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The Fate of City Beautiful Thought in Canada, 1893-1930

This paper seeks to summarize and account for the origins of major city beautiful concepts as advanced within the three professions which played the central role in the practice of town planning: architecture, engineering and surveying. It also attempts to explain why, by the end of World War I, almost all advocates of town planning had ceased to urge implementation of those concepts, and emphasized exclusively the need for preventive suburban planning. For the sake of brevity, the term "professionals" will be used to refer to members of the three professions mentioned.

The notion of introducing beauty into the urban environment was, patently, not new to the 1890's and early 1900's, though many laymen and some professionals considered it the essence of city beautiful thought. What its more ambitious professional supporters thought innovative in the city beautiful idea lay in its scope. No longer should beauty be confined to scattered and isolated buildings, its effect more often than not spoiled by an ugly setting. Instead, professionals would plan and regulate the entire city so that people might be surrounded by beauty. Architects who shared this vision grew impatient with their colleagues' preoccupation with individual commissions. Percy Nobbs, Professor of Architecture at McGill, declared in 1904,

> It would be a great advantage if the idea could be got in the heads of architects that beauty is not a quality to add to a city, but that it is or is not of the structure of it. . . . every street in the city should be made as beautiful as it can be, and every building, as far as possible, should cohere with the general plan; then we will have a beautiful city and not otherwise. . . . it is not merely be erecting a fine structure here and there that you will make any great improvement, or even laying out a little bit of park, although that may be an item; the construction of the city throughout should be made as beautiful as it can be.[1]

W.A. Langton, Toronto architect and editor of *The Canadian Architect and Builder,* made the same point in criticizing the periodic calls for the beautification of Toronto. "Always an isolated proposition," he complained, "something to be done in one place. But we have never yet heard of any

larger scheme which would comprehend the whole of Toronto, which would make . . . a plan of the city as a whole.''[2] His journal summarized the aesthetic assumption neatly. ''Beauty must be massed to tell, in a city as in any other work of art.''[3]

What was the origin of this wider view? For those (relatively few) engineers and surveyors who actively supported city beautiful architects, no general answer seems possible. Many architects had in their training been exposed to pictures of marvellous vistas from Renaissance and modern European cities. Even when in their planning proposals to penurious municipal governments, architects avoided any suggestion that the city be remade along such expensive lines, their wish to do so could not always be suppressed: the Ontario Association of Architects' 1909 plan for Toronto was studded with magnificent photos taken in European cities.[4] In later years, when leaders in the Canadian planning movement talked of its beginnings, they often traced the North American planning movement back to the Chicago World's Fair of 1893.[5] Though Canadian engineering and surveying journals show no significant response to the event, the Fair aroused considerable admiration among Canadian architects. Not only did its massed beauty move them, but the planning control exercised by the Fair's team of architects also stirred their envy. This immediate two-fold reaction was evident at the conventions of the Ontario Association of Architects and the Province of Quebec Association of Architects following the Fair. Addressing the Ontario group in early 1894, J. Gemmel gave a detailed and lyrical description of what he had seen; he summarized the vision thus:

> . . . the buildings rose in one harmonious whole, with no jarring rivalry of men and styles. [It was] a panorama conceived and carried out as genius only can.[6]

Similarly, A.T. Taylor told his Quebec colleagues in 1893 of ''the fair white city on the shores of Lake Michigan''. The discussion at both meetings drew the inference of architectural mastery over existing cities. But we must note the tone of resignation, the feeling that no architectural power could ever be wielded over a real city. At the 1894 meeting, O.A.A. President D.B. Dick spoke of how the architects had co-operated in designing the various buildings, determining the main features of the general ground plan, and how they had decided on a uniform architectural style, and on a modulus of height for all the principal buildings. He said nothing, however, of applying such power to a Canadian city.[7] A.T. Taylor's resignation to jumble growth for our cities was explicit:

> It is not often the happy lot of any members of our profession to be called upon to design an ideal city. The average modern city is not planned — like Topsy, it just grows, and we are only allowed to touch with the finger of beauty a spot here and

> there. One longs for the days of Pericles or Caesar, or even those of the First Empire, when cities were laid out with beauty and effect, and were exquisite settings for noble gems of architecture.[8]

Moreover, Canadian architects mentioned the Fair in print very rarely after 1894, and then in passing. On this evidence one hesitates to view it as a lasting stimulus to city beautiful thinking among Canadian architects. There may, however, have been an ongoing influence on the part of the many American civic centre projects inspired by the Fair between 1893 and 1917.[9] Canadian architects were exposed to this model; in 1905, for instance, the O.A.A. was addressed by Horace McFarland, President of the American Civic Association, who told how the slum area around the new state capital building at Harrisburg had been cleared away after a "reform" administration had taken over the local government.[10]

Probably the most significant stimulus to city beautiful thinking among architects, though, was the contrast between the profession's commitment to the creation of beauty and the ugliness of Canadian cities around the turn of the century. A common self-image among architects was that of "an artist, with the practical knowledge necessary to be able to carry out his dreams on a sound constructional basis."[11] Preoccupation with beauty, abundantly manifest in architectural journals, was never criticized in their pages, unless it were unaccompanied by the engineering technique needed to erect safe and sanitary buildings.[12] In explaining why this professional commitment was extended from the individual building to the city as a whole, Langton suggested a development of community consciousness which refused to accept perfection in occasional buildings and squalor in between.[13] This explanation really begged the question, of course. In any event, a number of architects from the 1890's to the 1930's seemed to assume that an ugly environment did psychological damage to all who beheld it, and that therefore to beautify the city as a whole was socially beneficial. Usually this assumption remained only implicit, but occasionally it was expounded. A painting, J.W. Siddall told the O.A.A. in 1899, would be seen only by a chosen or limited number; a sculpture only by those who sought it; the same applied to music and poetry. ". . . [B]ut architecture, as a decorative art, is seen by all men at all times, and its silent influence, consciously or unconsciously, affects the minds of the cultured and uncultured." The beautiful gives us pleasure; the ugly pain, and we cannot escape the ugly buildings which disfigure our streets.[14] This argument took for granted that architects' sensitivity to ugliness was more or less universal, if too often only subconscious. Those who believed this could easily justify government expenditure on and/or regulation of urban aesthetics. As Philip Turner, President of the P.Q.A.A., told a radio audience in 1933, an art that so profoundly affected our daily life, and from whose influence no mind could escape, must be subject to social control.[15]

Certainly downtown areas seemed to be getting uglier by the early 1900's, as overcrowding became ever more acute, as taller buildings began to disturb streetscapes, and as utility poles blemished most streets. The outrage which urban ugliness could arouse in the breasts of architects may be gauged by this outburst from Professor Nobbs:

> The Streets! — the numerous poles which make our main thoroughfares look like a Chinese harbour after a typhoon . . . the water tanks — the sky signs — the horrible advertisements painted in epic scale on the flanks of buildings — the lettering falling like a veil over many a fair piece of architecture — and the boardings bedight with playbills — all these things are without decency and contrary to the expression of any civic spirit or virtue.[16]

That architects' reaction against the local environment might come first, and use of foreign models only subsequently, was suggested by W.A. Langton in explaining the genesis of the O.A.A.'s 1905 plan for Toronto:

> When the idea of planning the future development of Toronto first came into our minds, some of us thought that we had got hold of an original idea, but when, having become interested in the matter, our attention was awake to allusions (in professional and other journals) to similar efforts elsewhere, we found that everybody else on the Continent of America seemed possessed by the same idea.[17]

* * *

The three chief principles of urban aesthetics which preoccupied city beautiful architects and their professional allies I shall term coherence, visual variety, and civic grandeur. The first of these principles was frequently expressed when architects discussed the appearance of an aggregate of buildings within view of street level, as opposed to the merits of one particular structure. In 1896, for example, O.A.A. President Darling, in closing such a discussion, emphasized that it would be impossible to have architecturally satisfying streets until people stopped erecting houses as though theirs was to be the only one on the street. Instead, they should co-operate with their neighbours ". . . to gain more uniformity along the street." Darling and most professional writers on this matter were advocating not rows of identical buildings, but buildings whose basic appearance together was harmonious, with their cornice lines running in accord with those of their neighbours, so that they produced the impression of a unified streetscape.[18] Haphazard mixture along a street of architectural style and of building size was held to create a disturbing effect on the minds of passers-by, while coherence of line among buildings along a street fostered serenity.[19]

Many of those who believed in the principle of coherence agreed that it should be imposed by an appointive municipal architectural control board,

including architects, which would approve plans for all new buildings. As early as the 1890's, architects Taylor and Raza of the P.Q.A.A. were arguing that only such a system would ensure that the ruination of whole streets by ill-proportioned buildings did not continue.[20] Behind the proposal was the belief that a trained architect could judge urban aesthetics better than anyone else. In a petition to Montreal City Council requesting the setting up of a Standing Art Committee, the P.Q.A.A. in 1895 contended that ". . . taste and a wise knowledge of art requires [sic.] a special and long training, which it is not in the power of everyone to command."[21] Architects continued the campaign for architectural control in the 1920's[22], and were supported by the *Journal* of the Town Planning Institute of Canada, which understood and accepted their assumption of superiority: "[t]he architects are of course right in dreading any control of design by untrained and unqualified public opinion . . ."[23] Their only success in achieving city-wide control occurred in Quebec, which in 1928 authorized the establishment of an architectural jury for its capital city with veto powers over the design, spacing, location, height and general suitability of all new buildings. It was to use architectural harmony with neighbouring buildings as one of its criteria. In late 1929, however, the Town Planning Institute's *Journal* reported indications that commercial pressures were limiting the commission's effectiveness.[24]

On the face of it, planning cities to avoid visual monotony might seem at odds with regulation for similarity of neighbouring architecture. Architects recognized no contradiction here because the beneficiary of visual variety was always assumed to be a person *travelling* along city streets or through a city parks system. The major solution to visual monotony offered in our period attacked slavish adherence to the rectangular street pattern. Professionals associated with prairie cities were particularly vexed on this point, especially in the early years of the century, when large trees had not had time to grow, thus leaving the expanse of dullness exposed throughout the year. In 1912 the Park Superintendent of Regina, Malcolm N. Ross, produced a classic indictment of the grid pattern on aesthetic grounds. Monotony, he argued, was the most damaging feature of any visual environment, and nothing could be more monotonous than the long straight roads in Canada's new cities, due to the prevalent rectangular plan.

> We must get away from the idea that interminable paved streets and concrete sidewalks, accompanied by equally interminable grass strips and rows of trees spaced at equal distances from each and other, varied by an occasional open space in which are a few flowers and shrubs will constitute a satisfactory place to live in, they never can; we must have more originality; variety and change, and get away from the present idea of uniformity in every thing, uniformity becomes only another name for monotony when it is carried out far enough and is used as a very convenient catch word for those who wish to avoid too much work and thought, as

> it is manifestly more trouble to make plans showing constant variety and change than it is to have one or two stock plans that will with few modifications be applied under all conditions.

The architect, he concluded, should be put in charge of the development of public property.[25] Ross' plea was not the isolated call of a self-interested landscape architect. At about the same time, Professor Nobbs was writing at McGill of the same principle. "The effects of City Planning, like those of any art, fall into the categories of contrasts and climaxes, symmetrical repetitions and non-symmetrical groupings of individual character."[26]

Architects and like-minded professionals prescribed two simple forms of relief from the monotony of long, straight streets: the vista and variation in street pattern. Major avenues, opined *The Canadian Architect and Builder*, ". . . should have what would be a great advantage to their beauty and interest — vistas of moderate length terminating with a building . . ."[27] Civil engineers W.R.O. Wynne-Roberts, hired by Regina in 1910 to improve its waterworks, and C.J. Yorath, Civil Commissioner of Saskatoon in the years before World War I, were both willing to accept the engineering heresy of street curves where topography made straight streets more efficient. Long straight avenues with no object to break the horizon should be avoided, wrote Yorath. If no natural scenic effect could be obtained, some architectural feature should be provided to break the skyline and thus ". . . relieve the monotony of long streets."[28] Both curved and diagonal streets were suggested in the effort to vary the street pattern. Curves were of course needed to obviate the beautiful views which were to terminate sections of an avenue. *The Canadian Architect and Builder* also recommended curves for their own sake, since they added little to street length and removed much of the fatigue in traversing a long street.[29] Engineer Wynne-Roberts tried to explain men's nervous irritation with long, straight streets. Nature, he explained, abhorred corners; instead she built up graceful curves. Although man worked with straight lines because they were simpler and perhaps cheaper, they were still unnatural and thus could not afford the visual relief in which men delighted.[30] Other professionals noted the potential for stimulation of diagonal streets. In discussing his proposal for diagonal through roads in Toronto, W.A. Langton stressed ". . . how much variety will be introduced into our uninteresting street plan when every street north of Queen Street is crossed by one of the diagonals, making pleasant irregularities, striking building sites, small open spaces, places for monuments, fountains, and seats under trees."[31] As in the case of Malcolm Ross, the stress in Langton's thought was less on grandeur than on surprise and delight — something at every corner "to feed one's imagination on."[32]

When professionals wrote about parks, they usually did so regarding recreation for the family. But for many city beautiful writers, the parks were also to be integrated into a system connected by parkways, which was designed to offer visual delight to vehicular traffic. The architects who drew up the Toronto Civic Guild's plan for the city in 1909 made such a system one of their two key proposals.[33] The P.Q.A.A.'s 1906 sketch plan for Montreal recommended the creation of a number of fine avenues forming uninterrupted circuits connecting the principal parks and open spaces.[34] A few engineers engaged in planning also supported this non-utilitarian proposal. The plan for Ottawa and Hull of 1915 was a joint product of the American landscape architect E.H. Bennett and a Canadian engineering staff headed by A.E.K. Bunnell, with E.L. Cousins of Toronto as consulting engineer. Their report emphasized the principle that the proposed parks system be "continuous and comprehensive", connected by parkways.[35] The Vancouver plan of 1930 was drawn up by the American city plan engineering firm of Harland Bartholomew, whose Resident Engineer and political troubleshooter was a Canadian, Horace L. Seymour. The report of 1930 contained the most sweeping programme of street development for visual pleasure of any plan in our period. "It is time," it declared, "the city considered giving those who find great enjoyment in these leisure-time and holiday tours a special route touching many of the larger parks and having qualities not possessed by ordinary city streets." These wide thoroughfares would be planted with trees, and lead past scenic views and places of outstanding interest. To avoid heavy utilitarian use of these drives, a major street was if possible to lie parallel to every pleasure route. The report aptly summarized the intended aesthetic effect of travelling along such a system, of ". . . just riding, riding for pleasure. There is *fascination in a changing picture* such as one gets from the window of a smooth-running motor car."[36]

The third basic city beautiful principle, that of civic grandeur, usually manifested itself in advocacy of grandiose public buildings set in spacious surroundings — a "civic centre." This idea got more support among architects than other city beautiful principles, since it attracted not only those who considered the civic centre as the focal point of overall city design, but also those who still thought of introducing beauty into the city by creating a beautiful building or cluster of buildings. It was partly because of this greater professional support that this expensive component of the city beautiful vision became the best publicized. Like the other aesthetic strategies we have discussed, a monumental civic centre was intended to have an important psychological effect on the citizenry. Alan Gowans has epitomized the Victorian tradition which dominated Canadian architecture from about 1820 to 1930 as the ". . . tendency to look on architecture as a means of communicating ideas, to choose architectural forms for their symbolic

implications . . .''.[37] The architects and engineers who sympathized with civic centre proposals certainly wished to instil civic pride[38], if not a feeling of subordination to governmental authority. Common to all government centre designs was the insistence that official buildings not be dwarfed by nearby structures. The plan submitted for Ottawa and Hull in 1915, for example, set out specific elevations above the streets near the Parliament Buildings, over which no building might be raised. The restriction was explained as ''preserving the dominating sky-line of the Parliament and Departmental'' groups of buildings by preventing the city's commercial buildings from reaching ''such a height as to detract from the beauty and importance of its government buildings.''[39] Vancouver's plan of 1930, which included an awesomely massive civic centre designed by two local architects, stated as a general rule that wherever possible, government buildings should be grouped on high ground, in order to permit a more imposing plan than would level terrain.[40] Another means advanced to emphasize the importance of government buildings was to construct a magnificent avenue leading to them. The redevelopment plan for downtown Toronto of 1929 advocated a uniform cornice line and other architectural restrictions for University Avenue, so that it might lead northward to the legislative buildings in a ''dignified and noble'' manner.[41] Similarly, engineer Noulan Cauchon's 1921 plan of a civic centre for Hamilton involved a broad, tree-lined avenue leading to it from an amphitheatre.[42] The language in some of these plans suggests an authoritarian impulse, but it is well to remember that many architects spoke about the proper display of buildings simply in aesthetic terms. As C.H.C. Wright, Professor of Architecture at the University of Toronto, complained in 1901, the effect of good architecture was often spoiled by incongruous buildings crowded around what would otherwise have given delight.[43] Percy Nobbs observed in 1906 that spacious grounds were particularly important for public buildings in the classical style, for they depended on proportion for their effect; if buildings of similar style and height were placed alongside them, they would ''. . . simply ruin one another.''[44] By 1900, symbolism in public architecture had become something of an automatic cliché, the use of which need not have involved conscious political purpose.

Whatever their motivations, advocates of new civic centres and broad avenues had to concede that such projects would be costly, and this fact encouraged critics to question the proponents' sense of social priorities. The fact that the most grandiose of pre-war civic centre proposals — such as the truly monumental one for Calgary submitted by Thomas Mawson in 1914[45] — seemed to come from foreign planning experts, did not lessen the vehemence of attacks on Canadian city beautiful advocates. The burden of these attacks, which became widespread after 1910 and reached a crescendo during and immediately after World War I, was that the first duty of professionals lay in

pressing for suburban regulation which would minimize the cost of providing workers' housing, and that people's identification of planning with costly city beautiful projects impeded public acceptance of the need for suburban planning. The *Canadian Municipal Journal*, one of the chief journalistic vehicles for professional planners, argued in 1911 that providing sanitary housing for the poor was "the real meaning of city planning":

> Magnificent avenues, leading to grand buildings, are desirable. Lovely and artistic parks should be in every city. But the dwellings in which those live who cannot get away from their homes the whole year long, really decide whether any city is to be healthy, moral and progressive. The common people are in the great majority; their proper accommodation is the greatest problem.[46]

By the end of 1915, attacks on city beautiful projects had become qualitatively different: instead of accepting their validity as part of improvement of the urban environment, though pointing out that decent housing had a higher priority, professional critics began to insist that society must choose *either* the city beautiful approach *or* the suburban regulation approach. The term "town planning", argued the *Canadian Engineer*, had been interpreted in two different ways, respectively by "the aesthetical school" and "the practical school." The former ". . . associate the phrase with the beautification of towns and cities by laying out picturesque boulevards, pretty gardens, fine parks, impressive civic centres, and so on." The latter school, which included the magazine, concentrated on "the economic considerations in providing for the future in the matter of health, homes, traffic, etc."[47] Such leading Canadian planners as engineers A.G. Dalzell and Horace Seymour felt it necessary through the whole period 1915 to 1939 to repeat *ad nauseam* that their variety of town planning did not involve grandiose civic projects.[48]

Why did these critics insist, beginning about 1910, that provision of workers' housing must be the first priority in Canadian planning? Why, during World War I, did they start to reject city beautiful projects as part of planning correctly understood? The answer to the first question is that after 1910, the shortage of decent housing became popularly regarded as Canada's greatest social problem, and suburban planning as the principal solution. The rate of population growth in the major centres of central and western Canada in the first decade of the century had been phenomenal[49], and it did not slacken before 1914. Because this influx of people contained an unusually high concentration of persons of child-rearing age,[50] the consequent demand for family accomodation was even greater than sheer numbers would suggest. Private enterprise proved incapable of providing all of these people with decent housing at prices they could afford. (In speaking of "decent" housing, contemporaries thought in particular of two criteria: the individual privacy required to safeguard morality, and sanitary surroundings.) Between 1910 and

1914, rents in Canada increased by 35.9%[51], as owners charged all the traffic would bear. Many owners converted their houses into flats, and tenants' financial straits forced many to subdivide their homes and apartments, or to take in lodgers, so that room overcrowding reached distressing intensity.[52] By 1914, many thousands of families occupied only one or two rooms each.[53] The severest cases of overcrowding were truly pitiable. In October, 1909, a Winnipeg health inspector paid a midnight call on a boarding house, and came upon twelve occupants in one room measuring 13 × 12 × 7 feet.[54] In 1913, Inspector Allison of the Toronto Police discovered no fewer than 565 people in five houses on King Street East.[55] Public health authorities observed a striking correlation between overcrowding and high mortality rates. This they attributed in part to the lack of sunshine and fresh air, and to the absence of adequate sewage facilities, in overcrowded neighbourhoods. The slum, with its damp and filthy houses, was pictured as the breeding-ground "... wherein huge cultures of disease are growing, ready when ripe to rise and sweep the city streets."[56]

Many of the socially concerned citizens who were determined to overcome the shortage of low-income housing, had by 1914 come to the conclusion that the realistic solution was to erect workers' suburbs. To threaten the owners of unhealthy buildings with demolition of these structures was unrealistic since the evicted would have nowhere to go. The lower the cost of a decent house in the suburbs, the argument ran, the greater would be the proportion of workingmen's families which could afford to buy one. If enough slum dwellers moved to these suburbs, the surplus population would be drained from overcrowded areas. As the exodus continued, slumlords would be forced to improve their properties because of the competing attraction of cheap and decent suburban housing.

Suburban planning came to be seen as a prerequisite to this process because the system of land development impeded the efficient provision of housing; in particular, it unnecessarily inflated the cost of servicing lots. That system in essence consisted of piecemeal development, by speculative subdivision of individual farms into building lots. (Land speculators were numerous, and typically did not buy two or more adjacent farms, but only one.[57]) In the absence of regulation, a developer's desire to extract the maximum number of lots from his farm often led him to ignore the location and/or width of projected or existing streets nearby, if by doing so he could squeeze more lots out of the property. This lack of co-ordination forced expensive road relocation and therefore higher local taxes.[58] The desire for quick and maximum profit also encouraged speculators to instruct surveyors merely to lay out the farm on the familiar grid pattern, regardless of topography. Not only were rectangular lots the cheapest to survey, but they

were also the most saleable in the short run, since lots had to be of a standard size and shape to maximize the uncertainty as to the use to which the land would be put; *i.e.*, to maximize its *speculative* resale value.

To the extent that the topography was irregular, serious inefficiencies arose when municipalities constructed roads, or pumped water, in the face of unnecessarily steep grades. The problem was significant in most Canadian cities; in British Columbia it reached ludicrous extremes. Thanks to the application of the grid system, some streets in Vancouver were so positioned as to create grades of 16%, whereas it had been possible to lay them out with grades of 5%. The problem was even worse in other centres in the province.[59] Perhaps the most serious widespread cause of unnecessarily high servicing costs was the scattered nature of subdivision development. As land along street-car routes rapidly appreciated in value, people would settle a little beyond the street-car terminals in order to obtain cheaper building lots. Since terminals often coincided with the city limits, these settlements were not eligible for city sewerage and water supply services. Neighbouring municipalities did at first offer lower property taxes and far less stringent — or even non-existent — plumbing and building regulations, so that the suburban pioneer could build a cheap rudimentary house. Unfortunately, one's water supply and waste disposal could be maintained only on an area of half an acre or more, and then only in favourable spots. After most surrounding lots had been occupied, residents were impelled to demand the provision of municipal water and sewerage services to their scattered clusters of homes. In numerous cases, the local municipality did attempt such works programmes, either incurred or foresaw financial disaster, and managed to have itself annexed. With annexation might come street-car service, and another cycle of population dispersion.[60] As well, the years before 1914 witnessed a significant suburbanization of industry near major cities in central and western Canada, as factories were strung further and further along railway lines.[61] The trend was intensified because some suburbs offered location bonuses[62], and because manufacturers located downtown found it too costly to acquire additional properties there for expansion.[63] Some of the employees of a relocated factory would commute from downtown to suburb, but others created little shack-towns near each plant.[64]

These factors help explain why the suburban rate of population growth in Canada could overtake the central city rate in the decade after 1910[65], but the reality of population increase could never have justified the orgy of suburban subdivision which took place before 1913. In Ottawa and Hull, for example, the population had by 1914 reached 123,000 souls, who would have occupied five square miles, given a density of forty per acre. In fact, the subdivided area covered sixty-five square miles, some of which was dotted with scattered

shack dwellings, but a great part of which was unused, held by absentee owners in search of speculative profit.[66] By 1914, before either Calgary or Edmonton had a population of 50,000, both cities had subdivided areas equal to the size of Toronto, which by that date had a population approaching 500,000.[67] In the boom years before 1913, municipalities both large and small actually encouraged speculation by servicing lots before they were sold for building purposes. The extent of this error varied from one centre to the next; Toronto, for example, was less irresponsible than Vancouver or Calgary. The latter by 1914 possessed 26,763 vacant lots served with sewers and watermains, enough at two persons per lot for its entire population.[68] The servicing of scattered subdivisions meant the uneconomical extension of pavement and sidewalk, water and sewer pipe, through stretches of unoccupied lots. In a surprising number of cases, promoters ignored the fact that their suburban developments were beyond the natural drainage area of the nearby city. The cost of a new trunk sewer and perhaps also of a new sewage-treatment plant, constituted yet another needless burden on the local taxpayer.[69]

Housing reformers were all the more determined to control subdivision development because the suburban householder, far more than the speculator, paid for road relocation, for the imposition of a grid plan on a hilly site, and for the cost of pushing local improvements through unoccupied areas. To understand why, we must note how local improvements were financed. The proportion of the cost charged to general revenues, as opposed to owners of property immediately benefitted, varied considerably within Canada. Usually, however, the total cost was considered part of the city debt, with only the sinking fund and interest charges levied directly on the improved properties. In a period of inflating land values, the speculator was willing to pay these charges for a year or two, in order to obtain servicing which increased both the saleability and value of his lots. Many speculators did not own land long enough to find themselves liable for taxes at all: wherever they could, they passed on the liability to purchasers for use.[70]

The lesson which housing reformers drew from the domestic situation was confirmed by the example of Great Britain, where the emphasis on preventive suburban planning had been embodied in the Town Planning Act of 1909. The Governor-General, Lord Grey, had for years been interested in the garden suburb solution to the housing shortage in Britain, and on his urging many leading Canadians visited workers' suburbs while in England. It was Grey who invited the leading housing reformer, Henry Vivian, M.P., to conduct a speaking tour of Canada. In his addresses during 1910, Vivian contrasted the expense of altering built-up areas with the relative ease of planning healthful new suburbs.[71] In 1912, a large number of business and

reform organizations determined to help solve the housing crisis by requesting the Commission of Conservation to secure the services of the Englishman who knew most about the solution in which they believed: the proper planning of workers' suburbs. In July of 1914 Thomas Adams, who had supervised the early implementation of the Act of 1909, was appointed Town Planning Adviser to the Commission[72], and became a major influence for the preventive approach both on public opinion and on provincial planning acts.

Such housing reform organizations as the Greater Montreal Housing and Planning Association helped popularize the phrase "housing and town planning", which by 1914 had come to summarize the new view of planning as oriented essentially to the efficient provision of suburban housing.[73] But the professionals who wished to obtain planning contracts or perhaps a newly-created government planning job[74] did not come to condemn city beautiful thought just because housing reformers were stressing suburban regulation. Rather, they were doing so by 1918 because by war's end their prospective employers, the provincial and local politician, had confined their interest in planning almost exclusively to suburban regulation. It was already evident before World War I that municipal politicians were more sympathetic to preventive regulation than to expensive projects to reshape the downtown. Apart from parks, city beautiful proposals for which no provincial or federal funding was available usually were rejected. Despite support from the prestigious Guild of Civic Art, the O.A.A.'s 1905 plan for Toronto was placed on the shelf by Mayor Coatsworth, who noted cagily that without the proposed trunk sewer, which would cost two and a half millions, Toronto's beauty would be largely lost.[75] In Calgary, budget-conscious councilmen seized on the grandiose elements of Mawson's plan of 1914, and were able to have the plan rejected in its entirety.[76] Councils such as Winnipeg's had no sympathy even for plans whose proposals for remaking the downtown were quite efficiency-oriented.[77] As for provincial governments, even before the recession of 1913-1915 they were giving municipalities wider powers to regulate suburban development beyond their boundaries. In 1912, Nova Scotia and New Brunswick passed virtually identical Town Planning Acts based on the British Act of 1909. Their scope was confined largely to the preparation of schemes for land in the course of building development, or which was likely to be developed. Lands already built upon could be included only if necessary for carrying out the scheme.[78] The Ontario City and Suburbs Plans Act of 1912 established a five-mile wide surburban zone around each centre of 50,000 or more, and required that plans for new subdivisions within such cities and their zones be approved by the Railway and Municipal Board.[79] In 1911, Saskatchewan made all new subdivision layouts subject to approval by an Inspector of Townsites.[80]

The determination of towns and cities to end the gross inefficiencies in suburban development was much intensified by the crisis in municipal finance which may be dated roughly from 1913 to 1923. In 1913, the land boom collapsed. Where now was the profit with which speculators could pay property taxes on their lots and, in addition, interest and sinking fund charges on any improvements? The war dashed hopes that heavy immigration would revive real estate activity; soon after the fighting ended came the great deflation of 1920-1923. During this period of low real estate values, municipalities found it increasingly difficult to collect the high taxes which servicing scattered development had necessitated. Moreover, during the war they incurred the new expense of supporting soldiers' families. Because of the war it became more difficult between 1915 and 1918 to float municipal bond issues, and taxes were repeatedly increased.[81] Arrears and tax sales became commonplace in Canada, especially in the Western Canada. By the mid-1920's, Calgary had by this means acquired 73,000 lots![82] In the early 1920's, suburban municipalities around Toronto, Winnipeg and Vancouver were approaching financial collapse.[83] Between 1913 and 1918, Nova Scotia, Ontario, Manitoba, Saskatchewan and Alberta strengthened provincial laws concerning suburban regulation, and in 1916 and again in 1917, the Union of British Columbia Municipalities demanded similar action.[84] The tax burden on workingmen's suburban homes was of course not relieved by this tardy provincial action, and indeed reached crushing levels.

The housing shortage became even more desperate during the war. While high taxes put suburban homes further out of the reach of workers' families, private capital to finance home-building became difficult to obtain even at higher rates. Material and labour costs rose steeply, so that building a house cost between 30% and 60% more in 1918 than it had in 1913. Builders expected a post-war deflation that would involve losses to those building under war-time conditions, and by 1918 private capital had deserted the home-building field. In 1918 many were asking along with Thomas Adams, "If we are now short of houses to provide for newlyweds and industrial workers, what will the situation be when great numbers of soldiers return?"[85]

The war-time spirit of sacrifice, the desperate need by 1918 for practical steps to provide low-cost housing for war workers and veterans, and the financial plight of municipalities by war's end all served to discredit costly, non-utilitarian planning. However, many people had in the years before 1913 been introduced by the media to the phrase "town planning" in conjunction with the presentation of a costly city beautiful proposal. The intensity of the attack after 1912 by engineers and surveyors on the city beautiful approach is explicable in part as a desperate attempt by these would-be planners to change their public image in accordance with the nation's sense of social priorities.

The city beautiful movement, contended engineer James Ewing in 1920, had undermined public confidence in anything labelled "city planning" or the like. Before the war, he recalled, magnificent plans had at first been greeted with awe and admiration, but people had come to realize that those plans had ignored basic urban problems.[86] Because planning experts had in boom times participated in drawing up such proposals without due regard for a general city plan, admitted engineer A.G. Dalzell in 1921, the public now regarded city planning as an "artistic fad."[87] In 1918, Adams bemoaned the same popular misconception and its corollary: ". . . it is still assumed by many that it [town planning] is only concerned with what is called by the ugly word 'beautification', and, therefore, is only a scheme for spending the money of the citizens."[88] During the prosperous later 1920's, however, it was Adams who condemned those opposing expenditure of public funds on civic beauty.[89] Engineers like Norman Wilson and Horace Seymour now included city beautiful elements in their planning proposals.[90] These facts suggest that political realities more than their own indifference to aesthetics account for at least some of the professionals' attack on city beautiful thought. One wonders whether the imagination of a second generation of Canadian planners was circumscribed by the mundane priorities during the housing shortage of the 1940's and early 1950's.

While the principle of civic grandeur was condemned by engineers and surveyors after 1912, they did advocate that zoning be used to enforce the principle that a city should have coherent streetscapes. While the chief benefits claimed for zoning were preservation of property values and economic efficiency, its proponents also cited the orderliness it would impose. The stress in city beautiful thought upon symmetry and order — as opposed to visual variety and civic grandeur — was shared by the advocates of zoning and presented as a bonus, a by-product of efficiency. In 1922, for example, James Ewing rejected the current campaign for a programme of embellishment for Montreal. Embellishment, he wrote, ". . . is beginning at the wrong end. If we can plan wisely on useful, economical, orderly and symmetrical lines, the city will naturally embellish itself."[91] Similarly, Adams argued in 1920 that "orderly development" through planning and proper zoning ". . . will produce beauty without seeking beauty as an end in itself."[92] Paul Seurot, Chief Engineer of the Montreal Tramways Commission, aptly summarized the aesthetic benefits such planners envisioned when he told the Montreal Town Planning Convention of 1921 that well-governed cities were characterized by "symmetry", "quiet orderliness", "regularity and harmony".[93]

Most obviously, zoning fostered orderly streetscapes by segregating various economic activities — and the differing sizes and shapes of buildings

needed to accommodate them. In a zoned city, ugly laundries and light manufacturing could no longer invade fine residential areas.[94] No longer could developers erect apartment buildings alongside fine homes, and build them up to the street and side lot lines, blocking the view up and down the street, for which sins they were notorious in both Ottawa and Vancouver.[95] Moreover, within each zone minimum standards of front yard depth and side yard width for homes, and set-back provisions for commercial buildings, would lead to a symmetrical arrangement of buildings along the street. This "inevitable by-product" of zoning was welcomed by B. Evan-Parry, Supervising Architect of the federal Department of Health[96], and such regulations were part of the zoning by-laws adopted by Kitchener in 1924 and by Vancouver in 1928.[97] Within each restricted zone there was generally also one narrow range of permissible building heights. The rule of height in a zoning by-law, explained G.H. Ferguson, Chief Engineer of the federal Department of Health, ". . . connotes a human quality. Absence of scale, or being 'out of scale', means that one building is out of harmony with another, that in each street the general setting is marred by some impertinent and illmannered intrusion."[98]

The narrow view of beauty as orderliness quite ignored that central criterion of city beautiful thinkers: the avoidance of visual monotony. Regarding this failure, we find a lack of actual, as opposed to implicit, debate in the sources. The city beautiful architects had offered relief, at least to the travelling public, by street curves, series of beautiful and varied terminations along lengthy avenues, parkway systems, and grand civic centres. The engineers of order offered none. Yet no debate ensued. In the years of municipal retrenchment after 1912, the architects and their friends may have recognized the orderliness resulting from efficiency as the only part of their vision the taxpayers would support.

NOTES

The following abbreviations are used:

AOLSP — Association of Ontario Land Surveyors, *Proceedings*
CA&B — *The Canadian Architect and Builder*
CE — *The Canadian Engineer*
CMJ — *The Canadian Municipal Journal*
C of CR — Canada, Commission of Conservation, *Annual Report*
MRC — *The Municipal Review of Canada*
OAAP — Ontario Association of Architects, *Proceedings*
RAICJ — Royal Architectural Institute of Canada, *Journal*
TP&CL — *Town Planning and Conservation of Life*
TPICJ — Town Planning Institute of Canada, *Journal*

[1] OAAP, 1904, p. 95.

[2] *Ibid.*, 1906, p. 49.

[3] CA&B, XVIII, 210, June 1905, p. 82.

[4] Toronto Guild of Civic Art, *Report on a Comprehensive Plan for Systematic Improvements in Toronto*, (1909).

[5] J.P. Hynes, "Town Planning Suggestions for Canadian Municipalities", CE, XXI, Sept. 21, 1911, p. 337; J.F.D. Tanqueray, "The Vancouver Civic Centre and English Bay Development Scheme", TPICJ, VIII, 1, Feb. 1929, p. 2.

[6] CA&B, VII, 2, Feb. 1894, pp. 32-33.

[7] CA&B, VI, 10, Oct. 1893, p. 104; and VII, 2, Feb. 1894, p. 25.

[8] *Ibid.*, VI, 10, Oct. 1893, p. 104.

[9] Arthur B. Gallion and Simon Eisner, *The Urban Pattern: City Planning and Design*, (Second edition, Toronto: Van Nostrand, 1963), pp. 191-201.

[10] OAAP, 1905, p. 47.

[11] As one Mr. Doran put it at a P.Q.A.A. "At Home". CA&B, XIV, 5, May 1901, p. 92. The same perception was emphasized by J.W. Siddall before the O.A.A. in 1899. CA&B, XII, 2, Feb. 1899, pp. 28-29.

[12] *Ibid.*, IX, 2, Feb. 1896, p. 18.

[13] *Ibid.*, XIX, 217, Jan. 1906, p. 3.

[14] J.W. Siddall, "The Advancement of Public Taste in Architecture", CA&B, XII, 2, Feb. 1899, p. 28.

[15] RAICJ, X, 5, May 1933, pp. 92-93.

[16] Percy Nobbs, "City Planning", CMJ, VIII, 4, April 1911, p. 141. See also the savage comments of A.T. Taylor, CA&B, VII, 10, Oct. 1894, p. 130.

[17] OAAP, 1906, p. 90.

[18] CA&B, IX, 2, Feb. 1896, p. 26. See also Nobbs' comments in CE, LIII, Dec. 13, 1927, p. 611.

[19] Vancouver, Town Planning Commission, *A Plan for the City of Vancouver, British Columbia, including Point Grey and South Vancouver and a General Plan of the Region*, (1930), p. 254. See architect John Lyle's comments in RAICJ, XII, 4, April 1935, p. 61.

[20] CA&B, VII, 10, Oct. 1894, p. 130; and XI, 11, Nov. 1898, p. 192.

[21] CA&B, XIII, 6, June 1895, p. 80.

[22] TPICJ, VI, 1, Feb. 1927, p. 67. For an indication of the heated denunciation that might be expected from colleagues by architects opposing the idea, see the reaction to Nobbs' opposition related in CE, LV, Sept. 18, 1928, p. 320.

[23] TPICJ, VII, 2, April 1920, p. 30.

[24] *Ibid.*, VI, 6, Dec. 1927, p. 197; VII, 2, April 1928, p. 29; and VIII, 5, Dec. 1929, p. 99.

[25] Malcolm N. Ross, "Landscape Art and City Design", CE, XXII, March 28, 1912, pp. 457-458. The unorthodox punctuation comes from the original.

[26] Percy Nobbs, "City Planning", CMJ, VII, 4, April 1911, p. 140.

[27] CA&B, XVII, 201, Sept. 1904, p. 145.

[28] For Wynne-Roberts' comments, see CE, XXII, March 28, 1912, p. 458; C.J. Yorath, "Town Planning", CMJ, IX, 10, Oct. 1913, p. 434.

[29] CA&B, XVII, 201, Sept. 1904, p. 145.

[30] CE, XXII, March 28, 1912, p. 459.

[31] Toronto Guild of Civic Art, *Report* . . . p. [16]. (The document is unpaginated.)

[32] Langton, "The Plan of Improvements to Toronto", OAAP, 1906, pp. 98-99.

[33] Toronto Guild of Civic Art, *Report* . . . The proposal is most readily comprehended by looking at the map facing the first page.

[34] CA&B, XIX, 222, June 1906, p. 88.

[35] Canada, Federal Plan Commission, *Report on a General Plan for the Cities of Ottawa and Hull,* (1915), p. 125.

[36] A.E. Foreman, "A Major Street Plan for Vancouver", TPICJ, VI, 4, Aug. 1927, p. 129; *A Plan for the City of Vancouver . . .*, pp. 175-176, 207. Emphasis added.

[37] Alan Gowans, *Building Canada: An Architectural History of Canadian Life,* (Toronto: Oxford University Press, 1966), p. 86.

[38] C.H. Mitchell, "Town Planning and Civic Improvement", CE, XXIII, Dec. 26, 1912, p. 913.

[39] Federal Plan Commission, *Report . . .*, pp. 119-120.

[40] *A Plan for the City of Vancouver . . .*, p. 239; J.F.D. Tanqueray, "The Vancouver Civic Centre and English Bay Development Scheme", TPICJ, VIII, 1, Feb. 1929, pp. 2-4.

[41] Toronto, Advisory City Planning Commission, *Report* (1929), pp. 25-29.

[42] CE, XL, Feb. 24, 1921, pp. 251-252.

[43] Wright, "Design in Modern Architecture", CA&B, XIV, 2, Feb. 1901, p. 40.

[44] Percy Nobbs, "The Official Architecture of European Capitals", OAAP, 1906, p. 85.

[45] Thomas H. Mawson and Sons, *Calgary: A Preliminary Scheme for Controlling the Economic Growth of the City,* (Calgary: City Planning Commission, 1914), pp. 39-42.

[46] CMJ, VII, 6, June 1911, p. 213. See also the editorial in CE, XX, April 13, 1911, p. 562.

[47] CE, XXIX, Oct. 21, 1915, p. 505.

[48] A.G. Dalzell, "Is Town Planning Too Costly?", *ibid.,* LIII, Oct. 25, 1927, p. 481; H.L. Seymour, "Town Planning Reduces City's Taxes", CE, LXXVI, April 25, 1939, p. 4.

[49] Some examples are:

	Montreal	Toronto	Winnipeg	Regina
1901	328,172	209,892	42,340	2,249
1911	490,504*	381,833*	136,035	30,212
	Calgary	Edmonton	Vancouver	
1901	4,392	4,176	29,432	
1911	43,704	31,064	120,847	

*Due in part to annexation.

Source: Canada, Dominion Bureau of Statistics, *Census 1921,* Vol. I, Table 12; Canada, Dominion Bureau of Statistics, *Census 1931,* Vol. II, Table 8; Canada, Dominion Bureau of Statistics, *Census 1941,* Vol. II, Table 16. Unless otherwise noted, the figures are based on constant boundaries (those of 1941).

[50] L.O. Stone, *Urban Development in Canada,* (Ottawa: Queen's Printer, 1967), pp. 63, 147, 149-151.

[51] TP&CL, I, 3, Jan. 1915, p. 56.

[52] W.J. Burditt, "Civic Efficiency and Social Welfare in Planning of Land", in Canada, Commission of Conservation, Conference on Urban and Rural Development in Canada, Winnipeg, May 28-30, 1917, *Report,* p. 75.

[53] J. Frank Beer, "A Plea for City Planning Organization", C of CR, 1914, p. 112; James Roberts, "The Housing Situation, Hamilton", CMJ, VIII, 7, July 1912, p. 255; Alan Artibise, "The Urban Development of Winnipeg, 1874-1914", (Ph.D. thesis, University of British Columbia, 1971), p. 233.

[54] J.S. Woodsworth, *My Neighbor,* (Toronto; University of Toronto Press, 1972), p. 139.

[55] CMJ, IX, 5, May 1913, p. 169.

[56] See the excellent summary of current findings and interpretations by public health officials concerning housing conditions in Dr. Charles A. Hodgetts, "Unsanitary Housing", C of CR, 1911, pp. 51-54, 61-65. The quotation is found on p. 54.

[57] Donald Kerr and Jacob Spelt, *The Changing Face of Toronto — A Study in Urban History,* (Toronto, 1964), p. 66.

[58] *Ibid.*, pp. 66-67, 113; Eric Arthur, *Toronto: No Mean City*, (Toronto, 1964), p. 24; Artibise, pp. 243, 250; James and Robert Simmons, *Urban Canada*, (Toronto, n.d.), pp. 31-32, 68-69; CA&B, I, 6, June 1888, p. 4; XVIII, 208, April 1905, p. 51; TPICJ, VIII, 3, June 1929, p. 163; CMJ, XI, 2, Feb. 1915, p. 52; CE, XLVII, Sept. 16, 1924, p. 334; TPICJ, I, 6, Oct. 1921, pp. 5, 7.

[59] Thomas Adams, "Town and Rural Planning in British Columbia", CMJ, XV, 1, Jan. 1919, p. 25; A.G. Dalzell, "A Contrast in City Planning", TP&CL, VII, 1, Jan.-March 1921, pp. 9-10; A.E. Cleveland, "Regional Planning", TPICJ, VI, 4, Aug. 1927, p. 144.

[60] CE, XLVIII, May 12, 1925, p. 475; and LX, March 31, 1931, pp. 17-18; Kerr and Spelt, p. 69; P.J. Smith, "Calgary: A Study in Urban Pattern", *Economic Geography*, XXXVIII, 4, Oct. 1962, pp. 315-329; MRC, XXIII, 5, May 1927, p. 198.

[61] Kerr and Spelt, pp. 129-130; Smith, pp. 317, 319; John Irwin Cooper, *Montreal: A Brief History*, (Montreal, 1969), p. 127; Artibise, pp. 239-240, 354.

[62] CMJ, X, 8, Aug. 1914, p. 309.

[63] L.B. Duff, "The Town Plan and the Factory", CE, XXXVII, Dec. 18, 1919, p. 544; A.G. Dalzell, "Classification of Land for Industrial Purposes", TP&CL, VI, 2, April-June 1920, p. 28.

[64] Dalzell, "Development of Urban Communities", CE, LVI, Feb. 26, 1929, pp. 268-269.

[65] Stone, p. 135.

[66] Thomas Adams, *Rural Planning and Development; A Study of Rural Conditions and Problems in Canada*, (Ottawa: Commission of Conservation, 1917), pp. 109-110.

[67] A.G. Dalzell, "The Relation of Housing and Town Planning in Cities Such as Vancouver", MRC, XXIII, 5, May 1927, p. 199; see also AOLSP, 1924, p. 238; W.A. Begg, "Town Planning and Development in Saskatchewan", CE, XL, Feb. 17, 1921, p. 220; Dalzell, "Should Shack-Towns Be Encouraged?", CE, L, March 23, 1926, p. 412.

[68] Adams, "Planning and Development of Land", in Conference on Rural and Urban Development, *Report*, p. 81; Adams, *Rural Planning and Development*, p. 118; MRC, XXVII, 2, Feb. 1931, p. 16; AOLSP, 1924, p. 238; *A Plan for the City of Vancouver . . .*, p. 31; CE, XLVIII, May 12, 1925, p. 477.

[69] A.G. Dalzell, "Problems of Sewer Design in Canada", CE, XLVIII, May 12, 1925, p. 475; George R. MacLeod, "The City Engineer's Work in Relation to Town Planning", MRC, XXXIV, 7, July-Aug. 1938, p. 17.

[70] C.J. Yorath, "Municipal Finance and Administration", Conference on Urban and Rural Development, *Report*, p. 28; Adams, *Municipal and Real Estate Finance in Canada*, (Ottawa: Commission of Conservation, 1921), p. 10.

[71] CMJ, VI, 10, Oct. 1910, pp. 401, 403.

[72] Among the supporters of the petition were the Canadian Manufacturers' Association, the Canadian Public Health Association, the Order of the Daughters of the Empire, the National Council of Women, the Montreal Parks and Playgrounds Association, the Union Committee of Charitable Organizations, Montreal, the Union of Charities of Toronto, the Hamilton Board of Trade and "a very large number of the most prominent citizens of Canada". C of CR, 1913, pp. 8-9, 11; see also *ibid.*, 1915, p. 162; and *ibid.*, 1917, p. 25.

[73] *Canadian Annual Review*, 1913, pp. 723-724; see also the accounts of the First Canadian Housing and Town Planning Conference, held at Winnipeg in 1912, in CMJ, VIII, 9, Sept. 1912, p. 338, and CE, XXIII, July 25, 1912, p. 235.

[74] For revealing evidence of this job-hunger among surveyors, see AOLSP, 1918, pp. 15, 22, 36-42.

[75] OAAP, 1906, pp. 56, 61.

[76] TPICJ, VI, 6, Dec. 1927, p. 205.

[77] Artibise, pp. 408-422; TPICJ, VI, 6, Dec. 1927, p. 190.

[78] C of CR, 1913, pp. 206-207, 211-212.

[79] CMJ, VIII, 6, June 1912, p. 209.

[80] Stewart Young, "Planning Progress in Saskatchewan", TPICJ, X, 1, Feb. 1931, p. 5.

[81] CMJ, XI, 2, Feb. 1915, p. 76; *ibid.*, XIV, 1, Jan. 1918, p. 26; *ibid.*, CMJ, XI, 12, Dec. 1915, p. 441; *ibid.*, CMJ, XIII, 12, Dec. 1917, p. 512.

[82] CMJ, XVI, 1, Jan. 1920, p. 11; CE, LII, June 21, 1927, p. 618.

[83] MRC, XXIII, 5, May 1927, p. 199.

[84] CMJ, XII, 12, Dec. 1916, p. 630; *ibid.*, XIII, 12, Dec. 1917, p. 505.

[85] Adams, "The Housing Problem and Production", TP&CL, IV, 3, July 1918, pp. 53, 55-56.

[86] Ewing, "Town Planning That Pays", CMJ, XVI, 3, March 1920, p.82.

[87] TP&CL, VII, 1, Jan.-March 1920, p. 10.

[88] *Ibid.*, IV, 3, July 1918, p. 65.

[89] Adams, "The Die-Hard Economist and the Subject of Civic Beauty", MRC, XXIV, 5, May 1928, p. 199.

[90] TPICJ, X, 3, June 1931, p. 57; CE, XLVII, July 8, 1924, p. 129.

[91] Ewing, "The Montreal Situation with reference to Town Planning", CE, XLII, March 21, 1922, p. 235.

[92] TP&CL, VI, 2, April-June 1920, p. 35.

[93] CE, XLII, Jan. 10, 1922, p. 132.

[94] J.M. Kitchen, "Preparing Zoning By-laws for the City of Ottawa", TPICJ, III, 3, June 1924, p. 22.

[95] TPICJ, VI, 1, Feb. 1926, pp. 19, 25-26.

[96] B. Evan-Parry, "Zoning for the Health of the Community", CE, XLIX, July 21, 1925, p. 150.

[97] TPICJ, IV, 1, Jan. 1925, pp. 2-4; *A Plan for the City of Vancouver . . .*, pp. 278-288.

[98] G.H. Ferguson, "Need for Zoning in Canadian Cities", CE, LI, Oct. 5, 1926, p. 353.