Modernism and the Quadrangular Courtyard: Wellington's Berhampore Flats, 1938-40

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ABSTRACT: Wellington's Berhampore Flats (1938-40) are recognised as being among the first full expressions of modernist architecture in New Zealand. This paper teases out and complicates the accepted interpretation of the Berhampore Flats as being, by New Zealand standards, stylistically advanced, by focusing on one of the ways in which it remained conventional, namely, its retention of a quadrangular courtyard layout. The paper outlines the British medieval, educational, garden city and garden suburb associations of the quadrangular courtyard layout, suggests a possible lineage for Wilson's use of this layout at Berhampore and considers the implications of his use of the quadrangle in combination with the flat roofs and lack of applied ornament of modernism. The aim of this paper is not to challenge the accepted interpretation of the Berhampore Flats as being stylistically advanced by New Zealand standards, but rather to expand upon and enrich this interpretation by acknowledging that multiple threads and influences can be read into the design.

Wellington's Berhampore Flats, or Centennial Flats as they are properly known, designed by F Gordon Wilson, chief architect of the Department of Housing Construction, in 1938 and opened in 1940, have an established place within New Zealand architectural historiography. In his history of New Zealand architecture (1991), Peter Shaw wrote, "European Modernist in conception and design, this was the first example of multi-unit housing in New Zealand."[1] He also quoted thus from architect Ken Davis' Bachelor of Architecture research report (1987): "Both in form and content the Berhampore Flats were one of the first expressions of the ideals of European Modernism in New Zealand and their design recalled mass social housing in Berlin by Bruno Taut and Hans Scharoun between 1926 and 1931."[2] Shaw added JJP Oud's Hook of Holland, Rotterdam (1924-27), into the mix of precedents and influences, notably for Berhampore's "main public space ... centred on a circular recreation hall" and its two storeyed blocks with "long horizontal first-floor balconies ... he [Wilson] even used the same light metal grilles [as Oud] to separate individual terraces in the rear access balconies."[3]

This interpretation, without the mention of specific precedents, is echoed in my own essay in Barbara Brookes' edited collection on the idea of the home in New Zealand (2000): "The scheme departed from the English cottage style of the state houses and, with its flat roofs and lack of ornament, showed that the new architecture of 1920s Europe – the International Style – had reached New Zealand."[4] It has been continued by historian Ben Schrader in his recent (2005) history of state housing in New Zealand:

> The most startling aspect of the complex was its modernist architecture. Designed by Gordon Wilson, the flats were perhaps his revenge on the English cottage style of state house. One of the first examples of modernism in New Zealand, they were based on developments in Europe.[5]

Such literature posits the Berhampore Flats in opposition to the thousands of state rental houses built by the first Labour government during its 1935-49 term. The above quotations emphasise difference between state houses and state flats at the levels of architectural

[1] Shaw *New Zealand Architecture* p 140.

[2] Davis "A Liberal Turn of Mind" p 21, quoted in Shaw *New Zealand Architecture* p 141.

[3] Shaw *New Zealand Architecture* p 141. Note: my brackets.

[4] Gatley "Going Up Rather than Out" p 141.

[5] Schrader *We Call It Home* p 104.

precedent, influence and style. Occupant density is a further point of difference, with the Berhampore Flats being considered medium density (50 flats on just under two acres),[6] and the schemes of detached and semi-detached houses being considered low density (four or five houses per gross acre, i.e. including roading). Given the emphasis placed on differences in precedent, influence, style and density, state flats become the antithesis of state houses, with the houses being interpreted as "the closest New Zealand came to realizing the garden city ideal,"[7] and the flats as the realisation of European modernism.

In my Master of Architecture thesis, completed in 1997 and on which the 2000 essay referred to above was based, I had suggested an alternative reading of the Berhampore Flats, acknowledging that while the scheme was consistent with the modernist aesthetic, it was not "devoid of all references to the past."[8] Further: "while the site planning addresses modern attitudes towards the provision of fresh air and sunlight to each unit, it also maintains the quadrangular layout of early garden city housing schemes."[9]

This paper teases out this reading of the Berhampore Flats as being layered in its influences and references by focusing on the scheme's quadrangular courtyard layout and considering the British medieval, educational, garden city and garden suburb associations of quadrangular layouts. The paper suggests a garden city/suburb lineage for the use of this layout at Berhampore on the basis of Gordon Wilson's employment in the office of Gummer and Ford, WH Gummer's prior employment in the office of Edwin Lutyens, and Lutyens' commissions at Hampstead Garden Suburb, London. Having established this lineage, the paper suggests that with regard to layout at least, the Berhampore scheme is consistent with garden city and garden suburb ideology, rather than antithetical to it, as has generally been assumed to be the case.

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Quadrangular courtyard planning has a long history in Western architecture (and in Asian architecture too, but Asian precedents are beyond the scope of this paper, concerned as it is with establishing a partial British lineage for a New Zealand building). Though used earlier, for monasteries and priories for example, the quadrangular approach to planning is most closely associated with the collegiate quadrangle, the latter term having been derived from the recurrent quadrangular layout of medieval and subsequent colleges at Oxford and Cambridge universities,[10] and continued in the campuses of Oxford and Cambridge emulators throughout the Western world, particularly in the nineteenth century when a host of new universities was established and the layout, planning and Gothic architectural language of the two prototypical university campuses served as

[6] The site was one acre, three roods, 39.6 perches. See Certificate of Title 12/18.

[7] Schrader "Avoiding the Mistakes of the Mother Country" p 409. See also Schrader "A Brave New World?" pp 62, 69.

[8] Gatley "Labour Takes Command" p 97.

[9] Gatley "Labour Takes Command" p 97. My thanks to Paul Walker who, as the supervisor of my Masters thesis in the 1990s, suggested that I consider the quadrangular layouts used within garden cities and suburbs as a possible point of reference for Wilson in his design of the Berhampore scheme.

[10] The quadrangle can be seen in the earliest of the Oxford colleges, such as Merton College, its thirteenth- and fourteenth-century buildings built around what became known as the Front Quadrangle. See Brooke, Highfield and Swaan *Oxford and Cambridge* pp 62-63,78. See also Colvin "Architecture" pp 831-856; and Tyack "The Architecture of the University and the Colleges" pp 84-122.

the model to which others aspired.

Between the turn of the twentieth century and the outbreak of World War II, quadrangular layouts were being used for medium and high density housing internationally. Examples include HP Berlage's perimeter blocks in Amsterdam South (1902-20); Le Corbusier's Immeubles Villas for Une Ville Contemporaine (1922, unbuilt); Bruno Taut's housing projects in Berlin (late 1920s); Ernst May's work in and around Frankfurt (1925-30); and Stein and Wright's various superblocks in New York and at Radburn, New Jersey (mid-to-late 1920s and the 1930s).[11] Such schemes were widely published in books and journals. In addition, various English schemes were featured in *Planning: An Annual Handbook*, published annually by The Architect and Building News, London.[12]

Even though the quadrangular layout has a long history in Western architecture, and even though there is a range of possible precedents for such layouts within British, American and European modernism, there are particular grounds for suggesting a garden suburb lineage for Wilson's use of a quadrangular plan at Berhampore, namely, his employment in the office of Hoggard, Prouse and Gummer from about 1920 and then Gummer and Ford from 1923 to 1936 when he resigned to take up his position as chief architect within the newly established Department of Housing Construction.[13] That WH Gummer had been influenced by garden suburb ideology and imagery is clear from Gummer and Ford's design of the Dingwall Presbyterian Orphanage, Papatoetoe, Auckland (1928-30), discussed in more detail below. In light of the Papatoetoe project, it becomes relevant to recall Gummer's employment in the office of Edwin Lutyens for much of 1911.[14] Lutyens, in his capacity as Consulting Architect to the Hampstead Garden Suburb Trust, designed the axial central square of Hampstead Garden Suburb, its three key public and religious buildings, as well as nearby vicarages and houses.[15] Like Letchworth Garden City and other subsequent garden suburbs, Hampstead incorporated quadrangular housing. While in Lutyens' office, Gummer worked on at least one of Lutyens' Hampstead buildings, St Jude's Church (1907-13),[16] and thus it is reasonable to assume that he would have been familiar with Hampstead's quadrangular housing through site inspections and visits to the church, if not through his own interest in contemporary developments in architecture and urban/suburban planning.[17]

[11] These schemes are discussed in Gatley "Labour Takes Command" pp 98-100.

[12] E and OE [*sic*] *Planning: An Annual Notebook*. Cedric Firth owned a copy of the 1939 edition and it is possible that Wilson had access to an earlier edition when designing the Berhampore Flats.

[13] For biographical information on Wilson, see Davis "A Liberal Turn of Mind," pp 3-14; and Gatley "Wilson, Francis Gordon" pp 566-567.

[14] For biographical information on Gummer, see Lochhead "Gummer, William Henry" pp 209-210; Petry "The Public Architecture of Gummer and Ford"; Shanahan "The Work of William H. Gummer" pp 9-48; and Waite *In the Beaux-Arts Tradition* pp 6-11.

[15] Lutyens' work at Hampstead Garden Suburb included the Institute Hall (1907-9), the Free Church (1907-11) and St Jude's Church (1907-13), all in Central Square, as well as vicarages and housing on nearby North Square (1907-12) and housing on Erskine Hill (1907-10). See Gray "Hampstead Garden Suburb" n.p.

[16] Waite *In the Beaux-Arts Tradition* p 6.

[17] Gummer's interest in contemporary urban planning is confirmed by the fact that he, with Verner Rees and Ernest Schaufelberg submitted an entry in the competition for the design of Canberra (1911-12). In addition, Gummer and Ford's own library of books included a copy of the proceedings from the Royal Institute of British Architects' Town Planning Conference, held in London in 1910. See Petry "The Public Architecture of Gummer and Ford" Appendix 5. This holding suggests that Gummer may have attended this important event, even though he is not listed in the proceedings as a delegate.

These events suggest a direct chain of influence from Lutyens and British garden suburbs, to Gummer, to Wilson, and thus to the Berhampore Flats. But such a chain cannot begin with Hampstead Garden Suburb. Any discussion of garden suburbs must begin with Ebenezer Howard and the garden city idea, and must also consider the design input of Barry Parker and Raymond Unwin.

Howard's influential book *Tomorrow: A Peaceful Path to Real Reform* was published in 1898 and republished as *Garden Cities of Tomorrow* in 1902. Reacting against the ninteenth-century urban consequences of industrialisation, Howard identified advantages and disadvantages associated with living in urban and rural areas and formulated the decentralised and communally owned town-country (Garden City) as the solution to urban ills. He argued that Garden City would have the advantages of both urban areas (economic and social) and rural areas (fresh air and natural beauty), the disadvantages having been negated.[18]

The Garden City Association was formed in 1899 to realise Howard's ideas. It held a competition for the design of its first garden city, Letchworth, in 1904. The competition was won by the partnership of Parker and Unwin and the city was built north of London in the years that followed. Hampstead Garden Suburb, founded by Henrietta Barnett and designed by Parker and Unwin in 1906, was not a new town built in the country but rather a planned residential development in north-west London.[19] Garden suburbs such as Hampstead came to epitomise "garden city-type planning," even though this was quite at odds with Howard's original intentions.[20]

Letchworth and Hampstead share a common architectural language. It was developed not by Howard, but by Parker and Unwin. Of it, Stanley Buder has commented: "Parker and Unwin's winding streets with white gabled cottages and red roofs were now the garden-city signature, a visual shorthand for a low-density and open form of housing development."[21] The language was derived from the Arts and Crafts movement, from British Domestic Revival architecture and thus, ultimately, from romanticised notions of British medieval and vernacular buildings. In addition to this aesthetic, Hampstead Garden Suburb exhibited a full repertoire of Parker and Unwin's urban and suburban design ideas: "quadrangle arrangements of housing, parks, and cul-de-sacs."[22]

Parker and Unwin had published these ideas in *The Art of Building a Home* (1901). Unwin elaborated upon them his better known tome, *Town Planning in Practice* (1909; republished many times), which was illustrated with multiple images of Hampstead. Unwin's biographer, Frank Jackson, makes the point that Parker and Unwin's quadrangular housing schemes were "clearly based on the Oxford college layouts that he [Unwin] knew as a child"; that quadrangular green spaces were intended to foster "communal social relations" and a sense of unity; and that Unwin supported the inclusion of communal laundries, kitchens and dining rooms into such schemes to reduce cost.[23] The term cooperative quadrangle was used to describe the schemes that incorporated communal

[18] For information on the garden city movement, see Buder *Visionaries and Planners*; Hardy *From Garden Cities to Green Cities*; and Ward *The Garden City*.

[19] For information on Hampstead Garden Suburb, see Slack *Henrietta's Dream*.

[20] Buder *Visionaries and Planners* pp 84-85, 101-104.

[21] Buder *Visionaries and Planners* p 95.

[22] Rowe *Modernity and Housing* p 95.

[23] Jackson *Sir Raymond Unwin* p 42. Note: my brackets.

facilities.

Even though the "garden-city signature" was developed by Parker and Unwin, the inclusion of quadrangular housing within individual garden cities and suburbs received particular support from Howard, in part because of the opportunities that this building type provided for communal kitchens, dining halls and housekeeping. Indeed, cooperative quadrangles exemplified the communitarianism that had underpinned his original garden city idea.[24] Parker and Unwin were not the only architects designing quadrangular housing blocks and cooperative quadrangles within garden cities and garden suburbs. The first and best-known example, Homesgarth at Letchworth (1909-13), was designed by H Clapham Lander. It was at Homesgarth that Howard and his wife lived from 1913.[25]

Gummer and Ford's Dingwall Presbyterian Orphanage, Papatoetoe (1928-30), is highly derivative of British garden city/suburb precedents in its layout and its architectural language.[26] The scheme is located at the end of a cul-de-sac and, rather than one sizeable institutional building, it comprised "cottages," each of which was to accommodate a "house mother" and between 12 and 20 children.[27] The original design included two pairs of cottages on either side of an open green space with a larger building at one end, the cottages and the larger building all linked by covered walkways and together forming a U-shaped layout, i.e. three sides of a quadrangle.[28] This layout is more readily apparent in the original drawings than in the realised complex, because only three of the four cottages were built.[29] But the central green space, the white gabled cottage aesthetic and the red roofs of the realised buildings all remain intact and legible.

During the initial design phase, Gummer and Ford recommended that the Dingwall Presbyterian Orphanage Trust Board opt for a communal kitchen and dining room within the scheme rather than separate facilities for each cottage.[30] They suggested that the larger building at the end of the green space could become the communal kitchen and dining room.[31] But the Trust Board opted for separate kitchens and dining rooms for each cottage, and the larger building was completed as an assembly hall.

WH Gummer is generally considered to have been Gummer and Ford's leading design architect. Gummer's son John remembers that the Dingwall Presbyterian Orphanage was one of his father's favourite jobs.[32] It is relevant here, however, that many of the original drawings carry Gordon Wilson's initials, "GFW."[33] Wilson had been promoted

[24] See Meller "Planning Theory and Women's Role in the City" pp 85-98; and Borden "Social Space and Cooperative Housekeeping" pp 242-257.

[25] See Hayden *The Grand Domestic Revolution* pp 230-237. For a more detailed history of British cooperative initiatives, see Pearson *The Architectural and Social History of Cooperative Living*. Homesgarth was followed by Meadow Way Green, Letchworth (1915-24) and Guessons Court, Welwyn (1922).

[26] I am grateful to Linda Tyler for organising and conducting a tour of the Dingwall Orphanage as part of the public programme for *Past Present*, 19 August 2006.

[27] Gummer and Ford "Dingwall Presbyterian Orphanage Trust Board" pp 4-5,7.

[28] See Gummer and Ford, Drawings of the Dingwall Presbyterian Orphanage.

[29] See aerial photographs of the complex in *The Story of Dingwall* (1951) b/w pp 4-5; and *The Story of Dingwall* (1960) pp 10-11.

[30] Gummer and Ford "Dingwall Presbyterian Orphanage Trust Board" p 9.

[31] See Gummer and Ford, An early drawing of the Dingwall Presbyterian Orphanage.

[32] John Gummer "Forward" in Shanahan "The Work of William H. Gummer" p 6. See also p 306.

[33] Other recurrent initials are RCM and RLM (thought to have been Ron Muston and R McPhail). See Gummer

from draughtsman to chief draughtsman while studying at the Auckland University College School of Architecture. He then completed his professional examinations earlier in 1928, the year the orphanage was designed, and was both elected an associate of the NZIA and made an associate partner in the firm that year.[34]

While Gummer, Ford, Wilson and their employees were designing, detailing and supervising the construction of the Dingwall Presbyterian Orphanage in Papatoetoe, the German Neue Sachlichkeit architect Ernst May was pushing garden suburb type housing in an entirely new aesthetic direction in and around Frankfurt. May was strongly influenced by garden city/suburb principles. He had worked in Unwin's office from 1910 to 1912 and even described his experience with Unwin as "the foundation on which the whole of my work is based."[35] With CH Rudloff, May's first work for Frankfurt, the Bruchfeldstrasse Estate (1926), comprised zigzag housing about a large communal garden.[36] The garden suburb influence is also apparent in May's relatively low density settlements in the Nidda Valley area of Frankfurt (Römerstadt, Westhausen, Praunheim, Lindenbaum and Höhenblick) where he and his staff adopted the principle of Trabantenprinzip (satellite planning). May gave attention to natural settings, and incorporated row housing that followed the topography of the land.[37]

The influence of garden city/suburb thinking extended well beyond May. This is readily apparent from the inclusion of discussions of the garden city idea within key histories of modernism. Benevolo, for example, in his *History of Modern Architecture*, included it, along with Berlage and Amsterdam South, in his chapter on late nineteenth- and early twentieth-centuries experiments in town planning;[38] Frampton, in *Modern Architecture: A Critical History*, included it in a discussion of the Arts and Crafts movement that extended to Lutyens;[39] and Curtis, tellingly, in *Modern Architecture Since 1900*, located it amid his discussion of the housing schemes of May, Taut, Oud and others.[40] Like May, Taut conceptualised his large-scale housing projects on the outskirts of Berlin, including the "horseshoe" housing scheme at the Britz-Siedlung (1928), "as garden suburbs, containing three-story apartment buildings with lawns and gardens between."[41] In the United States, Stein and Wright were also indebted to garden city ideology. They included a street named Howard Avenue in Radburn, New Jersey. As for Le Corbusier, his celebration of the new provided opportunities for others, notably Colin Rowe, to speculate on his historical influences,[42] and in doing so to question and challenge the polemic regarding modernism's rejection of historical precedent. Certainly Corb's advocacy of locating buildings within green space finds a range of precursors within late nineteenth- and early twentieth-centuries urban reform, including the garden city and suburb movements.

There are two final points that warrant consideration: the density of the Berhampore

and Ford, Drawings of the Dingwall Presbyterian Orphanage.

[34] Petry "The Public Architecture of Gummer and Ford" p 55; and Gatley "Wilson, Francis Gordon" p 566.

[35] Grinberg *Housing in the Netherlands* p 63, quoted in Rowe *Modernity and Housing* p 96. See also Lane *Architecture and Politics in Germany* pp 91-92.

[36] Frampton *Modern Architecture* pp 136-137.

[37] Curtis *Modern Architecture Since 1900* p 167

[38] Benevolo *History of Modern Architecture* pp 351-367.

[39] Frampton *Modern Architecture* pp 47-50.

[40] Curtis *Modern Architecture Since 1900* pp 249-252.

[41] Lane *Architecture and Politics in Germany* pp 105-107.

[42] Rowe "The Mathematics of the Ideal Villa" pp 101-104.

scheme compared with that of the quadrangular housing schemes of British garden cities and suburbs; and the inclusion of a circular community hall within Berhampore's quadrangular courtyard.

First, density. According to Raymond Unwin, "the desirable number would be between 10 and 20 houses to the acre, and in this case I refer to the net measurement of the building land, excluding roads."[43] Unwin acknowledged that a lower density was not desirable because it would lead to urban sprawl. Thus, while neither the Berhampore Flats nor Labour's schemes of detached and semi-detached houses fell within the range recommended by Unwin, it is possible that Unwin would have preferred Berhampore's 25 units to the acre over and above the four or five houses to the acre of Labour's detached and semi-detached housing schemes as a result of the latter's contribution to urban sprawl. Further, the housing within garden cities and garden suburbs including Letchworth and Hampstead is predominantly two-storeyed, often in short rows or terraces, rather than the predominant single storey of Labour's detached and semi-detached housing schemes.[44]

Finally, the community hall. Berhampore's community or recreation hall is one of the elements that has attracted comparison with Oud's Hook of Holland scheme.[45] It is also known that the inclusion of community halls was typical of May's housing estates.[46] But it might equally be recalled that communal facilities – and Berhampore originally had communal laundry facilities as well as the central communal hall – were consistent not only with the social programme of Dutch and German modernism, but also with the communitarianism of Ebenezer Howard, Parker and Unwin, cooperative quadrangles such as Homesgarth, and the assembly building at the Dingwall Presbyterian Orphanage.

This paper suggesting a garden city/suburb lineage for the quadrangular layout of the Berhampore Flats is not intended to challenge the accepted interpretation of the Berhampore Flats as being, by New Zealand standards, stylistically advanced, but rather to expand upon and enrich this interpretation by acknowledging that multiple threads and influences can be read into the design. The implication is that even though the architectural language of the Berhampore Flats differed from that employed in most of the thousands of state rental houses built by New Zealand's first Labour government, at the level of layout this medium density housing scheme is consistent with garden city and garden suburb ideology and should not, therefore, be posited as antithetical to Labour's schemes of detached and semi-detached state rental houses.

[43] Unwin *Town Planning in Practice* p 319.

[44] That said, the planning of the individual units within the Berhampore scheme differs from that of those at Letchworth and Hampstead in that the British garden city and suburb blocks tends to comprise two-storeyed housing units, whereas the two-storeyed blocks at Berhampore comprise two rows of single-storeyed units, stacked one on top of the other.

[45] Shaw *New Zealand Architecture* p 141.

[46] Lane *Architecture and Politics in Germany* p 94.

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