

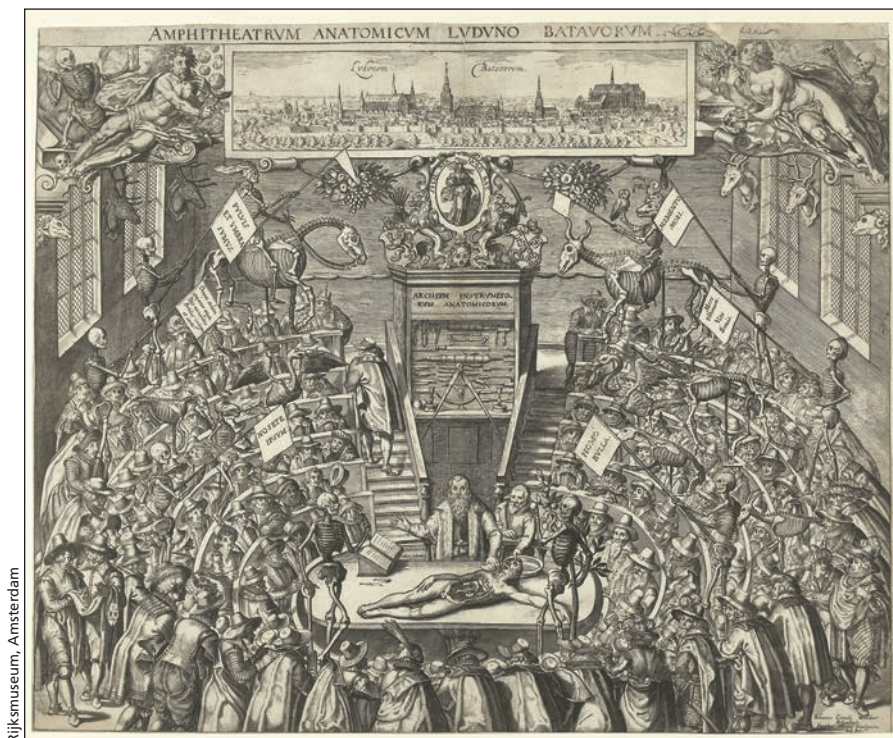
MEDICINE AND SOCIETY

Flaying the boundaries of the body: touch and knowledge

A 1609 engraving of the newly established anatomy theatre at Leiden University, Leiden, the Netherlands, shows the medical professor, Pieter Paaw (1564–1617), dissecting a human cadaver that is displayed prominently in the middle of the image (Figure 1). Some of the spectators are observing the central scene, while other audience members are standing in the foreground and are either engaged in discussion with each other or watching the dissection by the famed anatomist. The audience would have had varying backgrounds, ranging from city officials and members of the surgeon's guild to a broader, curiosity-seeking public that included visitors to Leiden. Thus, the dissection drew together people with diverse training, social standing and place of residence.

This image can be used to prompt thought about two key transformations in the way knowledge about the interior of the human body is acquired. It clearly emphasizes the spectacular nature of early modern dissections, which appealed to audiences beyond the medical sphere. This differs substantially from contemporary practice, where dissections are held behind closed doors, which restricts access to those associated with the medical community. Second, the image underscores the importance of the sense of touch to the dissemination of early modern medical knowledge. This emphasis on tactility contrasts with current practice, which limits the employment of touch by medical practitioners through the use of gloves and other distancing technologies.

Figure 1 shows members of the public observing and discussing the process of dissection. Of particular note are the figures in the left foreground of the image who are touching, discussing and contemplating what appears to be a piece of cloth. Upon closer inspection, it becomes evident that the focus of their attention is the flayed and preserved skin of a corpse,



Rijksmuseum, Amsterdam

Figure 1: Engraving, *Theatrum anatomicum van Leidse Academie*, 1609, by Jacob Marcus.

who most likely would have lived as a criminal (Figure 2). Upon the death of Paaw, an inventory of the holdings of the anatomy theatre listed the prepared human skins of two adults and one child.

In some versions of this image, the human skin is marked by an identifying label, E, which would have corresponded to French, Dutch, Latin and English inscriptions included at the bottom of the printed sheet. According to the corresponding inscription, E represented two figures “beholding the skin of a man which they *hold* in their hands.” Additionally, visitors to the theatre recorded their observations and interaction with preserved specimens of human skin during their visits. For example, in 1634, Sir William Brereton noted the presence of tanned skins of men and women in the collections at Leiden University. He stated that the man’s tanned skin was “much thicker

and stiffer than a woman’s.”¹¹ The author’s comments about the varying texture and thickness of the preserved human skins confirm that visitors were allowed to hold, touch and interact with many of the specimens on display to better understand the underlying structures.

These illustrated figures, who hold, inspect and discuss the preserved human skin to better know and attempt to better understand the corporeal and psychic boundaries of themselves, also reflect how medical knowledge was acquired outside the confines of the anatomy theatre. This need to touch and manipulate the material qualities of specimens, either the preserved skin or the actual body of a cadaver laid out on the anatomy table, was echoed in different medical publications that were a direct result of the dissections.

One related form of medical illustration was printed flap anatomic sheets,



Figure 2: Enlarged detail from the engraving, *Theatrum anatomicum van Leidse Academie*, 1609, by Jacob Marcus.

which were widely popular during the early modern period based on the number of known reprints (Appendix 1, available at www.cmaj.ca/lookup/suppl/doi:10.1503/cmaj.140985/-/DC1). To truly understand the interior structures of the body, one must engage with the physical properties of the image and fold back various layers of paper to reveal the organs that lay

below. Mimicking the process of the anatomist as he unmarks layers from the cadaver on his anatomy table, people who used these images also symbolically enacted a dissection. This emphasis on tactile learning was not restricted to medical spheres in early modern Europe. For example, in her investigation on the use of models in classical chemistry, Ursula Klein showed how paper models helped to generate new theories.² Bruno Latour, in his essay on visualization and cognition, identified nine critical advantages to the use of “paper-work” in the history of scientific discovery.³ More generally, an increasing body of evidence suggests that engagement with various types of “paper-work” was a central means by which early modern men and women lived their lives and made sense of the vast amounts of information they were receiving about the world.⁴ These studies showed the public’s reliance on touch as a central means of acquiring emerging scientific knowledge. Through acts of cutting, folding, reassembling and caressing specimens, the public was able to participate in the new scientific methodologies first promoted by famed anatomist Andreas Vesalius (1514–1564), and then enthusiastically adopted by Paaw.

The image of the anatomy theatre at Leiden prompts us to reconsider the importance of tactility to various aspects of medical training and knowledge dis-

semination in early modern Europe. The flayed skins held by the visitors to the Leiden anatomy theatre (Figure 2) can be regarded as symbolically evoking the centrality of this sense to what was considered a key motivation of dissection practices during the early modern period — self-knowledge.⁵ This emphasis placed on touch underscores the way in which early modern men and women ordered knowledge through immersive bodily engagement, which stands in contrast with contemporary practices that tend to give the sense of sight the privilege to be the means through which information is obtained.

Anuradha Gobin PhD

Sainsbury Institute for Art, University of East Anglia, Norwich, United Kingdom

References

1. Brereton W, Hawkins E. *Travels in Holland, the United Provinces, England, Scotland, and Ireland, 1634–1635*. London (UK): Chetham Society; 1844.
2. Klein U. Techniques of modelling and paper-tools in classical chemistry. In: Morgan MS, Morrison MC, editors. *Models as mediators: perspectives on natural and social sciences*. Cambridge: Cambridge University Press; 1999:146–67.
3. Latour B. Visualisation and cognition: drawing things together. In: Kuklick H, Long E, editors. *Knowledge and society: studies in the sociology of culture past and present*. Vol 6. Greenwich (CT): Jai Press; 1986:1–40.
4. Blair A. Reading strategies for coping with information overload ca. 1550–1700. *J Hist Ideas* 2003;64: 11–28.
5. Sawday J. *The body emblazoned: dissection and the human body in renaissance culture*. New York: Routledge; 1995.

CMAJ 2015. DOI:10.1503/cmaj.140985

Call for papers: CMAJ Holiday Reading

‘Twas months before the holidays and all through CMAJ house not a submission was stirring, making editors grouse. “Holiday Reading time is nigh!” they cried in despair, in hopes that your papers soon would be there.

Submit your brilliant missives, rigorous research (based on real data) on quirky topics or holiday-themed visuals at <http://mc.manuscriptcentral.com/cmaj>. Nonresearch submissions should be no longer than 1200 words. For information, contact kelly.clarke@cmaj.ca.

Deadline: September 15, 2015

