# THE CASE OF THE MISSING BAN: CADAVER DISSECTION IN ROMAN LAW

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## 1. Wikipedia (https://en.wikipedia.org/wiki/Galen):

Galen's principal interest was in human anatomy, but Roman law had prohibited the dissection of human cadavers since about 150 BC. [42] Because of this restriction, Galen performed anatomical dissections on living (vivisection) and dead animals, mostly focusing on pigs and primates. [6] This work was useful because Galen believed that the anatomical structures of these animals closely mirrored those of humans. Galen clarified the anatomy of the trachea and was the first to demonstrate that the larynx generates the voice. [43][44] In one experiment, Galen used bellows to inflate the lungs of a dead animal. [45][46]

- <sup>42</sup> 'Tragically, the prohibition of human dissection by Rome in 150 BC arrested this progress and few of their findings survived', Arthur Aufderheide, 'The Scientific Study of Mummies' (2003), page 5.
- **2. Arthur Aufderheide, 'The Scientific Study of Mummies' (2003), page 5** (in his section about Greek and Roman anatomical knowledge):

Thus it is not surprising that the commitment to a search for truth that formed the basis for the existence of the Alexandrian museum and library would lead men such as Herophilus of Chalcedon and Eristratus [sic] of Chios to base their learning of human anatomy on human dissections there during the third century BC. Tragically, the prohibition of human dissection by Rome in 150 BC arrested this progress and few of their findings survived. By the second century AD, Galen, the Greek physician who practiced principally in Rome, popularized the humoral theory of health and disease with the aid of only two human skeletons and animal dissections but without laboratory-based opportunities for human soft (nonskeletal) tissue dissection to guide him (Long, 1965:9-11; Lyons & Petrucelli, 1987:399; Porter, 1996:60).

## 3. Medicine: An illustrated history, Lyons and Petrucelli

In the third century before Christ, the study of anatomy was advanced considerably at Alexandria, where many discoveries can be attributed to Herophilus and Erasistratus, who were the first to perform human dissections systematically. After 150 B.C., human dissection was again prohibited for religious and ethical reasons, a prohibition strongly enforced in Rome. The science of human anatomy, however, persisted in the Hellenistic world, although only animal dissections were acknowledged. In the second century A.D., Galen achieved the highest level of success in the utilization of animal dissection (mostly of Barbary apes and pigs) and its generally correct application to human anatomy; however, some errors were inevitable due to an inability to confirm findings on human cadavers. [no citations provided]

- **4. Tombs** as *sacraria*: a selection of testimonia. Cic. Leg. 2.55; Pliny Ep. 10.689; The Nazareth Inscription, Metzger 1980; Ulpian D.1.8.9.2.
- **5. For laws concerning sacrilegium** see Augustus' Lex Iulia de de peculatus et de sacrilegis D.48.13.4.

**6. Rules for the property and bodies of executed criminals.** Note: D. 48.24 contains only three subsections; I summarized section 2.

## D. 48.24.1 Ulpianus 9 de off. procons.

Corpora eorum qui capite damnantur cognatis ipsorum neganda non sunt: et id se observasse etiam divus augustus libro decimo de vita sua scribit. hodie autem eorum, in quos animadvertitur, corpora non aliter sepeliuntur, quam si fuerit petitum et permissum, et nonnumquam non permittitur, maxime maiestatis causa damnatorum. eorum quoque corpora, qui exurendi damnantur, peti possunt, scilicet ut ossa et cineres collecta sepulturae tradi possint.

The bodies of those who are condemned to capital punishment are not to be denied to their folk: even the Divine Augustus wrote in the tenth book of his life that he had respected that policy. Today, however, the bodies of those who have been executed are not buried unless that right has been petitioned for and granted, and often permission is not granted, especially for those who have been condemned for *maiestas*. Also the bodies of those who are condemned to be burned can be petitioned for, obviously so that their bones and ashes can be collected and handed over for burial.

(Summary: **D. 48.24.2** stipulates that if the condemned dies in exile, the body cannot be moved without imperial permission.)

#### D. 48.24.3 Paulus 1 sent.

Corpora animadversorum quibuslibet petentibus ad sepulturam danda sunt.

The bodies of those who have been executed should be given up for burial to whoever asks for them.

## 7. Galen discusses cadavers that certain (unnamed) people have dissected

Galen Anatomical Procedures (AA) 3.5 (Singer trans.; Greek omitted for length)

Even the greatest experts in anatomy among the physicians, and even when examining the parts of the body at leisure, have obviously made many mistakes. For such a reason even those who sought to dissect the body of a German enemy, who had been killed in the war against Marcus Antoninus, could learn no more than the position of the viscera. But one who has practised beforehand on animals, and especially on apes, lays bare with the utmost ease each of the parts for dissection. It is easier for a careful man, previously practised in dissections, to gather something quickly from examination of a human body, than it is for one who is inexpert to discover the obvious even at his leisure.

For men have often rapidly observed whatever they wished in bodies of men condemned to death and thrown to wild beasts, or in brigands lying unburied on a hillside. Again, extensive wounds and ulcers, reaching deep down, have exposed many parts which were recognized by the experienced as having the same structure as in the bodies of apes, and yet they were of no service to the inexperienced. By constantly dissecting bodies of exposed infants, they were persuaded that man has the same bodily structure as an ape.

### 8. Skeletons Galen has studied Galen AA 1.2

Make it rather your serious endeavour not only to acquire accurate book-knowledge of each bone but also to examine assiduously with your own eyes the human bones themselves. This is quite easy at Alexandria because the physicians there employ ocular demonstration in teaching osteology to students. For this reason, if no other, try to visit Alexandria. But if you cannot, it is still possible to see

something of human bones. I, at least, have done so often on the breaking open of a grave or tomb. Thus once a river, inundating a recent hastily made grave, broke it up, washing away the body. The flesh had putrefied, though the bones still held together in their proper relations. It was carried down a stadium and, reaching marshy ground, drifted ashore. This skeleton was as though deliberately prepared for such elementary teaching. And on another occasion we saw the skeleton of a brigand, lying on rising ground a little off the road. He had been killed by some traveller repelling his attack. The inhabitants would not bury him, glad enough to see his body consumed by the birds which, in a couple of days, ate his flesh, leaving the skeleton as if for demonstration.

## 9. Opportunistic Vivisection in Pergamon; Galen AA 1.2

In an epidemic of the Anthrax in many cities of Asia, a number [of patients] presented parts stripped of skin and even of flesh. I was then still at home, studying under Satyrus. He had been three years in Pergamum with Costunius Rufinus, who was building for us the temple of Zeus Asclepios. Not long before there died Quintus, the master of Satyrus. All of us, who saw Satyrus demonstrating on exposed parts, recognized them explicitly and completely, telling the patients to make this movement or that, such as we knew was effected by this or that muscle, sometimes contracting or displacing the muscles a little to observe a large artery, nerve, or vein lying beside them. We then saw some students, as though blind, unable to recognize the parts, uselessly raising or displacing the exposed muscles (which needlessly distressed the patients), or even making no attempt to observe. Yet others, who had more practice, knew how to direct the patient to move the part appropriately. Thus I perceived that, in observing wounds, those are confirmed who already know what to expect, but the ignorant learn nothing thereby.

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