That was Then, This is Now
Hospital Architecture in the Age(s) of *Revolution*, 1970-2001[1]

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HSC 1951 and 1990

Hospitals built in the last thirty years or so are easy to spot. The slides on the screen now show the same institution, the Hospital for Sick Children in Toronto, in 1951 and in 1990. Clearly, something has happened. Although both buildings are essentially brick and glass towers, the 1990s perspective on the right by Zeidler Roberts architects reveals important differences. The hospital's circulation system is now expressed by an all-glass spine; the brick seems to be literally hanging off the frame of the building, rather than acting as support; 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 afficianados 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 (à la Hugh Feriss) in New York of the 1930s, references not-so-obviously related to healthcare. The something that has happened between these two slides is postmodernism.


Piazza d'Italia general and detail of CM

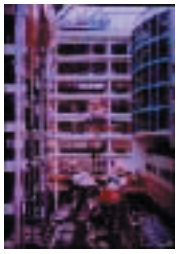
In the field of architecture in general, the tenets of postmodernism (a curious mix of neo-conservatism, high-tech virtuosity, humour, and references to everyday landscapes) are well known. They are less well articulated in medicine, although David B. Morris of the University of New Mexico has written a fascinating article (and book) suggesting that a bio-cultural (rather than bio-medical) model of illness is emerging as an essential part of postmodernism.

Although Morris makes no references to healthcare architecture per se, he notes that the term postmodernism was first used to describe architecture (before other fields) in a series of influential books by historian Charles Jencks in the 1970s. In *The Language of Post-modern Architecture* (1977) Jencks pinpointed the death of modern architecture as having occurred on July 15, 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. On the right is the late Charles Moore's Piazza d'Italia in New Orleans of 1978-79, an overtly post-modern environment about American-Italian culture (a far cry from Verona), which includes a typically immodest image of the architect, one of post-modernism's pioneers.

Disney

Among the most profound and under-studied postmodern places are the Disney parks: Disneyland in Anaheim (1955) and Disney World in Orlando (1971). These illustrate many of Jencks' original points about the movement: variegated, witty, messy, picturesque, and orderly. I would add to this 30-year old list the notion of "disconnectedness." Postmodernism often requires a separate precinct to be meaningful; in addition clear boundaries (Disney has boundaries, gates, and an expensive admission ticket), this sense of disconnectedness is also achieved most recently through the use of cell phones and video cameras by visitors (Disney calls them guests). Although there, we aren't really. Our real experience of postmodern architecture occurs later, when we look at images of buildings in an environment of our choice.

HSC entrance postcard and lobby postcard

Back to the here and now. My paper today will attempt to do three things: (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 my second point, change in hospital architecture is more more culturally- than medically-driven or determined . On the screen now you see two more slides of Toronto's Hospital for Sick Children (this time two postcards, rather than a drawing), showing the entry sequence and the rather monumental atrium interior, complete with flying pigs.

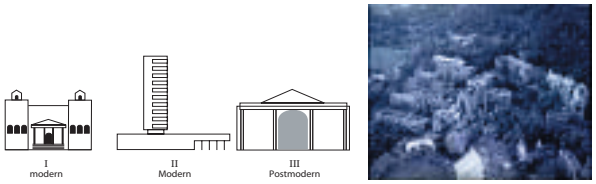
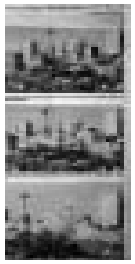


diagram showing three types and aerial of the Royal Vic (recent)

An approach which engages the methods of architectural history to explore the present,

and the impressive mandate of this conference to explore 1000+ years of hospital history, offer a unique opportunity to sketch out a tripartite explanatory model of the development of hospital architecture in the twentieth century, which the slide on the left is intended to illustrate: modern (-1945), Modern (1945-70), and postmodern (1970-present). By contrast, most authors of hospital architectural surveys, notably John D. Thompson and Grace Golden's 1975, *The Hospital: A Social and Architectural History*, leap directly from pavilion-plan buildings like Johns Hopkins of 1888, to skyscraper mega-hospitals of the 1930s.

In an ironic reversal of most postmodern architects' understanding of architectural change, my understanding of the present comes very much from the past (eg, many architects understand the past through the present). In other words, most of my research as an architectural historian teaching in a professional school of architecture has been on the early twentieth-century hospital, with a focus on the hospitals of the 1920s. These tend to look more like Scottish castles or Georgian mansions than how we might imagine modern hospitals to look–I am just finishing a book manuscript entitled *Making Modern Medicine: An Architectural History of the Canadian Hospital, 1893-1943*. Much of what I will present today is taken from the Epilogue of that book manuscript. On the right screen now you see an aerial of Montreal's Royal Victoria Hospital (original designed by Henry Saxon Snell, 1893), from which I have derived most of my ideas about the evolution of hospital architecture and in which all three eras of twentieth-century hospital architecture are legible (point these out).



Sesame Street Hospital (blocky)-Calgary demolition

Most frequently, hospitals designed in the middle period, 1945-70, have met with the same fate as Pruitt Igoe, demolition. On the right is a photograph of the demolition of the Calgary General Hospital in 1998, a Modern tower designed in 1953 by Somerville, McMurich and Oxley. On the left is the Sesame Street Hospital, not yet threatened with demolition, but with cancellation. A second level of inquiry in this paper is thus why hospital buildings of the 1920s are now considered more worthy of preservation and re-use than those of the 1950s and 1960s.

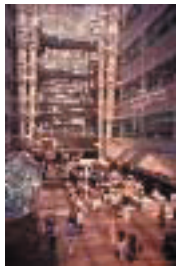
Dawn of the superhospital-Gazette photo of site with train

I will mostly support my argument that the postmodern hospital is in fact a renaissance of earlier ideas with visual evidence drawn from hospitals–past and present, real and proposed—associated with my own institution, including the Royal Victoria. Since 1993, five of McGill University's teaching hospitals have merged into a single institution: the McGill University Health Centre (MUHC), touted on their website as the world's largest voluntary hospital merger. The MUHC is currently planning to abandon five 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 2005. The $1.2 billion 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 abandonment of three historic hospitals.


Centennial Pavilion and demolition plan

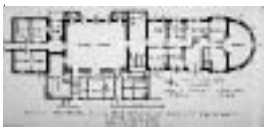
One more vital piece of information with regards to hospital transformation or demolition. In 1998, MUHC consultants determined that although the Royal Victoria is eminently unsuitable for re-use as a hospital, it would make good condominiums, especially if all the buildings constructed after World War II were to be removed. This demolition mostly entails postwar Modern towers, but also includes this $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 I like to call denounce-demonize-demolish.

Halifax Infirmary lobby under const'n and Mackenzie atrium

Let's look at new hospital architecture with postmodern ideals in mind. 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-centred, 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 new 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. Today I would like to suggest, however, that most of these architectural ideas are not so new and, by implication, that 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 (and clarity), I will present these ideas

through pairs of slides intended to illustrate popular misconceptions about contemporary hospital architecture.




Outpatients' RVH plan and waiting room

Our first misconception: that outpatients' departments are 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, 34 had new outpatient buildings, 85 had new building 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.

In the chapter dealing with social class of my forthcoming book, I show how the provision for outpatients countered that for private patients in every possible way–in the most general sense, that wealthy patients experienced a flowing, oblique, uninterrupted experience in the hospital, while outpatients (and other poor patients) experience was much more jarring and interrupted. We can read this in the architectures designed for both groups. 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 travelled 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' outpatient departments, like this one at the Royal Victoria, were among the most dignified of the interwar era.

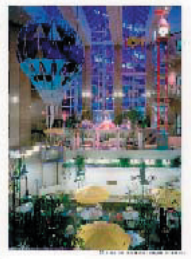

Eaton's table and Snell axonometric

Misconception number 2: 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. And in an uncannily post-modern way, much of the furniture designed for hospitals in the 1920s was double coded. This table, for example, designed by the Canadian

department store Eaton's (recently bankrupt) served multiple purposes simultaneously (as well as showing this obsession with smooth, flowing movement, like the micro-levelling elevators used in hospitals).


Ross gateway and OCH showing cars

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




St. Louis po-mo space and Rex in a modern corridor

_____Hospital planners today want both patient rooms and circulation spaces to look comforting and homelike, shown here on the left, rather than hard-edged and high-tech, such as the example on the right from the immediate postwar era. Nowhere is this as evident as in the design of children's hospitals, which typically include references to zoos and-or transportation systems (balloons, trains, planes). This is very postmodern; the application of architectural "style" as a thin veneer on a modern frame.


Disney Main Street and Piazza d'Italia detail

Disney and Piazza d'Italia illustrate this same notion. At Disney World the facades along Main Street USA are fake and everybody knows it. At the Piazza d'Italia the cheap construction and consequent deterioration have meant that the veneer is even more evident than Moore probably intended. What is clear, especially at Disney World, is that the neo-traditional picture is only possible through high technology, hence the proximity of Tomorrowland to Main Street.


Ross elevation and maternity room

Hospital architecture of the 1920s, too, concealed plenty of medical technology outside the patient's immediate environment. The slide on the left shows the 1911 Ross Memorial Hospital at the RVH, Canada's first private patients' pavilion. The elevator, fans, and ventilation equipment were housed in the hosptial's monumental central tower, which overlooked the patients' entrance. On the right is a typical room of the same period. What you don't see is the wiring included for telephone, the special night lights, allowing nurses to illuminate the rooms at night without using ceiling lights, or the call system similar to those found in mnay hospitals today. This 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.


MUHC report cover and Dr. Steinmetz

No architectural images have been produced by the MUHC, however, they have described what the new superhospital will ressemble. It will look like a campus, in particular, a New England liberal arts college with bicycle paths, suggesting a sort of neo-democratic, Jeffersonian healthscape. MUHC spokespersons have also stated that the new hospital will not be elevator-dependent, since they see that as the major problem at the current hospitals, and that the new buildings will be low-rise.


Freeport hospital images

This sounds something like the Freeport Health Care Village (first phase 1986-89) in Kitchener, Ontario, by the NORR Partnership with McMurrich and Oxley Architects, ironically, designers of the ill-fated Calgary General (point out the decentralized plan, clustered buildings, courtyard plaza, red brick, looks like many buildings through its massing, enclosed walkways).


Jewish General addition 1953 and MCH

This new "residentialism," as Verderber and Fine have called it, intended to counter the hospital architecture of the intervening period, say 1945-1970 (stage 2 in my tripartite division of the century) 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.

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


Notre Dame exterior and surgery interior

This is the heart of the argument in my book on interwar hospitals, also published as an article in the *SAH Journal* in 1999. Although many hospitals of the 1920s–this is Montreal's Notre Dame hospital–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, just like the way retro clothes popular today might be dismissed as tattered remnants of the past, unless you notice the spandex or other high-tech fabric content. This is why I named stage 1 of my tripartite model, modern. But because architectural historians have tended to read elevations, rather than plans of hospitals, these building have generally been omitted from studies of the building type and have been seen, mistakenly, as simple reverberations of the nineteenth-century model.


RVH as crown and detail of turrets

Today's hospital planners, unfortunately, also don't look beyond the mere image of these hospitals. To them this reads "Scottish castle," therefore old and bad; rather than "modern facility clothed in historicist garb in order to fit in." If planners considered for a moment why

such buildings should make good condos, but not good hospitals, it might click, especially given that hospital planners profess that hospitals should look like condos! 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 18th-century industrialists built factories to look like churches and schools–clock towers, etc.).

CHUM director and Notre Dame superintendent

By way of conclusion, I would like to reiterate this idea that not much has changed in the past eight decades. Here you see the superintendent of Notre Dame around 1930, and the director of the proposed 2007 *hôpital super-techno*, or CHUM, for the Université de Montréal. The opening of the new facility will see the abandonment of the older hospital, despite their similarities.

And by way of partial explanation, I would like to underline the idea that medical change does not result in new architectural form. This is an assumption which runs throughout the literature in the history of the hospitals as social institutions. How many times have we read that the end of the pavilion plan illustrates the revolution of the germ theory, even though pavilion plan buildings persist until the 1930s? 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 will be 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.


Rex reclining and detail of Thomas Cole's architect

Having blamed art historians, hospital planners, and now historians of medicine for this ongoing mis-understanding of hospital design, I would also like to suggest that 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 idea being that the next step (or next building) will necessarily be better than the last, as if design is the final stage of a scientific experiment. Hospital planners derive their sense of confidence from the model of progress, and their educations from the model of precedent. On the screen now is a detail of the architect reclining on his books, on a column, from Thomas Cole's 1840 painting, "The Architect's Dream." On the right is an intern reclining

in his private room at the Royal Victoria, probably in the early 1960s. It is just such collisions, juxtapositions, and untidy explanations that make our postmodern world.

ENDNOTES:

[1] Ideas for this paper are drawn from several research initiatives, most notably *Medicine by Design: A Hospital for the 21st Century*, funded by the Canadian Institutes of Health Research (CIHR), and my nearly-finished book project, *Making Modern Medicine: An Architectural History of the Canadian Hospital, 1893-1943*, funded by FCAR and the Hannah Institute for the History of Medicine. I have benefitted in both projects from the assistance of David Theodore.