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## **Exquisite, Disturbing Objects From 500 Years of Human Anatomical Science**

**Greg Miller** • 03.10.2014

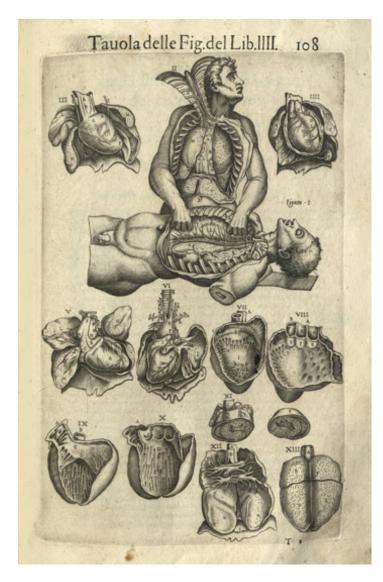


Harris P. Mosher ecturing at Harvard Medical School in 1929. The giant skull was made in the 1890s and is part of the new exhibit. Harvard Medical Library / Francis A. Countway Library of Medicine

For centuries people have been simultaneously fascinated by what's inside the human body and squeamish about getting close enough to a cadaver to actually find out. "There's this tension between the desire to know, and what it takes to get that knowledge," said David Jones, a historian of science at Harvard Medical School and one of the curators of a new exhibit on the history of anatomy at Harvard's Collection of Historical Scientific Instruments.

The *Body of Knowledge* exhibit, which opened last week and runs through December 5, illustrates some of the ways in which people have wrestled with that tension through the ages. Science, culture, and religion have all played a role.

"People have been opening up and breaking apart human bodies for a very, very long time," said Katherine Park, a science historian at Harvard and another of the exhibit's organizers. "But it's meant different things in different times and different places."



A page from Juan Valverde de Amusco's Anatomia del corpo humano (1560). Image: Harvard Medical Library / Francis A. Countway Library of Medicine

The science of anatomy may have its roots in the embalming practices of ancient Egypt, Park says. The Egyptians became skilled at dissection through the art of mummification, which included removing the organs of the deceased to preserve them for the afterlife. The ancient Greeks knew of these practices but mostly did their dissections on animals instead of human cadavers for legal and religious reasons.

Medieval Christians routinely extracted organs from the bodies of saints and distributed tiny pieces of them to be used as relics, Park says. "They became magical ritual objects," Park said.

By the 1400s more scientific dissections were being done in university medical schools. But they weren't always somber, strictly educational affairs, like the human anatomy classes taught today. "You have the sense there was a lot of gallows humor going on, a lot of joking when the genitals are dissected," Park said. But much depended on the personality of the anatomy professor, she says. "There seems to have been a lot of horsing around in Bologna. In Padua it was much more serious."

These dissections were cultural spectacles, even tourist attractions. It wasn't uncommon for city leaders to try to impress visiting dignitaries by taking them to see a dissection, Park says.

After the invention of printing, the production of beautifully illustrated anatomical books began to flourish in the 1500s. Anatomists sought out artists to produce these books, and at the same time artists like Leonardo da Vinci and Michelangelo sought out anatomical knowledge to make their human figures more realistic.

The acquisition of cadavers for dissection has been an uncomfortable issue over the years, and the exhibit doesn't shy away from that, says Dominic Hall, curator of Harvard's Warren Anatomical Museum, one of several institutions that contributed objects to the exhibit. Initially many public dissections used the corpses of executed criminals or of foreigners, the poor, or people who died in hospitals and had no one to claim their body. But demand outstripped supply, and grave robbing became a problem.

In the late 18th and early 19th century, medical schools often required students to procure their own cadaver for anatomy class, says Jones. "There was a famous case in London, where medical students attacked a funeral procession, knocked over the pall bearers, and grabbed the cadaver, and ran for it," he said. An angry mob gave chase. "It was a very uncomfortable period," Jones said. Fortunately, laws passed in the latter half of the 19th century helped put an end to it.

The images in this gallery are just a few of those on display, but they give a sense of anatomy through the ages — in all its creepy and disconcerting beauty.