

The Anatomical Mission to Burma

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In 1816, an intrepid band of Baptist men and women undertook a hazardous voyage from Salem, Massachusetts, halfway around the world to Burma (present-day Myanmar) “to propagate the Gospel amongst the Heathen” (1). Once ashore, the devout New Englanders set out to learn the native tongues, and began translating the Bible and Sunday school tracts. They preached the Word, made converts, formed congregations, and established schools. By the mid-1830s, they had distributed thousands of bibles and more than 200,000 Sunday school tracts, all of them printed on their own presses. At mission schools, they taught native pupils reading, writing, and arithmetic, as well as the fundamentals of Christian scripture, theology, and practice. They also taught another, perhaps more surprising, subject: anatomy.

This was no easy task. Anatomy textbooks had to be translated, and native equivalents had to be found or devised for the technical names; engravings had to be purchased. In 1843, the missionary press published Stella Kneeland Bennett’s translation of *The House I Live In*, William A. Alcott’s anatomy “for the use of families and schools” (2). Three decades later, Juliette Pattison Binney, the head of a mission school in the Karen hills, noted that those interested in the “education and the elevation of Karen Christians” still regarded anatomical instruction as “a necessity” and that Karen students manifested a “deep interest” in anatomy—but *The House I Live In* no longer sufficed. The missionaries therefore undertook to translate a superior work, Calvin Cutter’s *Anatomy, Physiology, and Hygiene*, and commissioned a physician in Philadelphia to procure the plates. But this work was also found lacking, so Mrs. Binney set about making a new translation, specifically “adapted to the different customs and wants” of the Karen hill people. The final published textbook contained 150 engravings, more than the original American edition.

Mrs. Binney considered it a great success.

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Anatomical illustration from an 1872 textbook used in Baptist mission schools in the Karen region of Burma.

The students, she reported, now readily “comprehended the Scientific terms.” But anatomical instruction was not confined to book study: San Tay, a native, assisted the teachers by procuring “from the Bazaar” the organs of animals to dissect so the class could observe their characteristics and compare them with pictures of human organs. San Tay also obtained “portions of the human skeleton” from Calcutta (3).

At first glance, this deep and abiding interest in anatomy is puzzling. With all the pressing tasks of converting people of an alien culture in a far-off land, we might wonder why Mrs. Bennett and Mrs. Binney attached such great value to the study of anatomy. Why did they consider the acquisition of anatomical knowledge to be a vital part of the christianizing process and, in Mrs. Binney’s words, an “upward step in the elevation of the Karens”? The answers to these questions are complicated, but per-

In the 1830s, a small group of reformers preached that the teaching of anatomy was crucial to the civilizing process. Our anatomical conception of self is their legacy.

haps useful in considering the origins and meaning of our own deeply embedded conception of ourselves as anatomical beings.

Traditional Karen religion revolved around the worship of the spirits of ancestors and other entities, who spoke through omens, dreams, and divination. Failure to worship the spirits, it was thought, could cause bad luck, poor harvests, accidental injuries, illness, or death. To the missionaries, anatomy appeared to be a potent weapon in combating such beliefs (which they dismissed as paganism or superstition, but which anthropologists call animism). The study of anatomy shed light on the innards, provided a map or a guidebook to the parts. That mysterious place, the body, became an open and legible book, the work of an all-powerful, law-giving Creator—a companion testament to the Scripture. Once an anatomical perspective was brought to bear, the body could no longer harbor spirits or demons. Even more dramatically, anatomy restructured relations between the living and the dead. The Karen believed that magical occurrences were the work of dead ancestors. The anatomist took the bodies of the dead, cut them open, and gained knowledge from them, without any retribution from the spirit world. Anatomy thus appeared to be very powerful indeed.

The missionaries sought to convert the Karen to a scientific conception of self, to make them give up native ideas about the body and instead to identify with the images and diagrams offered in anatomy books. This was a body of flesh and blood, captured in diagrams and text, imprinted with scientific names and internal boundaries, and governed by physiological law. Amid the anatomical illustrations, Alcott and Cutter preached that intemperate desires caused the affected parts of the body to sicken and die, a pathological narrative that could be read in postmortem dissections of the victims. Excessive drink, glutony, promiscuity, uncleanliness, swearing, and masturbation unbalanced the body.

Physiological law, then, was moral law: health depended on moderation in all matters. The punishment for the indulgence of desire, the wages of sin, was sickness and death. For Alcott and Cutter, anatomy was the cornerstone of physiological morality. With anatomical self-knowledge, one could

monitor, control, and repress emotions arising from the body: impulsive anger, immoderate hunger, thirst, and sexual desire. Animals, incapable of knowing themselves as anatomical beings, were at the mercy of their appetites. But human beings were capable of reason. The cultivation of anatomical consciousness, then, was part of a civilizing process by which children and savages (who were metaphorically likened to animals) could learn to tame themselves and become fully “human.”

It is tempting to tell the story of the mission to Burma as an encounter between the modern, scientific West and the backward, ignorant East. Yet, in teaching anatomy to the natives, Mrs. Bennett and Mrs. Binney were only trying to replicate a process that they, and their parents and grandparents, had undergone. In the 1600s, many New Englanders believed in witchcraft, demonic possession, omens, astrology, and humors: the Salem witch trials took place in 1692. The first modern anatomical text, Vesalius’s *De Humani Corporis Fabrica*, was published in 1543, but before the 1830s, most Americans had never seen an anatomical illustration. Doctors dissected corpses and studied anatomy, but the subject was not taught in schools and colleges, and illustrated anatomy books were too expensive to be circulated widely.

That changed with the publication in 1834 of Alcott’s *The House I Live In*, the first anatomy book aimed at the reading public rather than the medical profession. In the early 1800s, New Englanders were casting off beliefs in signs, omens, and demons. No longer puritans, they had modern ideas about how to reform the world and themselves. The industrial revolution was well under way, and improvements in the steam press, wood engraving, and papermaking were making illustrated books cheap to manufacture. Authors and publishers quickly raised a mass readership for illustrated anatomy books among that large group of people who were thirsting for “self-improvement.”

The House I Live In was just the first “popular anatomy” (as such books were termed). Many others followed, and it quickly became the norm for popular medical texts, previously barren of pictures, to include anatomical diagrams. Suddenly, anatomy was new and exciting, scientific and modern. A well-educated person had to know the geography of the body, as well as the geography of the world (4).

Today, we are the inheritors of Victorian popularizers like Alcott and the Baptist missionaries. We believe that anatomical images—artists’ illustrations and photographs of dissections and body parts, microphotographs, x-rays, magnetic reso-



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Viscera. Inside/Outside Series. Artist Katherine Du Tiel projects anatomical figures onto the bodies of actual people and then photographs them. Her work plays on the discrepancy between anatomical image and living flesh.

nance images (MRIs), and computer modeling—show us a true picture of ourselves, our inner reality. Our conception of ourselves as anatomical beings is secure. The anatomical image is our mirror. And there is something reassuring about that. Our bodies are mapped, explained, controlled. Anatomy is us.

But if we see ourselves in the anatomical mirror, we also see double. The science of anatomy is founded on the dissection of corpses. The skeleton and the opened body are emblems of human mortality and monstrosity. Anatomical images represent something we fear and deny: the undomesticated body, the body of desire, disease, deformity, and death; the body that, despite all efforts, resists our control.

That body haunts us. We—members of the privileged world of consumer goods and scientific breakthroughs—spend our lives encased in automobiles, parked in front of television sets, clicking away at computer terminals. Most of us no longer have to perform arduous physical labor. Modern medicine shields us from the sickness and deformity that previous generations have known. Health and funerary professionals protect us from dealing with death and the dead.

At the same time, television, films, magazine articles, and advertisements condition us to obsessively think of bodies and bodily pleasures. Bombarded by images of “perfect” bodies, food, drink, fast cars, and other products associated with desire, we anxiously try to reconnect to our bodies by purchasing objects and services: health club memberships, massage, books on Eastern religion, swing dancing lessons.

Perhaps this estrangement from embodied existence explains our current fascination with anatomy. In the last few decades, anatomical themes, objects, and images have become increasingly prominent in our culture. Artists like Damien Hirst and Marc Quinn make sculptures out of anatomical manikins, dissected animals, and body parts and fluids (5). The Body Worlds exhibition of German anatomist Günther von Hagens presents outlandishly posed cadavers in various states of anatomical undress, attracting audiences in the hundreds of thousands; von Hagens has also performed an autopsy live on commercial television (6). Television shows on the subject of forensic science proliferate, while Hollywood films become increasingly graphic, allowing the public to feast on unveiled scenes of gutted bodies and body parts (facts of death only hinted at in early and mid-20th century murder mysteries and horror films).

In all of these cultural productions, we see our inner reality, grotesquery, mortality, bloodiness, and sliminess, played back to us without the reassurances or sanction of science and without any protective veil. “Look at that” and “look at me” converge. Anatomical art stages what used to be unstageable: the “real” body, the facts of life and death. And that gives us pleasure and discomfort: a thrill of recognition, a tingle of disgust.

Our cultural landscape is crowded. In mass media and the art world, among all the solicitations and come-ons, it is difficult to get anyone to pay attention. The anatomical body—the “real” body—does get our attention, and for good reason. We think of ourselves as anatomical entities. And that belief is part of a centuries-long collaboration between pioneering anatomists, missionary schoolteachers, educational reformers, and our own present-day anatomical entrepreneurs.

References and Notes

1. Robert G. Torbet, *Venture of Faith: The Story of the American Baptist Foreign Mission Society and the Woman’s American Baptist Foreign Mission Society, 1814–1954* (Judson Press, Philadelphia, 1955), p. 2.
2. William A. Alcott, *The House I Live In. Part 1: The Human Frame* (Lilly, Wait, Colman & Holden, Boston, 1834). Mrs. Bennett took her translation from the second edition (Boston, 1836). The translation into Karen, *Lu Kuyi’ Khan’ dha’ aim’ e’ a Kron’ ca*, by Stella Kneeland Bennett (Karen Mission Press, Rangoon, 1843) went through four editions between 1843 and 1884.
3. Calvin Cutter, *Anatomy, Physiology, and Hygiene* (in Sgau Karen), transl. and adapt. J. G. Binney (Rangoon, 1872). All quotes are from Mrs. Binney’s preface.
4. For popular anatomy in 19th-century America, see Michael Sappol, *A Traffic of Dead Bodies* (Princeton Univ. Press, Princeton, NJ, 2001).
5. Eric Ridder, *Dissecting the Corpse of the Twentieth Century*, *Artwrite* 17 (1999); see www.artwrite.cofa.unsw.edu.au/9917/Eric%20Ridder.htm.
6. See www.bodyworlds.com/indexx.htm.

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