

Railway Architecture of The Great Southern and Western & The Great Northern Railway

John Mc Evoy



M0056567NC

RAILWAY ARCHITECTURE OF THE GREAT SOUTHERN AND WESTERN AND THE GREAT NORTHERN RAILWAY

NAME: John Mc Evoy

DEPARTMENT: Visual Communication

Submission for Bachelor of Design degree, June 1985.



CONTENTS

Chapter	2	History.
Chapter	3	The Dublin Termini.
Chapter	4	The Great Southern & Western rural stations.

Chapter 1 Introduction.

Chapter 5 The Great Northern stations of the late C.19th.

Conclusion.

CHAPTER 1 INTRODUCTION

Malahide Station (Platform) Fig. 1

In this paper my aim is to develop my own understanding and appreciation of the architecture of Irish railway stations. This will be done through analysis of the styles which were applied in approximately sixty years of building with reference to stations in which one can identify both the styles and the influences which created them. This shall be dealt with in three main sections, firstly the Railway termini, secondly the early rural architecture and thirdly the mass produced stations of the late nineteenth century. There have been approximately 500 stations in existence in Ireland since 1836, not all of them necessarily at the same time due to closures of financially unviable lines or stations; this so as not to over generalise I decided to focus on the existing architecture of the now defunct companies of the Great Northern Railway and the Great Southern and Western Railway with particular attention to their Dublin termini and two individual sections of rural line as seen under the above sections.

Railway architecture first interested me whilst commuting from Malahide to Dublin. The small picturesque station of Malahide (see Fig. 1) whilst not of great architectural merit maintained a visual charm and character which is difficult to find today in Irish buildings in general. Modern demands have created the need to adapt and alter existing buildings for a faster moving consumer world. In Dublin recent electrification has called for modernisation of many buildings and removal of some, such as the old canopy of Amiens Street Station. Semi-rural and rural station buildings like Malahide struck me as being close to their original state with a feeling of the period in which they were constructed. The reason for this



absence of change is founded in the fact that the rail traffic has decreased in the past fifty years; in fact some of the smaller line found themselves in decline almost as soon as they had been built !

Being architecturaly uneducated yet visually aware I was fascinated by the variety of style and form which was produced in only sixty years of railway construction. The buildings produced of this period as a group stand as a three-dimensional record expressing the variety of architecture of the mid-nineteenth century and for this are of great interest. The architectural setting for the development of the railways is the interim period between the revival movement of past styles and the emergence of a modern movement towards a more functional architecture which was accelerated by the use of new mass produced materials of iron and glass in rail termini in particular. The former movement had been the output of the architect; the modern was the result of the influence of the engineer. This distinction was brought about by incompatability of industrial needs and traditional aesthetics and Industrial needs demanding higher output in terms of faster and cheaper construction. The architects interests concerned both the function of the building and aesthetics, his fundamental training being in the academic assthetic formulae which when applied to a structure created a conventional building. The two contrasting disciplines meet in the great termini which we shall later discuss.



Fig. 2 Kingsbridge Station



CHAPTER 2 HISTORY

To understand the architecture of the railways some background of the nature of their development is first required. Public railways as such first began with the running of the Stockton and Darlington railway in England in 1823. This railway had evolved from the need to move coal from fields in Co. Durham to the river port of Stockton. Ireland was unlike England in that it never contained any rich deposits of natural resources such as coal or iron ore, thus it had no areas of heavy industry. This factor meant that the emphasis was initially placed upon passenger traffic. The first railway was that of the Dublin and Kingstown; (Dunlaoghaire) a line promoted for the purpose of increasing the interest and improving the accessability to the port, especially since the port of Dublin was silting over and the deep water port of Kingston was now of greater importance. The line of six miles in length appeared very successful as within the first few weeks 200,000 passengers had travelled upon the line. This level of interest and excitement promoted great optimism amongst speculators. This optimism had begun and was further developed through the success of rail in Britain which was of course an industrialy orientated nation unlike Ireland. The cost of rail on the Kingstown line was put at £60,000 per mile, laid on granite sleepers, the overall cost of which didn't seem to decrease interest in the proposal. The effect of the optimism and confidence generated upon the station architecture of the following twenty years expressed itself particularly in imposing individually designed city termini especially in Dublin where five different companies would vie for both investors and passengers (see Fig 2).



The birth of the Great Northern Railway began with the second railway in Ireland which was the first to cater for both goods and passenger traffic. This was the Ulster railway stretching southwestwards from Belfast along the Lagan valley in 1839. This railway was intended to eventually link up Belfast and Armagh which was at the time the most densely populated area in Ireland. By 1842 Portadown had been reached. At the Dublin end Drogheda had been linked by the Dublin and Drogheda railway in 1844. A third company made plans to bridge the gap between Portadown and Drogheda linking Irelands two main cities and was called the Dublin and Belfast Junction Railway. This feat was accomplished in 1853. The amalgamation of these three companies amongst others in the north of Ireland took place in 1875-6. The new company which formed was called the Great Northern railway.

In the Southern part of Ireland railway had spread with equal fervour and speed. The Great Southern and Western which was to become the largest individual company and most prosperous was incorporated on the sixth of August 1844 but did not open until two years later on the fourth of August 1846; it was financed by the directors of the London and Birmingham Railway whose capital of £1,300,000 launched the company. The English investment was later to be an important influence upon the choice of company architect as we shall later see. The company was similar in development to the early days of the Great Northern, with lines spreading from the major towns. The first line linked Dublin and Carlow. This style of development created several minor termini of which Carlow was the first. By 1849 Dublin and Cork had been linked. In the following fifteen years tentacles of iron road spread from other centres under the banner of the Great Southern



and Western railway such as Limerick and Waterford. The other main railways which had extended from the Capital to serve the country's eight million people were the Midland Great Western, the Dublin South Eastern which had developed from the Dublin-Kingstown line and finally the narrow gauge railway of the Dublin and Wicklow Railway.



Fig. 3 Amiens Street Station.

In Dublin the five competing companies produced five separate termini, beginning with Westland Row in 1834, then Amiens Street 1844-5 (Fig. 3),Kingsbridge 1845-6 (Fig. 2), Broadstone 1841-50 (Fig. 4) and finally Harcourt Street in 1856 (Fig. 5). That same period in English Railway architecture did not see quite the same enthusiasm as in Ireland. England's 'great' termini were not built until the period of 1860-80, and as such; cannot be seen as an influence. By 1856 Dublin's five termini were complete and did not need to be expanded in the following fifty years of railway expansion nor ever since.

The style in which early English termini were built (these being contemporary to the Irish termini) were in the main in the Classical style. Philip Hardwick's work in the classical set a style and standard with his dramatic Doric arch of 1836 (Fig. 6). Standing at the enterance to Euston Station, it stood as though a remnant of the Roman invasion. The railway company aimed at creating an impression of solidity combined with elegance "partly out of natural pride in commerce but also to reassure nervous people who never before had travelled by train" Philip Hardwick's entrance to the London and Birmingham terminus was built with both these in mind. Much of the British termini were indeed built in the classical though some work especially by I. K. Brunnell was in the Gothic, such as his engine shed in Bristol Temple Meads which more resembles the coverage of a structure such as Westminster Hall than an industrial railway. The Gothic style was later to be continued to dramatic effect by W. H. Barlow in the Great St. Pancras Station.

CHAPTER 3 THE TERMINI



Fig. 4 Broadstone Station



Fig. 5 Harcourt Station

On the continent the choice of style was also split between classical and Gothic with a general preference for the classical. In Italy the early termini were as one might expect elaborate renaissance structures with classical decoration applied both internally and externally. In Germany, Munichs main station was also classical, described by Hamilton Ellis as Ludwig-Romanesque. The dominating features of the facade are the long arcade of Italianate arches and upper floor windows. Finally in the Gothic style, was the Delftsche Poort Station of Rotterdam, Holland built in 1848. The station is in the form of a city gateway, elaborate in embellishment and overall treatment.

In Ireland Amiens Street station (Fig. 3) was the first terminus of note, the previous being the characterless Westland Row station designed by Charles Vignoles, the companies engineer which possibly has something to do with its greater emphasis on function rather than form. Amiens Street was designed by the architect William Butler Dean and for that possibly lacks a little in practical function in that as it was built it was impossible to gain access to the platform level by carriage. Dean was not a specialist in railway design; an Irish architect, his work previousl included St. Kieran's College Kilkenny (1836-9) and St. Mary's Cathedral Kilkenny 1843-57, of which Maurice Craigé obviously unimpressed by Deans work says'it has a very tall central tower but little to commend it.².¹ Of Amiens Street he says it '.. is not of great distinction¹² speaking in the context of the Dublin termini in general.

The building is of a classical theme as were all five of the Dublin termini and was built of Wicklow granite at a cost of £7,000. It was designed as the terminus and offices of the Drogheda



Fig. 6 Amien Street Station

and Dublin line, but was later to become the Southern head office of the Great Northern Railway. The station is in theform of a classical Italian Villa, the central tower of which is the focal point of the half mile vista which includes Talbot, Henry and Mary Street. The vista intersects O'Connell Street at the point where Nelson's Pillar originally stood. The terminus was originally to be sited on O'Connell Street but various arguments led to its final location on Amiens Street. The Station itself is a symetrical composition with the strongly Italianate tower dominating the structure (Fig. 6). To either side stand the main two storey blocks with two further towers two-thirds of the way along their length. The main square tower has beneath it the main entrance, originally in the form of twenty-two feet of steps which climbed through the main arch and two smaller arches, right of centre to the platform level. A steel escalator which strongly contrasts with its stone surroundings now carries the weary traveller up the height through the main arch. About the main arch eight pillasters support the tower structure to the level of the first floor. Above the two flanking arches are two crests one depicting the three castles of Dublin, the second, now weathered by acid rain depicts the city itself. Above the central arch upon a ledge which protrudes from the cornice above the second floor stands a clock with a granite surround. The clock which stands proud of the overall building and central to the composition is designed to emphasise the concept of time keeping, a subject with which Railway companies prided themselves. The clock and stone surround forms a balcony to the dominant single window on the third tier. On either side of the tower, identical mock windows decorate the surface (Fig. 6). The fourth and final tier is in the form of an open look-out; the



purpose for which the tower itself was originally designed. The tower is covered by a characteristically Italian shallow roof and a simple pointed fenial on top. The two outer towers which stand only two and half floors high echo the form and structure of the main tower. Three linking windows sharing adjacent column supports further characterise the Italianate influence; a style of window originally dating from the seventy century. The main two floors of the building proper are less Italianate than the tower sections and appear more purely classical with a corinthian colonade separating the two storeys. The parapet is decorated by balusters, the theme of which is continued on the outer towers in the form of a balcony outside the central windows and also above the cornice on the second floor of the main structure.

The overall impression of Amiens Street is that as a formal building it stands out in its use of the Italian style for which Butler is credited for introducing to Dublin and because of this suggests the inovative nature of the new transport system of 150 years ago. Whatever judgement we may make upon it now, it was certainly highly thought of in its day, by Murray's'Handbook for Travelers in Ireland' for 1864. 'Of all the Dublin termini, it decidedly carried off the palm for architectural excellence, with its light and graceful Italian facade.'

Kingsbridge was the third Dublin terminus to be completed and is regarded by many as the best piece of Railway architecture in Ireland. Hammilton Ellis describes it as 'One of the most meritorious railway buildings in Europe.'

In 1845 the Great Southern and Western Railway held a competition for a design for their terminus to be positioned



Fig. 7 Kingsbridge Station (Left-Wing)

adjacent to the warehouses of the period at Kingsbridge. Twenty designs were submitted from which the chief engineer Sir John MacNeill chose seven which were worth attention. Of them were included designs by William Butler Dean, designer of Amiens Street station and J. Skipton Mulvany who was in the process of building the Broadstone terminus (Fig. 4). The chosen architect was an English architect Sancton Wood, already experienced in railway architecture; described by Michael Binney in the context of England as being amongst 'the best architects available'. The decision was made by the London committee of the Great Southern and Western who may have been hiased towards an English designer through Wood's acceptance in England. None-the-less, the completed design expressed the optimism of the early steam age and the profit which lay therein.

Sancton's building (Fig. 2) is decoratively the most impressive of the Dublin termini; its grandeur captures the celebration and excitement which the new railway company must have hoped to express to the citizens of the metropolis. The structure also fits in well with the ornate iron bridge 'Kingsbridge' which was built accross the river Liffey in 1821; the style and design which it well reflects. The buildings east face is in the form of an Italianate renaissance palace. The front as seen by the approaching traveller from the city, dominating the skyline of the quays has a main body of two stories with two wings on either side, each surmounted by a clock tower (Fig. 7). On the ground floor there are eight windows with a small central door. The masonary of the ground floor is rusticated as is the convention with buildings of this classical style. From the ground floor rise ten corinthian pillars which support the cornice. On the parapet, balusters occupy four of the



Fig. 8 Crest Detail, Kingsbridge



Fig. 9 Detail Kingsbridge

nine spaces between the pillars, the other five are in the form of inset dates and crests (Fig. 8 & 9). On the outer wings which are just one storey high, supported by two Doric columns stands the elaborate clock towers which look a little like thin mausolea (Fig. 10) with their domed caps and supporting pillars. The clocks have long since gone, if indeed they were ever mounted as photographs of the 1920's also show empty holes. Nevertheless the structures in themselves are elaborate pieces of construction if only purely decorative. The towers display a nice juxtaposition of linear and curvilinear forms. These is much ornate masonary about the capitals of the pillars and also around the circular mount for the 'clock'. Organic and scroll forms defy and contradict the nature of stone. Leaves curl at the base of the circular stones as if to prevent them from falling and so fulfill a visual need. On the main block five 'fruity swaqs' hang between the six central columns above the second floor windows (Fig. 11). The detail is tremendous and beautifully crafted. One can pick out all sorts of tropical fruit; pineapples, bananas, artichokes, bunches of grapes, the odd apple and rose-like flowers. The overall composition is bound by a reed-like ribbon. Unfortunately the detail probably goes unoticed by the passing traveller, due to its distance from the ground. Even less likely to be seen are the now darkened lion heads which decorate the cornices above each column (Fig. 9). The date upon the inset stone previously mentioned is 1844, in Arabic numerals. This date could be found to be misleading in that the date of actual acceptance of Woods designs didn't come until the sixteenth of July 1845 and Kingsbridge was not completed until 1846. The reference of the date is of course that of the incorporation of the Great Southern and Western Railway Company.



Detail Clock Tower, Kingsbridge Fig. 10



Fig. 11 Detail Kingsbridge





Fig. 14 Ceiling, Kingsbridge



Fig. 15 Passenger Shed, Kingsbridge



The South face which is less striking in terms of approach is equally commendable architecturally. The structure of the building is symetric about the main entrance which is sheltered by a Doric portico. To either side eighteen classical windows occupy the main area of lengthy facade which is connected to the South wing of the East front (Fig. 2). The area beneath the portico is attractive with detailed stone volutes supporting the portico roof and also a portion of the entrance arch (Fig. 13). The use of these detailed curvilinear forms lend a contrast to the otherwise plain surfaces. They are obviously more ornamental than functional but nevertheless I find them a little incongruous in their inverted form, in that they are so finely crafted that one expects their wound-up spring to suddenly unroll. The scroll form is further reflected in the four lamps which grow out of the wall below. The lamps show a high quality of craftsmanship, and in design they display a powerful treatment of movement and organic growth through the medium of the solid iron.

The only criticism which might be leveled upon the forms of the lamps is that they only copy the forms previously produced in stone, the nature of which can be seen upon the clock tower. There is no real attempt to utilise the greater flexability of iron, alas this was not to be until the arrival of Horta's staircase.

As we move through the doorway to the inside we find ourselves in the decorative looking hall with elaborate ceiling (Fig. 14) worthy of a palace but then in stark contrast meving past the bland modern booking office we arrive at the huge passenger shed which was put up independently of Sancton Wood's facade in 1845. It was designed by the company'e's engineer John McNeil. The roof above is



Fig. 16 Broadstone Freize Detail



Fig. 17 Broadstone Front Elevation

supported by a forest of seventy-two cast iron cominthian columns covering two and a half acres, although when compared to a station like Stephenson's old Euston in London, Kingsbridge would appear as though a small wood. Ornamental acantus leaves decorate the tops of the rows of columns; unfortunately many of the cast iron leaves have been removed or damaged due to fitting of electric wires and piping. An elaborate iron framework between the rows of columns supports the huge roof which is composed of wooden planks and glass. The use of wooden planking was required due to the need to waterproof the drainage channels which was at the time unfeasable with glass.

Finally the perimeter walls of the passenger shed are decorate on by a long row of recessed classical mock windows. This use of these window forms echo and enforce the overall design of the building reminding those in the industrial shed of the classical theme of the exterior.

The termini which followed the Great Northern terminus of Amiens Street and the Great Southern and Western of Kingsbridge were Broadstone and Harcourt Street neither of which were as elaborate as either of the two; nevertheless architecturally they are both highly commended and merit comparison.

The Midland Great Western terminus of Broadstone (Fig. 4) is a bold austere structure, built (1841-50) in the Egyptian style with a Grecian influence by John Skipton Mulvany. It contrasts sharply with the Renaisance palazzo of Kingsbridge, (Fig. 3), there being little embelishment of any description upon it except for the freize which though perpetualy shadowed





by the overhanging pediment, displays some carved Grecian patterns. Decoration aside Maurice Craig is certainly impressed by it. 'But in purely architectural terms it is hard to praise it too²³ highly.'

The sharp Egyptian angularity is enforced through the absence of any of the relieving classical curvilinear forms which are essential to the style of Amiens Street in particular (Fig. 2). The tapering form of the rising entrance block creates a visual tension in its break from the vertical which conflicts with the rest of the composition (Fig. 17).

As a personal comment, whilst it may be a successful composition of bold masses and could certainly evoke confidence, I find it is more suggestive of a burial tomb than a trip to the country.

The Egyptian influence though not frequently used in railway architecture can also be seen in a building such as Marshall's 'Temple Mill' in Leeds (built 1842) or closer to home, it was used by John MacNeil in his 'Egyptian Arch' bridge on the main Belfast line.³

Returning to a more Roman classical theme the last terminus of Dublin is the Harcourt Street station (Fig. 5) of the Dublin and Wicklow Railway Company. It was designed by George Wilkinson and built in 1859 of brown brick with granite drassings. It is a more modest Station than the rest: built for a smaller company. It resembles a truncated Amiens Street (Fig. 2) with the upper floor removed. The main entrance arch suggests a baroque



influence with the doubled use of columns and supporting volutes. The Doric colonade at either side give the overall station a sense of classical grandeur. Harcourt Street is the only Dublin terminus facade to be built of two differing materials; i.e. brick and granite; a reflection of its financial state. Nevertheless the two textures are worked together harmoniously.

The choice of the classical style as opposed to another such as Gothic used in several British termini, merits attention. The Dublin termini as a grouping must be viewed in the context of the architecture of the city which had been produced before them. Classical architecture was undisputably the architecture of Dublin. Buildings of any stature had been built in the grand Greco-Roman style. Buildings of State in particular were classical, for instance Parliment House (1729) (Bank of Ireland), Leinster House (1745), Gandon's Four Courts and the Custom House of 1776 and 1781 respectively and finally, more contemporary to the railways, Francis Johnson's General Post Office completed in 1818. As a result architecture instilled the impression of the solid reliable institution. The Gothic Houses of Parliment had a similar effect upon English architecture. In Dublin there was little alternative to the classical design. A new concept such as rail, before unseen, was not about to turn the tide of a hundred years of Georgian tradition. The writings of Palladio were bound to be adhered to. When the industrial era arrived in the form of Steam engine there was to be no sudden change. This smokey machine was to be glorified like a Roman chariot.

Kingsbridge creates for me the greatest incongruity of all. An Italianate Renaissance palace (Fig. 3) fronts an industrial iron and glass shed (Fig. 15) in which one mounted a noisy train to speed one to the other side of the country. The overall complex viewed as a whole illustrates both metaphoricaly and physicaly the meeting of the industrial era and the classical revival architecture which had plodded on unmoved by any new material which may have evolved such as iron and glass in particular. Stead-fast in the old traditions of classicism they really masked the interior reality of the new steam monsters and huge spans of iron beams which sheltered the waiting passengers. The architects were indeed quite strange in their conservative refusal to ever suggest the actual purpose of the termini; after all, the steamengine was deemed to be the great inovation of the nineteenth century; a product of the industrial revolution, a product which would accelerate its development.



Monastereven Station Fig. 18

From the classical achievements of Dublin termini which fronted the passenger sheds of iron and glass, I shall now turn my attention to the more intimate early rural stations which contrast in both size and style from the termini. The area I will concentrate upon is a circuit of the Great Southern and Western network about fifty miles from Dublin which displays many of the characteristics of early Irish rural stations in general.

The particular stations chosen are Monasterevin, Portarlington, Portlaoise, Carlow and Bagenalstown. The first four are of particular relevance since they represent the change of style and accent from the classical termini, whilst being the product of the two Kingsbridge designers; Sancton Wood and John MacNeil. Bagenalstown is of interest for its own architectural merits but also for the apparent misplacement of style in a rural setting.

Monasterevin (Fig. 18) is a station house truly of the Gothic style. It was designed under the direction of Sancton Wood. To the exterior front there is no impression at all of a railway or any such product of the industrial revolution. The appearance is completely ecclectical with its overall apparent Crucifix format with nave, transept and church style porch included. A second transept of course does not exist as the train passes through that area in which it is mentally suggested. The high gable and steep roof also suggest the nature of a Church. The lower portions of the porch and trancept are supported by closed butresses. Unfortunately the station is no longer open, but in use as a private house, as a result the front windows are now blocked over.

CHAPTER 4

THE GREAT SOUTHERN AND WESTERN RURAL STATIONS.



The home of station masters were combined in the bulk of stations. Closeness was desirable due to the long working hours and importance of punctuality in the work of the Station master. As a result this combination led to a more domestic style being adapted to station houses.

Originally the two windows on the front gable were covered by hexagonal glazing whilst the porch had diagonal glazing. The only feature which would lead anybody from believing that it was not in fact a Church is the tall chimneys which dominate the skyline of the structure. The overall stonework of the building is of limestone and shows good craftmanship in the execution of the Gothic doorways and windows in particular. The actual railway, the supposed focus of any station building passes at the height of the first floor and is accessable by a flight of stone steps which climb inside the building to the platform.

The platform level itself is a bit of an anti-climax. The structure from the line appears of course as a one storey building. There are just two Gothic windows which look out from the main building. There is also the exit to the stairway and the entrances into the ladies and Gentlemens waiting rooms respectively. There is no canopy or any further attempt at embelishment of the structure A factor one feels that a Gothic structure such as Monasterevin holds in common with a classical terminus like Kingsbridge is the greater emphasis upon outward appearance as opposed to functionalism and the use of platform. Text book structures were apparently lifted from their context and applied with use of either Gothic, classical, Elizabethan or some such style regardless of real purpose.



Fig. 19 Portarlington Station

Monasterevin station is interesting in terms of its aspect. The front entrance of the station yard opens directly onto the grand canal physically confronting the system which was in direct competition with the railway. Ironicaly the canal had been deemed the transport system of the 'future' fifty years previously. In Monasterevin the canal caused the railway to be built over it thus resulting in the need to design a split level station. 120,000 passengers traveled on the boats of the Grand Canal in 1846. This potential competition must have influenced the building in a small canal town like Monasterevin.

Moving along the circuit again in the Gothic theme is Portarlington station (Fig. 19) built in a style of architecture which I personally associate with rural Irish railway stations. It is one of the many attributed to Sancton Wood who had designed the main bulk of stations from Monasterevin to Limerick. The upper section of track from Kildare to Dublin was carried out by John MacNeil or under his direction; as he was a busy engineer having a hand in most railways of that period.

Portarlington was built c. 1847 of grey limestone as were the main bulk of his stations upon the line, the stone being easily accessable on that particular geological belt.

To the road the station appears as if it were decigned in two separate sections (Fig. 19) the main storey structure to the left which house the station master appears to be based upon a large domestic country cottage. The right hand side is in more of a pavilion style and intersects the gable end of the cottage. The main cottage has quite a detailed structure especially in the main



Fig. 20 Portarlington Entrance

facing gable. The ground floor has a bay window flanked by two square pillars which support the upper floor. The centre of the upper floor which contain angular Gothic windows projects out about a foot and hangs over the lower bay window. Above the windows the stone is inlaid with planks of plain wood which suggests a Tudor influence. The above eaves are decorated by ornamental bargeboards (Fig. 19) which hang like lace frills on a curtain. These decorative boards were very much characteristic of English railway architecture of the period. The patterns upon these bargeboards is neither the same in different stations nor in an individual building (Fig. 20). The pattern is altered between gables and sides of buildings, although the texture and tone of the decoration is usually similar varying between geometric and organic forms. In Portarlington station alone there are four different patterns discernable. The elements may be common to two or more patterns. The patterns themselves may be croped or otherwise altered to suit the individual portion of the eave which it is required to decorate. The designs appear to be based upon stylised forms of Italian Gothic stone embellishments placed about architraves and freizes of Cathedrals and Palaces.

In the stations they give an interesting texture to the otherwise dull eaves working on the fact that the pattern catches the light and stands out due to the dark shadowed background beneath the roof.

The entrance porch to Portarlington (Fig. 20) strongly in the Gothic style also has bargeboards above it. Inset in the stone is some more Tudor wooden pannels emphasising the gable shape. Flanking the doorway are two recess mock window forms. One can see

Fig. 21 Portarlington Platform Side







in this area that the architect utilises the texture of the stone, using smoothly finished masonary for dressings such as arches and corners and coarser stone for the rest of the structure.

The rest of the 'pavilion' building have rectangular windows with dominant wooden frames. The third facing gable of the building makes further use of the Tudor style wooden panneling.

On the platform side (Fig. 21) the dominating features are the bell tower, the high gable, and the arcaded shelter in between, this style of shelter being a common characteristic of many of Woods designs upon the line like Portlaoise (Fig. 25). The arcade roof is supported to the front by four wooden pillars. The intermediate spaces, save one are linked with decorative wooden rails with finials upon their posts (Fig. 22). The use of these railings and the above bargeboards lend a visual texture to the composition which characterises the early railway architecture of the line.

On the opposite platform to the main station house stand an equally large building which is connected to the supporting block(FG23) of the water tower. The overall structure of the building is similar to the main one with overhanging rooves forming arcaded shelters for waiting passengers. Once again we see here another common characteristic of WoodSGothic, that is the eccleastical(FG24) styled glazed windows. The individual windows are made up of lead strips with a plaster moulding around them, each glass piece of course being separate. The windows create a further texture to the appearance of the buildings. Similar to the bargeboards there is no constant pattern used in the glazing of each or any station, thus each one is totaly unique whilst a common Tudor-Gothic style pervades.



Fig. 23 Portarlington Second Building



22





Fig. 25 Portlaois Platform Side



Fig. 26 Portlaois (Road Side)



The third station is also of the Gothic theme and shows the further adaption of the style. Portlaoise is alike Monasterevin in its split level, appearing to the rail to be a small intimate cottage. The details that enforce its height, especially from the road, like tall chimneys are so positioned that from the train window they are not visible at all. The rest of the platform side characteristics show that it was built at the same period of 1847 as Portarlington. The shelter is created by two projecting gables, symetric in composition, but not in detail. The left hand window has an oriel window with a single narrow Gothic window above. The right hand gable is decorated by a projected gable form upon it. The main facade to the road is contrasting in size and impact in that it is a relatively large and impressive house with a good deal of surface and structural decoration. There are three gables to the front; the entrance and two main gables both of which are composed of complicated recessed, sloping and projecting planes (Fig. 27). The devices used are many. The left hand gable is treated with recessed forms whilst the right hand with projecting forms. The lower floor of the right hand gable has two Gothic windows with a third identical mock window in between. Above them the upper floor is projected forward slightly.Cornices state the divide of the two floors. The upper storey has two windows framed by two mock window recesses, between which there is a mock loop hole and above that a circular mock window recess. The gable is trimed by the usual ornamental bargeboards of which there are three different patterns discernable in the Portlaoise Station all of which differ from those at Portarlington.



Fig. 27 Portlaois Stone Work Detail



Castle Oliver Fig. 28



The second gable is even more indulgent with two gothic windows inset in a projected mock gable which supports an Oriel window on the second floor. The projected gable is complete with mcck slated roof and stylised volutes supporting its eaves. The base of the Oriel window (Fig. 27) is decorated by carved stone forms with a logo type upon a shield in the centre. In the corner between the mock gable roof and the side of the window is placed a tiny turret, as though an afterthought to the composition. The stonework of the overall facade is attractive with contrasting smooth dressings and rougher stone of the main structure. The use of differing tones of limestone also gives an interesting chequered appearance to the building.

The overall style leaves one a little confused, as does any attempt to describe it. It shows an escapist treatment of portions of the stonework apparently adapted from characteristics of castle construction such as the approach to the oriel windows and the loop hole on the opposite gable all applied to a domestic form. The romantic escapism was prevalent in certain buildings of the period, for instance Castle Oliver in Co. Limerick (Fig. 28) (Cloghanofoy Castle) built in 1850 by the English architect G. Fowler Jones who also utilises turrets, oriel windows, projecting planes and loop holes upon a country house.

set for Hamlet."

The fourth rural station I shall discuss alters from the Gothic style of the previous three, it is nonetheless a little escapist in

An indication of Sancton Woods romantic tendancies can also be seen in his Locomotive shed at Inchicore (Fig. 29) 'With its castleated lookout tower which would do justice to a



Fig. 29 Locomotive Shed, Inchicore



Fig. 30 Carlow Front Entrance

its nature (Fig. 30).

Carlow (Fig. 31) is one of the largest on that line, originally being built as a terminus for the Dublin - Carlow railway Company in 1846. It is an interesting station in design and layout with several influences incorporated in it, the design of which has been attributed to John MacNeil the engineer of the line and designer of the passenger shed at Kingsbridge.

The main structure is of brown brick. Corner dressings and gable tops are of granite. The main house is primarily domestic Elizabethan in style with high pointed gables. The main entrance (Fig. 30) is a romantic castleated affair, the modern equivalent of which would be a semi-detached with a new porch of Grecian columns and pediment all of granite. The entrance is nonetheless interesting, with flanking brick columns and castleation around the door. Directly above it is an inset shield now weathered, but it would appear to be purely decorative. The dolumns are caped by granite pinnacles and finials more suggestive of a Gothic cathedral than a railway building. The castleation is also used above an oriel window on the right hand side of the house, which is inclined to make the otherwise symetric composition a little unbalanced. The windows are rectangular except for two Gothic diagonaly glazed windows in the entrance. Over the rectangular windows (Fig. 32) are granite drip stones, a Gothic characteristic revived in the Elizabethan era and now revived. On the roof area four large chimneys are a dominating feature (Fig. 31). They are larger than necessary as was the fashion. The rest of the building spreads out symetrically on either side. The main features are the Flemish



Fig. 31 Carlow Station



curves of the facing gables (also Elizabethan) and their chimneylike fenials (Fig. 32).

The front of the building is directly mirrored on the platform side with each gable corresponding to another on the opposite side. This station is one of the few which is equally impressive on both sides.

There is a canopy for shelter on the station side with the decorative valance essential for stopping the driving rain but also in the days of origin, it stopped the swirling smoke and steam from the engine. Three iron pillars support the roof. The decoration on the pillars is that of the classical acantus leaves carved on the capitals of the traditional corinthian pillars, but they are not particularly well handled in this particular cast iron form (Fig. 33) being a little crude.

The overall impression is that functionally it is a well designed station with the main dominating house working as the axis of all other movement. There is equal emphasis given to the impression and function at rail and road. When all is said and done, I still get the impression that there was no real acceptance of the industrial revolution instead an escapism through the construction of fanciful private 'castles' belonging to a time centuries before.

A question which arises when seeing these romantic escapist structures is why and what caused them. They are primarily the result of the Gothic revival movement, the beginning of which Horrace Walpole is credited. He turned away from the paladian traditions and built his house 'Strawberry Hill' as a Gothic castle.



Fig. 33 Canopy Detail



Fig. 34 Bagnalstown Station



This led to oddities like the construction of sham ruins ! The romantics which developed continued well into the middle of the nineteenth century. Penoyre and Ryan express the opinion that the movement was caused by the 'Men of Sensability' who '....instead of blaming their inability to control and organise the new world that was being created with the help of the machine, they blamed the machines themselves. They attempted to put the clock back to return to what they thought of as the more genuine ways of the medieval era.'

Ironically it was this attitude which influenced the application of the Gothic style to the stations of the steam engine.

Bagenalstown (Fig. 34) is the fifth of the Great Southern and Western stations which I have chosen to discuss. Situated in County Carlow it is of interest in the context of rural station architecture because it is classical in design as opposed to the previous Gothic stations of Portarlington (Fig. 19) etc. This was especially the case in the Southern parts of Ireland although on the Great Northern stations designed by MacNeil of Portadown, Monaghan and Armagh were classical although a little more subdued than Bagenalstown.

Aside from its differences it also merits attention as a fine piece of architecture. The reason for such a grand building (which now serves only a small town) is partially the fact that it was originally built, alike Carlow, as a terminus for the Bagenalstown and Waterford railway. The designer is unfortunately unknown but we do know it was built in 1848. Bagenalstown is an 'Ornamental station in the Baroque style'.



Fig. 35 Bagnalstown Balcony Detail



Fig. 36 Bagnalstown Platform



Bagenalstown expressed its rural surroundings in its appearance of a typical country house, just as the Dublin termini reflected their formal surroundings, such as the Townhouses, Banks, Post Offices, etc. The layout of the building with its main block with the smaller buildings and additional wall attached at either side along with its small first floor windows, suggest the form of a Paladian house.

The building is attractive in its simple areas of composition, being smaller than its classical Dublin counterparts. The main facade capped by the pediment stands forward of the two wings which form entrance porches on either side; the left hand entrance opens onto the platform, the right hand into domestic quarters. The dominant features of the front are the three large lower and three smaller upper windows, separated by four pilaster strips. There is also a small balcony, primarily decorative on the first floor, punctuated at either end by two stone balls (Fig. 35) and supported from above by two volutes. The balcony is decorated by three pieces of cast iron work now painted white which serves well to highlight them. The two recessed wings have a circular window above the porch roof which lends an individual character to the building. These rooms form part of the station masters quarters. Upon both end gables of the building stand large exaggerated chimneys which are an important design element, in that they help to give an overall balance to the composition as a whole. The pediment of the end gables overhang in a strange fashion and are intersected by the chimney breast Fig. 36).

The two outer buildings are similar in proportion to the main block and inforce its character with their format of the projected



centre and wings. Dominating the centre is a typical classical Baroque window. Of further interest on the front pediment is the unexplicable use of a mock Italian slate roof which sits upon the tops of a projecting cornice. It appears superfluous to the design but was obviously found to be necessary by the architect to consolidate the central composition.

The station side of the building is interesting with classical stone shelters (Fig. 36) on both sides of the line. On the building side we can see that the shelter is formed between the gables of the two outer buildings. The form of the shelters is the most solid I have seen. The main support is in the form of square section monolithic columns with equally solid cross sections on top which support the roof.

The impression one gets from the railside of the station is that the architect obviously revelled in the use of stone, not using any of the usual wood or iron supports or ornamentation. This side of the station, though certainly solid is a little cluttered in appearance and actual space, the overall style of building being suited to a larger format. The building is in fact smaller than its proportions are inclined to suggest, the actual height being under thirty feet.

In conclusion Bagenalstown is undoubtedly the most elegant of the five stations, dressed in its classical style. The common factor they all hold is that they were solidly built, and designed to last. Utilising and reviving the architecture of past movements they produced a variety of stations which were representative of a thousand years of architectural development.



Sion Mills Station4 Fig. 37

The last quarter of the nineteenth century and the early years of the twentieth saw the emergence of certain distinctive style in Irish Railway architecture resulting from several factors; the amalgamation and subsequent standardisation on several of the principal systems, the construction of branch lines into areas of potentially low return and the greater availability of new and traditional building materials. The design of station buildings by the main companies was now more a matter for the civil engineer than the architect. Blueprint designs emerged which were applied again and again on stations being built after 1870. The buildings which emerged were functional, plain in appearance with little ornamentation other than the prefabricated ironwork which was now economically produced.

On the Great Northern W.H. Mills became overall chief engineer two years after the merger of the five different companies in 1875. The majority of the stations built on the Great Northern railways in the years which followed were to his design. Mills design was flexible and could be adapted to a wide range of buildings. The earliest example of the application of his design was in Sion Mills Co. Tyrone (Fig. 37). It was constructed in a style which suited and befitted the form of the engines it served having an adequate sufficiency of ornamentation. It was a domestic style representative of the influence of the mass construction of brick dwellings especially in England.

CHAPTER 5

GREAT NORTHERN STATIONS OF THE LATE C19TH CENTURY



Fig. 38 Drogheda Out-Building





The railway itself had increased the utilisation of brick in 12 rural areas. Previously only coastal towns like Dublin, Cork and Belfast were able to get access to Flemish and English brick which often came in the form of balast in ships. Distribution of brick had been impractical as the limited canal system had been the only mode of heavy transport. Irish brick was generally regarded as being of poor quality and as a result was little used.

The yellow brick buildings of the Great Northern Railway were to be their characteristic style of building. The brick in question is likely to have been brought into Belfast and distributed by rail from there. The quality of brick was a good deal better than the earlier brown brick used for instance in Carlow station (Fig. 30) which did not weather as well as the new smooth faced brick.

Sion Mills has a building on the 'down' platform only incorporating living accomodation for the station master in a main two storey block with a single storey section for waiting rooms and entrance hall. The booking office is combined in the accomodation area. There is little superfluous about the design. It is simple and functional.

Dundalk (1893) is one of the larger stations to be built in the Mills' style. The basic'building block' of his design is the pavilion form, which is extended or shortened as required for the individual station. In Dundalk there are two blocks in line upon a central platform. The feature which distinguished the new stations above all was the use of colour. The main brick used was yellow, through which run lines of black, brown or red brick (Fig. 39). The windows are accentuated as a design element through the use



Fig. 40 Column Detail, Malahide

of a black brick trim over the window arches in the form of a drip stone. There is also further simple decoration of the windows surround; a column form is composed of special corner bricks, an ingenious device which whilst not time-consuming is suggestive of the old type of embellishment previously handled in stone. Mills design was also useful for smaller needs, like an extension to an existing building in Drogheda (Fig. 38).

Malahide was one of the last stations to be built on the line to his design. The architectural drawings of the station (Railway Records Society) is dated 1903 and bears witness to the maintenance of the station in its original state eighty-two years later.

Malahide is consistent in almost every detail with the application of the design upon the larger station of Dundalk ten years earlier and the entrance hall glass is identical in structure to that of Sion Mills (Fig. 37) twenty years earlier.

The main feature of the platform is the fine canopy which (FiG1) covers the width of it. An attractive point of interest in its construction is the decoration upon the three supporting iron columns (Fig. 40). At the top of each column, four branches support the roof. The motif of the Great Northern Railway is integrated as a decorative element in the supporting ironwork of each branch.

The most attractive individual element of the station is the roadside entrance which is quite elaborate by comparison with the other stations of its genre. A projecting gable of 'cottage orne' decoration form an entrance porch with a semi circular wall



Porch Malahide Fig. 41

panneling.(FIG41)

The use of wooden panneling is further developed in Laytown Station (Fig. 42) a wooden solution of W.H. Mills to the need for inexpensive stations serving a small population. The main framework in wooden, built about three red brick chimneys based on similar buildings in England of the South Eastern and Chatham railway described as 'Kentish clapboard'. It is a simple single storey building without canopy. Decoration is by way of simple use of the linear pattern existing in the panneling as on the entrance halls lower zig-zag sections. This wooden form of construction was also well suited to use in shelters and signal boxes. (FiG 43)

It is obvious that there is a large gap between the output of the architect in a station such as Portlaoise and the solution of an engineer and the application thereof to a station like Malahide.

Unlike the Great Southern and Western the companies under the Great Northern, not being unified for several decades did not in the rural context build stations which would endure time or fulfill the needs of the later company (The Great Northern). As a result the mass produced stations of W.H. Mills whilst not of great architectural merit are now nonetheless representative of the style of the company.

constructed of wood plaster and glass as is the embelishment above. The porch is glazed with a hexagonal and diamond pattern. To either side of the entrance are two further glazed pannels. The lower portion of the overall entrance is trimmed with zig-zag wooden

The Architecture produced by the Great Northern and Great Southern Railways in the sixty years of development was diverse and contrasting. It reflected the nature of the Irish railway system which had developed, relatively unco-ordinated with many companies contributing to the overall network. This is illustrated in the contrast between the Elizabethian station of Carlow (Fig. 31) and that of the classical Bagnalstown (Fig. 34) only fifteen miles away. Thus it also expressed the architectural revival movements which prevailed in the nineteenth century through the individual choice of the different companies.

The division of style between urban and rural was a reflection of the existing surroundings, especially in the context of Dublin. The work of Sanctan Wood in particular shows the change of emphasis from the classical sytle in the city to the Gothic style in the country.

The Dublin termini as a grouping, display the effect of competition upon a group of buildings which had to evoke the excitement and grandeur of the new transport system and at the same time instil a feeling of security and success amongst potential investors. Whilst they were all of a classical theme they also show the variety of styles under

CONCLUSION

a 1

the classical umbrella, from Italianate Villas and Renaissance palaces to Egyptian "tombs".

The termini made no attempt to suggest the physical nature of the steam engine, instead they disguised it, contrasting sharply with the feats of engineering which accompanied it.

In contrast to the architectural achievements of the early stations, the stations of the Great Northern built at the end of the nineteenth century display the development of smaller stations towards a co-ordinated design, by the engineer as opposed to the architect.

The collection of stations now standing, are a record of that period of confused architectural style which had few characteristics of its own other than that of revival and minor industrial influence. As such a group they merit preservation and maintenance of their original identity.



BIBLIOGRAHPY

Published By Irish Times, Dublin.

The Great Northern Railway of Ireland, By E. M. Patterson Published By The Oakwood Press, Lingfield, Surrey.

Railway History in Pictures, Ireland Volume 1,

Railway History in Pictures, Ireland Volume 2,

Published By David & Charles, Newton Abbot.

The Pictorial Encyclopedia of Railways, Published By The Hamlyn Publishing Group Ltd., London.

The Gothic Revival, By Kenneth Clark

Dublin, By Peter Somerville-Large Published By Hamish Hamilton, London.

Railway Architecture, By Marcus Binney & David Pearce Published By Orbis Publishing, London.

The Observer's Book of Architecture, By John Penoyre &

Published By Frederick Warne & Co. Ltd., London.

The Story of Art, By E. H. Gombrich Published By Phaidon Press Ltd., London.



Highlights of Ireland's Story, By Harry Percival Swan Published By Dundalgan Press Ltd., Dundalk.

The Architecture of Ireland (From The Earliest Times Published By B. T. Batsford Ltd., London.

The Architecture of Europe, By Doreen Yarwood Published By Chancellor Press, London.

Published By B. T. Batsford Ltd., London.

Midland Great Western Railway of Ireland, Volume 17, No. 6 Cara, The Inflight Magazine of Aer Lingus.

Outline of Irish Railway History, By H. C. Casserley Published By David & Charles, Newton Abbot.

The Railways of the Republic of Ireland 1925-75 Published By D. Bradford Barton Ltd., Truro, Cornwall,

Published By D. Bradford Barton Ltd., Truro, Cornwall,

Malahide, Past and Present, By Noel Flanagan



- 21. The Great Southern and Western Railway, By K. A. Murray & D. B. McNeill
- 22.
- Dublin 1660-1860, By Maurice Craig 23.
- 24. Vol. 12 Published 1975 No.68.

Other Sources:

Irish Railway Records Society, Heuston Station, Dublin. Transport Museum, Belfast. Architectural Archive, Merrion Square, Dublin.

Published By Irish Record Society, Dublin.

Irish Standard Gauge Railways, By Tom Middlemas Published By David & Charles, Newton Abbot.

Published By Allen Figgis Ltd., Dublin.

Journal of the Irish Railway Record Society.