceted facades.
- Many miners' baths such as those at the Penallta Colliery (1938), Gelligaer were also built in the style.

SULLY HOSPITAL, SULLY, GLAM.

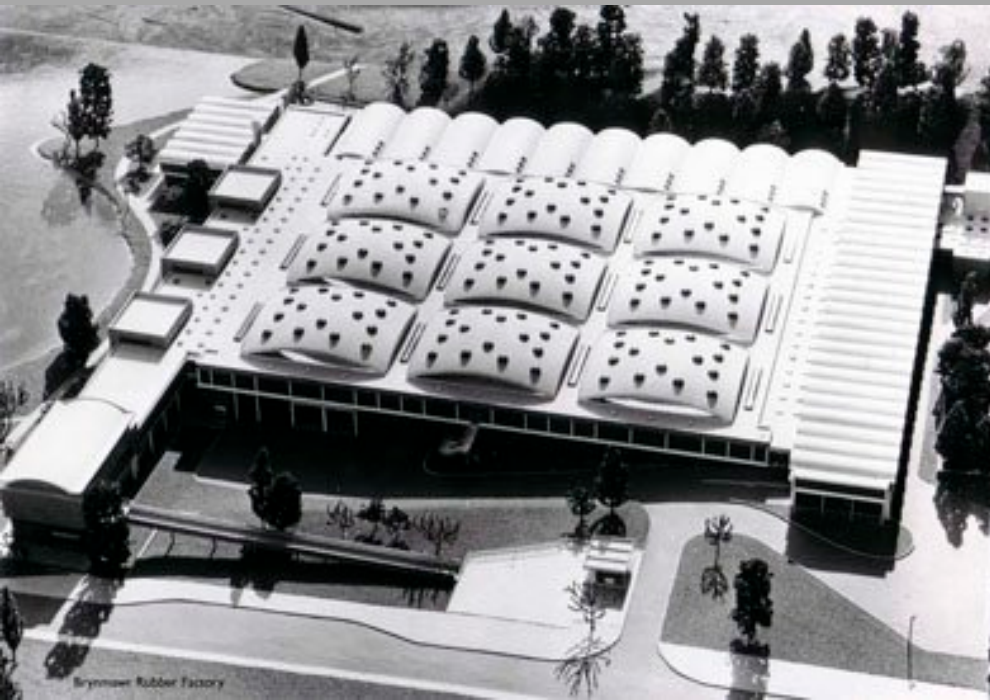
WELSH NATIONAL ARCHIVE
100 ABERCROMBY STREET, W.L.F.



Mid 20th Century Early Modern

- Concrete was one of the favourite materials of early functionalist architects as it allowed large spans to be covered and difficult forms, such as domes, to be constructed, as at the innovative Brynmawr rubber factory in 1947- 51 (now demolished).

Mid 20th Century Early Modern



- Brynmawr rubber factory in 1947- 51 (now demolished).

Mid 20th Century

Early Modern

- Reinforced concrete and steel frames were used to advantage in multi-story tower blocks where similar floor slabs could be supported on comparatively thin columns.
- In practice the principles of functionalism often proved difficult to apply in a pure way and, with the passing of doctrinaire ideas, a more flexible approach to modern architecture design began to take place.
- This can be seen, for instance, in a number of sensitively designed and laid out schools built in north Powys during the 1950's.

Mid 20th Century

Modern



- Gradually, design began to reflect more expressionist or allusive attitudes.
- Exemplars of these tendencies are to be found in religious buildings and their counterparts, such as crematoria.
- Not surprisingly, they tried to evoke feelings of the highest order. By the 1970's more imaginative use of forms, materials and colour helped to give large public buildings a warmth and humanity that had sometimes been lacking in earlier functionalist examples.

Aberdare, Llwydcoed Crematorium 1970 CE Architect HMR Burgess+Partners

Mid 20th Century
Modern

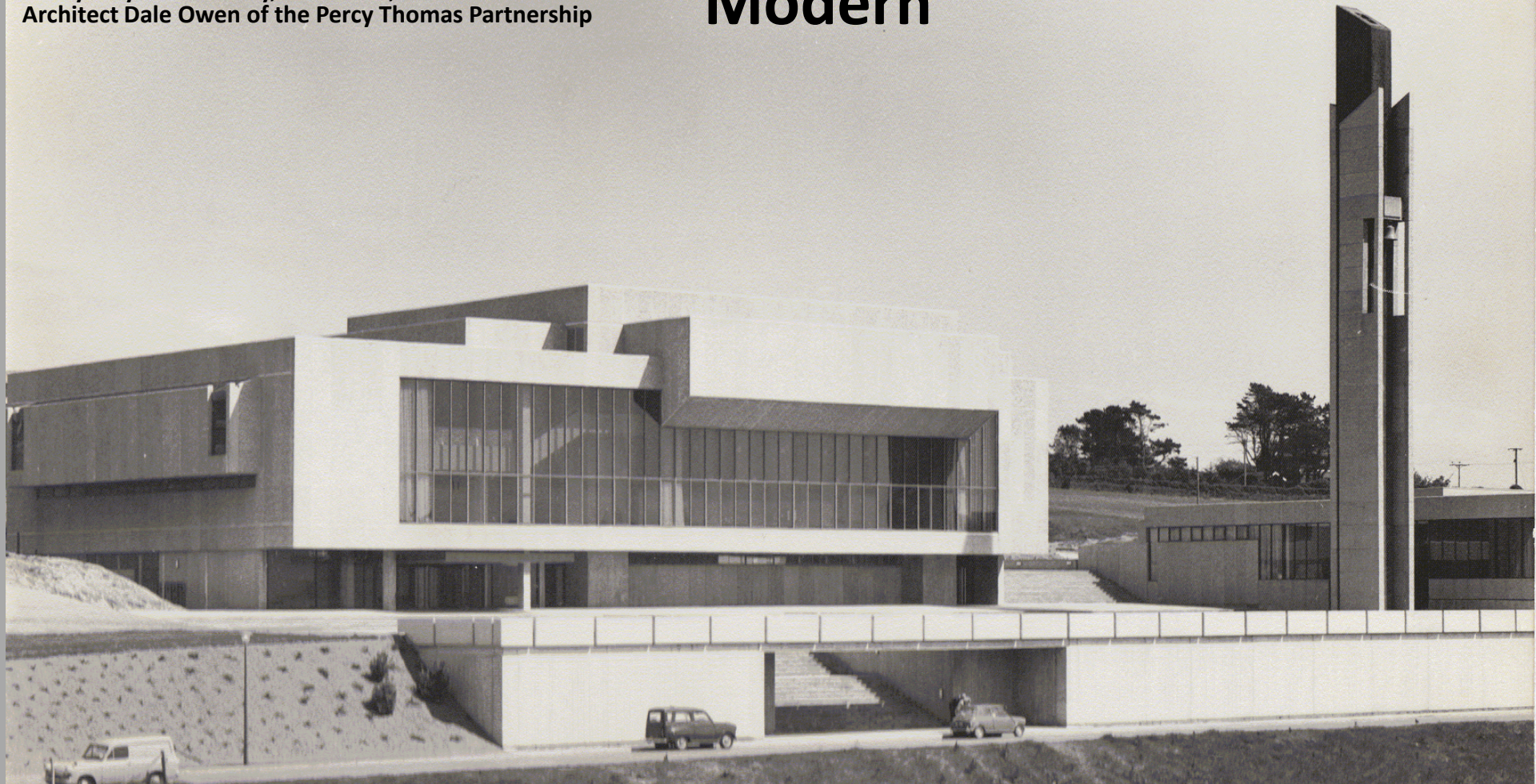


Aberdare, Llwydcoed Crematorium 1970 CE Architect HMR Burgess + Partners

Late 20th - 21st Century

Modern

Aberystwyth University, Great Hall,
Architect Dale Owen of the Percy Thomas Partnership



- During the last quarter of the twentieth century, the functionalist approach to building design has continued to develop in different ways.
- Apart from the so-called postmodernist style, which is basically concerned with decoration and symbolism, three concepts have emerged.

Late 20th - 21st Century

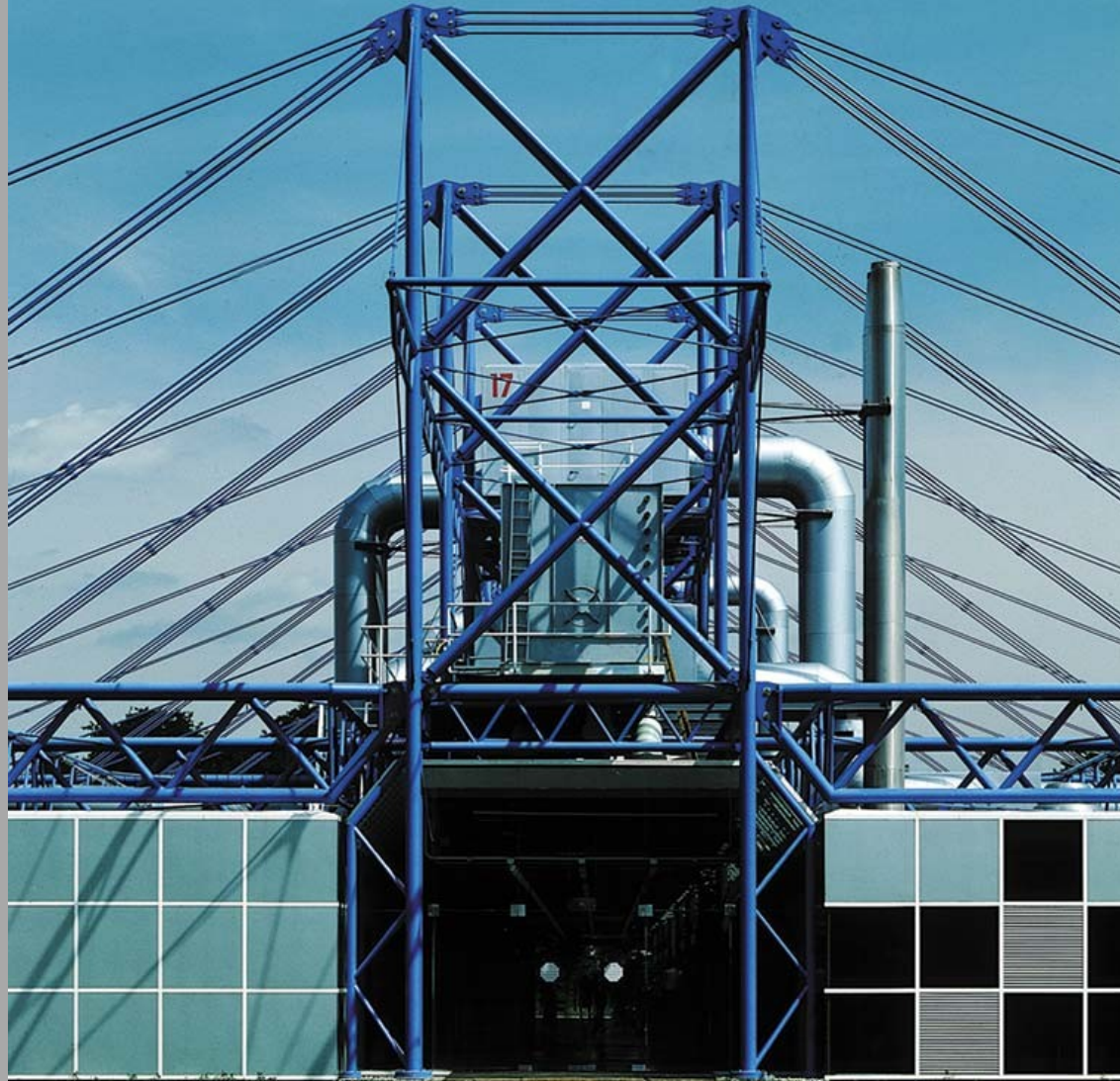
Modern

Inmos Factory, Newport 1982CE
Richard Rogers Partnership

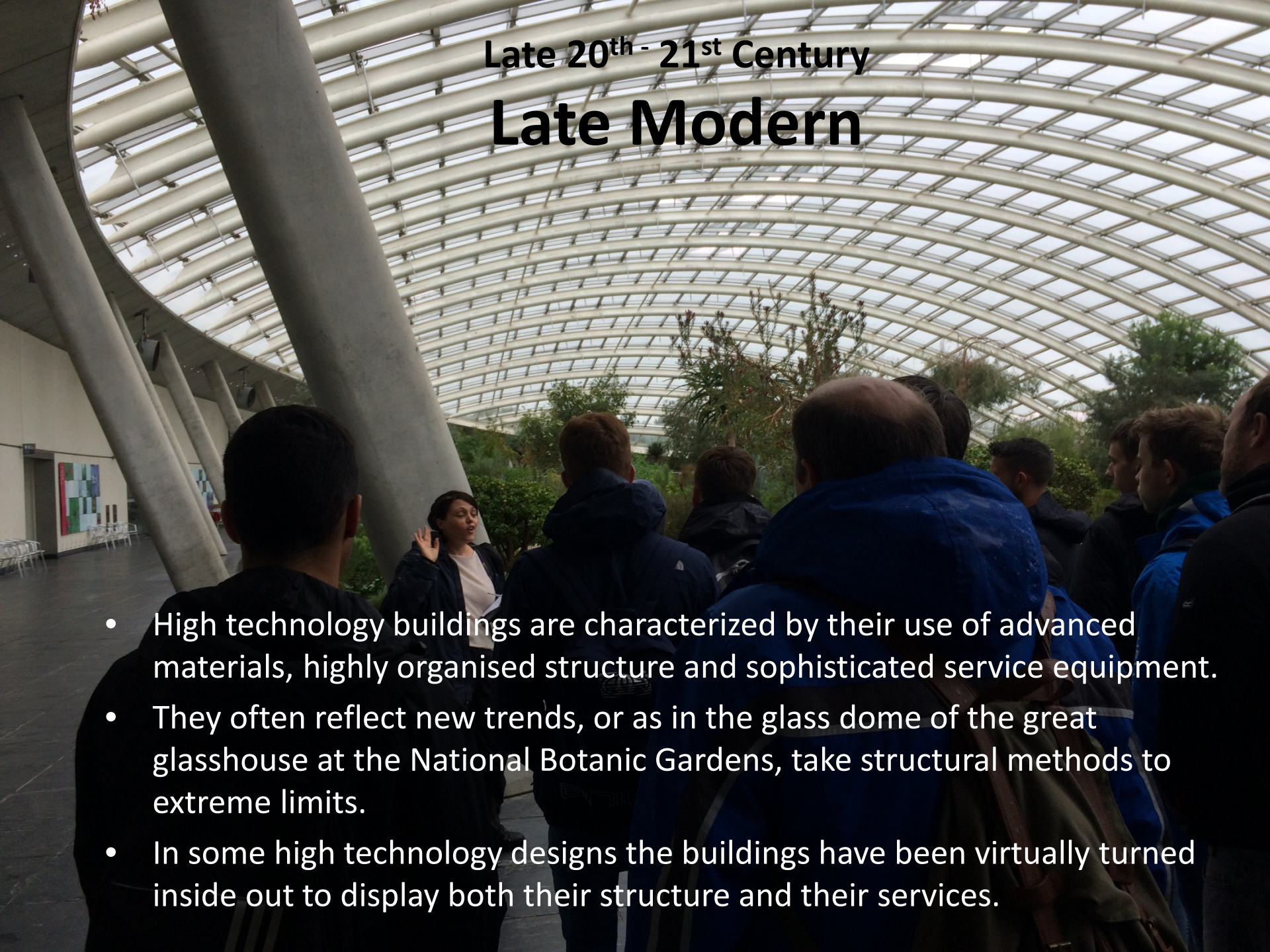


Late 20th - 21st Century

Modern



Inmos Factory, Newport 1982CE
Richard Rogers Partnership



Late 20th - 21st Century

Late Modern

- High technology buildings are characterized by their use of advanced materials, highly organised structure and sophisticated service equipment.
- They often reflect new trends, or as in the glass dome of the great glasshouse at the National Botanic Gardens, take structural methods to extreme limits.
- In some high technology designs the buildings have been virtually turned inside out to display both their structure and their services.



Late 20th - 21st Century

Late Modern

The great glasshouse is the centrepiece of The National Botanic Garden of Wales. Designed by Foster and Partners and is the largest single-span glasshouse in the world. Elliptical in plan, and is tilted south to maximise sunlight. The roof measures 99m x 55m and rests on twenty-four arches, which rise to 15 metres at the apex of the dome. The glasshouse was constructed between 1995-2000.

National Botanic Gardens, Great Glass House, Foster and Partners 2000CE

Late 20th - 21st Century

Late Modern



National Botanic Gardens, Great Glass House, Foster and Partners 2000CE

Late 20th - 21st Century

Late Modern

National Botanic Gardens, Great Glass House, Foster and Partners 2000CE

Late 20th - 21st Century

Late Modern



**Aqua Eco Laboratory, National Botanic Gardens Wales,
Project Office, Welsh School of Architecture 2000**

Late 20th - 21st Century

Late Modern



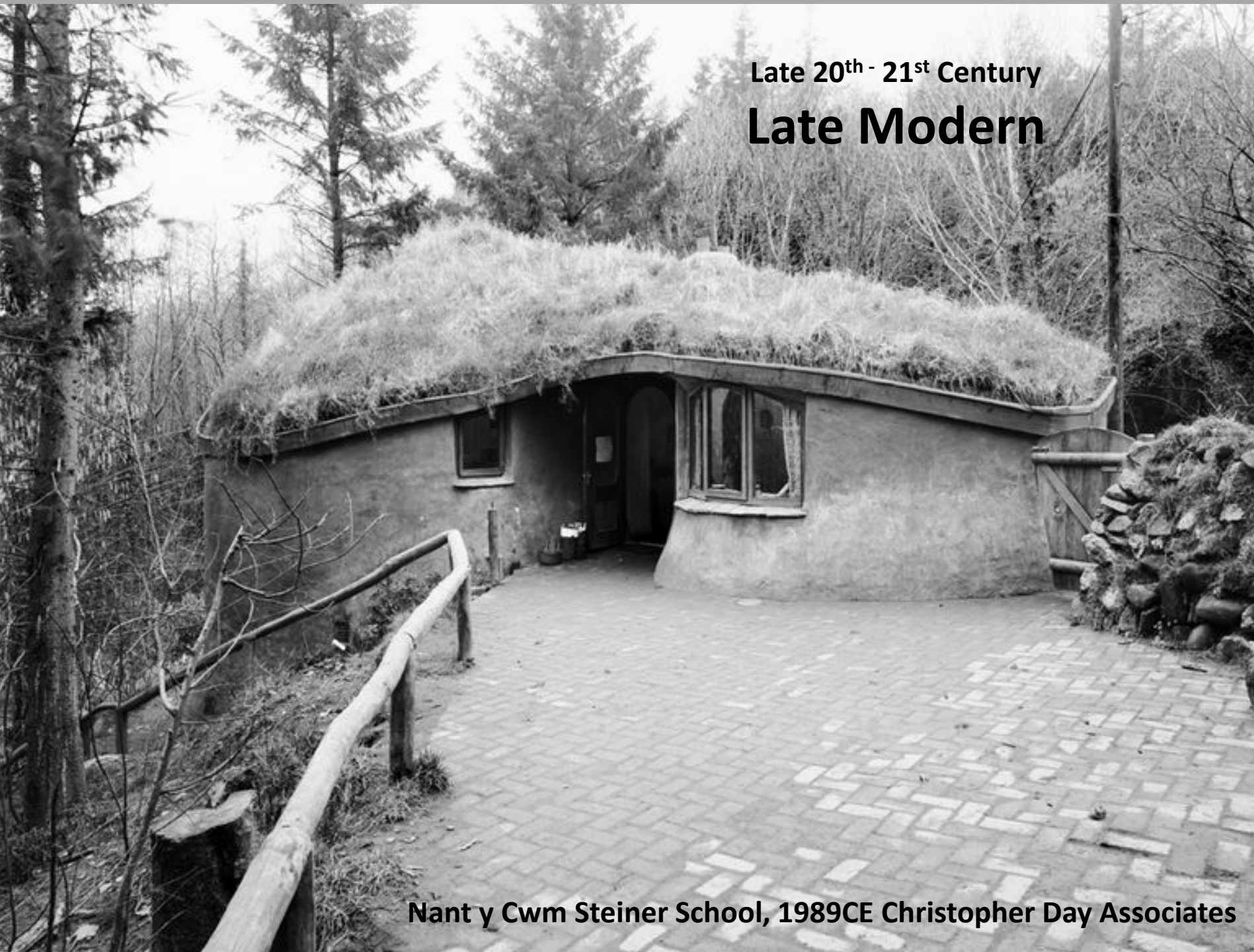
Aqua Eco Laboratory, National Botanic Gardens Wales,
Project Office, Welsh School of Architecture 2000

Late 20th - 21st Century

Late Modern

- In contrast to high-technology designs, buildings employing 'green' technology use sustainable natural materials and well insulated walls instead of expensively produced components.
- The use of naturally found or grown materials, including grass roofs together with the need to minimise energy requirements by recycling help to give green buildings their characteristic handmade appearance.

Late 20th - 21st Century
Late Modern



Nant y Cwm Steiner School, 1989CE Christopher Day Associates

Late 20th - 21st Century
Late Modern



Nant y Cwm Steiner School, 1989CE Christopher Day Associates

Late 20th - 21st Century

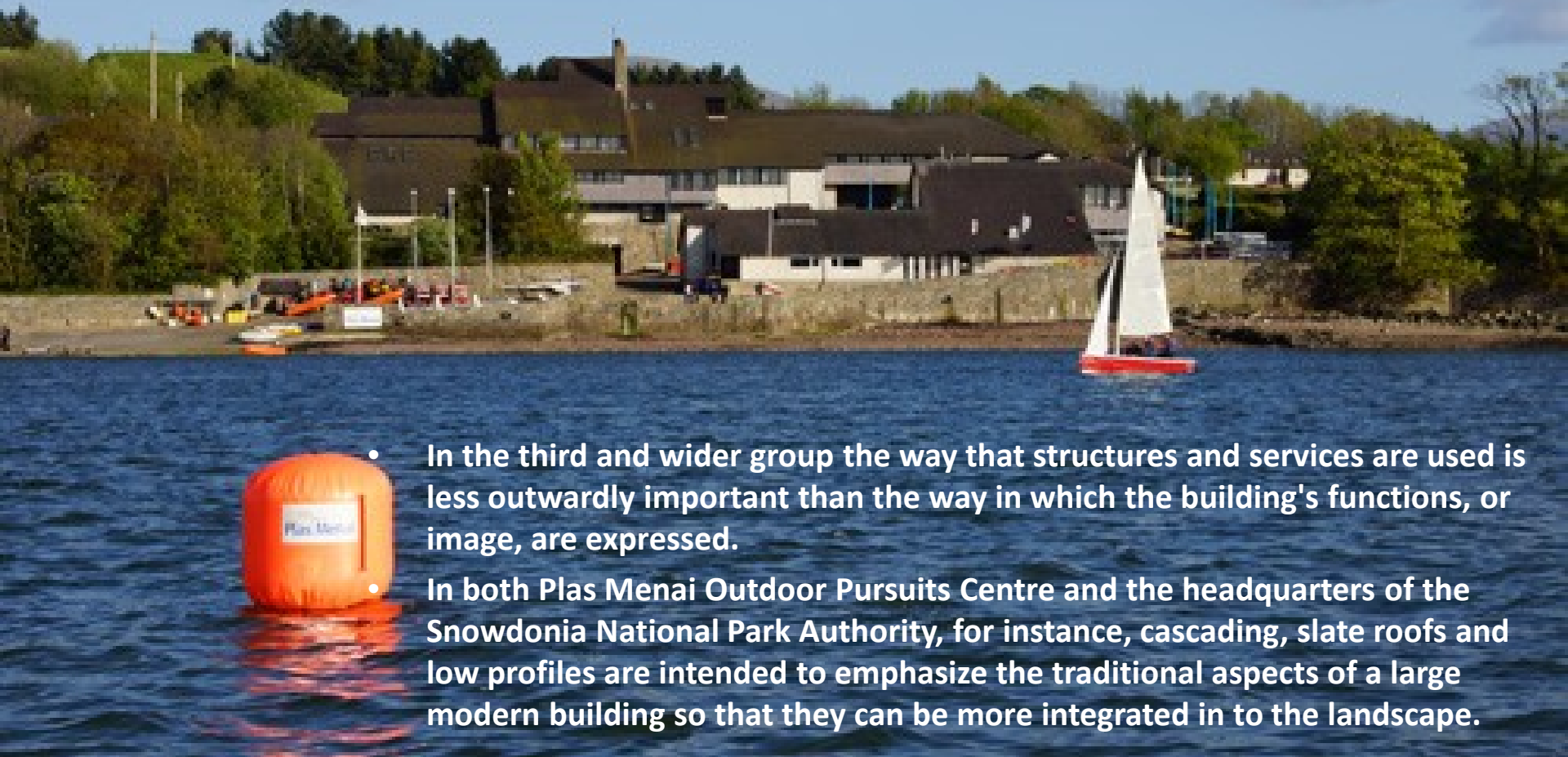
Late Modern



Nant y Cwm Steiner School, 1989CE Christopher Day Associates

Late 20th - 21st Century

Late Modern



- In the third and wider group the way that structures and services are used is less outwardly important than the way in which the building's functions, or image, are expressed.
- In both Plas Menai Outdoor Pursuits Centre and the headquarters of the Snowdonia National Park Authority, for instance, cascading, slate roofs and low profiles are intended to emphasize the traditional aspects of a large modern building so that they can be more integrated in to the landscape.

Late 20th - 21st Century

Late Modern



- At the Wales Millennium Centre the function of each part of the building is reflected in its shape, while the building's Welsh credentials are emphasized by the use of materials from different parts of the country and the incorporation (in enormous letters) of verses in English and Welsh.

Late 20th - 21st Century
Late Modern



Wales Millennium Centre 2004 CE, Percy Thomas Partnership- Jonathan Adams

Late 20th - 21st Century

Late Modern



Wales Millennium Centre 2004 CE, Percy Thomas Partnership- Jonathan Adams

Late 20th - 21st Century

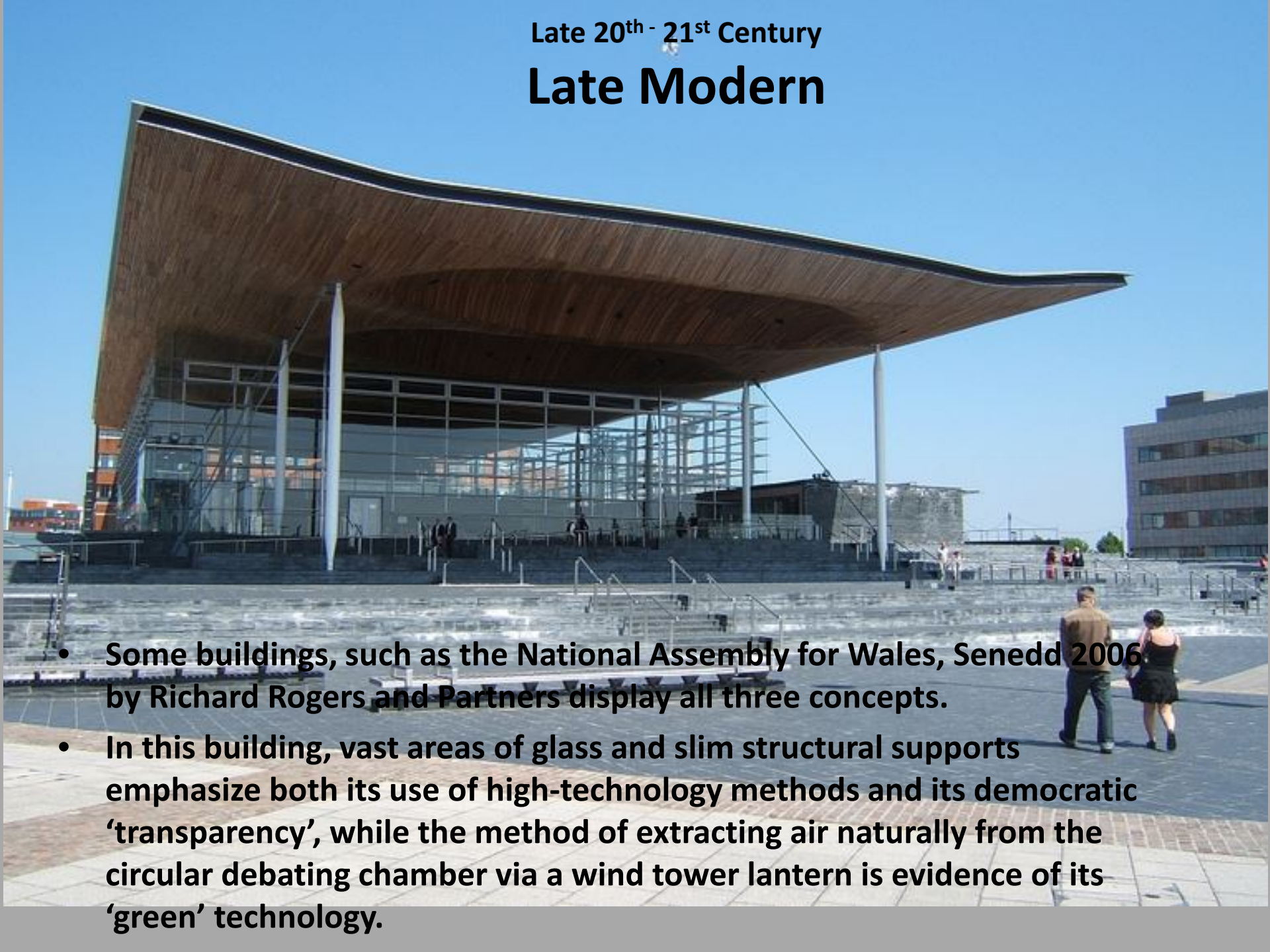
Late Modern



Wales Millennium Centre 2004 CE, Percy Thomas Partnership- Jonathan Adams

Late 20th - 21st Century

Late Modern

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- Some buildings, such as the National Assembly for Wales, Senedd 2006 by Richard Rogers and Partners display all three concepts.
 - In this building, vast areas of glass and slim structural supports emphasize both its use of high-technology methods and its democratic ‘transparency’, while the method of extracting air naturally from the circular debating chamber via a wind tower lantern is evidence of its ‘green’ technology.

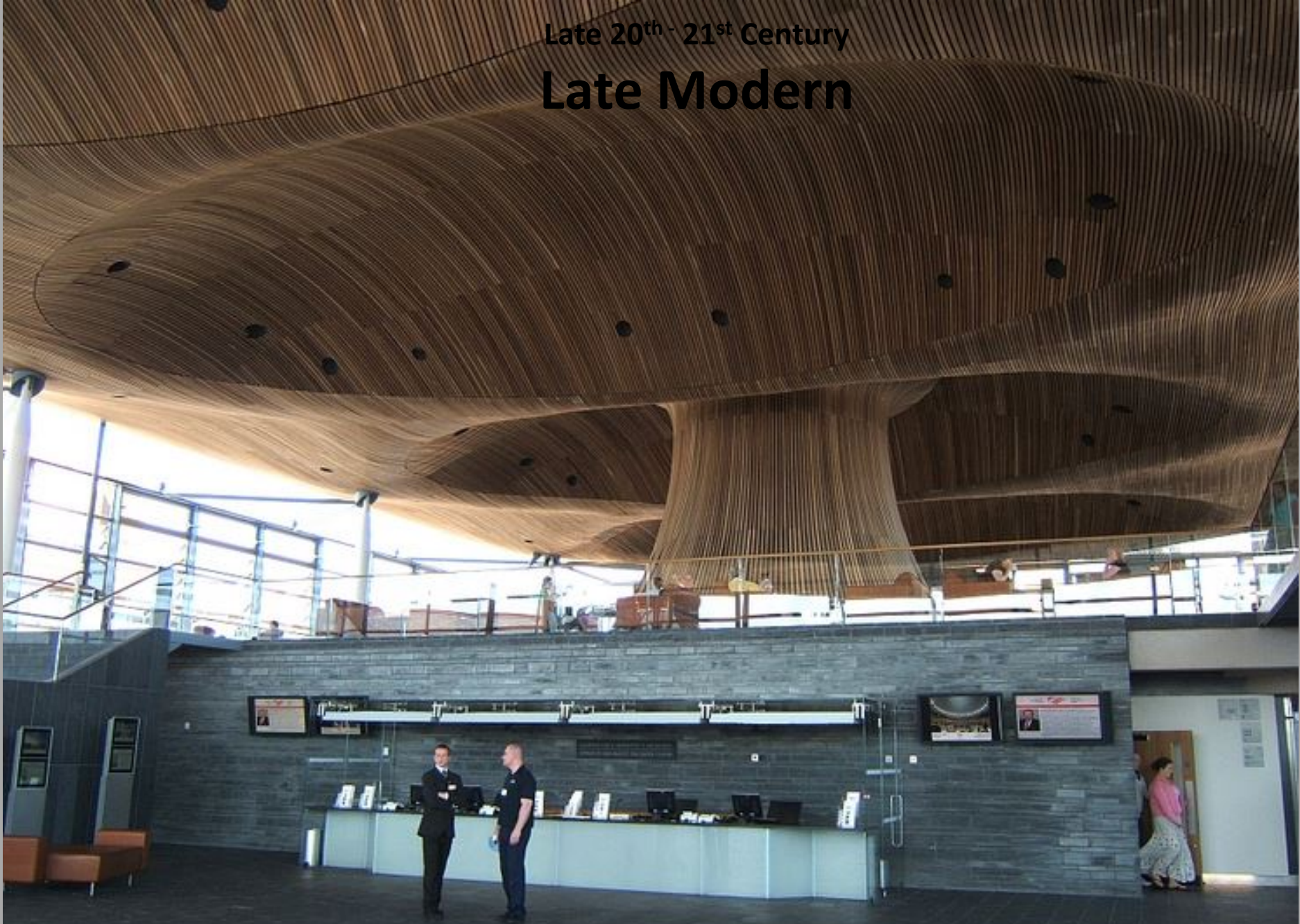
Late 20th 21st Century

Late Modern

National Assembly for Wales, Senedd 2006 by Richard Rogers and Partners



Late 20th 21st Century
Late Modern



National Assembly for Wales, Senedd 2006 by Richard Rogers and Partners

Late 20th - 21st Century

Late Modern



National Assembly for Wales, Senedd 2006 by Richard Rogers and Partners

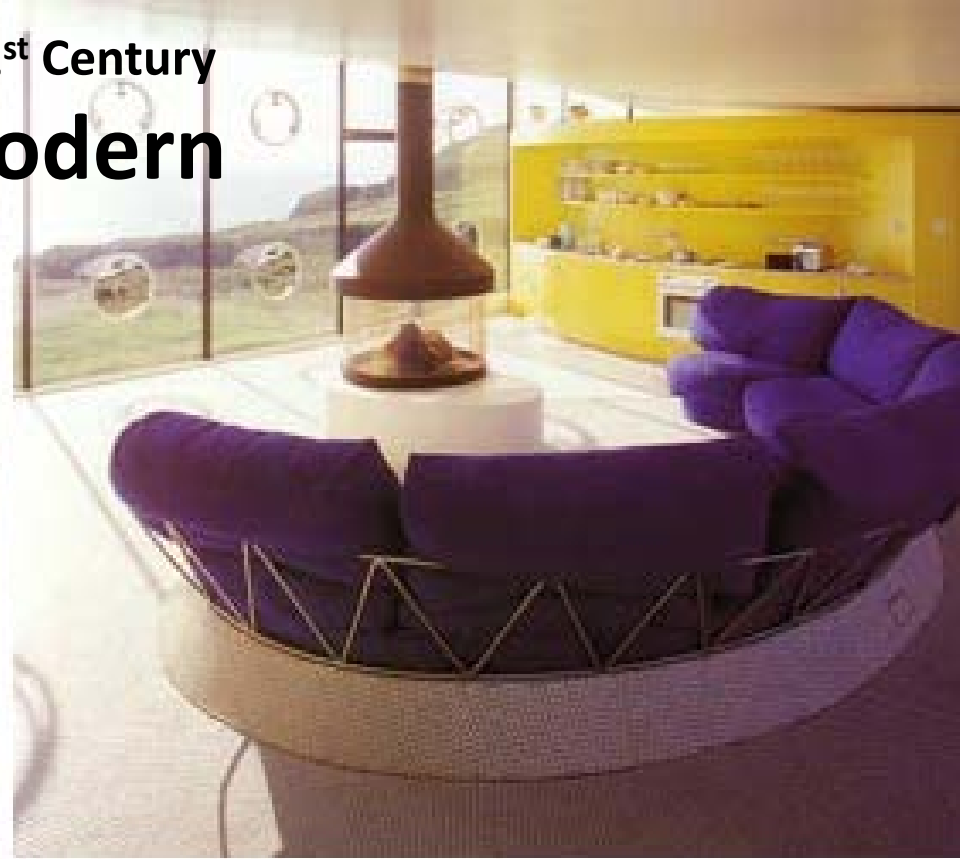
Late 20th - 21st Century

Late Modern



- In house design Future Systems, Project 222 in Pembrokeshire is a good example of high-tech building in a sensitive setting.

Late 20th - 21st Century
Late Modern



- Malator House in Pembrokeshire, Future Systems, Project 222 – 1998 CE

Late 20th - 21st Century

Late Modern



- Malator House in Pembrokeshire, Future Systems, Project 222 – 1998 CE

Discussion/ Reflection/Recap