GETTING A FEEL FOR TOUCH TABLES:

A PILOT PROJECT AT THE OSLER LIBRARY OF THE HISTORY OF MEDICINE

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Digital, versatile, and engaging, touch tables occupy a central position in the continued shift to more interactive museums (1 & 3). Consultants -both individuals and entire companies- now specialize in the design of interactive displays, although each new generation of these multifunctional tools is slated as more intuitive and user-friendly for both the museum-goer and the exhibit designer. But how easy is it for a non-specialist to design and program their own high-quality touch table display? This paper discusses a pilot project conducted at the Osler Library of the History of Medicine as part of the establishment of a touch table program at McGill University Libraries. The results of that pilot project, and the practical issues encountered during its implementation, have provided insights about designing, programming, and integrating a touch table display within a small- or medium-sized exhibition of archival and museum materials (2).

In the fall of 2015, Nick Whitfield and I-then both history postdoctoral fellows at the Department of Social Studies of Medicine at McGill University in Montreal, Canada- undertook the co-curation of a bilingual exhibition called *Knowing Blood: Medical Observations, Fluid Meanings / Sang sens: observations médicales, interprétations fluides* at the Osler Library of the History of Medicine from January to August of 2016. This exhibition explored the fundamental role

of observation in shaping medical approaches to blood between the late fifteenth and late twentieth centuries. We created displays of rare books and museum objects that highlighted different kinds of medical observation, changing haematological practices, and the broader social meanings of blood. The exhibition featured items borrowed from McGill's special collections, the Maude Abbott Medical Museum, and the Musée des Hospitalières de l'Hôtel-Dieu de Montréal. These objects were organized into five large conventional glass display cases, each with a dedicated theme.

Our original plan included showing films that connected to these five themes and highlighted socio-cultural dimensions of medical knowledge about blood. While investigating the logistics of projecting a series of films within the exhibition space, the opportunity arose to trial-run an *Ideum touch table*, which McGill Libraries had just procured as part of a Dean's grant. Project funds were used to purchase the first of potentially four touch tables. *Ideum* is a top "interactive design firm" from New Mexico, USA, which primarily sells touch-display technologies to museums (5). The touch table in question was a turnkey solution, including a form factor (16G RAM) computer, a motorized stand, headphones, a surround-sound system, Wi-Fi and Ethernet connectivity, Windows educational apps, a two-year warranty, and customer support—essentially, the whole kit and caboodle.

Whitfield and I were pleased to use this device as there are several advantages of showing films on the touch table rather than with a projector: fewer space requirements, greater scope for curating user experience, and the possibility of showcasing different kinds of digital material. Although both familiar with designing museum exhibits, neither of us knew much about setting up an interactive touch table display. Being slightly more technologically adept, I undertook the programming; I am not, however, a trained or seasoned programmer. For this first trial run, I used *Ideum*'s in-house software, Open Exhibits. This freeware is installed easily from their website, comes with web support, uses Creative Markup Language (CML), and offers simulation options for coding on personal computers with or without touchscreen capabilities. I diligently proceeded through their tutorials and, after many trial-and-error attempts, achieved a workable exhibit. The resulting display was a pared-down version of our original vision: a modest selection of twentieth-century film and radio clips ranging from three to thirty minutes in length that visitors could browse, read about, and watch or hear. These arresting multimedia elements added a dynamic,

socio-cultural dimension to the exhibition's narrative and provided an intriguing complement to the displays of books and objects.

However, several problems cropped up in the design and execution of this touch table display, most of which stemmed from shortcomings in the Open Exhibits software and CML's finicky coding. These shortcomings included insufficient layout options, limited user controls for playing multimedia files (e.g. no fast-forward or rewind functions), too much sensitivity for some gestures (a problem that could only be remedied with added coding in Gesture Markup Language), and no available accents for French script. More troubleshooting and coding work could fine-tune some of these glitches and deficiencies. Nevertheless, using the Open Exhibits SDK 4.1 software is limited and troublesome, especially for the uninitiated CML coder and the time-scarce researcher-cum-curator.

The second touch table pilot project was undertaken in the Marvin Duchow Music Library by Sharon Rankin, an academic librarian with expertise in technology projects. After my experience with Open Exhibits, Rankin opted for an alternate software called *IntuiFace*. This program is produced by *IntuiLab*, a smaller company that designs software to allow "creative people to effortlessly, without coding, make engaging digital experiences (6)." For comparisons sake, Rankin and I used *IntuiFace* to redesign the touch table display for *Knowing Blood*. It was a relatively quick and painless process, and the result was a much-improved, glitch-free, and sleek-looking version (7). For the non-specialist designing a temporary exhibit, this kind of user-friendly, non-coding software is sure to save time, effort, and frustration.

Touch tables are ideal tools for making available online or digital resources and prompting visitors to actively participate; yet, this technology can be disruptive within an exhibition. In the book-lined, wood-paneled, and studious surroundings of the Osler Library, the touch table stood out as conspicuous black contraption. The bold presence of this technological bulk can inordinately detract attention from the object displays, a tendency which Gido Albert Hakvoort has observed in his research (4, 150). Such undue attention can be curtailed through mindful curation that balances the aesthetic and positioning of a touch table with the conventional object displays. Another method for offsetting digital distraction is loading the touch table exhibit with cues guiding visitors to specific objects in the display cases.

For simply viewing films, the vast digital capacity of the touch table verges on technological overkill. With the touch table, the viewer tends to crowd close to the screen, poised to actively browse, select, and manipulate. By way of comparison, a Soviet short film called *Experiments in the Revival of Organisms* (1940) used in the touch table display of *Knowing Blood* was subsequently recommended for the 2017 exhibition *Art Without Death: Russian Cosmism* at the Haus der Kulturen der Welt in Berlin. In the Berlin exhibition, the film played on a stand-alone wall-mounted monitor equipped with headphones and placed adjacent to other monitors simultaneously showing various films. This set up provided a more inviting and intuitive film-watching experience, which was due partly to the darkened exhibition space and partly to the passivity of watching a looping film. However, the touch table does allow visitors the opportunity to explore a far greater range of materials.

In sum, this pilot project highlighted the following considerations for designing a touch table display: pursue a specific purpose for the display that complements the exhibition's objects and themes while exploiting its wide capabilities; carefully choose a software that blends functionality and ease of use; and be mindful of the attention the table might demand of visitors. Although the initial learning curve can be steep, designing a professional-looking interactive touch table display is increasingly within the grasp of the non-specialist.

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7. I have no conflict of interest in recommending IntuiFace or in criticizing Open Exhibits.