

## HYDROSTONE'S HERITAGIZATION: GARDEN CITY OF WAR<sup>1</sup>

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In 2007, Halifax, Nova Scotia, celebrated the ninetieth anniversary of its destruction, an event that would shape both the future of the city and the early stages of official planning in Canada. In the morning of December 6, 1917, an explosion rocked the harbour, destroying much of the city. Under the shadow of a worldwide conflict, many initially thought that the Germans had attacked; but an investigation soon revealed that two naval warships, the Norwegian vessel *SS Imo* and the French cargo ship *SS Mont-Blanc*, had collided. The city's entire North End was levelled and nearly one thousand seven hundred people perished, and hundreds of others were wounded<sup>2</sup>. It was the worst man-made disaster before the atomic bomb (fig. 1).

Reconstruction began immediately. By 1922, all vestiges of the disaster had disappeared, so much so that seventy years later in 1993, the Hydrostone district was known as a "1920s public housing project in the English garden-suburb style." The designation of a small part of the devastated area, now rebuilt as a *National Historic Site* of Canada by Parks Canada, spotlights the innovative character of the project but overlooks the essential reason behind the reconstruction.

As presented by Parks Canada, the Hydrostone model of heritagization appears to trace its beginnings after the project's completion, once the first inhabitants were housed. But Hydrostone was a neighbourhood rebuilt primarily to house disaster victims. The initial plan was not conceived as an innovative housing project; it was first and foremost an urban response to



FIG. 1. SCENES OF DEVASTATION REMAINED IN HALIFAX WELL AFTER THE EXPLOSION: SOME AREAS WERE STILL NO MAN'S LANDS IN JUNE 1918. | GAUVIN AND GENTZEL, JUNE 19, 1918. NOVA SCOTIA ARCHIVES AND RECORDS MANAGEMENT, ACCESSION NO. 1992-359, NEGATIVE NO. N-7086.

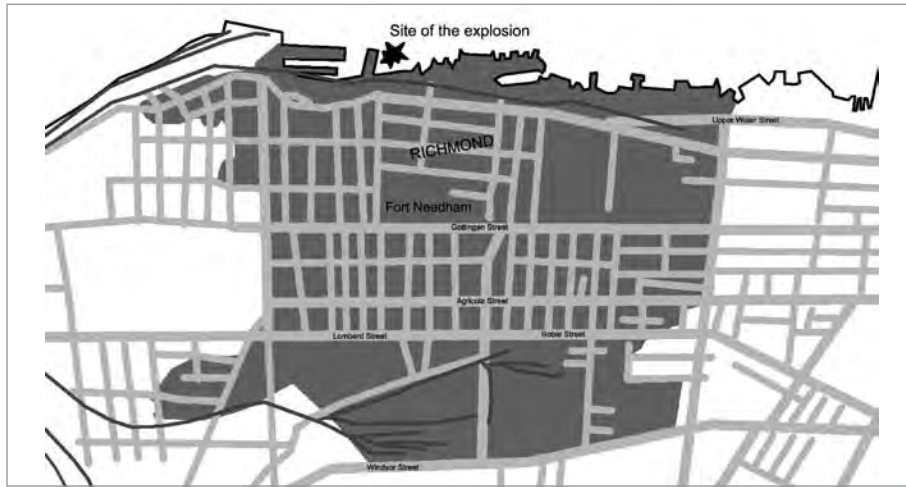


FIG. 2. HALIFAX DEVASTATED. | ADAPTED BY THE AUTHORS FROM A 1918 LITHOGRAPH. NOVA SCOTIA ARCHIVES AND RECORDS MANAGEMENT, NOVA SCOTIA BOARD OF INSURANCE UNDERWRITERS COLLECTION, ACCESSION NO. V6 / 240-1917 HALIFAX, LOC. 4.2.3.2.

a catastrophe. As the sole example of a reconstruction project on Canadian soil tied to a modern-day armed conflict, Hydrostone’s exceptional character is emphasized by the fact that it was part of a very distinct urban trend—a garden city of war.

Consequently, this research note attempts to cast a new perspective on the process, beginning with the catastrophe and aimed at showing that Hydrostone was not so much a public housing project as it was a garden city of war that followed an international reconstruction movement. Our discussion will hinge on three propositions. At the time, the garden city model was considered as an essential, even necessary tool for a rapid return to normal life. Therefore, Halifax would have chosen the garden city as a means to rebuild, thus joining an international “reconstruction management” movement. Urban resilience—a city’s ability to return to normal—could have affected the heritage recognition process.

**THE GARDEN CITY—A RECONSTRUCTION TOOL**

After the explosion, chaos reigned: seven hundred and fifty families needed hous-

ing, all landmarks had disappeared, fires broke out, and a blizzard raged (fig. 2). A good part of the city needed rebuilding, and damage was estimated at nearly twenty-eight million dollars. International rescue and aid workers were quickly organized and the federal government imposed the *War Measures Act*, giving full power to the Halifax Relief Commission, which was created to manage reconstruction.

The Halifax Relief Commission quickly called on Thomas Adams (1871-1940) to define the boundaries of the devastated area (two and a half square kilometres) and prepare reconstruction plans. At that time, Thomas Adams was a city planner for the Conservation Commission, an organization created in 1909 to ensure management of Canadian resources. Called over from England in 1914 as a garden city specialist,<sup>3</sup> he remained a key resource person in Europe where he actively participated in discussions on reconstruction.

Appearing in the late nineteenth century, the garden city was defined as an alternative to industrial urban living conditions. Presented by Ebenezer Howard in his work *Garden Cities of To-Morrow*<sup>4</sup> (1898), it aimed to combine the advantages of



FIG. 3. ARTICLE WRITTEN BY THOMAS ADAMS ON THE PLANNING OF HALIFAX PUBLISHED IN *THE CONTRACT RECORD* (TORONTO), AUGUST 28, 1918, P. 680-683. | NOVA SCOTIA ARCHIVES AND RECORDS MANAGEMENT, HALIFAX RELIEF COMMISSION COLLECTION, ACCESSION NO. 1976-166.57.

both the city and countryside through the principle of cooperation. From Ebenezer Howard’s ideal, urban planners only retained some of the principles. As a social concept, the garden city is often interpreted as a construction method that became standardized, and thus the tool of choice in early twentieth-century urban planning.

In 1899 in England, the Garden City Association was formed, institutionalizing a movement which soon became international in scope. This association had a major impact on the spread of the concept via a program of publications, international conferences, exhibitions, and site visits. When World War I broke out in 1914, the association’s contribution to ideas about reconstruction was only reinforced. Within the very first months, a number of conferences were organized by the Garden City and Town Planning Association and the International Union

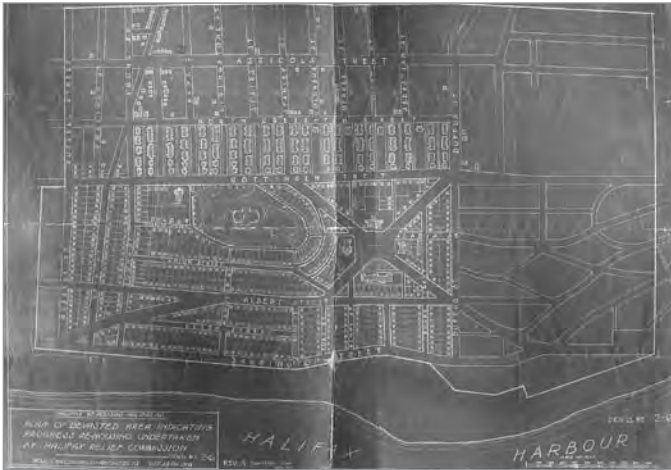


FIG. 4. BLUEPRINT FOR THE "PLAN OF DEVASTATED [SIC] AREA INDICATING PROGRESS REHOUSING UNDERTAKEN BY THE HALIFAX RELIEF COMMISSION," PREPARED BY THE FIRM ROSS AND MACDONALD, OCTOBER 25, 1918 (COMPLETED MARCH 1919). | NOVA SCOTIA ARCHIVES AND RECORDS MANAGEMENT, HALIFAX RELIEF COMMISSION COLLECTION.



FIG. 5. HYDROSTONE DISTRICT AND ITS SURROUNDINGS, CA. 1921. PARK FORT NEEDHAM CAN BE SEEN ON THE LEFT. | NOVA SCOTIA ARCHIVES AND RECORDS MANAGEMENT, HALIFAX RELIEF COMMISSION COLLECTION, ACCESSION NO. 1976-166.41.



FIG. 6. MERKEL PLACE, FACING ONE OF THE LINEAR PARKS. | YONA JÉBRAK, JUNE 2006.



FIG. 7. ONE OF THE LINEAR PARKS, BETWEEN CABOT STREET AND SEBASTIAN STREET. | BARBARA JULIEN, JUNE 2006.

of Local Authorities.<sup>5</sup> Practitioners and authorities gathered, enabling the spread of information and implementation of intervention guidelines. The Association lobbied so effectively that the garden city was considered one of the only valid plans for rebuilding war-torn cities. Thomas Adams promoted the idea in Canada through the publication of numerous articles on the matter<sup>6</sup> (fig. 3).

Thus, it is in that context of urban innovation that the destruction of the Hydrostone district precipitated Canadian

thinking on reconstruction and city planning in general. It can be conceived that Halifax, itself a victim of war, wished to join the European-style reconstruction movement. The choice of hiring Thomas Adams to rebuild Hydrostone seemed clear: he was not only famous, he was also a garden city theorist and practitioner.

### HYDROSTONE—A GARDEN CITY

Hydrostone's urban environment—garden city principles combined with the need to rebuild rapidly—is composed of a

two-part orthogonal grid divided by Gottingen Street, the district's central axis. In the upper area, a series of twenty rows of equal width are repeated in a standardized sequence: alley, row of houses, street, linear park, street, and row of houses. In the lower area, the streets are parallel to the port. The sequence is broken by a central park and two diagonals that create a formal square. Reconstruction began with the upper part of the plan, which we call the Hydrostone district. The lower area was mainly developed in the 1930s (figs. 4-5).





FIG. 8. YOUNG STREET, THE COMMERCIAL STRIP. | YONA JÉBRAK, JUNE 2006.

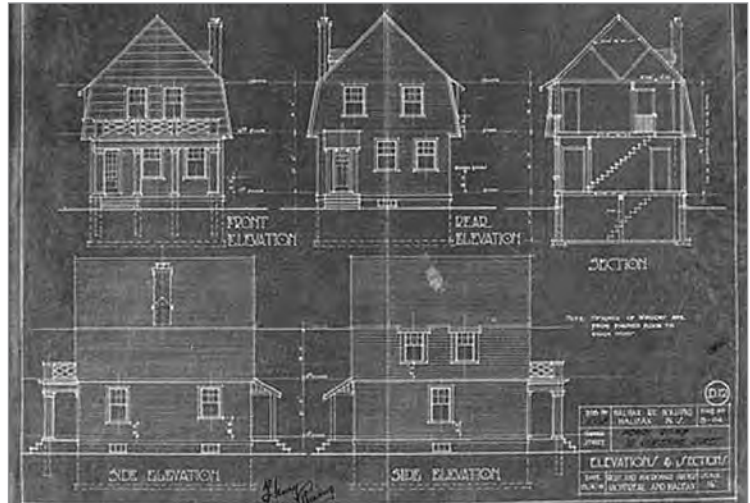


FIG. 9. BLUEPRINT FOR ONE OF ROSS AND MACDONALD'S HOUSE DESIGNS, HOUSE DESIGN D.12 (JUNE 1918). | NOVA SCOTIA ARCHIVES AND RECORDS MANAGEMENT, HALIFAX RELIEF COMMISSION COLLECTION, REFERENCE NO. MG 36, SERIES R, NO. 1028.



FIG. 10. A TYPICAL HYDROSTONE MODEL ON STANLEY STREET, BETWEEN NAVONLEA STREET AND ISLEVILLE STREET. | YONA JÉBRAK, JUNE 2006.



FIG. 11. A TYPICAL HYDROSTONE MODEL ON CABOT STREET. | BARBARA JULIEN, JUNE 2006.



FIG. 12. CANADIAN HYDROSTONE PLANT, EASTERN PASSAGE, JANUARY 1919. THE PLANT WAS BUILT IN ORDER TO ACCELERATE HOUSE RECONSTRUCTION. | NOVA SCOTIA ARCHIVES AND RECORDS MANAGEMENT, WILLIAM SMITH COLLECTION, ACCESSION NO. 1991-325, NEGATIVE NO. N-7050.

There were three underlying development criteria to the plan: first, it introduced a standard neighbourhood design composed of an economic centre and residences. A commercial thoroughfare with the same architectural design was developed in the vicinity of the three hundred and twenty-six new residences. The road hierarchy—the second criteria—consisted of a five-level system of streets including thoroughfares, primary and secondary collection highways, local access roads, and service roads. This organization not only separated the different kinds of traffic and controlled their

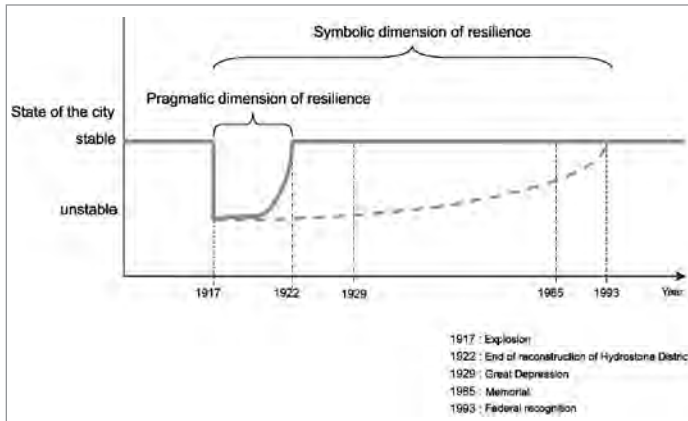


FIG. 13. THE SYMBOLIC AND PHYSICAL MECHANISM OF URBAN RESILIENCE APPLIED TO THE RECONSTRUCTION OF HALIFAX DEVASTATED AREA. | JÉBRAK AND JULIEN, 2008, "HYDROSTONE PATRIMONIALISÉ : CITÉ-JARDIN DE GUERRE," P. 65.



FIG. 14. NEWLY BUILT HYDROSTONE HOUSES DESIGNED BY ROSS AND MACDONALD. THIS STRIP OF HOUSES IS LOCATED ON THE NORTH SIDE OF SEBASTIAN PLACE, WEST OF GOTTINGEN STREET. | GAUVIN AND GENTZEL, MARCH 24, 1921. NOVA SCOTIA ARCHIVES AND RECORDS MANAGEMENT, WILLIAM SMITH COLLECTION, ACCESSION NO. 1991-325, NEGATIVE NO. N-7015.



FIG. 15. ADVERTISEMENT FOR *DEVASTATED HALIFAX*, A GRAPHIC PICTURE STORY PUBLISHED BY GERALD E. WEIR. EXCERPT FROM STANLEY K. SMITH, *HEART THROBS OF THE HALIFAX HORROR* (HALIFAX, 1918), P. 118. | NOVA SCOTIA ARCHIVES AND RECORDS MANAGEMENT, REFERENCE NO. F5249 / H17 / EX96 / 566.



FIG. 16. POSTCARD PUBLISHED IN 1918 ILLUSTRATING "STORES AND RESIDENCES DESTROYED" DURING THE 1917 EXPLOSION. | COX BROS., NOVA SCOTIA ARCHIVES AND RECORDS MANAGEMENT, HALIFAX CITY REGIONAL LIBRARY COLLECTION, ACCESSION NO. 1983-212.

volume and direction, it also limited the dangers associated with traffic and pollution, thus fostering the development of a local community. This quest for an ideal community is also illustrated by the priority given to public spaces, notably parks—the third criteria. Three kinds of

parks were included. First, across from the commercial strip was a triangular outdoor space boasting green plants and park benches where shoppers could rest between errands. In addition, eight garden boulevards, bordered by residences, were at the centre of the project and gave the district its special feel. Lastly, Park Fort Needham—a central park area of over eight acres that was the crowning point of the garden city—was a recreational space as well as a historic landmark. It served as a natural border for the dis-

trict and provided Halifax's North End with something it had lacked before the disaster: an accessible, multifunctional park network (figs. 6-8).

For architectural expertise, the Halifax Relief Commission called on the services of George Allen Ross from the Montreal firm Ross and MacDonald. In close collaboration with Thomas Adams, Ross fine-tuned a standard home construction method using hydrostone—cinderblocks made from cast concrete. This material



was non-flammable, relatively inexpensive, and, most importantly, could be produced quickly. As well, Ross standardized his architectural design. The seven home models he proposed were in the English cottage style, which is reminiscent of the garden city architecture proposed by Raymond Unwin and Barry Parker at Letchworth, England (figs. 9-12).

### HALIFAX'S RESILIENCE

A study of the Halifax reconstruction reveals the existence of a process of resilience.<sup>7</sup> The shorter the reconstruction period, the more effective urban resilience will be. The components of this resilience can be categorized in two groups: physical elements and symbolic elements (fig. 13).

Physical elements are pragmatic in nature: when a well-organized municipal structure takes charge of victims, quickly and from the very start, an even greater catastrophe is avoided. Despite winter and the incredible devastation, there were no sanitary problems after the explosion and all of the victims were housed within a month of the disaster. Moreover, permanent reconstruction was all the more efficient as the Relief Commission, sole party responsible for reconstruction, quickly named Thomas Adams to draw up the reconstruction plans. The garden city, whose applicability had already been determined, was rapidly approved, thus enabling a return to normal (fig. 14). We consider that community resilience was achieved in 1922, as, by that date, physical reconstruction was complete.

Nevertheless, even though by 1922 the homeless had found new lodging, it cannot be considered that the catastrophe had been forgotten by then. The memory of an event enlists a sphere of representations: that is symbolic resilience. It does not follow the same pattern as physical resilience

in that it is supported by a set of references that varies from one group of actors to another. Symbolic resilience is achieved through a series of stages. At first, the ruins prompted discussion of the disaster. As in Europe, where the *Michelin Guide* proposed guided tours of the battlefields even before the war was over, postcards and guidebooks of the Halifax rubble were offered for sale (figs. 15-16). Next, as the first Hydrostone occupants moved into new dwellings, new discussions centred on the beauty of the restored district, thereby allowing the disaster victims to regain their community. Grieving gave way to thoughts of the future. Starting in the 1980s, Hydrostone was no longer referred to as a reconstructed district. In 1983, it was time to commemorate the disaster victims by erecting a memorial in the heart of Fort Needham Park.

### CONCLUSION

The explosion and reconstruction had, and still have, an impact on national and local collective memory following the federal recognition of heritage. However, that recognition seems to overlook the circumstances in which Hydrostone was born. Can this paradox be explained by our natural tendency to forget, associated with successful urban resilience?

Hydrostone is clearly a garden city of war. World War I created an environment that encouraged international cooperation among city planner professionals and theorists. This pooling of ideas not only spurred thinking about rebuilding a city, it also sped the application of the theory. Through model standardization and simplification of the building process, a rapid response was therefore possible; a new urban design was born. In choosing Thomas Adams, the city of Halifax sought to join this international reconstruction movement. Hydrostone became the tan-

gible application of ideas from abroad and helped develop the basis for modern Canadian urban planning. Far from the "English garden city" model, Hydrostone illustrates the ability of a city to rebuild... and to forget its past.

### NOTES

1. This research was also published in Jébrak, Yona and Barbara Julien, 2008, "Hydrostone patrimonialisé : cité-jardin de guerre," In Marie-Blanche Fourcade (ed.), *Patrimoine et patrimonialisation. Entre matériel et immatériel*, Québec, Presses de l'Université Laval, p. 51-72.
2. Ruffman, Alan and Colin D. Howell (ed.), 1994, *Ground Zero. A Reassessment of the 1917 Explosion in Halifax Harbour. Canada's Most Tragic Disaster*, Halifax, Nimbus Publishing Limited.
3. Adams was the Garden City Association's secretary and administrator (1903-1906) of Letchworth, a garden city in Hertfordshire, England.
4. Howard, Ebenezer [1898] 1902, *Garden Cities of To-Morrow* (1898), London, Swan Sonnenschein and Co., Ltd.
5. See Hardy, Dennis, 1991, *From Garden Cities to New Towns. Campaigning for Town and Country Planning, 1899-1946*, Oxford, E and FN Spon Publisher; Ward, Stephen, 2002, *Planning the Twentieth Century City: The Advanced Capitalist World*, Chichester, John Wiley; and Smets, Marcel (ed.), 1985, *Resurgam. La reconstruction en Belgique après 1914*, Bruxelles, Crédit communal.
6. See Adams, Thomas, 1917, *Plan et Développement ruraux. Une étude sur les conditions et les problèmes ruraux au Canada*, Ottawa, Commission de la conservation du Canada; and Adams, Thomas, 1917, "What Town Planning really Means," *The Canadian Municipal Journal*, vol. X.
7. On the topic of urban resilience, see Vale, Lawrence J. and Thomas J. Campanella (eds.), 2005, *The Resilient City. How Modern Cities Recover From Disaster*, New York, Oxford university Press.