



*1 – Lockwood and Mawson, South City Markets (1878), South Great George's Street  
main entrance, with cathedral-like double-arched opening*

# Chromatic delights: Dublin's terracotta buildings in the later nineteenth century

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SUSAN KEATING

THE VICTORIANS' LOVE AND USE OF COLOUR IS WELL KNOWN. AT THE International Exhibition in London of 1862, a richly coloured temple designed by Owen Jones housed the English sculptor John Gibson's *Tinted Venus*. The statue was positioned within a niche which bore the inscription *Nec Vita Nec Sanitas Nec Pulchritudo Nec Sine Colore Iuventus* (without colour there is neither life nor health, neither beauty nor youth).<sup>1</sup> Many publications from this period were concerned with the implementation of polychromy in interiors and exteriors, drawing on the past for inspiration. Influential writers such as Owen Jones and John Ruskin endorsed the use of colour in architecture. According to Ruskin, 'Architecture is itself a real thing ... a reality ought to have reality in all its attributes: its colour should be as fixed as its form. I cannot, therefore, consider architecture as in any wise perfect without colour.'<sup>2</sup>

Among the materials capable of adding vivacity and colour to the grimy reality of Victorian Britain, terracotta was held as an exemplar of economy and cleanliness. Initially viewed as a substitute for stone, terracotta combined the same compressive strength with a less expensive means of decoration, where simple moulds of a repetitive pattern were employed. Examples of this economical usage can be found on many shop gables on Upper Baggot Street.<sup>3</sup> Thus this 'modern' material could be factory produced to specific architects designs. In addition, unlike stone, it was thought the material was less likely to display the ravages of industrial pollution. Finally, given the Victorian preoccupation with historicism, terracotta was endowed with prestige through its association with the Renaissance and antiquity.

The architects who favoured colour were those who worked broadly within the Gothic revival. The prolific Victorian architect Alfred Waterhouse (1830-1905), sometimes known as 'Mr Terracotta', was very much in favour of colour as an adjunct to his work. On his return from France in 1855 Waterhouse wrote, 'returned home much disgusted with English architecture. We want size, light, and shade, and colour in our buildings.'<sup>4</sup> Waterhouse went on to design one of the masterpieces of

the Victorian age, the Natural History Museum, London (1872-81). Where once reserved classicism and Portland stone were considered *de rigueur* for an important public building, Waterhouse employed terracotta in a chromatic neo-Romanesque design. The beauty of this remarkable structure was instrumental in changing public opinion regarding the appropriateness of terracotta for the display of civic grandeur.

This article is concerned with the Irish architectural response to the terracotta revival of the nineteenth century. In charting this response I shall explore some of the issues related to the use of architectural terracotta, using for my examples key buildings in Dublin from about 1878 to 1901. These issues include the purpose of manufacturers catalogues: did these lavishly illustrated order books signal the demise of an architects' responsibility for the decorative details of his brief? Was it possible for architects to simply order patterns and apply them glibly instead of creating their own designs? Another topical debate was concerned with the categorisation of this material: should terracotta be considered as a replacement for stone, or as an extension of brick? In addition, we can use the evidence of the buildings to discover whether colour-contrast enhances form, as Dublin architect A.E. Murray believed, or kills form, as Waterhouse came to believe.<sup>5</sup> We shall also briefly address the question of the viability of a contemporary national terracotta industry.

## TERRACOTTA IN BUILDINGS

In addition to terracotta's ability to enliven the streetscape, practical concerns such as its potential fireproof qualities and its resistance to pollution added to this material's value. Lauded in Britain for its resistance to the effects of soot and grime, terracotta was favoured for these qualities over stone. Dublin certainly had some thriving industries, predominantly biscuits, distilling and brewing.<sup>6</sup> However, its lack of coal-related industry ensured that the city's stonework escaped the extensive damage experienced in Britain's industrial cities. Indeed, in 1882 *The Irish Builder* remarked on the undamaged appearance of the stonework on Dublin's major public buildings: 'The Bank of Ireland, The Four Courts, The Custom House and The Royal Exchange are faring well, with some decay noticed on Trinity College and the Law Courts.'<sup>7</sup> This is in direct contrast to the serious erosion on the stonework suffered in Britain's industrial centres. In a reappraisal of Alfred Waterhouse's use of terracotta at the Natural History Museum, Mr J. Millar Carr saluted his 'true modern use of terracotta', and, significantly, in the light of the remarks above, he notes that twenty-five years after its completion the building looks almost as clean as when it was first built, 'surely a valuable quality in our dirty atmosphere'.<sup>8</sup>

In the catalogue that accompanied the Irish Industrial Exhibition of 1853, one of the contributing writers, W.K. Sullivan, stressed the importance of mineral resources in relation to a country's wealth. Significantly, he also remarked on the important role geology played in dictating the appearance of a country's architecture:

Architecture [is] an art which depends in a great degree upon the comparative abundance and quality of building materials. Where these are bad, or scarce, or expensive, architecture never progresses ... why has Rome developed her architecture? Because it is situate upon the tertiary travertine. Why is there such a general tendency to ornamental architecture in the houses of Paris? Because the soft tertiary limestone of Montmartre is cheap and abundant.<sup>9</sup>

Sullivan went on to recommend terracotta for enlivening the façades of large houses and public buildings, and noted its cost-efficiency:

That it is very much cheaper than stone there can be no doubt, for it is used in Paris, where one of the best and easiest worked stones in Europe exists; and if it is found advantageous there, how much more so would it be here, where stone for working ornaments and figures is very expensive and has to be imported?

Pertinent to an exhibition that was concerned with both showcasing and promoting Irish industry, Sullivan claimed that Ireland did in fact have an abundance of material suitable for producing terracotta. However, if this was indeed the case, how did it come to pass that the decorative terracotta on every significant building in Dublin was made by just three major companies, all of them British?

## TERRACOTTA PRODUCTION

The usual route into terracotta production was via the brick industry. In fact, major brickworks often branched out into terracotta production for prestige and in order to gain spin-off orders for matching bricks.<sup>10</sup> Two Dublin architects closely associated with the use of terracotta, J.F. Fuller and A.E. Murray, both consistently ordered bricks from their terracotta supplier to blend with their chosen architectural ceramic. However, only large companies were in a position to undertake the kind of long-term investment terracotta production entailed.

Although Britain had many advantages over Ireland in terms of producing architectural terracotta, it remained the most challenging area of the clay industry. While materials scientists currently maintain that Ireland does have deposits of suitable clay for terracotta production (situated mainly in Cavan), the economic condi-

tions in Ireland during the mid to late-nineteenth century negated the possibility of a national terracotta industry.<sup>11</sup> These conditions, frequently examined in contemporary trade journals, include the lack of serious and sustained investment in brickworks and quarries, and a less than ideal communications network.<sup>12</sup>

With the exception of the Kingscourt Brickworks in Cavan, used by William Isaac Chambers, and the Lagan Vale Estate Brick and Terracotta Works in Belfast architects working in Ireland found it easier and cheaper to import the materials they needed. It seems that Kingscourt and Lagan Vale produced terracotta on a modest scale only, since the author has so far failed to discover a major frontage in Dublin faced with ceramic supplied by that company.<sup>13</sup>

It is perhaps indicative of the problem of achieving the correct balance that today the Dublin-based ceramicist Terry Carton employs a mix of up to fifteen different clays to arrive at a suitable material. This gives us some idea of the complexities inherent in high-quality clay production. This goes some way to explaining why the terracotta which adorns the façades of D'Olier Chambers, Baggot Street Hospital and Kensington Lodge, Rathmines, for example, was imported from the major producers in Britain – J.C. Edwards and Messrs Denis, both in Ruabon in Wales, and Wilcock and Co (Burmantofts) in Leeds.

## LOCKWOOD AND MAWSON AND THE SOUTH CITY MARKETS

We begin our discussion of case studies with the South City Markets on South Great George's Street, the competition for which took place in 1878. It is notable for introducing Dublin to the use of architectural terracotta on an unprecedented scale, in conjunction with design principles associated with Alfred Waterhouse and another leading practitioner in the medium, George Gilbert Scott.<sup>14</sup> In fact, Alfred Waterhouse was the adjudicator in this competition, while Maurice Craig, in a reference to Waterhouse's association with the Prudential Assurance Company and in particular his design for their London head office in Holborn, describes the South City Markets as 'the nearest equivalent in Dublin to the Prudential in Holborn'.<sup>15</sup> The winning design was by the English firm Lockwood and Mawson, who had established their reputation in Britain with Saltaire in Yorkshire, one of the purpose-built industrial estates of the nineteenth century.<sup>16</sup>

Despite the alterations made to the markets in the aftermath of fire damage in 1892, the elements discussed here remain as originally planned. The architects' use of bright red brick in combination with small blocks of geometrically shaped terracotta of the same hue is in sympathy with the Waterhouse idiom. For example, Lockwood and Mawson effect a strong horizontal across the entire façade by plac-



2 – *South City Markets:*  
*detail of corner pavilion with pyramidal mansard roof and tourelles*

ing a band of diaper pattern between the first and second storeys (Plate 1). This horizontality is repeated in the machicolated cornice and in the balusters, all composed of regular-sized small blocks of terracotta. Therefore, the employment of terracotta on the South City Markets could be read as an argument for its use as an extension of brick since the decoration is repetitive and the pieces used are small. This interpretation of the role of terracotta in building accords with the approach to terracotta by both Waterhouse and Scott.<sup>17</sup>

The South City Markets owe a debt also to Scott's elevational treatment of St

Pancras Chambers, London (formerly the Midland Grand Hotel, 1867-73). This can be seen in elements of the roofline and the hierarchical window treatments. Where Scott opted for trefoils and circles in his fenestration, Lockwood and Mawson employ a combination of quatrefoils and rose patterns. In keeping with the fashion of the period, the principal entrance on South Great George's appropriates the language of Gothic cathedrals for a commercial purpose: a double-arched opening is surmounted by a triple opening featuring geometrical tracery and lancets. These elements are flanked by twin turrets and crowned by crockets. An exotic note is introduced at the corners with pyramidal mansard roofs in conjunction with tourelles (Plate 2). Scott employed these motifs on the Midland Grand Hotel, although there the roofline is even spikier. It is not surprising, then, that against all this surface richness, the submission by the Irish firm of McCurdy and Mitchell was deemed 'a little flat in treatment, but no doubt with the effect of coloured materials much of the flatness would disappear'.<sup>18</sup>

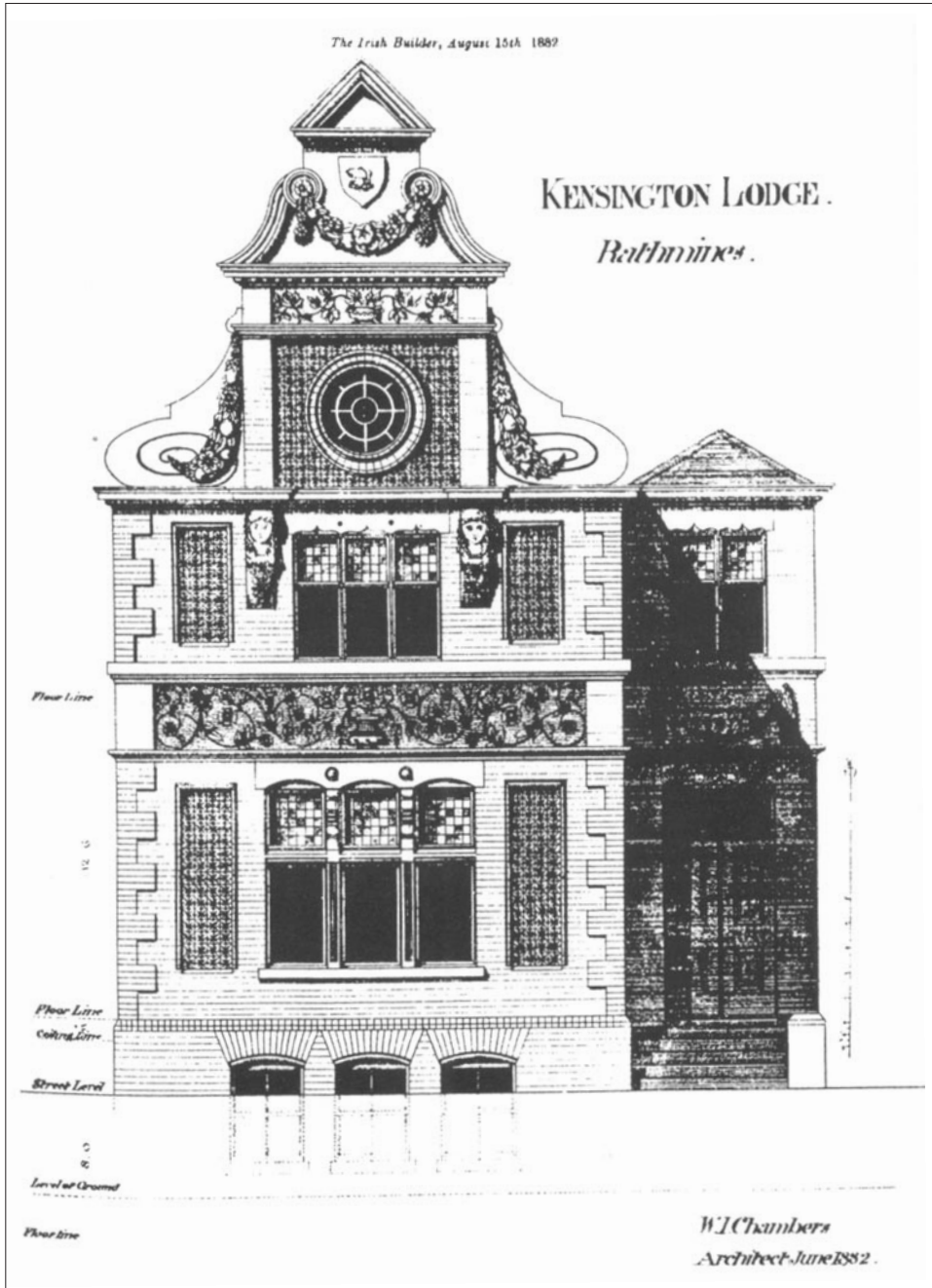
#### WILLIAM ISAAC CHAMBERS AND KENSINGTON LODGE

William Isaac Chambers was an English architect who was active in Ireland from about 1880 to about 1888.<sup>19</sup> By 1890 Chambers had returned to England, where he maintained an office at Savoy House, London. Many of Chambers' designs in England and Ireland are picturesque essays in the style of the domestic revival. Whenever possible, Chambers sourced his materials in Ireland. The pretty Glebe House and Groom's Cottage by Chambers at Monasterevan, Co Kildare, employ moulded brick supplied from Messrs Thompson of Kingscourt, Co Cavan.<sup>20</sup>

Chambers designed Kensington Lodge in Grove Park, Rathmines, for himself in 1882, and it is therefore a reliable indication of his own taste. The terracotta for this house was modelled to Chambers' own designs, and imported from Wilcock and Co (Burmantofts) in Leeds. Remarks in *The Irish Builder* suggest that this may be the first introduction of architectural terracotta to Ireland, and the response was favourable:

We have inspected some of the specimens of this terracotta, and more artistic or beautifully modelled work it is difficult to conceive, every outline is as sharp and well received as if straight from the carver's chisel; the colour is very good; and we are sure that, when once introduced into this country, it will meet with the approval and demand it certainly deserves.<sup>21</sup>

These remarks indicate that those involved in the building trade were impressed with terracotta's ability to rival stone. Although today much of this crispness has



3 – William Isaac Chambers, Kensington Lodge (1882), Rathmines: elevation  
(THE IRISH BUILDER, 15 August 1882)





*Kensington Lodge,  
Rathmines*

*4 – View from the street  
showing the highly  
decorative façade*

*5 – Detail showing Baroque  
female herms*

been lost through atmospheric erosion, it remains a remarkable building.

For his own home, Chambers opts for a somewhat weighty interpretation of Queen Anne, expressed in the variety of detailing (Plate 4). A heavy swag over the entrance is accompanied by recessed, vertical foliate panels which flank the ground-floor windows. Running above the string-course is a horizontal panel of dogtooth pattern, set into the wall surface. Adding further to the animation are two Baroque female herms complete with diadems and breast rosettes (Plate 5). These features are flanked by a minor reiteration of the foliate panels. Crowning the whole, the shaped gable is pierced by a wheel window, contributing to the lively character of this unique house.

Some changes can be noticed by comparing the building with the architect's published elevation of 1882 (Plate 3). In the drawing, the gable features an idiosyncratic swan's neck pediment, flanked by heavy scrolls enriched with garlands. This ornate feature has, however, been simplified in execution. A technical problem such as warping, resulting in substandard ceramic, could account for the modification.

Another potentially problematic area lay with the preparation of shrinkage-scale drawings. This is an issue which James Holroyd, the manager of Burmantofts, addressed in a lecture given to the Leeds Architectural Association in 1881.<sup>22</sup> Holroyd stressed the need for the architect working with terracotta to familiarise himself with the particular demands of this material. This entailed planning ahead for the decorative elements; on average, the manufacturer needed eight weeks notice. In addition, architects were required to supply the modeller with two sets of drawings – one standard set of drawings of the enrichments, and one set drawn to shrinkage scale. In the early days of terracotta production, the manufacturer took care of the shrinkage-scale drawings since this was a specialised area. However, it became apparent that if this skill was not mastered, architects' designs would diminish in crispness by passing through another's hands.<sup>23</sup>

An editorial of 1904 in *The Irish Builder and Engineer* provides a fascinating insight into the concern regarding the possible abuse arising from the use of 'free designs' in manufacturer's catalogues: 'There is a regrettable tendency nowadays for architects to shirk much of the designing necessary for work which is to be executed in terracotta, and to throw this burden on to the manufacturer.'<sup>24</sup> However, the concerns voiced here may have been without real foundation, and more recently one authority has noted that 'even the laziest third-rate architect or builder would encounter the practical problem that terracotta had to course in with brickwork and there was, as yet, no standardisation in the size of bricks'.<sup>25</sup> Indeed, this last author argues that this practice of designing was completely against the ethos of the Victorian architect.<sup>26</sup> Certainly an analysis of A.E. Murray's drawings indicates that he, like Waterhouse, inked in all of the design details. Although small and difficult





6 – A.E. Murray, *Working Boys' Home* (1891),  
*Lord Edward Street: published perspective*



7, 8 – A.E. Murray,  
*Working Boys' Home* (1891),  
Lord Edward Street:  
details of gables showing  
animal motifs



9 – Example of terracotta  
supplied from a catalogue:  
a ridge tile to a gable

to see, the curious animal motifs (Plates 7, 8) in, for example, his Dublin Working Boys' Home on Lord Edward Street can be discerned even in the published drawing (Plate 6). An example of the type of item likely to be ordered from the catalogue is also illustrated (Plate 9). While pattern books featured drawings by well-known architects, these designs were intended to showcase the possibilities of designing with ceramic features.

### J.F. FULLER AND D'OLIER CHAMBERS

Occupying a commanding site, D'Olier Chambers (1891) is undoubtedly one of the glories of terracotta building in Dublin (Plate 10). Its location on a tapering corner site, encompassing Hawkins Street on one side and D'Olier Street on the other, lends it an impact similar to that of the Flatiron building in New York. The building's situation brought with it an opportunity for dramatic handling, which its architect James Franklin Fuller admirably supplied.

Fuller was born in Co Kerry in 1835, and received his architectural training in England. He worked with Alfred Waterhouse for one year, in 1859, and it was an exciting one, for this was the year in which the office was working on Waterhouse's successful entry for the Manchester Assize Court competition. If Fuller harboured a manifesto regarding the use of terracotta we are none the wiser, since his autobiography, *Omniana*, reveals little of his architectural opinion and only tantalising glimpses of his contemporaries William Burges and Waterhouse, though he does at least mention the ongoing battle between the 'Gothic young bloods' and the 'Classicists', current during his time with Waterhouse.<sup>27</sup> The classicists held the opinion that the Gothic style in architecture was not dignified enough for a public building such as the Manchester Assize Courts. Despite this opinion, Waterhouse won the competition, and the approval of John Ruskin sealed his triumph.<sup>28</sup> Three years later, Fuller returned to Ireland and took up the position of architect to the Ecclesiastical Commissioners. Apart from his unremarkable work with George Ashlin on the enlargement of Ashford Castle, Fuller is better known for his deft handling of Irish Romanesque, most notably at Rathdaire, Co Laois (1885).<sup>29</sup>

At D'Olier Chambers, his most expansive essay in terracotta, plain brick courses act as a foil to the large decorative panels (Plate 12). Marking a fundamental difference in approach between the classicists and the goths, the dramatic soaring roofline features tall arcaded chimneys, thereby transforming a utilitarian necessity (Plate 11). Arabesque panels, in combination with panels of attenuated grotesque decoration and high-relief festoons, makes this building an argument in favour of terracotta as a replacement for stone. The sculptural treatment features a combina-



10 – J.F. Fuller, D'Olier Chambers (1891), corner of D'Olier Street / Hawkins Street  
opposite 11, 12 – D'Olier Chambers: detail of gable stack and D'Olier Street elevation

tion of Flemish and Italianate motifs, and with the enrichments extending to the soffits, the crisp stone-like quality is reinforced. Most of the visual impact is on the façades on College Street and D'Olier Street, while Hawkins Street receives less enrichment and is therefore expressed as the least important of the three elevations. In the building accounts, Fuller specifies that J.C. Edwards' 'best buff terracotta' is to be used, and also their facing brick.<sup>30</sup> It is likely that Fuller became familiar with the J.C Edwards ware through his contact with Alfred Waterhouse, since Edwards was a trusted supplier. In his employment of a single buff shade, Fuller appears to be following the Waterhouse dictum that colour contrast kills form.

A premises on Dublin's Grafton Street designed by J.F. Fuller is advertised in the lavishly illustrated J.C. Edwards catalogue of 1890 as 'a specimen of the materials manufactured'.<sup>31</sup> Unfortunately, it was not illustrated and the street number was not given. However, it is highly likely that this is the building now occupied by the AIB Bank on the corner of Grafton Street and Chatham Street, which was, at the turn of the century, the premises of Lambert Brien & Co (Plate 15).<sup>32</sup> The façade appears in a Lambert Brien & Co advertisement of 1900, illustrated in Bennett's *Encyclopaedia of Dublin*, looking much as it does today.<sup>33</sup> The four-bay, four-storey building is clad in the hard-wearing, bright red Ruabon







*The former Lambert Brien & Co building (now AIB Bank) on Grafton Street,  
attributed to J.F. Fuller*

*13, 14 – Gable and panel details*

*opposite 15, 16 – Chatham Street / Grafton Street corner and gable detail*



terracotta for which J.C. Edwards was famous. Originally there were two gables on each façade facing onto Grafton Street and Chatham Street. Today, the double gables have been reduced to single ones on each side. Compared to Fuller's work on D'Olier Chambers, the ratio of terracotta here outweighs the brick, although the actual panels of terracotta used on D'Olier Chambers are larger. The Grafton Street and Chatham Street elevations are divided into a grid of windows of various sizes that mark the storeys, and this division is enhanced by the decorative detail of graduated richness. A delightful frieze of putti and grotesque heads runs above the ground floor (Plate 14).

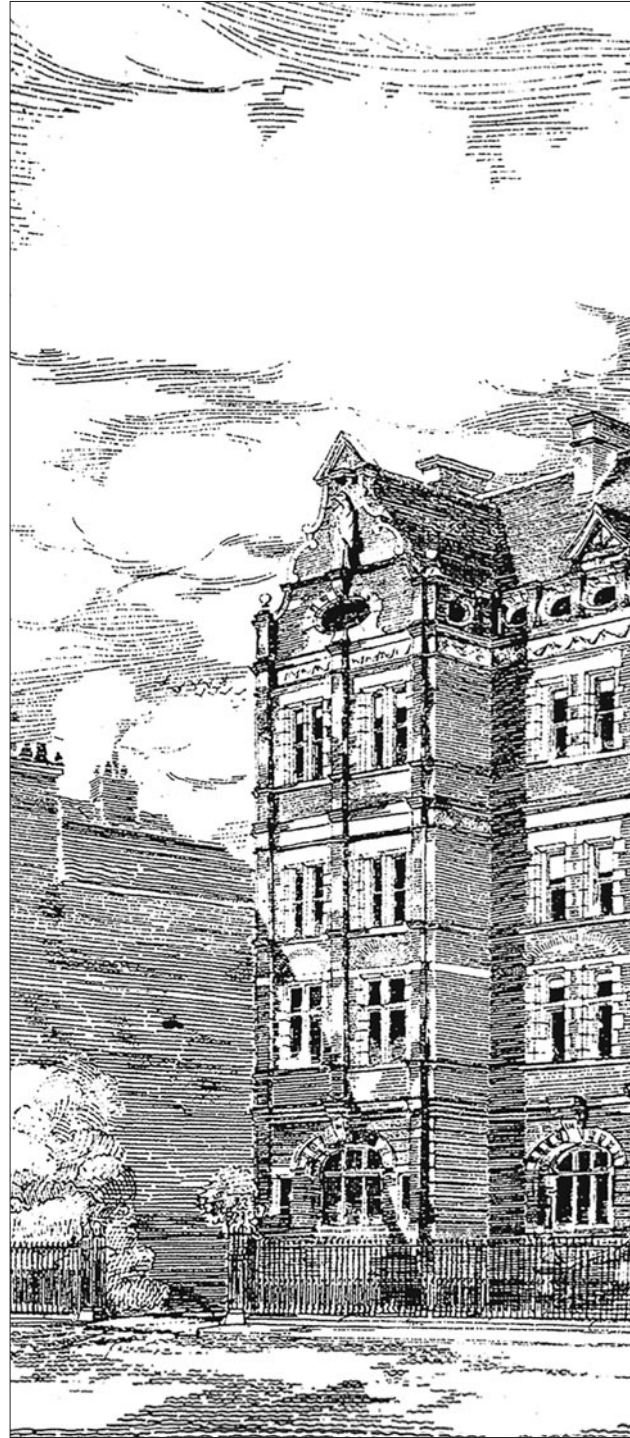
The textural beauty of terracotta in combination with brick is expressed in the spandrels of the gable against the sunken pilasters of brick (Plate 13). Subtle variations in the detailing and layering reveal the architect's skill in controlling the surface. Under these recessed pilasters are members that are flush, while the window architraves on each floor are marked by slight changes in the mouldings (Plate 16). In place of capitals the architect has used corbels, which assist in the creation of texture and the manipulation of light, thus distinguishing the elements of a façade comprising one bright colour. The depth of modelling on this building, especially in the putti, indicates that a considerable amount of hand-finishing or 'settling' was used.



## A.E. MURRAY AND THE ROYAL CITY OF DUBLIN HOSPITAL

Albert Edward Murray was a member of an architectural dynasty; each generation contributed significantly to the face of the city. His grandfather – a cousin of Francis Johnson, and his assistant – was responsible for the enlargement and present façade of the College of Surgeons (1825). Murray's father, William George Murray, designed the imposing façade of the Union Bank on College Green, and the Royal College of Physicians on Kildare Street. A.E. Murray was a busy and successful architect, and was president of the Royal Institute of the Architects of Ireland from 1914 to 1917. He worked for the private and public sector, designing schools, hospitals and suburban homes. Murray could easily lay claim to Alfred Waterhouse's title 'Mr Terracotta' for his enthusiastic use of this material on numerous buildings in Dublin in the last quarter of the nineteenth century.

Originally founded in 1832, the Royal City of Dublin Hospital, Baggot Street, gained its new façade, designed by Murray, in 1892. This was the same year it won its royal association through Queen Victoria's patronship of the institution.<sup>34</sup> The hospital was also situated on the Earl of Pembroke's estate; indeed, the Earl offered £6,000 towards



17 – A.E. Murray, *Royal City of Dublin Hospital (1892)*, Baggot Street: perspective (*THE IRISH BUILDER*, 15 December 1892)





18 – Royal City of Dublin Hospital: gable detail

its erection. Consequently, the new façade needed to reflect this status, and the emblems of both the Queen and the Earl are included with those of the City of Dublin. The heraldry is missing from the original drawing, which was executed when the hospital was known simply as the City of Dublin Hospital (Plate 17).

Murray consistently ordered facing brick and terracotta from Messrs Dennis of Ruabon, with one order only from J.C. Edwards.<sup>35</sup> The hallmark of all Murray's terracotta designs is bichromatic; buff terracotta marks the enrichments in the creation of a visually effective composition. The hospital's façade consists of a triple-gabled frontage, of which the highly ornate central gable commands the main focus of attention. Sumptuous garlands are entwined around curvaceous volutes, the whole crowned by a scallop shell (Plate 18). All of this ebullient detail is executed in buff terracotta, creating an exterior reminiscent of the Flemish seventeenth century. The positioning of a *flèche* on the crest of the roof further enhances the central focus. On the finished building, sometime after 1905, Murray changed the upright railing (never executed, but seen in the drawing) to open work, which echoes the *oeil de boeuf* motif of the parapet (Plate 19). Murray's pride in the building is underlined by the use of his initials as decoration on several grilles on the façade.<sup>36</sup>



19 – *Royal City of Dublin Hospital: elevation to Baggot Street*

The response to the building was favourable: ‘It will be an ornament to the neighbourhood in which it has been erected ... and [shows] that excellent work and effect can be obtained by the use of red brick and terracotta.’<sup>37</sup> Compare how Murray’s use of terracotta panels key in smoothly against the brickwork on this building (and, indeed, on all of his other works) in contrast to the rough edges of the herms against the brick courses at Kensington Lodge. This, of course, could be evidence of the builder’s inexperience in aligning the terracotta with the brick courses. If *The Irish Builder* is correct, and terracotta was first used in Ireland at Kensington Lodge, then such inexperience is understandable. We must remember also that experienced English contractors and subcontractors were employed for the South City Markets while it is likely that Chambers used local tradesmen.<sup>38</sup>

#### CARROLL AND BATCHELOR AND THE RICHMOND HOSPITAL

The Dublin-based firm of Carroll and Batchelor were the architects of the light and airy Richmond Hospital (today Richmond Courts), North Brunswick Street, in 1897.

The original hospital follows design principles championed by Florence Nightingale. Twin two-storey pavilions, originally housing the wards, flank the central administrative block. This arrangement ensured cross-ventilation and light, while the towers housed essential utilities. These exotic copper-domed pavilions (Plate 20) are responsible for the persistent tale that this building plan was destined for India but, through a mishap, was built in Dublin. In this instance we see the development of a robust use of terracotta as opposed to its decorative qualities. Large blocks of terracotta are employed in an ashlar-like manner in the emphatic gate piers. This structural use of terracotta is repeated in the brackets and piers of the second-storey verandas. A notable and very apt feature is the way in which vertical brick courses emerge as flame-tipped terracotta finials on the roofline. The terracotta supplier is so far unknown to the author. Carroll and Batchelor went on to design the Royal Victoria Eye and Ear Hospital, Adelaide Road, begun in 1901, again employing the latest principles in hospital construction in conjunction with innovative materials.<sup>39</sup>

#### PAUL MERRILL AND SPENSER HARTY AND THE FRUIT AND VEGETABLE MARKETS

In contrast with the South City Markets, the Fruit and Vegetable Markets building (1892) on St Mary's Lane is on a smaller scale and comprises one storey (Plate 21). The markets were created after the clearing of a congested site on St Mary's Lane and St Michan's Street. Fourteen years separates this structure from the markets on George's Street, and we can expect some significant changes in principle. This building presents us with an Irish example of the collaboration between engineers and architects working with the vernacular idiom that characterises the prelude to the modern movement. Paul Merrill created the design but died before its execution. Spenser Harty was the city engineer, and the product of their collaboration was the object of civic pride. 'Infinite credit' was his due, and it was thought that the building would 'contrast favourably with any similar building in the Kingdom'.<sup>40</sup>

Limestone, terracotta and iron are employed in a functional manner, maximising the characteristics of each material in line with the ethos of modern engineering interests. Cast-iron columns support the building, while the entrance in the form of a triumphal arch is in grey limestone, which contrasts well with the warmth of the terracotta and brick (Plate 23). The tympanum of the central entrance and the arch of every second bay are decorated with hammered ironwork by Messrs McGloughlin & Son, Great Brunswick Street (Plate 22).

Here we see the plastic qualities of terracotta fully utilised in a narrative pro-



20 – Carroll and Batchelor, pavilion of the former Richmond Hospital (1897),  
North Brunswick Street

21 – Paul Merrill and Spenser Harty, Fruit and Vegetable Markets (1892), Smithfield:  
St Mary's Lane corner elevation







*Fruit and Vegetable Markets*

22 – Main elevation

23 – Main entrance

24 – Detail of arch impost



gramme suitable to the building's function. The various fish and vegetables available within the market mark the impost of each arch, effectively creating an exterior that reflects the business of this structure (Plate 24). This brings to mind the work created in stone by the O'Shea brothers on the museum building in Trinity College Dublin, and the naturalistic carvings by Charles W. Harrison on the Kildare Street Club, all carried out more than thirty years previously. The illustrative nature of the terracotta modelling is given further emphasis by Harrison's sculpture group depicting 'Fair Trade and Justice', with the city's arms over the main entrance. The trade name of the brick and terracotta supplier Henry Dennis – Dennis, Ruabon – is stamped on one of the bricks on St Michan's Street.

## CONCLUSION

Terracotta has been around since classical antiquity, and each era that rediscovers it adds to its versatility. However, the Irish response to the use of decorative terracotta was not universally positive. Recognising that the use of architectural ceramic for the proposed new National Library and Museum on Kildare Street would entail imports, geologist Professor Hull objected: 'I will here assume ... that brick and terracotta will not be used ... they would have to be imported to a large extent and in such a case the opportunity for using Irish building stone would be lost.'<sup>41</sup> Speaking before the Royal Dublin Society in 1883, Professor Hull went on to highlight two issues that were detrimental to the success of the Irish materials industry – the 'excessive rates' then charged for freight, and the fact that valuable quarries in Galway and Donegal were inactive. Concerned at the prospect of importing materials to decorate a national building, Hull believed the museum building in Trinity College provided the model (by showcasing Irish stone) for the new complex.

Although pragmatic reasons such as terracotta's resistance to grime and its fire-safety qualities undoubtedly contributed to its popularity in the late-nineteenth century, in the final analysis sheer enjoyment of its appearance is the main reason for its selection by Dublin's busiest architects. Terracotta was associated with enough old-fashioned craft to satisfy Ruskin and enough technology to appeal to 'modern' builders of the time. Against a cityscape of restrained horizontals arising from Dublin's Georgian architecture and its modernist buildings, these dramatic gabled façades offer a conspicuous reminder of the decorative taste of the Victorian era.

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## ENDNOTES

- <sup>1</sup> John Gage, *Colour and Culture* (London 1993) 11.
- <sup>2</sup> John Ruskin, *The Seven Lamps of Architecture* (London (1849) 1956) 138-9
- <sup>3</sup> For a discussion of the economy of low-relief moulds versus the costly production of high-relief or sculptural pieces, see Michael Stratton, 'The Terracotta Industry', *Industrial Archaeological Review*, viii, 1986, 205-9.
- <sup>4</sup> Jane Fawcett (ed.), *Seven Victorian Architects* (London 1976) 104.
- <sup>5</sup> Colin Cunningham, *Alfred Waterhouse 1830-1905: Biography of a Practice* (Oxford 1992) 170. As Cunningham explains, Waterhouse developed a keen sense for creating harmony in constructional polychromy and a strong conviction regarding the combination of certain materials. Waterhouse believed that form should not be sacrificed to colour, except deliberately.
- <sup>6</sup> J.W. O'Hagan (ed.), *The Economy of Ireland Policy and Performance* (Dublin 1987) 21.
- <sup>7</sup> *The Irish Builder*, xxiv, 1882, 34.
- <sup>8</sup> *The Irish Builder and Engineer*, xlvi, 1903, 1,862.
- <sup>9</sup> John Sproule (ed.), *Catalogue of the Irish International Exhibition of 1853* (Dublin 1854) 93-4.
- <sup>10</sup> Stratton, 'The Terracotta Industry', 211.
- <sup>11</sup> Bill Procter, materials scientist, is of the opinion that the best Keuper marl in the world is deposited in the Kingscourt area of Co Cavan. Kinahan's survey notes the excellence of the brick produced from the Keuper marl at Kingscourt. See G.H. Kinahan, 'Economic Geology of Ireland', *Journal of the Royal Geological Society of Ireland*, vii, 1885-89, 333.
- <sup>12</sup> Kinahan, 'Economic Geology of Ireland', 328-9. Kinahan's report notes that after the devastation of the famine, imported building materials gained a niche in the Irish market while national manufacturers struggled to regain their former position. *The Irish Builder* regularly raised the issue of the importance to Irish manufacturers of a competitive and affordable rail system, and up to 1903 commented on the regrettable fact that many construction materials could be imported and sold more cheaply than produced in Ireland. See *The Irish Builder*, xxiii, 1881, 311, and *The Irish Builder and Engineer*, xliv, 1903, 2,095.
- <sup>13</sup> The Kingscourt Brickworks was later named Kingscourt Brick and Tile Works. I am grateful to Susan Roundtree for bringing this article to my attention. By 1903 many of the significant buildings in Dublin were already built, and therefore Kingscourt was too late to supply the home market. It is also a moot point whether they had the capacity to supply large and challenging orders; see *The Irish Builder and Engineer*, xliv, 1903, 2,066.
- <sup>14</sup> Cunningham, *Waterhouse*, 162.
- <sup>15</sup> Maurice Craig, *The Architecture of Ireland from the Earliest Times to 1880* (Dublin 1997) 307.
- <sup>16</sup> Rodger Dixon and Stefan Muthesius, *Victorian Architecture* (London 1985) 168.

- <sup>17</sup> Michael Stratton, *The Terracotta Revival* (London 1993) 80-1, and Cunningham, *Waterhouse*, 162. While Stratton places Waterhouse in the terracotta-as-brick camp, Cunningham asserts that Waterhouse viewed terracotta as a unique material 'requiring its own particular treatment'.
- <sup>18</sup> David J. Griffin and Simon Lincoln, *Drawings from the Irish Architectural Archive* (Dublin 1993) 66.
- <sup>19</sup> See 'A Database of Irish architects 1720-1940', currently in the process of compilation by Ann Martha Rowan for the Irish Architectural Archive, and presented in serial form in *IADS*.
- <sup>20</sup> I am grateful to Susan Roundtree for supplying me with her own photographs of these buildings.
- <sup>21</sup> *The Irish Builder*, xxxiv, 1882, 241. The statement contained in this issue indicating that this is the first use of terracotta in Ireland is confusing; the South City Markets building was begun in 1878 and opened in 1881.
- <sup>22</sup> *The Building News*, 1881, 721
- <sup>23</sup> With experience, Alfred Waterhouse became proficient in this area – see Cunningham, *Waterhouse*, 161. We can only speculate as to A.E. Murray's skill in preparing shrinkage-scale drawings. Given his views regarding the encroachment of 'specialists' in architectural practice, and his insistence on architects maintaining responsibility for all aspects of their work, we can assume that he was capable of producing them. See *The Irish Builder*, xxxiii, 1891, 280.
- <sup>24</sup> *The Irish Builder and Engineer*, xlv, 1904, 346.
- <sup>25</sup> Stratton, *The Terracotta Revival*, 97.
- <sup>26</sup> *ibid.*, 98
- <sup>27</sup> J.F. Fuller, *Omniana* (Dublin 1916) 81
- <sup>28</sup> *ibid.*, 81-2.
- <sup>29</sup> Craig, *The Architecture of Ireland*, 301.
- <sup>30</sup> Patterson, Kempston & Shortall Collection, Irish Architectural Archive, Dublin, 0594.
- <sup>31</sup> J.C. Edwards, *Catalogue of Patterns* (Ruabon 1890), a publication originally issued in 1883.
- <sup>32</sup> I believe that this may well be the building in the J.C. Edwards catalogue for the following reasons. It is conceived in the bold, red terracotta identifiable with the Edwards ware. The type of modelled panel, i.e. the pattern and the degree of relief, is very close to D'Olier Chambers (by Fuller, 1891), where the Edwards ware was used. The device of the cornice jutting into the incline of the gable is used in both buildings. This occurs above the windows in Lambert & Brien (now AIB Bank) and in line with the impost marking the round-headed fenestration in D'Olier Chambers. The composition of the gable area in both buildings is very similar.
- <sup>33</sup> Douglas Bennett, *Encyclopaedia of Dublin* (Dublin 1991) 31
- <sup>34</sup> Richard Lattimore, *Rambling Around Baggot Street* (Dublin 1993) 29.
- <sup>35</sup> A.E. Murray used facing brick and decorative terracotta from Messrs Dennis of Ruabon on the Working Boys' Home, Royal City of Dublin Hospital, and Drummond Building (1901, now Hodges Figgis), among others. He used J.C. Edwards facing brick on Waterloo House (1889).
- <sup>36</sup> Other changes include the omission of statuary from the pavilions; in their place there are urns, and Murray shows his dormers as pedimented in the drawing but in execution they are not.
- <sup>37</sup> *The Irish Builder*, xxxv, 1893, 264.
- <sup>38</sup> A report on the lack of trade at South City Markets suggested that a 'boycott' was in place due to the use of English contractors in its construction. See *The Irish Builder*, xxix, 1882, 183-4.
- <sup>39</sup> *The Irish Builder*, xliii, 1901, 789-10.
- <sup>40</sup> *The Irish Builder*, xxxiv, 1892, 262.
- <sup>41</sup> *The Irish Builder*, xxv, 1883, 159.