Early Twentieth Century Town Planning Improvements in New Zealand¹

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ABSTRACT: The first decades of the twentieth century were critical for an introduction of town planning views in New Zealand. This was the time when the country was moving in a natural progression from solving the basic problems of establishing new settlements, through extensive infrastructural works (construction of roads and railroads; introduction of electricity and tramways, etc), to the point of early re-evaluations and criticisms of the achieved results. Concurrently the British town planning concepts were, for the first time, discussed among New Zealand architectural professionals and other interested parties as the New Zealand cities and towns were actively being constructed with new and improved infrastructure. This period provided ample opportunity to set up models that could influence future urban developments.

This paper will discuss the professional town planning developments in relation to the broader context of urban improvements of the same period. It will explore the concepts that underpinned the developments and evaluate the lasting effects they have had on the development of New Zealand towns and cities.

International context

In many parts of the world during the late nineteenth and early twentieth century, numerous new technological inventions were being introduced into the everyday life. These significantly altered the way human activities were approached and executed. The innovations included more popular use of electricity, followed by telephone, radical transformations to the transport systems, newer trains for newly constructed, longer, railroads, horse-pulled and electrically operated tramways, and the early horselesscarriages. Most of these innovations reflected the technological developments which accompanied the industrialisation.

On the social level, industrialisation was

accompanied by a general increase in population and the massive migration of the work force into cities now rapidly exceeding their historic sizes. In Europe, an outcome of this process was the uncontrolled construction of urban housing that often fell below the standards of the previous periods.

By the mid-nineteenth century the housing problems were repeatedly recognised by the philanthropists who started calling for organisational improvements. One response was the development of suburbia and, later, the theoretical proposal of Garden Cities by Ebenezer Howard (1898). In Britain these served as a basis for a more organised calls for town planning as one important tool in preventing future problems associated with built environments, which resulted in the 1909 Housing and Town Planning Act (UK).

By the early 1900s, town planning was becoming a strong force in Britain. Most of the British town planning developments were unequivocal in their support of suburban densities and rarely engaged in the more comprehensive urban reconstruction programmes. In contrast, many parts of Continental Europe had a much longer history of more comprehensive urban regulations, which often included a stronger focus on reconstruction and redevelopment of the problematic urban cores.

In New Zealand, the European experience was either unnoticed or ignored and town planning

¹ This paper develops my work in Petrović "Your New House"

followed in the spirit of the British discussions of the time, albeit with some references to the North American experiments with the City Beautifying societies. However, those concepts should be evaluated within the context of the real New Zealand urban situation.

The early settlement of the New Zealand towns in the pioneering period reflected attempts at planning punctuated with improvisation. The plans were often left to surveyors with military backgrounds, which influenced their rigid geometry.² Even when some guidelines existed, such as those of the New Zealand Company, they were neither detailed nor extensive. Rather, the authors of these guidelines were satisfied with outlining requirements of recreational open spaces (botanical gardens and parks) and providing prescriptions of reserves for the indigenous population.³ Within this setting, gridiron layouts were prominent. However, as a result of often insufficient information about the targeted terrain, the gridiron geometry was frequently weakened by necessary improvisations.⁴ Throughout the nineteenth century a similar circumstance dominated most of the town planning efforts in New Zealand.

The Reality of urban improvements in the early twentieth-century New Zealand towns While in the 1870s roads were still often marked more clearly on the maps than in their real physical states, and problems with mud and dust were frequently noted by the press,⁵ by the early twentieth century most roads were in macadam, reflecting standardised widths. The general quality of the roads was much higher, when in 1914 a new series of discussions were initiated in an attempt to respond to the international engineering developments in the area of road construction.⁶ By this time, it was recognised that macadam roads have a permanent tendency to collect and create new dust, because the very use of the road grinding the material into dust.⁷

This problem was observed as especially acute, as motor-cars were using wider tyres, and thus raising more surface dust.⁸ Scientific methods for the evaluation of quality of roads were developed and numerous attempts were made to improve to construction of macadam roads to a much higher standard. However, the solution was more often found in scientific experimentation with new materials, and this is the time when properties of materials such as asphalt were discussed as possibly providing a more adequate solution for future roads.⁹

While the discussion of road materials clearly indicates progress in this area, it also signals the concerns that existed at this time among professionals and the public, as the whole

² McDonald "The "Tenths" Experiment" p 434.
³ McDonald "Samuel Cobham's Britannia" p 207; McDonald "The "Tenths" Experiment" p 434.
⁴ Probably the most radical example of improvisation was the negotiation of the actual site and the early plan for the settlement of Wellington, which unfolded after the arrival of the settlers. Colonel William Wakefield and Captain William Mein Smith, the two men leading the settlement of Wellington, appear to have had

different aims for the new settlement in mind when selecting Port Nicholson and the banks of the Hutt River, respectively, as sites for Wellington. The reality of unsettled riverbed of the Hutt River and the dense bush surrounding it, helped in deciding to base settlement in the proximity of the Lambton Harbour. See McDonald "Samuel Cobham's Britannia" pp 207-208. ⁵ Hodgson *Colonial Capital* p 34.

⁶ Whitson "Road Surfaces and the Dust Problem" pp 871,

^{873;} Mair "Our Roads" pp 973, 975; "Examiner" "Road Surfacing" pp 1041-1042; "[Editorial Comment]" p 1103;

Suffacting pp 1041-1042, [Eutofial Comment] p 1103,

Whitson "Road Construction" pp 27, 29; Anon.

[&]quot;Constructing Motor Road Surfaces" p 31.

⁷ Whitson "Road Surfaces" p 871.

⁸ Whitson "Road Surfaces" p 873.

⁹ "Examiner" "Road Surfacing" pp 1041-1042; Whitson "Road Construction" pp 27, 29.

network of roads was seen as possibly needing upgrading, and not just maintaining of the achieved standards. In the 1870s, gas was generally used for lighting streets and interiors throughout New Zealand,¹⁰ only to be superseded by electricity from the 1880s. In the Municipal Corporation Act 1886, empowered the local authorities to use electricity for street lights, and by 1889 Wellington had used this right, becoming the first city in the Southern Hemisphere to use electricity for public street lighting.¹¹ It was observed that the electric lighting was cheaper and more efficient, and the lights expanded swiftly from the first 500 lights on Lambton Quay area.¹²

In the years that followed, generation of electric power and development of its application in everyday use were two areas witnessing intense developments. Initially, small local generators powered early applications, but by the 1910 the government had started more organised efforts in developing an appropriate infrastructure to support future consumption of electricity, and by around 1915, it was possible to observe that "electrification [had] entered the New Zealand home."¹³

The first decades of the twentieth century were the years of intense development of the application of electricity for public purposes such as public street lighting, powering of the public transportation, or introduction of other similar new networks, such as the telephone. For example, an urban development scheme in 1912 unified in Invercargill the introduction of tramways and electric street lighting.¹⁴ The Wellington Telephone Exchange began with 36 subscribers in 1883, and by the 1909 there were 2,400 numbers listed in Wellington.¹⁵

The intensity of these technological developments has had major implications for the visual quality of urban spaces. Lamp sheds

and stands varied, just as did the overhead gear for electric tramways, and the poles that distributed different wires through the towns.¹⁶ This was further compounded by the shelters such as the street telephone boxes and tramway waiting sheds.¹⁷ When adding to this mix the diverse forms and shapes of items such as letter boxes, bins, street names and numbers and even insufficiently regulated requirements for the central verandahs, some members of the New Zealand Institute of Architects feared for the harmony of the urban landscapes.¹⁸

Early understanding of town planning in New Zealand

At the outset of the twentieth century, urban planning topics were first addressed in New Zealand by the City Beautifying groups, inspired by the American City Beautiful movement.¹⁹ They focused on planting trees aligning the streets, and on the development of open recreational spaces. In professional circles, Christchurch-based Samuel Hurst

¹⁰ Hodgson *Colonial Capital* p 36.

¹¹ Leach "Power Architecture" p 23.

¹² Hodgson Colonial Capital p 142.

¹³ Leach "Power Architecture" pp 24-25, 28. An unsigned article from 1910 reports on Sir Joseph Ward's views on the new water power plants that were to be built throughout New Zealand. See Anon. "Engineering and

Electricity" pp 437-439.

¹⁴ Anon. "Invercargill Tramways and Electric Lighting" p 1099.

¹⁵ Hodgson Colonial Capital p 145.

¹⁶ Anon. "Shadows of Town Planning" pp 37-38; Anon.

[&]quot;Concrete Telegraph Poles" pp 479-481.

¹⁷ Anon. "Shadows of Town Planning" p 39.

¹⁸ Anon. "Shadows of Town Planning" pp 36-34.
¹⁹ New Zealand's City Beautiful groups were most prominent in Christchurch, Dunedin and to a lesser extent in Wellington. See Miller "Transmission, Perception, or Adoption?" p 447.

Seager (1854-1933) developed his initial support for the Garden City on the basis of the City Beautiful concepts.²⁰

Hurst Seager called for the return of urban "unity" and "cohesion," both of which he saw as having been irreversibly lost through the strong emphasis that was placed on individualism.²¹ One of his ongoing criticisms of the New Zealand urban situation related to street signage, placards, which were in his view, too large and "disharmonising" the overall beauty of the built environment.²² To support this, he used comparative illustrations of the same setting with placards and with airbrushed placards.²³

Hurst Seager also recognised the importance of economy and harmony that can be achieved by the use of curved roads that respond to the topography, rather than imposing orthogonal grids. He criticised the wastefulness of the wide macadam roads common in suburbia, where part of their width could be allocated for greenery. The same points were repeatedly attacked in Britain by the Garden City supporters.

Hurst Seager's own design work rapidly adopted Garden City principles. Whanganui's Durie Hill is one of the earliest examples of this kind in New Zealand. Hurst Seager's experiments with the hillside architecture in Canterbury, like Clifton Spur, were no less important.²⁴ This early development in urban planning of New Zealand already focused on improving the planning and architectural quality of new suburban developments.

In 1909, a new, vigorous boost to the promotion of town planning in New Zealand came from journalist Charles C Reade (1880-1933). After travelling to Britain, Reade published a series of articles in the *New Zealand Times*, the Auckland Star, the Dunedin Star, and the Sydney Morning Herald. These were collated and published as a book, *The Revelation of Britain: a book for colonials* (1909).²⁵ The text criticised the urban and social problems generated in Britain by industrialisation. His vivid description of the urban evils found in the Old World formed the background for the proposal of a poetic vision of a happy society achievable through new concepts of garden planning. This was exemplified by Lever's Port Sunlight (1902) near Liverpool.²⁶

The same ideas dominated the London Garden Cities and Town Planning Association which soon delegated Reade and William R Davidge (1879-1961) to undertake a lecture tour throughout New Zealand and Australia in 1914.²⁷ The aim of the tour was the establishment of the Garden City movement throughout Australasia.²⁸

 ²⁰ Miller "Transmission, Perception, or Adoption?" p 448.
 ²¹ Seager "Town Planning and Architects Responsibilities in Relation Thereto" pp 41-42.

²² Seager "Town Planning" part 1, pp 770-771, Seager "Town Planning" part 2, pp 809-811. Seager, "Town Planning and Architects Responsibilities in Relation Thereto" pp 41-43.

²³ Seager "Town Planning and Architects Responsibilities in Relation Thereto" figs. 15, 16.

²⁴ Anon. "Obituary: Samuel Hurst Seager" p 58.

²⁵ Reade *The Revelation of Britain*. Reade went to Britain to report on the 1905-6 All Blacks rugby tour. While there, he was commissioned to write about living and working conditions in England. These articles form the basis of *The Revelation of Britain*. In Britain, Reade also got in touch with the Garden Cities and Town Planning Association. See Garnaut *Colonel Light Gardens* pp 11-12. ²⁶ Reade The Revelation of Britain

²⁷ Seager *Town-planning Report* p. 1; Anon. "The Town Planning Field" p 75. After the initial positive reaction on the Garden City ideas in New Zealand, Reade returned to London to work for the Garden Cities and Town Planning Association where he was in position to propose the Australasian lecture tour. See Garnaut *Colonel Light Gardens* pp 13-14.
²⁸ As result, within two years Town Planning Associations had been formed in all Australian

From 1915, Reade became the South Australian Government Advisor on Town Planning, and from 1917 the first Government Town Planner in Australia.²⁹ While there, he organised the First Australian Town-planning Conference in Adelaide, in 1917, and the Second Australian Town-planning Conference and Exhibition in Brisbane, in 1918. Later he designed and realised Colonel Light Gardens in Adelaide as the first model garden suburb in Australasia.³⁰

Throughout the same period, support for the Garden City in New Zealand also came from Arthur Myer. In Auckland, Myer, businessman and politician, strongly supported planned interventions towards improvements in urban health.³¹ He was receptive to Reade's ideas, and the two men collaborated for a time.³² Myer not only provided much political and lobbying support for the development of the Town Planning Act in New Zealand, but also financed the first slum clearance scheme, Myer Park, in Auckland (1916).33

The main features of Reade's influence, which was supported by Myer's actions, was an emphasis on avoiding the contemporary urban problems evident in Britain, and an interpretation of that situation as clear proof that garden suburbs were the only viable alternative.34 While the solution to urban problems was seen in slum-clearance, with frequent exceptions, the work of early urban planners mainly focused on strategies to improve suburban developments. There were few attempts to reconstruct urban cores by developing or reinforcing their unique qualities as was seen in Paris and Continental European cities.

Considerably later, the town planning work of Edmund Anscombe on road schemes for

³¹ One of the biggest personal contributions of Arthur Myers and his wife Vera towards improvement of urban conditions was Myers Park (1915) in Auckland, which they developed to present to the city of Auckland. See Gatley "Jews, Breweries & National Efficiency in Early 20th Century Auckland" p 266.

Dunedin (1924) and Wellington (1936, 1938-1948)³⁵ can be understood as one of the professional efforts to engage more directly with the planning of the urban cores. Efforts like those remained infrequent.

To support the central importance of reaction against urban slums for town planners, as widely accepted in Britain, within the Australian and New Zealand context, in their lecture tour Reade and Davidge did include some images of local slums.³⁶ Nevertheless, this classification opens more questions.

The "housing problem"

This awakening of interest in town planning was accompanied by an increased awareness of the existing urban problems. By the beginning of the twentieth century the absence of effective urban regulations and the neglect of improvements created problems in many of

³⁶ Wheeler "Our Town Planning Opportunity" p 199.

provincial capitals. See Garnaut Colonel Light Gardens pp 14, 18.

²⁹ Garnaut Colonel Light Gardens pp 25-26.

³⁰ In 1920 Reade took up appointment as Government Town Planner in Malaysia, and later in Northern Rhodesia and South Africa, where he committed suicide in 1933. With frequent moves to different countries, Reade's influence was marked by constant lobbying for an increasing awareness that town planning is needed and promotion of the Garden City principles towards

this aim. I am grateful to Christine Garnaut for sharing with me her insights into the complexities of Reade's personal life and career. For more information on Reade see Garnaut Colonel Light Gardens.

³² Garnaut Colonel Light Gardens pp 12-13.

³³ Gatley "Jews, Breweries & National Efficiency in Early 20th Century Auckland" pp 263-284.

³⁴ Similar criticism of Reade's argumentation can be found in Miller "Transmission, Perception, or Adoption?" pp 445-454.

³⁵ McCarthy "Traffic and the City" pp 417-432.

New Zealand's central urban areas. Those unable to afford transportation to suburbs inherited urban housing whose material quality was often suspicious.³⁷ Although the tenements of the Old World hardly ever existed in New Zealand, some parts of urban areas reached densities that were considered too high. In 1917, for example, a density of 17 to 20 dwellings per acre was criticised in Dunedin as "overcrowding," while English bylaws only a few years earlier allowed for 50 houses per acre.³⁸

According to historians Penny Isaac and Erik Olssen, density was only a small portion of the problem. By the 1880s, the existence of a permanent wage-earning working class became apparent in New Zealand.³⁹ These social groups had difficulties in obtaining either land or homeownership which set them aside from the rest of New Zealand. In reaction (with the Advances to Settlers Act of 1894), the government started legislative involvement with housing, enabling state-loaned mortgages,⁴⁰ and from the late 1890s, the state started providing small allotments of land for urban workers.⁴¹

These powers were further increased with the Worker's Dwelling Act of 1905 which established a basis for the government to erect workers' houses.⁴² However, general complaints of governmental involvement with workers' housing were that the houses they built cost too much and were too distant from employment to provide a real solution to the problem.⁴³

There were no significant improvements in workers' housing before 1918 when New Zealand experienced the influenza epidemic that swept through many parts of the world. This prompted a rapid evaluation of hygiene and living conditions. Investigations were organised on a national basis and by early 1919 the New Zealand Epidemic Commission presented its findings.⁴⁴ The conclusions reinforced the association of urban slums with "poverty, filth, disease, moral degeneracy, tenements, overcrowding and renting."⁴⁵ This cultural perception of slums reflected the British association of poor housing conditions with moral decay.⁴⁶ The experience of influenza and the conclusions that followed intensified the awareness of a need for conscious legislative and professional town planning action against urban slums, as already proposed by Reade.

Using this favourable movement, in 1919, Hurst Seager gathered various groups together in Wellington to discuss the issues of town planning and housing at the First New Zealand Town Planning Conference and Exhibition.⁴⁷ The conference crystallised a general agreement on the correlation between urban

³⁷ Wilson "Workers' Dwellings" p 92.

³⁸ Wilson "Workers' Dwellings" p 93. This article conveys conclusions of the Public Health and City Improvements Committee of the Dunedin City Council, of which Wilson was a member.

³⁹ Isaac and Olssen "The Justification for Labour's Housing Scheme" p 107.

⁴⁰ Department of Housing Construction General Report on State Housing in New Zealand p 6.

⁴¹ Isaac and Olssen "The Justification for Labour's Housing Scheme" p 107.

⁴² The powers of this Act were extended by the Worker's Dwellings Act 1910 and the Worker's Dwellings
Amendment Act 1914. See Department of Housing
Construction *General Report on State Housing in New*Zealand p 6.

⁴³ Isaac and Olssen "The Justification for Labour's Housing Scheme" p 107.

 ⁴⁴ Ferguson Building the New Zealand Dream pp 71-74.
 ⁴⁵ Isaac and Olssen "The Justification for Labour's Housing Scheme" p 109.

⁴⁶ The report of the Epidemic Commission focused exclusively on urban problems, as "rural society was thought to be virtuous, clean and morally up right." See Isaac and Olssen "The Justification for Labour's Housing Scheme" pp 109-110.

⁴⁷ The conference gathered over 200 participants:

slums, substandard housing, and various "social pathogens," including political unrest.⁴⁸ Minister of Health, George W Russell, reinforced this by recognising that "[r]evolution and anarchy are not bred in the houses of men who have happy homes and delightful gardens."⁴⁹ He also proposed the remedy in the predomination of the garden suburb model. The 1919 First New Zealand Town Planning Conference established a basic general consensus that Garden City strategies might help remedy urban problems.

More importantly, the conference established in New Zealand a link between professional views and the political and ideological positions of the time. As in many other international examples of this time, this collaboration between the professionals and the governments was a necessary step in the process of the "normalisation" and "modernisation" of local housing and town planning projects.

The professional knowledge needed

governmental support in order to be employed in this move towards solving housing and urban problems. In turn, the governments needed the professional expertise to develop a plan of action. The conference also established that the government and the profession jointly work towards supporting and further popularising garden suburbs and home ownership as the most favourable options in the New Zealand context. In reaction to these events, the New Zealand government passed the Housing Act 1919 which expanded its role in national housing production.

Throughout the early twentieth century an awakening of professional recognition of urban problems continued as professional views became more clearly articulated. In the 1910s, and especially the 1920s in New Zealand, town planning received much more attention in professional publications. The then established *Journal of the NZIA*, and the just a little older *Progress*, published numerous articles discussing the topic. Together with the First Town Planning Conference, these works led towards the recognition of the importance of including professionals in decision-making about urban developments. Although there were considerable efforts from 1911 to pass a Town Planning Bill, this was legally ratified only in 1926 by the Town Planning Act.⁵⁰

The Act required the development of townplanning schemes for all towns with more than 1000 inhabitants within three years. These plans were to be developed and approved by the urban planning or architectural professionals who through this scheme gained considerable influence in the local Town Planning Boards.⁵¹ Although there were significant delays in production of these plans, the critical importance lay in the fact that they were established as a system which acknowledged the profession.⁵²

Conclusion

It is possible to observe certain discrepancies between what was discussed in the professional press in relation to town planning and the urban reality of the early twentieth-

politicians, architects, engineers, surveyors, medics and reformers. See Gatley "Jews, Breweries & National Efficiency in Early 20th Century Auckland" p 264. ⁴⁸ Isaac and Olssen "The Justification for Labour's Housing Scheme" p 111.

⁴⁹ Isaac and Olssen "The Justification for Labour's Housing Scheme" p 111.

⁵⁰ Many articles in *Progress* during the 1910s reference initiatives to pass the Act. In relation to the first attempt see Seager "Town Planning" pp 770-771. See also Miller

[&]quot;Transmission, Reception, or Adaptation? p 445.

⁵¹ Anon. "The Town Planning Act" p 123.

⁵² Anon. "Town Planning in the Dominion" pp 132-134;Greenish "Out Housing Policy and the Timber Utilisation Problem" pp 137-143.

century New Zealand. Reality of the urban developments in many ways reflected a simple progression in improving the recently established settlements. After solving the key infrastructural problems, it was possible to move on to the discussion of the beauty of the final outcome. This indigenous New Zealand readiness at the beginning of the twentieth century to engage with the beauty of its cities and towns coincided nicely with the American City Beautiful movement and the British Town Planning promotions and the vocabulary of both was appropriated by local professionals. Hurst Seager used more references similar to the City Beautiful, while Reade reflected British Town Planning.

While it is possible to challenge the presumptions of the existence of urban slums in New Zealand, and several authors have done so over the last several years,⁵³ this view was still colouring much of town planning promotion in early twentieth century New Zealand. Reasons for this can be found in the same reasons that have informed many concepts of British Town Planning. With a strong support for the Garden City, and, in practice, more frequently executed garden

suburb concepts, British town planning was not interested in looking to urban reconstructions, but rather constantly to the development of new land. Much of the national and local financial and political setting prevented newly-formed town planning organisations to have the capabilities to engage with the reconstruction of urban cores. One of the rare nineteenth-century examples that successfully undertook comprehensive urban reconstruction, Paris under Napoleon III, relied primarily on the use of state means.

There was no political readiness to use state means for extensive urban reconstructions either in Britain or in New Zealand. Within this ideological setting it made perfect sense to disregard possibilities for urban developments, apart from slums, and turn to suburban developments, away from the urban problems of the city centres.

The implication of this lack of planned involvement with the urban cores was that they remained regulated primarily by private profit within a loose framework of the legislative regulatory requirements that mainly focused on the bare safety requirements (fire-proof materials in areas of higher densities, heights in relation to the quality of soil, and width of the streets). Even much of the "beautifying" strategies that were potentially feasible, such as standard street name places and similar urban features, remained left to the goodwill of local councils.

The question of this symposium, as expressed in words of Hurst Seager "we have no style, no distinctive forms of art ... our cities are chiefly made up of architectural quotations," in the context of New Zealand early twentiethcentury town planning initiatives, is simultaneously partly true and partly false.

It is true in that promotion of town planning relied heavily on British (and some American) principles and criteria regarding how to move forward. In the New Zealand case, this desire to adopt the reasoning of the "mother country" led to an exaggeration of urban slums in New Zealand, almost to the point of inventing them. Similarly, many practical principles were "imported" from overseas, just as the first electric streetlights came from Europe.

However, if we consider the definition of

Adaptation?" pp 445-454.

⁵³ Isaac and Olssen "The Justification for Labour's

Housing Scheme"; Miller "Transmission, Reception, or

invention as a unique combination of already existing proposals, as understood by the creator of the Garden City,⁵⁴ it is clear that the early New Zealand town planners were "inventing" completely new solutions by combining the available precedents. Within this context it is not surprising that a few distinctly local questions are restated every so often, based on real New Zealand problems, such as the vividly negotiated roles of the newly constructed and upgraded roads, or unregulated street signage.

While drawing strongly upon external influences for ideas, the New Zealand town planning actions of the early twentieth century strongly reflected the requirements of the local context. This constant shifting between prioritising the outside influences when it comes to ideas and concepts, and prioritising the local realities when it comes to application and action, was to remain one of the features for the town planning and architectural developments of the twentieth century in New Zealand.

Urban Utopias in the Twentieth Century p 28.

⁵⁴ Howard Garden Cities of To-morrow p 118; Fishman

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