

Articles

Borrowed Buildings: Canada's Temporary Hospitals during World War I¹

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Abstract. This article explores the alterations and additions made to houses, colleges, and larger public buildings in their temporary use as convalescent homes for wounded Canadian soldiers during World War I. These "borrowed buildings" anticipated and emphasized three important characteristics of subsequent hospital architecture by suggesting that domestic environments enhanced healing, that hospitals should be accessible, and that patients should be segregated according to social status and disease. The broader implications of the study are that temporarily appropriated spaces contribute to the definition of many institutions and often act as arenas of resistance to established practices.

Résumé. Cet article examine les remaniements et les ajouts effectués aux maisons, aux collèges et aux bâtiments publics de plus grande taille utilisés comme maisons de convalescence pour les soldats canadiens blessés lors de la Première guerre mondiale. Ces bâtiments «empruntés» temporairement anticipaient trois importantes caractéristiques de l'architecture ultérieure des hôpitaux en suggérant qu'un environnement domestique favorise la guérison, que les hôpitaux doivent être accessibles et que les patients doivent être regroupés selon leur statut social et leur maladie. Dans une perspective plus large, l'auteur souligne que des espaces ainsi réaffectés temporairement peuvent contribuer à définir diverses institutions et représentent souvent des lieux de résistance aux pratiques établies.

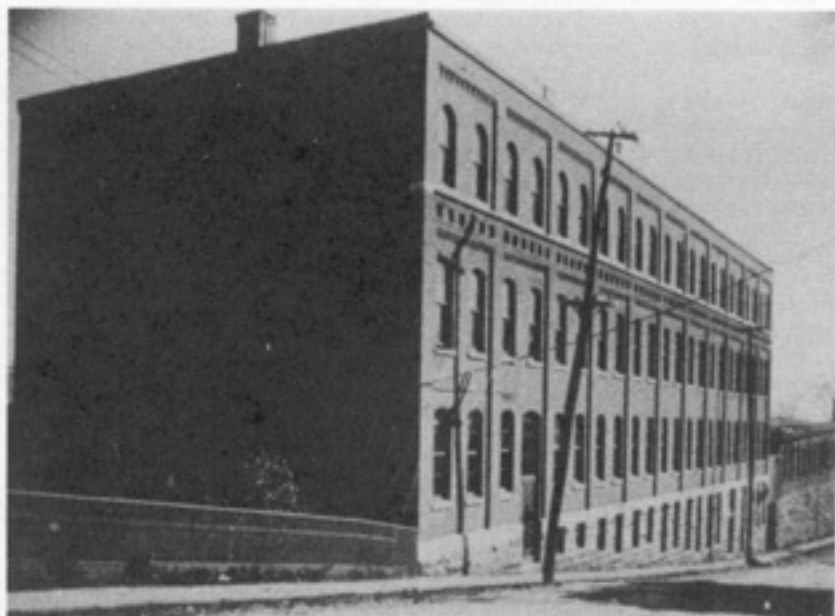
The early twentieth century was the golden age of the North American hospital. During the 1920s in particular, medium-sized Canadian cities

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like Hamilton, Ottawa, and Quebec saw the construction of monumental general hospitals designed by architects whose practices were dedicated to medical buildings. Toronto, Vancouver, and Montreal witnessed the building of these in addition to more specialized maternity, children's, and private hospitals. According to one hospital superintendent, the number of hospital beds in Montreal actually doubled about 1931.² Both the general and the specialized hospitals were monumental, six to ten-storey, U- or H-shaped ensembles, with central entries and relatively small rooms organized along double-loaded corridors. They featured sophisticated technology (medical and architectural) and increasingly differentiated zoning.³

At best, however, these heroic hospitals are half of the story. While scholarship in the history of medicine has focused on monumental urban hospitals, a great deal of medicine in the first half of this century was actually practised in less heroic, often invisible places: clinics, houses, hotels, temporary structures—borrowed buildings.

Figure 1



Northern Electric Company Factory, Aqueduct St., Montreal, used as emergency typhoid hospital in 1910 (Bell Canada Historical Services).

When a deadly typhoid epidemic broke out in Montreal in 1910, for example, patients were treated in the emergency hospital set up in a

Northern Electric Company factory (Figure 1).⁴ In five days the industrial building was transformed into the Montreal Emergency Typhoid Hospital for the poor; the entire project was funded through private efforts.⁵ The temporary hospital was described as "systematic" and "organized," "even to the temperature charts on the wall beside each bed," by Miss Lewis, the superintendent of the Montreal Maternity hospital, who toured the building soon after its opening.⁶ Eight years later during the deadly epidemic of Spanish influenza, 38% of the city's hospital beds were in borrowed buildings.⁷

Figure 2

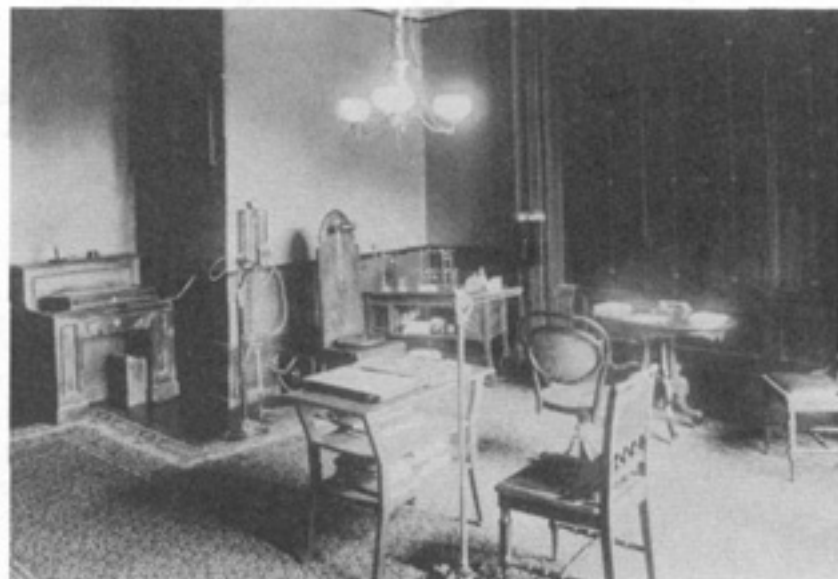


Ross and McFarlane, Chateau Laurier Hotel, 1909-12, Ottawa; 1927-30 addition by John S. Archibald and John Schofield included extensive health facilities (*Journal of the Royal Architectural Institute of Canada*, 7 [November 1930]: 393).

Buildings borrowed for hospitals came in all shapes, styles, and degrees of comfort. The Chateau Laurier Hotel (Figure 2) in Ottawa, designed by George Ross and David MacFarlane in 1912, added extensive hydro-therapy facilities to its lower level in 1930. Far from the image of the modernist, scientific institute, this "French-chateau-style" railway hotel was nevertheless considered a model of avant-garde medical space in its day.⁸ Similarly, the Montreal medical clinic of Dr. Herbert S. Birkett (Figure 3), laryngologist, was a decidedly "homey" building, where wealthy Montrealers would have come in 1890 to seek

state-of-the-art medical treatment for throat problems. In 1913, estimates suggested that more than 86% of cases of sickness in New York state were cared for at home.⁹ House calls were, of course, a normal part of urban medical practice in Canada into the 1950s and 1960s.

Figure 3



Dr. Birkett's consulting room, Montreal, date unknown (Notman Photographic Archives, Musée McCord Museum).

These decidedly non-medical buildings became significant sites of up-to-date medical diagnosis and treatment with relatively little architectural intervention. In the 1920s, St. Mary's Hospital in Montreal occupied the "famous" Shaughnessey mansion (Figure 4 and Figure 5), built in 1874-75. "Comparatively few alterations [were] necessary" to transform the Shaughnessey house into "one of the most compact and at the same time, most suitably located hospitals of its kind in the city," claimed a local journalist at the time of its opening.¹⁰ Today the building is better known as the centrepiece of the Canadian Centre for Architecture. During this period of its history (which has been completely erased from the record), the "spacious music room" on the main floor became administrative offices and the reception hall was used for patients, probably for those suffering from tuberculosis, pneumonia, or typhoid; the "Prince of Wales suite" on the second floor was occupied by the sisters of St. Joseph, who ran the hospital until 1929.

Figure 4



St. Mary's Hospital in Shaughnessey House, Montreal, ca. 1924; exterior, Dorchester Blvd (St. Mary's Hospital Audio-visual Collection).

During World War I, the medical appropriation of buildings designed for other purposes was unprecedented. Canada's medical participation in the war focused on the Military Hospitals Commission, or MHC, whose mandate after 1916 was to restore the sick and wounded "to some semblance of economic self-sufficiency."¹¹ Their architectural directive was to borrow buildings—mostly houses, colleges, and large public buildings—and to transform them into temporary hospitals and convalescent homes for sick and wounded Canadian soldiers. What was the relationship of subsequent Canadian hospital architecture to these consciously ad hoc environments? What role did these ephemeral places play in the hospitalization of medicine and in the evolution of the hospital building type? How was the Canadian military convalescent hospital, a ubiquitous interwar hospital heralded in the architectural press as a "new type of building," affected by its birth in these makeshift conditions?¹²

The scale on which the sick and injured needed hospitalization during World War I was also unprecedented.¹³ As military historians Desmond Morton and Glenn Wright noted in their 1987 book on World

War I veterans, *Winning the Second Battle*, "it was not the mass armies of 1914-1918 that were new, or even the horrifying death tolls. . . . What was new was the remarkable proportion of sick and wounded who survived."¹⁴ In addition to the amputees (who were greatly heroized back at home), World War I soldiers needing hospitalization suffered from tuberculosis, insanity, and blindness.¹⁵

Figure 5



St. Mary's Hospital in Shaugnessey House, Montreal, ca. 1924; interior (St. Mary's Hospital Audio-visual Collection).

As early as November 1917, the MHC had remodelled 45 buildings for the treatment of 10,000 men.¹⁶ By the war's end, the commission had borrowed a total of 71 buildings.¹⁷ The facilities ranged from more general vocational training centres, where disabled soldiers might convalesce while learning skills such as drawing, carpentry, mechanics, agriculture, or beekeeping, to more specialized medical renovations (i.e., true hospitals) where men were treated for orthopaedic injuries, tuberculosis, or insanity. The facilities which accommodated "passive treatment," that is vocational training and convalescence, such as those at Esquimalt, British Columbia, occupied a variety of rather unspecialized buildings. So-called "active treatment," on the other hand, demanded purpose-built facilities to accommodate medical technology,

especially x-ray, electrical equipment, and exercisers. An example of this type was the Central Military Convalescent Hospital in Toronto, housed in the former Bishop Strachan School.

Borrowed buildings helped to define an important distinction between passive and active space, a distinction that was critical to the evolution of the hospital building type following the war. This passive/active duality was also reflected in the tradition of calling the former "homes," and the latter "hospitals." By May 1917, of their nearly 15,000 beds in use or under construction, the MHC offered soldiers 1,720 beds for active treatment in 23 "hospitals," and 3,980 beds for convalescents (plus 6,101 under construction) in 57 "homes."¹⁸

During the earliest days of World War I Canada's wounded soldiers were accommodated in large, private houses, mostly loaned to the government by their wealthy owners. The transformation of these structures from private residences for 8-10 people to institutions for 25-70 injured soldiers typically involved as few changes as an addition to the kitchen and dining facilities and some new plumbing.

Figure 6



Euclid Hall M.H.C., Toronto, exterior (National Archives of Canada).

Euclid Hall (Figure 6) in Toronto was the first permanent soldiers' home opened in Canada.¹⁹ It had 40 beds intended for cases of paralysis. Like other private homes, Euclid Hall was particularly attractive

because of its natural surroundings, but also because of the music room (Figure 7), which featured a large pipe organ. One of Toronto's best organists gave semi-weekly recitals at Euclid Hall—"render(ing) the lives of the unfortunate inmates as restful and happy as medical science can make them."²⁰ In this way, domestic bliss was framed by the MHC as therapeutic to soldiers.

Figure 7



Euclid Hall, Toronto, interior music room (National Archives of Canada).

However, as the numbers of returning men increased, particularly during 1916, larger buildings were taken over. Houses were seen as inadequate and medium-sized institutions were appropriated. At the same time, many convalescent homes were transformed into hospitals, as the original notion of the MHC hospitals came under fierce criticism:

The supply of comforts which in many cases were luxurious, the relaxation of discipline, the treating of men as one treats a civilian patient in the interval between illness and the resuming of ordinary occupation, which might do no harm if the experience was to be counted in days, are most seriously detrimental to the best interests of the men when extended over the prolonged periods which have been found unavoidable. The first conception of the homes was that they were places of relaxation; the right one which experience has taught us to realize, is that they are places of rehabilitation. In other words, we are changing as rapidly as may be, our convalescent homes into hospitals. . . .²¹

Educational buildings, such as Loyola College (Figure 8) in Montreal, were considered particularly suitable as temporary hospitals, as they already had large kitchens and their classrooms easily could become dormitories. An important condition of the loan of these buildings to the government was that they would be returned to their owners following the war in the state in which they were originally given. As a result, renovations were kept to a minimum.

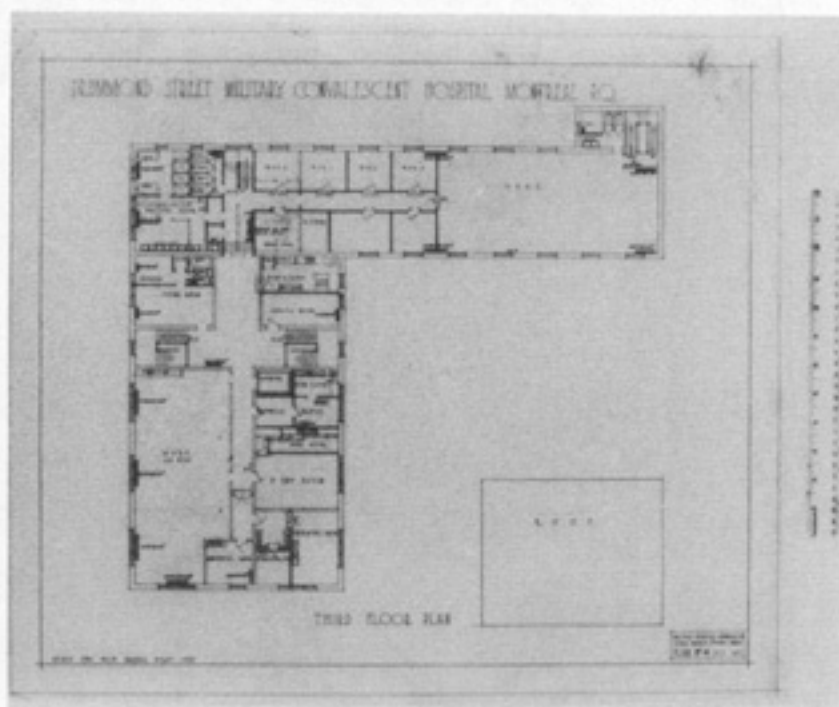
Figure 8



Drummond Military Convalescent Hospital, Montreal (former Loyola College) (*Construction*, 10, 9 [September 1917]: 298).

The MHC, however, spent \$75,000 on renovations to Loyola College during the war. As indicated in the plan (Figure 9), the third floor included smaller wards and a relatively sophisticated surgical suite of rooms, including spaces for anaesthesia, sterilization, surgery, and x-ray.²² An advertisement (Figure 10) shows the new ward, which was formerly occupied by 14 separate rooms and a connecting corridor. Another important aspect of MHC makeovers was the inclusion of generous spaces for massage, limb bathing, and various electrical treatments, considered fundamental scientific treatments for amputees and orthopaedic cases.

Figure 9



Drummond Military Convalescent Hospital, Montreal (former Loyola College), plan of third floor (National Archives of Canada).

One of the most paradoxical facets of the borrowed-buildings chapter in the evolution of the modern hospital is how the ad hoc situations contributed to a working definition of the "modern" hospital. What was not there (such as surgical suites) had to be added or transformed. This frequently entailed the addition of solaria, in which tuberculosis patients "took the cure." These light-frame additions (structurally not much more than a veneer) could be removed easily and at the time must have acted as signifiers (or maybe warnings) of a building's temporary reuse as a hospital, or, in other words, that passive space had become active.

The Sir Oliver Mowat Sanatorium in Kingston, "the largest hospital combatting the white plague in the Dominion," illustrates the centrality of the verandah or solaria in the treatment of tuberculosis. The heart of the hospital was an historic house (Figure 11), which saw the addition of "sun balconies." These were intended for so-called "fever patients" among those with tuberculosis, whose beds would be wheeled out on

Figure 10

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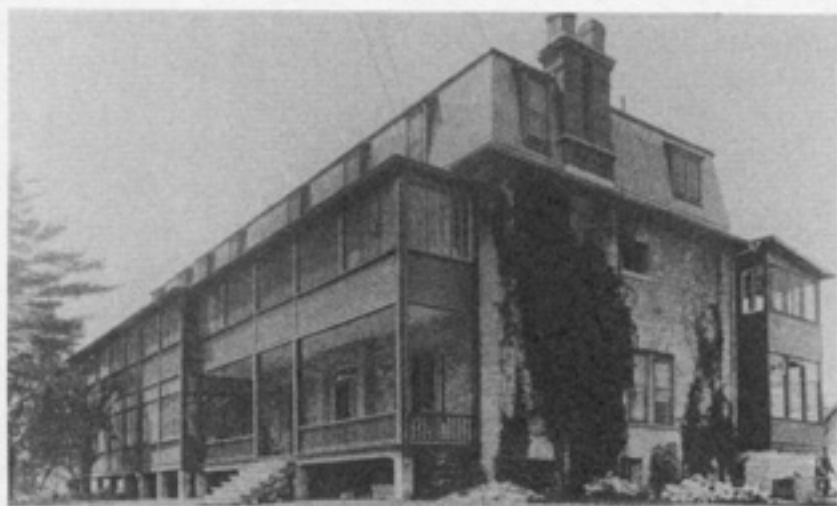
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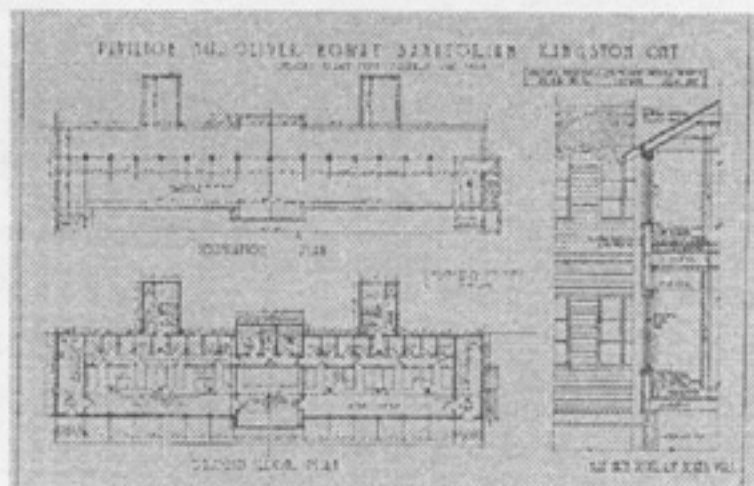
Advertisement showing ward in Drummond Military Convalescent Hospital, Montreal (*Construction*, 10, 9 [September 1917]: 60).

Figure 11



Sir Oliver Mowat Sanatorium for Tuberculous Returned Soldiers, near Kingston, exterior (*Construction*, 10, 9 [September 1917]: 319).

Figure 12



Sir Oliver Mowat Sanatorium for Tuberculous Returned Soldiers, near Kingston, plans (*Construction*, 10, 9 [September 1917]: 319).

the porch-like addition, permitting patients to benefit from the sun and fresh air. New pavilions at the Mowat Sanatorium were even more extreme. As the plan attests (Figure 12), patients' beds were located on open, unheated wards. The only heated section of the building, even during the harsh Kingston winters, was the row of dressing rooms located behind these wards.

Figure 13



Fire chute, Grey Nuns' Military Convalescent Hospital, Montreal
(*Construction*, 10, 9 [September 1917]: 299).

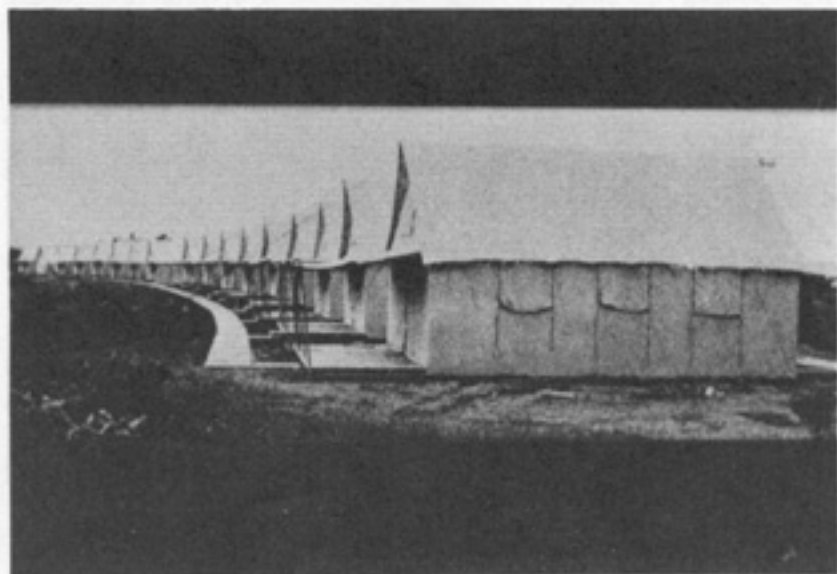
Other subtle architectural additions and subtractions may have expressed the same message to careful observers of the rapidly changing built environment during the Great War. Immigration sheds, a half-completed training school of the Salvation Army, a cash-register factory, a Grey Nuns' convent (Figure 13), and even the prison at Guelph (Figure 14) were eventually taken over as MHC hospitals. At Guelph, the prison bars were simply removed from the building in its transformation to a hospital; at the convent, a fire chute was added. The fact that such diverse places could become hospitals overnight by the addition of a few simple elements underlined the notion of hospital as a simple passive shell for active medical technology. In fact, prisons, convents, and hospitals were remarkably similar in plan at this time: H-, T-, or U-shaped ensembles with small and large spaces zoned largely by their functions.

Figure 14

Guelph Hospital (*Reconstruction* [April 1918], inside front cover).

Some MHC borrowed buildings were even more ephemeral. At Kentville, Nova Scotia, a virtual tent city (Figure 15) was erected in 18 days to accommodate 160 unexpected soldiers suffering from tuberculosis. The tent colony was a model of geometric order, laid out behind an existing sanatorium in a circle on a six-degree curve.²³

Figure 15



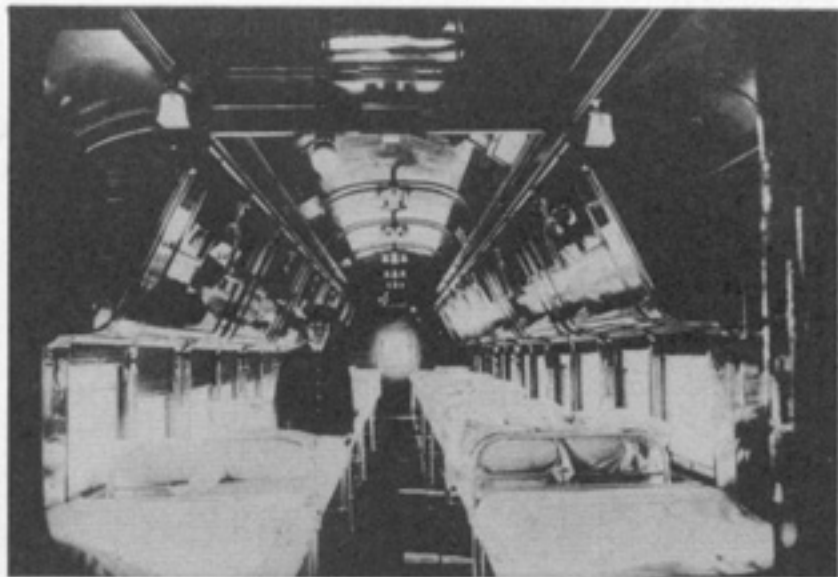
Tent colony at Kentville Sanatorium (*Construction*, 10, 9 [September 1917]: 324).

Even trains (Figure 16) were refitted as state-of-the-art medical space, in conjunction with the Canadian Government Railways and the Canadian Pacific Railways. Hospital trains were arranged in units of two cars, known as composite and ward cars. The composite car accommodated six to eight staff, while the ward car held 12-14 patients. Standard hospital cots, kitchens for special-needs diets, and heavy curtains to block drafts were some of the trains' special features.²⁴

Despite the ease with which such transformations occurred, the MHC described such borrowed buildings to sick and injured soldiers overseas and in their newsletters at home in precisely these terms, namely, as state-of-the-art medical facilities. Capt. W. L. Symons, the architect responsible for most of the MHC renovation work, justified his office's "light construction" in 1917, "We are not doing this thing for a joke, going about it in the easiest way. We are following the very best

laid down worldwide rules for hospital erection. We are studying our plans with a view to producing the very best results."²⁵

Figure 16



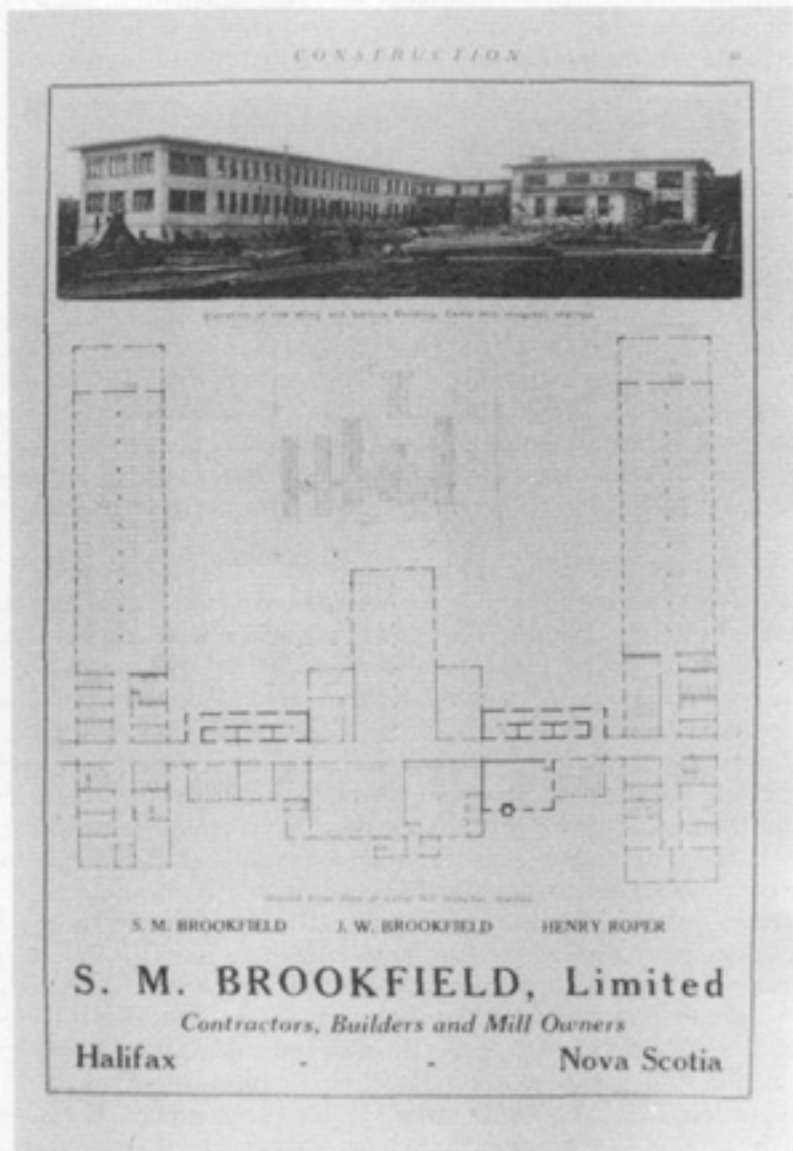
CP Hospital car (National Archives of Canada).

When the time came to justify the construction of huge, purpose-built convalescent hospitals, however, the official attitude towards the borrowed buildings turned critical nearly overnight. Camp Hill (Figure 17) in Halifax, the most famous of these large hospitals, was built to accommodate 150 bed cases and 150 convalescents.²⁶ This rhetorical edge—that modern medicine demanded purpose-built space and that the modern hospital was something very different from the borrowed, rather unspecial space required for simple convalescence—was underlined with its construction.

In formal terms, however, the plan of Camp Hill, and the three other purpose-built military hospitals designed by the Chief Architect's Branch of the Public Works Department in Ottawa (Convalescent Hospital, Ste. Anne de Bellevue, Quebec; Psychopathic Hospital, London, Ontario; Tuxedo Park Military Hospital, Winnipeg, Manitoba), did not appear too different from renovation jobs like Loyola; Camp Hill had the expected solaria, large open wards (following a worldwide trend, the average ward grew smaller as time went on), and kitchen/dining arrangements. The only significant change was in the sheer scale and in

the site planning, which permitted the grouping of buildings for the accommodation of hundreds of patients and the clear separation of vocational training and "active" medical treatments.²⁷

Figure 17



Advertisement showing Camp Hill Hospital, Halifax, plan and exterior (*Construction*, 10, 9 [September 1917]: 61).

The MHC was particularly proud of Camp Hill's "quick-build" building technology, by which they fended off critics of both the building's extravagance and its shoddiness.²⁸ Construction began in March of 1917 and the first patients were admitted in September.²⁹ Camp Hill's extravagance may have included its construction details, which were much more substantial than the other semi-permanent MHC buildings. Camp Hill's foundations, for example, were 16 inches wide and continuous, whereas the more temporary hospitals had 10 × 10 inch or 12 × 12 inch wooden posts sitting on concrete pads. Camp Hill also was constructed to allow a veneer of brick, while the other hospitals were finished in stucco.³⁰

The genres of ad hoc or "passive" and official, "active" medical space influenced each other in rather complex ways. The borrowed buildings anticipated and emphasized three important characteristics of military convalescent hospitals; and the MHC hospital, filled past capacity during the war, in turn exerted an enormous influence on other building types. After the war, for instance, the image of the modern hospital even "invaded" ordinary office buildings. Architects Barott and Blackader included laboratories, surgery, and a quiet room for women in their design (Figure 18) for the prestigious headquarters of the Bell Telephone Company in Montreal, constructed in 1929.³¹ In fact, the inclusion of such facilities became an important hallmark of the modern corporation.

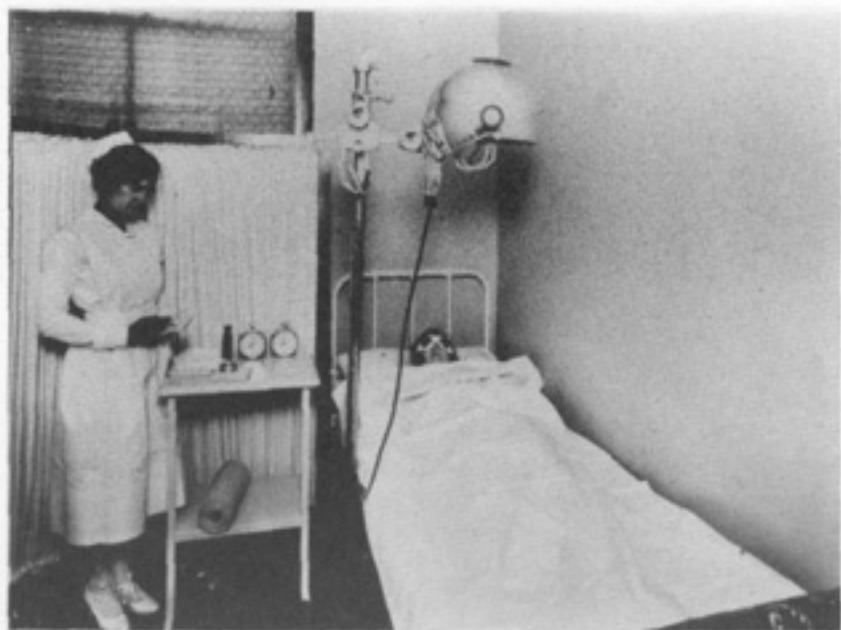
The first significant characteristic of the MHC hospitals was the notion that a homey, cosy, familiar environment was ideal for healing; this "domestic therapy" flew in the face of the medical elite's urge to sanitize and to standardize in the early twentieth century. The prevalence of borrowed buildings as hospitals and their association with convalescence (chronic illness = slow death) may have accelerated an association of the antiseptic, standardized, purpose-built hospital with an instant, seemingly magical cure. The movement to include homey spaces within the modern hospital is still a major point of contention in the design of medical space today—we see the same tension, for instance, in the advent of birthing centres within the big white box.³²

The second is the notion of accessibility. This chapter in the history of Canadian medicine was the first large-scale instance of the Canadian government's providing access to health care. Those who went to the non-military borrowed buildings, particularly during crises like the typhoid epidemic of 1910 or the Spanish influenza which swept the country in 1918, mostly were overflow from the official hospitals.³³

It is interesting to note with respect to this question of the borrowed buildings as spaces for the excluded that it was particularly marginalized and/or ethnic groups which saw the origins of their health care

institutions in these ad hoc situations. In Montreal, the most obvious examples are the Women's General, the Homeopathic hospital, the Chinese hospital, the Jewish General, and English-speaking Catholics. Doctors, too, who were excluded from practice at the big, prestigious teaching hospitals borrowed space in these temporary hospitals to practice their profession, especially pediatricians, homeopaths, and physicians without university clinical affiliations. In almost all of these cases, commissions for monumental, purpose-built architecture followed in the 1930s. Borrowed buildings thus provided health care to those excluded from the purpose-built institution, even outside the urgent situation occasioned by the war. They also helped to maintain a traditional charitable service to the poor in the post-World War I period, as hospitals moved to attract paying patients to the new services they offered, especially surgery.

Figure 18



Barott and Blackader, Bell Building, Montreal, 10th-floor medical clinic (Bell Canada Historical Services).

Finally, like the official hospitals of the wartime and interwar eras which attempted to classify their users according to class, gender, and often disease,³⁴ the borrowed building (especially non-military) at-

tempted to separate and segregate before healing. The MHC hospital, in fact, even aspired to "defeminize" health care. As Morton has noted, "too much softness, in little convalescent homes, debilitated morale and added to the looming pension burden."³⁵ The degree of luxury provided also was much criticized at the time. In his report on the care of wounded soldiers in Britain, France, and Belgium on behalf of the MHC, W. M. Dobell, a member of the commission, reported:

There is an absolute unanimity of opinion that the influence of convalescent homes is bad; the life in these institutions is conducive to lax discipline and idleness; men are shown a different standard of living from what they have been accustomed to, and one which they will probably not be able to maintain. This naturally produces unrest and dissatisfaction.³⁶

Among the reasons that this much-neglected chapter in the history of hospital architecture is interesting today is that the case made by interwar hospital experts for purpose-built space as an essential aspect of the modern hospital is echoed nearly verbatim now by the physicians arguing for the construction of billion-dollar superhospitals. As government cutbacks have resulted in the closing of many hospitals across Canada, these doctors now point to the hospitals of the interwar period—considered by specialists at that time as well-machined tools of medical technology—and suggest that such icons of order are either too homey or not homey enough, too accessible or not really accessible enough, and above all, too muddled, to function as proper modern hospitals. Now, as then, there are few medical imperatives for new construction, yet superhospitals are on the drawing boards in Montreal, Ottawa, Boston, Paris, and many other cities.³⁷ In February 1997, Halifax's new superhospital opened, called the Halifax Infirmary (Figure 19).³⁸ Ironically, its construction entailed the demolition of Camp Hill.

McGill University's plan to merge the Montreal General, the Royal Victoria, the Montreal Children's, the Montreal Neurological, and the Montreal Chest Hospitals is focused on the claim that the current buildings are "unsuited to modern technology and modern needs."³⁹ Like the wartime critics, the doctor-architects behind the superhospital hope to exclude convalescence and non-specialized treatments from the new institution. In light of this inquiry into the relation of large institutions to its ancillary spaces, it is interesting that they want to return these problems to the home and other supposedly non-medical building types, like hotels and restaurants. "The slow removal of basic services and uncomplicated procedures from the McGill centre would eventually leave it free to concentrate on super-specialized care," says Dr. Nicolas Steinmetz, the Associate Executive Director (Planning) for the proposed McGill University Health Centre, "the mission is to be able to look after the most complex and rarest of problems."⁴⁰ Accord-

ing to Steinmetz, houses work better for basic care. "It's easier to get a hip replaced in hospital than it is to get a good meal or a back rub or decent pain medication," Steinmetz adds. "Home is more comfortable . . . and it's cheaper."⁴¹ These very hospitals were constructed, of course, because meals and back rubs at home supposedly were inferior!

Figure 19



WHW Architects, Halifax Infirmary under construction, 1997 (Courtesy WHW Architects).

The implications of exploring hospital history through its temporary manifestations are broad. Such a "bottom-up" or, in this case, "outside-in" approach to an institution reveals how temporarily appropriated spaces contribute to the definition of institutions and even act as arenas of resistance to certain trends. Studying the homeless to improve housing or fairgrounds to understand cities, for example, would illuminate the same sorts of relationships. Just consider the social changes evident in commercial building entrances as smoking is suddenly prohibited in offices across the continent.

Borrowed buildings are, of course, easiest to find during times of crisis, like war or epidemics, but they are always present. Many urban universities, like my own, for example, have appropriated housing along their edges, supposedly in anticipation of more permanent quarters for departments and services. Houses along Peel Street, McGill's western

edge, now accommodate Women's Studies, Jewish Studies, the Polish Institute and Library, the McGill Institute for the Study of Canada, the Graduate Program in Communications, and the university daycare. These programs challenge the traditional structure of the university, critiquing the status quo from its decidedly domestic edge.

At the very least, an exploration like this should underline the danger of narrow typological studies and serve as a reminder of the ever-expanding boundaries of the fields of architectural and medical history. By transgressing meaningless limits and contesting established modes, we (like the unnamed "architects" and users of borrowed buildings) have only to gain.

NOTES

- 1 This article is drawn from a larger project which explores interwar hospital architecture and its relationship to the increasingly specialized practice of medicine at the time, funded by FCAR and the Hannah Institute for the History of Medicine. David Theodore is the research assistant and has contributed enormously to the project. I also am grateful to Des Morton for alerting us to the MHC lantern slide show and for his insightful comments on this draft. Carolyn M. Goldstein also read an earlier text and provided useful suggestions. Earlier versions of this research were presented at the annual meetings of the Canadian Society for the History of Medicine and the Vernacular Architecture Forum in 1997.
- 2 On 13 November 1931, the superintendent of the Royal Victoria Hospital wrote to the hospital president, Herbert Holt, that planned and recent hospital construction would nearly double the available beds in the city (Letter in the possession of Royal Victoria Hospital).
- 3 On these monumental hospitals, see Annmarie Adams, "Modernism and Medicine: The Hospitals of Stevens and Lee, 1916-1932," *Journal of the Society of Architectural Historians*, 58, 1 (March 1999): 42-61.
- 4 On the emergency hospital, see "Hospital May Be Ready Tuesday," *The Gazette* (Montreal) 3 January 1910, p. 6; "New Hospital Rapidly Filling," 6 January 1910, p. 4; and "Temporary Hospital for Sufferers Meets Warm Approval of Citizens; Heated Factory Is Latest Offer," *The Montreal Daily Star*, 31 December 1909, p. 12.
- 5 The renovations began on Saturday, 1 January, and the first patient was admitted on Wednesday, 5 January. See "First Patient in Emergency Hospital Cot," *The Montreal Daily Star*, 5 January 1910.
- 6 "Hospital May Be Unable to Meet Demands," *The Montreal Daily Star*, 6 January 1910, p. 12.
- 7 These totals are calculated from City of Montreal, *Report of the Department of Health of Montreal* (1918) and *Report of the Military Hospitals Commission of Canada* (1918), p. 22, 31. On the worldwide epidemic of influenza, see Alfred W. Crosby, *Epidemic and Peace, 1918* (Westport, Conn.: Greenwood, 1976); and Edwin O. Jordan, *Epidemic Influenza: A Survey* (Chicago: American Medical Association, 1927). On the Canadian epidemic, see James De Jonge, "The October Crisis: Influenza in Kingston, 1918," *Historic Kingston*, 46 (1998): 43-61; Janice P. Dickin McGinnis, "The Impact of Epidemic Influenza: Canada, 1918-1919," *Canadian Historical Association, Historical Papers* (1977); and Eileen Pettigrew, *The Silent Enemy: Canada and the Deadly Flu of 1918* (Saskatoon: Western Producer Prairie Books, 1983). On the influenza epidemic in Montreal, see S. Boucher, "The Epidemic of Influenza," *Canadian Medical Association Journal*, 8, 12 (December 1918): 1087-92.

- 8 See *The Hydro and Electro Therapeutic Department Turkish Baths and Swimming Pool of the Chateau Laurier, Ottawa, Canada* (Canada: n.p., [1930]). On the 1930 addition, see "The New Chateau Laurier, Ottawa," *The Journal, Royal Architectural Institute of Canada*, 7, 11 (November 1930): 393-411.
- 9 Richards M. Bradley, "Large Part of Hospital Work Performed in the Home," *Modern Hospital*, 1, 4 (December 1913): 227.
- 10 *The Montreal Daily Star*, 22 May 1924, p. 35. See also J. J. Dinan, *St. Mary's Hospital: The Early Years* (Montreal: Optimum, 1987), p. 43.
- 11 Desmond Morton and Glern Wright, *Winning the Second Battle: Canadian Veterans and the Return to Civilian Life, 1915-1930* (Toronto: University of Toronto Press, 1987), p. 19.
- 12 "Canada's Military Convalescent Hospitals," *Construction*, 10 (September 1917): 293.
- 13 On the general relationship of war and medicine, see Mark Harrison, "The Medicalization of War—The Militarization of Medicine," *Social History of Medicine*, 9, 2 (August 1996): 267-76; Roger Cooter, "Medicine and the Goodness of War," *Canadian Bulletin of Medical History*, 7 (1990): 147-59; and Roger Cooter, "War and Modern Medicine," *Companion Encyclopedia of the History of Medicine* (London: Routledge, 1993), p. 1536-73.
- 14 Morton and Wright, *Winning the Second Battle*, p. 9. See also Sir Andrew MacPhail, *The Medical Services* (Ottawa: Acland, 1925), p. 280-94.
- 15 Desmond Morton has noted that the war blind were actually relatively rare. Of 178 discharged as blind, less than half could attribute their condition to war (personal correspondence from Morton, 21 March 1997).
- 16 *Bulletin Military Hospitals Commission-Canada* (November 1917), inside front cover.
- 17 MacPhail, *The Medical Services*, p. 317. For an overview of the planning and construction of the MHC hospitals, see Janet Wright, *Crown Assets: The Architecture of the Department of Public Works, 1867-1967* (Toronto: University of Toronto Press, 1998), p. 142-47.
- 18 *Report of the Work of the Military Hospitals Commission* (May 1917), p. 13.
- 19 For a description of the house and list of its illustrious owners, see William Dendy and William Kilbourn, *Toronto Observed: Its Architecture, Patrons, and History* (Toronto: Oxford, 1986), p. 115-16.
- 20 *Report of the Work of the Military Hospitals Commission* (May 1917), p. 25.
- 21 J. S. McLennan, "Introduction," *Military Hospitals Commission Special Bulletin* (April 1916), p. 7.
- 22 Further evidence that Loyola was considered "active" was that as patients reached the convalescent stage they were removed to the convalescent home at Ste. Anne de Bellevue.
- 23 "Care of Soldiers Suffering from Tuberculosis," *Construction*, 10 (September 1917): 324.
- 24 *Report of the Work of the Military Hospitals Commission* (May 1917), p. 42.
- 25 "Canada's Military Convalescent Hospitals," *Construction*, 10 (September 1917): 297.
- 26 On Camp Hill, see W. L. Symons, "Canada's Military Hospitals," *Construction*, 13 (March 1920): 71-84.
- 27 Canadian hospitals were noted for their two-storey massing; a journalist claimed at the time of Camp Hill's opening that the hospital had the only "runways" (presumably ramps) in Canada. See "Camp Hill Hospital," *The Morning Chronicle*, 1 October 1917, p. 9.
- 28 J. H. W. Bower, "Canada's War Hospital Development," *Construction*, 13, 3 (March 1920): 87-90.
- 29 K. A. MacKenzie, T. E. Kirk, and R. E. Lemoine, "Camp Hill Hospital: Its History and Development," *The Nova Scotia Medical Bulletin*, October 1957, p. 369.
- 30 J. H. W. Bower, "System of Hospital Construction Described," *Construction*, 10 (September 1917): 326-27; although brick was planned, the buildings at Camp Hill were stuccoed. See the description of the buildings on opening day in "Camp Hill Hospital," *The Morning Chronicle*, 1 October 1917, p. 9.
- 31 "The Beaver Hall Building, Montreal," *The Journal of the Royal Architectural Institute of Canada* (October 1929), p. 353-72.

- 32 Horsburgh has suggested that the return to homelike settings in the contemporary hospital reflects a return to patient-centred medicine, see C. Robert Horsburgh, Jr., "Healing by Design," *The New England Journal of Medicine* (September 14, 1995), p. 738-39.
- 33 The non-military hospitals were paid for by "public spirited citizens," not with civic, provincial or national funds. In the 1910 Montreal typhoid epidemic, for example, citizens met "to secure an Emergency Hospital in spite of the City Council's weak-kneed attitude" ("Hospital Fund Grows Rapidly," *The Montreal Daily Star* 7 January 1910, p. 10). The MHC hospitals were the first instance of government-funded "universal" access to hospitals.
- 34 New client groups, such as women and children, meant that huge volumes of space were now designed purposefully for the treatment of ailments seeming to belong to those new groups. Populations of women and children increased dramatically in the 1920s and 1930s, as these client groups now came to the hospital for new or at least different reasons. For example, sick women in the 1920s might come to Toronto's Women's College Hospital for childbirth, and for children, the new hospitals provided substantial space for orthopaedics and the treatment tonsillitis. Each of the new specialist pavilions for new users functioned like models of the larger hospital, and the larger city. Class and gender were prescribed at every scale: separate entrances, different types of rooms, access to technology (e.g., private rooms had private nurses, and more expensive, often custom-designed furniture).
- 35 Personal correspondence from Morton, 21 March 1997.
- 36 W. M. Dobeil, "Report on European Work," *Military Hospitals Commission Special Bulletin* (April 1916), p. 26.
- 37 The "folly" of constructing superhospitals in times of financial crisis is noted by Spyros Andreopoulos in "The Folly of Teaching-Hospital Mergers," *The New England Journal of Medicine* (2 January 1997), p. 63.
- 38 The New Halifax Infirmary comprises a merger of the Old Halifax Infirmary and the Victoria General. See "Old Emergency Rooms Close," *The Chronicle-Herald* (1 March 1997), sec. A, p. 6.
- 39 Carolyn Adolph, "The Dawn of the Super Hospital," *The Gazette*, 14 May 1994, sec. B, p. 1. For a full justification of the superhospital plan, see "Final Report of the Steering Committee Looking at the Feasibility of the Creation of a McGill University Hospital Centre" (March 1, 1994); and "McGill University Health Centre: Report on Planning Activities Related to the Creation of a New Facility" (April 3, 1998).
- 40 Adolph, "Dawn of the Superhospital," p. 1.
- 41 Jeff Heinrich, "'Superhospital' Planner Approves of Hospital Cuts," article distributed by the SouthamStar Network on the internet, 17 January 1996.