

Animals in Copenhagen's Anatomy House

Ivana Bičak

In the seventeenth century, Denmark boasted one of the best anatomy theatres in Europe. At the forefront of anatomic research, Copenhagen's anatomists found time to write poems to their experimental animals. Their neglected Latin verse offers a unique perspective on the topics of early modern vivisection, dissection, and taxidermy.

Thomas Bartholin (1616-1680) inaugurated a golden age in the history of Danish medicine. As Chair of Anatomy in Copenhagen, he discovered the lymphatic system, and his textbook on anatomy became one of the most influential in seventeenth-century Europe. His scientific breakthroughs were enabled by a constant supply of animals for dissections and vivisections, both domestic and exotic. In this menagerie of rabbits, hens, horses, peacocks, parrots, and lions, one particular animal stood out. The creature that brought Bartholin international fame was a dog. With the help of its vivisected body, Bartholin was able to publish the first full description of the lymphatic system in 1653, entitled *Vasa lymphatica, nuper Hafniæ in animantibus inventa* (*The Lymphatic Vessels, recently Discovered in Copenhagen in Living Creatures*). As a sign of his thanks for the dog's contribution to medical research, Bartholin wrote him a poem. The verses exhibit clear awareness of the dog's suffering under the anatomist's knife, referring to the violence of his death and his hurting entrails. Interestingly, rather than celebrating his own achievement in the art of anatomy, Bartholin focuses all his attention on the animal. He likens the dog to a European explorer: instead of discovering the source of the Nile, the dog reveals the bodily river of the lymph. The reverence for the dog is accompanied by the assurance that he will live on even after death, in the memory of the mortals. This theme of life after death is repeated again and again in Danish 'taxidermic' verse.

Thomas Bartholin (*Carmina varii argumenti*, Book 2)

XVI. *In Sceleton Canis, in quo Vasa Lymphatica primum detecta.*

Molosso
Violenta morte felici
Non pilis candido
Sed ossibus
Qui primus sine invidia
Aguas lymphaticorum
Effudit invisas
Extis patentibus & dolentibus
Ut siccus nullique molestus
Sociorum cum invidia
Post mortem supereset

Memoriæ mortalium
M. H. G. P. TH. B. D.
Non canis hic Nilum, liquidas sed corporis undas
Detegit, & celeri limpida vasa pede.
Dignus lacte canis, cujus de sanguine manat
Ros vitreus, per quem lactea lymphæ patet.¹

XVI. To the Skeleton of a Dog, in whom Lymphatic Vessels were first discovered.

To the Molossian hound,
Productive in his violent death,
Glittering not with his fur
But with his bones,
Who first ungrudgingly
Spilled his invisible
Lymphatic fluids
From his open & hurting entrails,
So that bleached and injurious to no one,
Envied by his mates,
He might survive after death
In the memory of the mortals
Dr. Thomas Bartholin has placed this memorial in gratitude.

With his quick feet, this dog has discovered not the Nile,
But the body's liquid waters, & transparent vessels.
This dog deserves milk, from whose blood drips
Crystal-clear dew, through which the milky lymph can be seen.²

After dissections, animals were frequently mounted as skeletons and placed on the walls of Copenhagen's Anatomy House. The founder of the institution and Bartholin's predecessor Simon Paulli (1603-1680) had perfected the technique of drying and bleaching the bones of his dissected subjects. For the purposes of teaching his technique, he wrote a little guide entitled 'On the Boiling of Bones.'³ Bartholin's later catalogue records creatures frozen in time, such as a 'Squirrel gnawing a nut' (*skeleton Sciuri nucem rodentis*).⁴ Curiously, the exhibited skeletons were accompanied by Latin epigrams written by Paulli's diligent assistant, the German physician Michael Kirstein (1620-1678). Kirstein's pithy verses reflect on philosophical and ethical questions involved in animal experimentation. His lines on the skeleton of an ape address the topic of comparative anatomy, a field of scientific inquiry that rose to prominence in the seventeenth century. This epigram draws attention to the similarities between human and simian anatomy, and even links them to the behavioural similarities. Interestingly, the title, SIMIÆ (OF AN APE), is one of the rare ones written in capitals. Immediately after follows an epigram entitled HOMINIS (OF A HUMAN). The typography thus seems to strengthen the link between humans and apes. Other titles written in capitals include SOL (SUN) and DEUS (GOD). Crocodiles, elephants, and swans do not receive this treatment.

Michael Kirstein (Epigrammata, Book 3)

XLV. SIMIÆ.

Quod nostros alibi sectetur Simia mores,
Hic, quod convenient ossibus ossa, vides.

XLV. OF AN APE.

That the ape imitates our own behaviour in other respects
Here you may see, as its bones agree with our bones.⁵

Dogs and apes have always been considered to be close to humans, so it is no wonder that the anatomists chose to address them when they spoke on the topic of animal experimentation. But Bartholin and Kirstein also engaged in writing poems on vermin. These 'imperfect creatures' become a serious subject of study as the anatomists contemplate their place in the natural order. The defining traits of vermin are that they are small, vile, and noxious. They can be carriers of diseases and the rate at which they reproduce threatens to disrupt the ecosystem. Yet seventeenth-century anatomists refuse to see vermin exclusively in this light, exploring instead their different dimensions. Antonie van Leeuwenhoek, after having dissected a scorpion, commented on 'the wonderful make of this animal, though to us it is so detestible [sic], and indeed so noxious.'⁶ An epigram by Kirstein plays with the idea of usefulness of a living organism, and presents an ironic twist in the post-mortem purpose of a scorpion. In folk medicine, oil of scorpions was used as an antidote and it was recommended for the bite of a rabid dog. Kirstein's scorpion is roused from its death slumber and speaks from a wall or shelf of the anatomy house. Like Bartholin's dog, the scorpion lives on even after death.

Michael Kirstein (Epigrammata, Book 3)

LXVII. *Scorpius excicatus*.

Miraris quid sim? poterit me prodere cauda:
Dum vixi, pestis, nunc medicina vocor.

LXVII. *Roused scorpion*.

You wonder what I am? my tail will tell:
While I lived, I was called vermin; now I am called medicine.

Notes

¹ Bartholin, T. (1669). *Carmina Varii Argumenti*. Copenhagen: Daniel Paulli.

² This and the following translations of the poems are mine.

³ Paulli, S. (1673). 'Observationes in coctura ossium, præsertim sterni,' in *Acta Medica et Philosophica Hafniensia*. Copenhagen: Peder Haubold, pp. 279-88.

⁴ Bartholin, T. (1662) 'Catalogus Rerum Naturalium, ad Anatomen & Zootomen spectantium in Musæo Th. Bartholini', in *Domus Anatomica*. Copenhagen: Peder Haubold. p. 53.

⁵ Kirstein, M. (1645?). *Libelli III Epigrammatum*. Copenhagen: Georgius Lamprecht.

⁶ Van Leeuwenhoek, A. (1800). *The Select Works*. Trans. Samuel Hoole. London: G. Sidney.