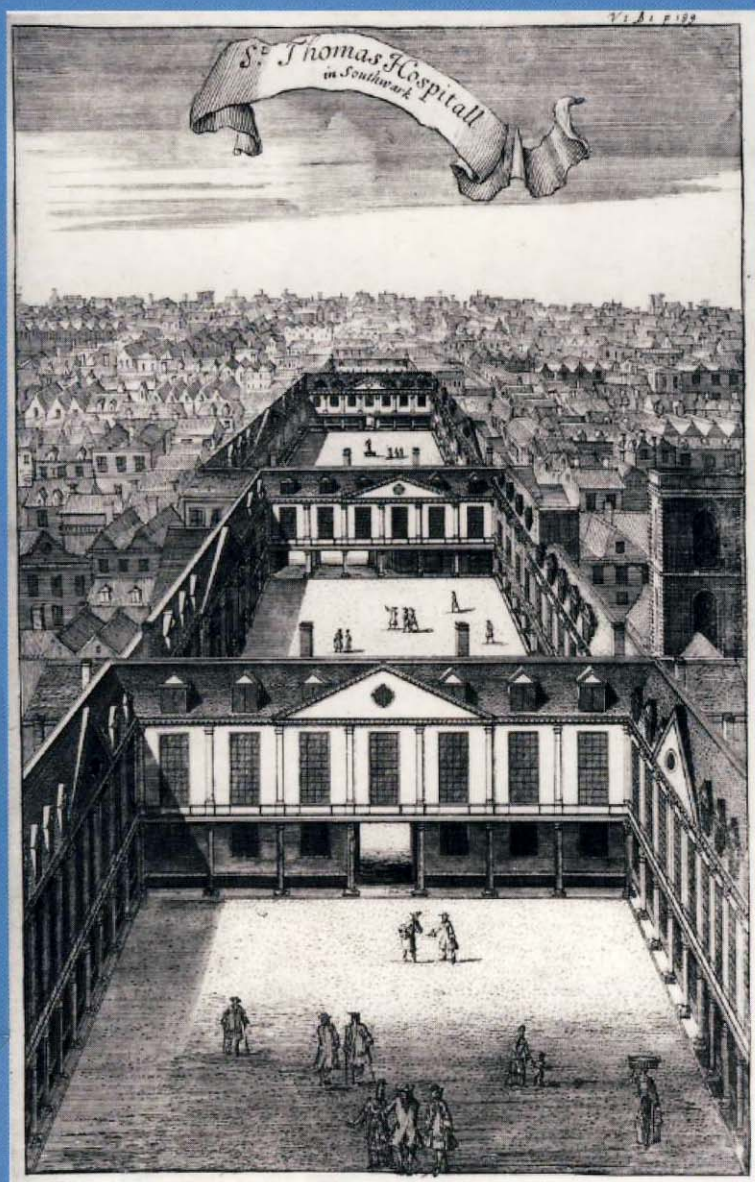


THE IMPACT OF **HOSPITALS** 300–2000

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Chapter 8: 'That was Then, This is Now': Hospital Architecture in the Age(s) of Revolution, 1970–2001

Hospitals built in the last thirty years or so are easy to identify.¹ Two images (Figs 8.1 and 8.2) of the Hospital for Sick Children in Toronto of 1951 and of 1990 articulate this difference.² Although both buildings are essentially brick and glass towers, the 1990s perspective by Zeidler Roberts Architects reveals important changes in the intentions of the hospital four decades later. Here the institution's circulation system is expressed by an all-glass spine; the brick seems to be literally hanging off the frame of the building, rather than acting as a supportive structure; varying window sizes and treatments reveal functional zoning; and perhaps most notably, a covered walkway defines the hospital's entrance and acknowledges the scale of the individual patient.

Seasoned architectural aficionados may also note that the building's ziggurat-like massing recalls both the stepped monuments of Mesopotamia, and the debates over the height restrictions of tall buildings in New York of the 1930s, references not-so-obviously related to healthcare. And the hospital's main public space looks like an urban shopping mall. What happened between the 1950s and the 1990s is postmodernism.

In the field of architecture in general, the tenets of postmodernism are well known. Postmodern buildings are often neo-conservative, feature high-tech virtuosity, references to everyday landscapes, and are sometimes even humorous. Postmodern characteristics are less well articulated in medicine, although David B. Morris of the University of New Mexico has suggested that a bio-cultural (rather than bio-



Figure 8.1 Postcard of Hospital for Sick Children, Toronto. (Collection Annmarie Adams)

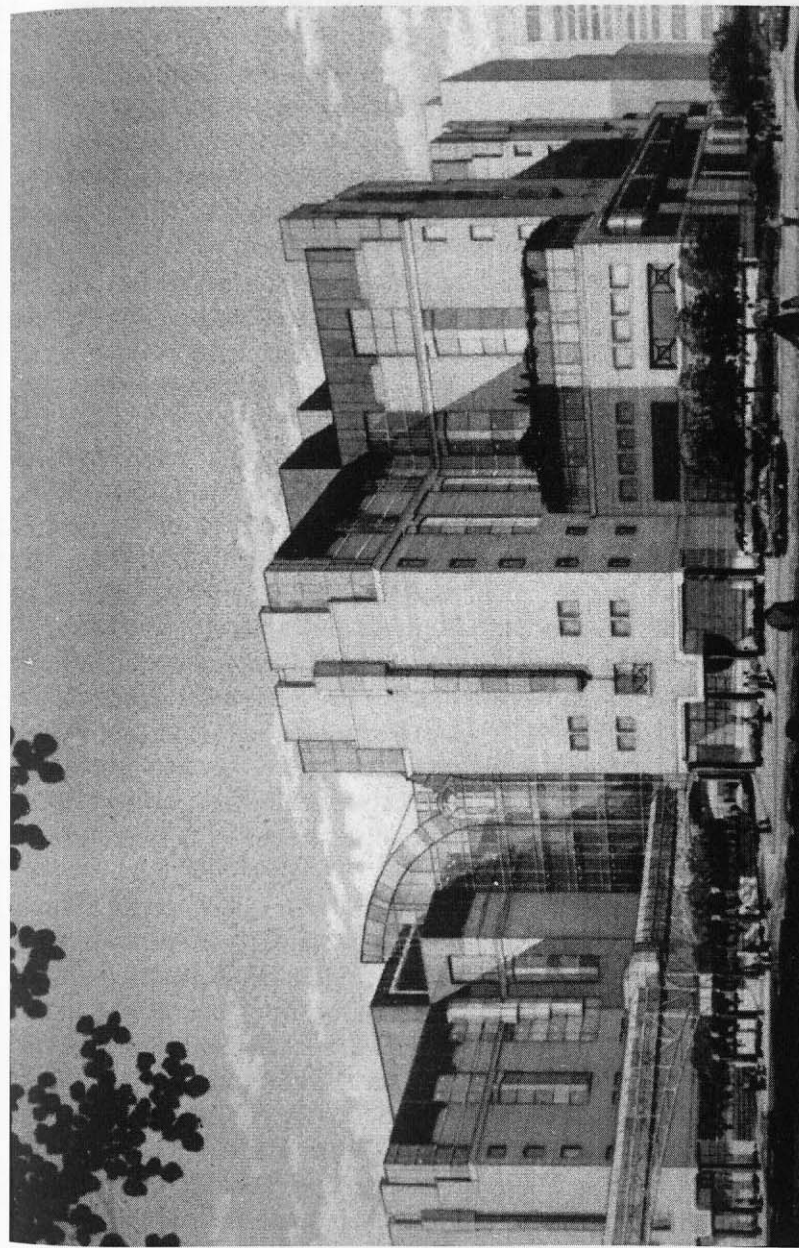


Figure 8.2 Perspective rendering, Hospital for Sick Children, Toronto. (Zeidler Roberts Partnership Architects)

medical) model of illness is emerging as an essential part of postmodernism.³

Although Morris makes no references to healthcare architecture per se, he notes that the term postmodernism was first used to describe architecture in a series of influential books by architectural theorist Charles Jencks in the 1970s. In *The Language of Post-modern Architecture* (New York, 1977) Jencks pinpointed the death of modern architecture as having occurred on 15 July, 1972, at 3:32 pm in St Louis, with the demolition of the Pruitt-Igoe housing project built in 1952. Symbolic of a growing critique of modern architecture, the demolition of the public housing tower ushered in a new 'after-modernism' era, in which buildings engaged multiple, simultaneous codes of expression.

Among the most profound and under-studied postmodern places are the Disney parks. Disneyland in Anaheim, California, of 1955, and Disney World in Orlando, Florida, which opened in 1971, illustrate many of Jencks' original points about the movement. They are variegated, witty, messy, picturesque, and orderly. In the case of the Disney parks, a clear sense of separation from other realms also serves to underline their postmodernity. Boundaries, gates, and an expensive admission ticket add to a sense of disconnectedness for visitors, compounded recently through the extensive use of cell phones and video cameras by visitors. Although we are visitors, we are not really. Our real experience of postmodern architecture occurs later, when we look at images of buildings in an environment of our choice: the private home.

This paper has three objectives: (1) to explore recent hospital architecture in terms of a broader understanding of the twentieth-century hospital; (2) to illustrate that postmodern hospital design is actually more reactionary than revolutionary. Most of the ideals postulated by hospital planners today that is – for example, increased provision for outpatients, flexibility, accessibility, and comfort – echo nearly verbatim the notions put forth during the 1920s and 1930s, and even earlier. And (3), to argue that, in general and not unrelated to the second point, change in hospital architecture is more culturally than medically driven or determined. Hospitals look like shopping malls,

that is, because many public buildings now look like shopping malls, not because of a medical imperative to design them this way.

An approach which engages the methods of architectural history to explore the present also offers a unique opportunity to sketch out a tripartite explanatory model of the development of hospital architecture in the twentieth century. This diagram (Fig. 8.3) illustrates: modern (1916–39), Modern (1945–80), and postmodern (1980–present) hospital architecture. It contrasts with classic architectural surveys, notably John D. Thompson and Grace Goldin's 1975 book, *The Hospital: A Social and Architectural History*, which leap directly from pavilion-plan buildings like Johns Hopkins Hospital of 1888 to skyscraper mega-hospitals of the 1930s.

Evidence to support this argument that the postmodern hospital is a renaissance of earlier ideas is visual evidence drawn from hospitals – past and present, real and proposed – associated with my own institution, McGill University in Montreal, Quebec. Since 1994, five of McGill University's teaching hospitals have voluntarily merged into a single institution: the McGill University Health Centre (MUHC). The MUHC is currently planning to abandon four of its historic urban hospitals, and to open a purpose-built facility on a polluted former railway yard at some distance from Montreal's city centre in 2011.⁴ The 1,579.5 million dollar project is known locally as the superhospital, despite the best efforts of its planners to shake the nomenclature. The Université de Montreal, a French-speaking university, is planning an equally ambitious French-speaking facility to open simultaneously, also involving the reconfiguration of three historic hospitals.⁵

In 1997, MUHC consultants reported that although the Royal Victoria Hospital is eminently unsuitable for re-use as a hospital, it would make good condominiums, especially if all the buildings constructed after World War II were to be removed.⁶ This demolition mostly entails postwar Modern towers, but also includes the \$29 million 1994 emergency, ICU and birthing centre (the condition of the buildings is apparently irrelevant). This scenario is a good illustration of the sequence, denounce-demonise-demolish, which often precedes the destruction of hospitals.

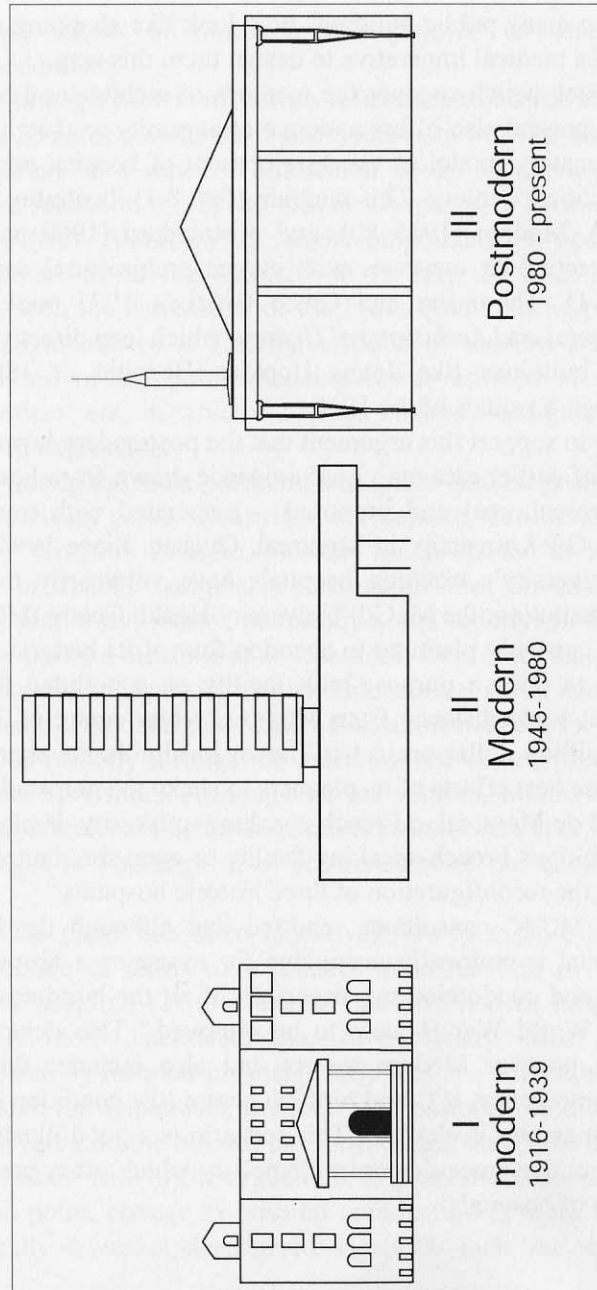


Figure 8.3 Conceptual diagram of twentieth-century general hospital types. (Drawing by David Theodore)



Figure 8.4 Photograph of women outpatients' waiting room by S.J. Hayward, Royal Victoria Montreal Maternity Hospital, Montreal. (Collection Royal Victoria Hospital)

Many new medical facilities constructed in the last thirty years or so, like the new addition to the Hospital for Sick Children in Toronto, claim to be more flexible, accessible, humanly scaled, comforting, and homelike than those constructed between 1945 and 1970. They also identify themselves as healthcare facilities, rather than hospitals. Healthcare facilities planners assert that these architectural reforms come from the so-called revolution in the delivery of medical care which has taken place since about 1980, whereby treatment is now patient- rather than physician-centered, and new technologies have resulted in a huge increase in day surgeries and outpatient services. In Quebec this change is known popularly as the *virage ambulatoire*. Stephen Verderber and David J. Fine's book, *Healthcare Architecture in an Era of Radical Transformation*, suggests that the hospice movement (begun in UK in 1967) and the move to managed care in the United States is largely responsible for such changes.⁷ Most of these architectural ideas, however, are not so new. Hospital architecture evolves as part of a larger cultural discourse rather than mostly as a result of medical change or innovation. In the interest of brevity, this can be illustrated through five popular misconceptions about contemporary hospital architecture.

Ambulatory Care

Outpatients' departments are not a new idea. Hospital administrators today constantly state this: 'older hospitals do not accommodate outpatients.' It was, in fact, one of the most significant new parts of older hospitals in the 1920s. A survey of 500 non-teaching hospitals conducted by the journal *Modern Hospital* in 1926 revealed that 34 had new outpatient buildings, 85 had new buildings projected, 76 had some new construction finished, 83 had assigned more space to the outpatient department without construction, and 87 planned improvements to the outpatients department, not yet undertaken.⁸

The provision for outpatients countered that for private patients in every possible way. The floor plans of general urban hospitals, such as Montreal's Royal Victoria Hospital (opened 1893), illustrate how wealthy patients experienced a flowing, oblique, uninterrupted experience in the hospital, while outpatients' (and other poor patients') experience was much more jarring and interrupted. Private patients' departments were typically located at some distance from the main hospitals, while outpatients were often in the basements of older hospitals. So while paying patients literally traveled upwards to their quarters, poorer patients descended. And not surprisingly, while private patients were offered privacy and seclusion, outpatients departments were nearly always congested. This is perhaps most evident in the ubiquitous bench seating, whereby families would huddle next to each other without any separation. Architect Edward Stevens' outpatients' departments, such as he designed for the Royal Victoria Hospital, were among the most dignified of the interwar era (Fig. 8.4).

Flexibility

A second common misconception is that hospital architects of the past never thought about flexibility. Architects of pavilion-plan hospitals, as we know from Jeremy Taylor's superb 1999 book, *The Architect and the Pavilion Hospital*, were obsessed with the typology's potential for infinite expansion, and with the fact that the open-plan spaces of the Nightingale wards were infinitely malleable.⁹ And in an uncannily postmodern way, much of the furniture designed for hospitals in the 1920s and 1930s was double coded. A table, for example, designed by the Canadian department store Eaton's served multiple purposes simultaneously (Fig. 8.5). The table design also shows this obsession with smooth, flowing movement, like the micro-levelling elevators used in hospitals of this era.

Illustrated is Eaton's new bedside table as installed in the new Private Patients Pavilion, Toronto General Hospital.

Eaton's New Bedside Table

Top pushes back, permitting table leaf to be pulled up and put into position over bed without disturbing books, flowers or dishes on table. Table made up to order in any wood or finish, and with drawer or cupboard space as desired. Estimates gladly furnished—for further information communicate with Eaton's Contract Department

Outfitters to Hospitals, Hotels, Theatres and Steamships

THE T. EATON CO. LIMITED

Please refer to THE CANADIAN HOSPITAL when writing

Figure 8.5 Advertisement of bedside table, *Canadian Hospital*, 7, No. 7 (July 1930), p.29

Accessibility

Postmodern hospital planners are insistent that healthcare facilities should be more accessible. This echoes the concerns of interwar architects, who carefully sited their buildings for easy access, by public transportation, pedestrians, and automobiles simultaneously. The gateway at Stevens' 1916 Ross Memorial Pavilion (part of the Royal Victoria Hospital) and his Ottawa Civic Hospital of 1924, show how hospital design anticipated the arrival of patients and physicians by automobile.

Concealed Technology

Hospital planners today want both patient rooms and circulation spaces to look comforting and homelike, rather than hard-edged and high-tech. Nowhere is this as evident as in the design of children's hospitals, which nowadays typically include references to zoos or transportation systems (balloons, trains, planes). This is very post-modern; the application of architectural 'style' as a thin veneer on a modern frame.

The Disney parks illustrate this same notion. At Disney World the facades along Main Street USA are fake and everybody knows it. This neo-traditional picture is only possible through high technology, hence the proximity of Tomorrowland to Main Street.

Hospital architecture of the 1920s, too, concealed plenty of medical technology outside the patient's immediate environment. At Ross Memorial Hospital, among Canada's first private patients' pavilions, the elevator, fans, and ventilation equipment were housed in the hospital's monumental central tower, which overlooked the patients' entrance (Fig. 8.6). A typical patient room of the same period included wiring for telephone and special night-lights that allowed nurses to illuminate the rooms at night without using ceiling lights. A call system

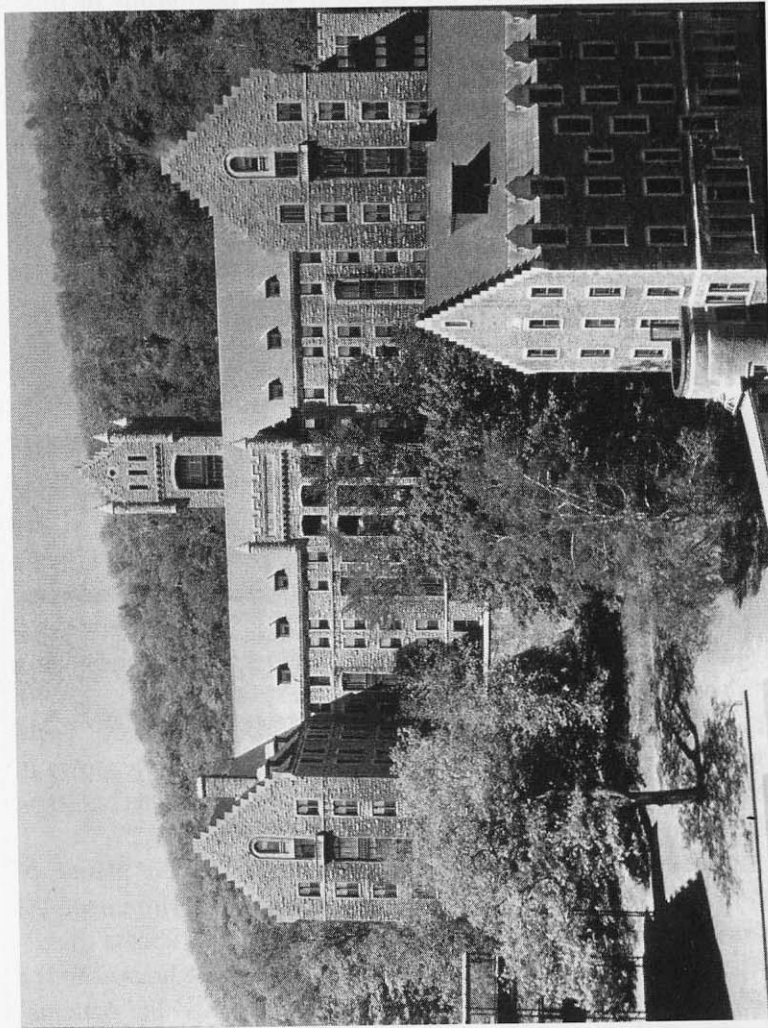


Figure 8.6 Ross Memorial Pavilion, Royal Victoria Hospital, Montreal.
(Collection Royal Victoria Hospital)

similar to those found in many hospitals today comprised a system of lights over the doors of rooms indicating the location of doctors and nurses. Instrument cabinets, refrigerators, blanket warmers and drying closets were built right into patient room walls; and each floor had receptacles for electro-cardiograph.

Residentialism

Details of what the superhospital site will look like are sketchy. Few architectural images have been produced by the MUHC, however, they have described what the new superhospital will resemble. When the project was first announced, former MUHC director Hugh Scott and former MUHC planning director Nicolas Steinmetz boasted that the hospital would look like a university campus, with an arrangement of interconnected low-rise pavilions integrated in a landscape of parks, walkways and playgrounds, an absurd suggestion, given the enormous scale of the proposed institution.¹⁰ Perhaps they were imagining something like the Freeport Health Care Village (first phase 1986–9) in Kitchener, Ontario, by the NORR Partnership with McMurich and Oxley Architects. The Kitchener hospital is significant for its decentralised plan, clustered buildings, courtyard plaza and use of brick.

This new ‘residentialism,’ as Verderber and Fine have called it, intended to counter the hospital architecture of the intervening period in 1945–70, was very different than both the preceding and succeeding eras. These mostly stark, undecorated towers expressed both a faith in medical progress and a more democratic stance as a public institution than hospitals before or after them. Modern hospitals looked like Modern office buildings, just as interwar and postmodern hospitals look like hotels and malls respectively.

How have contemporary planners missed the foreshadowing of their own needs in the buildings of the 1920s? While I once believed that planners, anxious to justify their own new projects, simply over-

looked the buildings of the past, I now believe that the interwar buildings themselves are to blame.

Conclusion

Although many hospitals of the 1920s looked quite conservative, they were actually modern in their spatial attitudes, structure, endorsement of aseptic medical practice, anticipation of expansion and change, sanctioning of expert knowledge, and appeal to new patrons.¹¹ This is why stage 1 of the tripartite model is called 'modern.' But because architectural historians have tended to read elevations, rather than plans of hospitals, these buildings have generally been omitted from studies of the building type and have been seen, mistakenly, as simple reverberations of the nineteenth-century model.

Today's hospital planners, unfortunately, also don't look beyond the mere image of these hospitals. A historic building which resembles a 'Scottish castle' is to them old-looking and therefore bad. How can futuristic research take place within an institution which appears medieval, even if the interior has been continuously updated for eight decades? At the same time, however – and here's where postmodernism comes in – they build new places to look and function like less threatening institutions, just the way eighteenth-century industrialists built factories to look like churches and schools by including clock towers.

Medical change does not necessarily inspire new architectural forms. This is an assumption which runs throughout the literature in the history of the hospitals as social institutions. Part of the problem comes from the fact that hospital architecture is only used to illustrate the history of medicine, rather than as evidence. When the story is solely derived from medical milestones and medical men, buildings are passive.

Architecture changes architecture – sometimes inspired by changes in other fields like medicine – but hospital architecture is not

a passive illustration of medical history. Contemporary hospitals are much more closely derived from contemporary architectural ideas than medical ones; if it were the other way around, we would likely see houses, hotels, and malls that look like hospitals.

The larger problem comes from a head-on collision of architectural and medical reasoning. While architectural reasoning is based on case studies and precedent (like law), modern medicine is founded on a notion of progress. The assumption is always that the next step (or next building) will be better than the last, as if design is the final stage of a scientific experiment. Hospital planners derive their sense of confidence from this model of progress, and their educations from the model of precedent. Such collisions, juxtapositions, and untidy explanations make up our postmodern world.

Notes

- 1 Ideas for this paper are drawn from several research initiatives, most notably 'Medicine by Design: A Hospital for the Twenty-First Century', funded by the Canadian Institutes of Health Research (CIHR), and my forthcoming book, *Medicine by Design: The Architect and the Modern Hospital, 1893–1943* (Minneapolis, 2007). I have benefited in both projects from the assistance of David Theodore.
- 2 For a more detailed analysis of the evolution of children's hospitals, see A. Adams and D. Theodore, 'Designing for "the Little Convalescents": Children's Hospitals in Toronto and Montreal, 1875–2006', *Canadian Bulletin of Medical History* 19.1 (2002), pp.201–43.
- 3 See D.B. Morris, 'How to Speak Postmodern: Medicine, Illness, and Cultural Change', *Hastings Center Report*, 30, no. 6 (November–December 2000), pp.7–16; and D.B. Morris, *Illness and Culture in the Postmodern Age* (Berkeley, 1998).
- 4 A. Derfel, 'At Last, Superhospitals Get Go-Ahead', *The Gazette* (8 April 2006), A1.
- 5 On the CHUM, see M. Turenne, 'L'hôpital de 850 millions', *L'Actualité*, 25, no. 20 (15 December 2000); J. Heinrich, 'French Superhospital due by 2003', *The Gazette* (17 October 1998), A1; and A. Derfel, 'CHUM's "Hospital of the Century" Unveiled', *The Gazette* (20 December 2001), A3. On the MUHC, see

- C. Adolph, 'Dawn of the Superhospital', *The Gazette* (14 May 1994), B1-B2; A. Derfel, 'Superhospital's Costs Rising', *The Gazette* (24 April 2002), A1, A6
- 6 Lecavalier-Lalonde and Saïa et Barbarese, 'Evaluation of Potential for Reuse of Existing Sites, Working Document #3, Heritage Evaluation of the Sites' (McGill University Health Centre Planning Group, November 1997). See especially the plan that shows the authors' evaluation of the heritage value of each building on page RVH10.
- 7 S. Verderber and D.J. Fine, *Healthcare Architecture in an Era of Radical Transformation* (New Haven, 2000), pp.84-6.
- 8 M.M. Davis, 'Planning Buildings for Out-patient Service', *Modern Hospital*, 26.3 (March 1926), pp.219-27.
- 9 Jeremy Taylor, *The Architect and the Pavilion Hospital: Dialogue and Design Creativity in England 1850-1914* (London, 1997).
- 10 See McGill University Health Centre Report on Planning Activities Related to the Creation of a New Facility (3 April 1998), p.38, and the quotes from former McGill University board chairman Alex Paterson in M. Lalonde, 'Super-Hospital Idea Clears a Big Hurdle: Panel Warms to Union of 5 Big Institutions', *The Gazette* (8 June 1993), A1; and A. Derfel, 'Super-hospital Site Set', *The Gazette* (23 October 1998), A2.
- 11 A. Adams, 'Modernism and Medicine: The Hospitals of Stevens and Lee, 1916-1932', *Journal of the Society of Architectural Historians*, 58, no. 1 (March 1999), pp.42-6.