

ESSAY

The colour of medicine

Green used to be the colour of medicine. Why, how and when did this happen? While researching the history of a radiation therapy machine made in the 1950s by Atomic Energy of Canada Ltd., I became curious about the origins of its soothing green metallic colour, which is also used in numerous other medical apparatus, furniture, clothing and catalogues in our collection that date from roughly 1950 to 1975. The Canada Science and Technology Museum in Ottawa, Ontario, is displaying a small portion of these artifacts in its exhibit, *Colour of Medicine* (until April 2010), to highlight this conspicuous, yet neglected, dimension of medical history.

Green first appeared in a San Francisco hospital in 1914. Harry Sherman, an American surgeon, found traditional whites too bright, and the glare (especially with new lighting systems) reduced his ability to discriminate anatomical features under scrutiny. Using colour theory, he developed a “spinach green” environment, as the colour complement to hemoglobin red and created an entirely green operating theatre, complete with green walls, floors, sheets and towels. He discovered that his eyes could rest on the details and texture of the wound without competing with “extraneous light.”¹ Several other surgeons followed this direction in the 1910s and 1920s.

Around the same time, green also entered hospital culture through “colour therapy.” William Ludlow, an architect advocating colour in hospitals, stated: “White is negative; the convalescent needs the therapeutic reaction of the positive colours that nature has spread so lavishly for her children. ... Our eyes were made to find rest and contentment in soft greens, pale blues, an occasional touch of red, but above all, the glorious golden yellow of the sunshine.”²

In a variation of this trend, Dr.



Canada Science and Technology Museum

Iron Lung for treating Polio. Warren E. Collins Inc., Boston, MA, 1950 (acc. no. 1970.0038). Misty green was a popular colour for medical equipment.

Charles Ireland of Guy’s Hospital in London wrote an entire book in 1930, *Colour and Cancer*, on the use of concentrated doses of coloured light for treating cancer.

The largest push behind the widespread adoption of colour in hospitals, however, came from a group of industrial colour consultant, a new and growing specialty, in the 1930s. The leading figure was Faber Birren, a former graduate of the Chicago Art Institute, who set up a highly influential and successful colour consulting business in New York City. His clients included the US Army and Navy, hospitals, schools, prisons, factories, General Motors and Dupont. From the 1930s to 1970s, Birren and his colleagues literally transformed and coloured the institutional and industrial landscape of North America. His motto was “putting color to work.” For hos-

pitals, he suggested an array of colours applied to specific rooms, furniture and equipment. He worked with two basic principles: bright colours “tend to stimulate an outward attention toward



Canada Science and Technology Museum

A radiation therapy machine, Theratron Junior, Atomic Energy of Canada Ltd., 1957 (acc. no. 1966.0043).

DOI:10.1503/cmaj.091058



Canada Science and Technology Museum

The green artifact spotlight will be at the Canada Science and Technology Museum until April 2010.

the environment” whereas “soft colours on walls tend to minimize the environment as a source of interest. Here there will be more of an inward attitude and attention.”

“Green is one of the best of all hues,” he wrote. It is “fresh in appearance and slightly passive in quality.”³

It calmed patients and workers and invited inward repose. Misty green, derived from colour schemes he developed for the US Navy, came to be one of the more popular shades used by medical instrument makers.

These colour trends travelled north.

By 1945, an official at the Canadian Medical Association claimed that colour had become an item of “major importance” in the psychological treatment of a patient by promoting serenity of mind and restfulness.⁴ Ten years later a *CMAJ* editor noted that the use of colour was one of the most radical changes in the modern ward. He wrote, on the other hand, that we should not get carried away “with all this” and find our wards covered in green walls and red ceilings.⁵

But his cautionary words were too late, as green was rapidly finding its

way into Canadian hospitals. In 1955, one of Canada’s pioneering neurosurgeons, Dr. William Feindel, opened a neurosurgery unit at the University Hospital in Saskatoon, Saskatchewan, complete with a cutting-edge green surgical suite. When Feindel asked, however, if he could install more viewing screens on the walls, the chief of surgery reluctantly agreed, warning that the architects would not like to see their beautiful green tiles covered (personal communication).

In other words, green had become a major symbol of the modern hospital, advocated by hospital administrators and architects, and would remain a staple of the medical experience well into the 1970s.

David Pantalony PhD

Curator

Physical Sciences and Medicine

Canada Science and Technology

Museum

Ottawa, Ont.

REFERENCES

1. Sherman H. The green operating room at St. Luke’s Hospital. *Cal State J Med* 1914;21:181-83.
2. Ludlow WO. Colour of the modern hospital. *Mod Hosp* 192;16:511
3. Birren F. Colour makes hard work easier. *Mod Hosp* 1955;84:63-4.
4. CMAJ [Abstracts: Medicine]. Colour in hospital rooms. *CMAJ* 1945;52:104
5. WS. [Editorial comments] Hospital function and design. *CMAJ* 1955;73:840-1.

Memories of medical green. Do you have a tale to tell about green in medicine? Post your comments online or email the author at dpantalony@technomuses.ca