



# Dr Robert Knox and his book on fishing in Scotland: A window into his mind

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## Abstract

Robert Knox was publicly vilified for his suspected complicity in the 16 murders committed by Burke and Hare, although he had no involvement in them. Along with several books on anatomy Knox also wrote a book on angling in Lowland Scotland. In 'Fish and Fishing in the Lone Glens of Scotland' Knox's deep love for nature and for fishing emerges. Most interesting however is that although generally focussed on fish and fishing, the book abounds with asides on Knox's other preoccupations and passions. These provide rare insights into the character of the great anatomist, whose personality has otherwise retained its opacity over the years. In the book, Knox writes in passing and in a relatively unguarded fashion, about such topics as transcendental anatomy, Scottish Independence, empiricism, race and Edinburgh medical figures. In so-doing, we contend that he affords the reader some insight into the mind of the real Dr Robert Knox.

## Keywords

Robert Knox, fishing, Scotland, race, anatomy

## Knox the anatomist

Robert Knox (1791–1862), the first Conservator of the Surgeons' Hall Museums of the Royal College of Surgeons of Edinburgh, was a brilliant anatomist and anatomy teacher. He is also amongst the most vilified medical figures in the history of Scotland because of his perceived culpability, or at best his 'turning a blind eye', in the case of the 16 'West Port Murders' committed by the serial killers William Burke and William Hare in 1827–1828. When it emerged that all of these bodies had been purchased for dissection in Knox's school, the Edinburgh Press condemned Knox, in turn inflaming the people of Edinburgh against him. Popular anti-Knox feeling culminated in a threatening mob gathering outside his school in Surgeons Square while he lectured and also his home in Newington Place, where they burned his effigy and caused minor damage.<sup>1</sup> Knox's abandonment by the Edinburgh Medical Establishment throughout these tribulations and their failure to come to his defence, greatly worsened this state-of-affairs. This was despite the fact that Edinburgh University Medical School, or any of the other seven or so private anatomy schools that flourished around it in the old town in the early nineteenth century, could equally have been the welcoming recipients of Burke and Hare's reliable supply of fresh bodies. When 'Old Donald' the pensioner died of natural causes in Hare's boarding house in November 1827, Burke and Hare recognised a potential source of income to offset the debt of £4 that he owed to Hare. They set off for the University of Edinburgh's Anatomy Department seeking Professor *Monro tertius* in Old College, the location of the anatomy department. However, when they

reached Old College, the student to whom they enquired regarding directions to *Monro tertius*' rooms was an acolyte of Knox, and he redirected them to Knox's school at ten Surgeons Square.<sup>2</sup> If the two serial killers had first seen *Monro tertius* or the Head of any of the other schools, then they, rather than Knox, would have ended up being the focus of the public opprobrium that fell on Knox. No anatomy school enquired closely into the murky origins of the hundreds of illegal bodies they each received every year from the shadowy figures colloquially called resurrectionists. The clandestine resurrectionist trade in stolen bodies was tacitly sanctioned by the authorities, who recognised the necessity for surgeons to learn their trade on cadavers rather than by butchering the living. It seems likely that the Edinburgh Medical Establishment would have rallied to the defence of any of these other Heads of Schools had they found themselves in that position, but they did not come to Knox's defence. The unfortunate and destructive behaviour of the Edinburgh surgical/anatomical community towards Knox can be explained by four factors as follows:

1. Knox's arrogant and conceited personality and his readiness to criticise that community. Knox freely

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criticised everyone from the Royal Society of Edinburgh itself for cliquishness and what we would now call ‘dumbing down’, down to individual surgeons, whose anatomical knowledge he often questioned whilst teasing them for their vanity.<sup>3</sup> His tongue was sharp and satirical, and he never missed a chance to use it to skewer those he saw as his rivals; he addressed these sarcasms to anyone who would listen, but especially to his hundreds of adoring medical students. One potential reason for Knox’s animosity towards the Edinburgh Medical Establishment was his reputed and ironic failure in his final anatomy examination, meaning he failed to graduate from Edinburgh University Medical School first time around.<sup>1,4</sup> This was blamed on the poor teaching of *Monro tertius*, and the story goes that Knox then undertook a period of study with the great William Barclay who taught him well, recognised his anatomical talent and set him on the path to pass his resit and launch his career as a great anatomist. In fact, whilst this story feeds the myths of *Monro tertius*, Barclay and Knox, a respected historian and author of a recent book<sup>2</sup> undertook a search of Edinburgh University Medical School records and found evidence that Knox had passed his anatomy examination first time; there was no evidence of failure.

2. Jealousy of Knox’s brilliance as an anatomist. Knox was amongst the most talented anatomists of his day. He was friend of Baron Jean Léopold Nicolas Frédéric ‘George’ Cuvier (1769–1832), arguably the world’s greatest anatomist at that time and Professor Richard Owen (1804–1892), the UK’s greatest comparative anatomist. He had been chosen by the great Edinburgh anatomist John Barclay as his successor to carry forward the mantle of topographical anatomy, in Edinburgh. Topographical anatomy concerned itself with the structure and function of the human body as befits a training for medical doctors. Importantly, though, Knox had also taken up ‘transcendental’ anatomy, an altogether different science than topographical anatomy, during a year of study in Paris in 1828–1829. He had met and got to know Cuvier, Etienne Geoffroy Saint-Hilaire (1772–1844) and Henri Marie Ducrotay de Blainville (1777–1850), the doyens of that new and exciting branch of anatomy.<sup>4</sup> Transcendental anatomy concerned itself with nothing less than the uncovering of the origins and organisation of life on earth through comparative anatomy and palaeontology, before Darwin and Natural Selection provided the answer to these big questions. As such it was an enormously promising and exciting field in which to work at that time. However, Knox had not ignored topographical anatomy and pathology, and he had carried out autopsies in L’Hopital de Charite every day of his year in Paris,<sup>1</sup> amassing considerable knowledge of anatomical pathology.

3. Resentment at Knox’s remarkable and enormous popularity as an anatomy teacher. As John Barclay’s chosen successor Knox took over the running and teaching of the largest anatomical school in Edinburgh at ten Surgeons Square, with 400–500 students.<sup>1</sup> He was a charismatic and motivational teacher with many students reporting on the clarity of his lectures and the breadth of his anatomical knowledge,<sup>4</sup> incorporating topographical anatomy, anatomical pathology, transcendental anatomy, embryology and comparative anatomy. He was revered by the students, who, in the wake of the West Port Murders scandal, loyally supported him to the point of adoration, even when he was spurned by Edinburgh’s medical community, shunned by the populace and disparaged in the press.
4. Knox’s disregard for conventional religion. Knox showed little patience for organised religion in his personal life, and although not an atheist, he had a low regard for religion and its practitioners.<sup>3</sup> As Knox’s friend Lonsdale puts it, Knox believed that churches were ‘instruments of governmental and priestly tyrannies’.<sup>3</sup> Knox did not regularly attend his local church and often commented negatively on religion.<sup>1</sup> The very goal of transcendental anatomy was to determine how life on earth came about and so was in direct opposition to the prevailing creationist story in scripture and this inevitably set Knox against religious authority.

It should also be noted that Knox asked a committee, composed of senior figures in Edinburgh medical, civic and legal circles, to investigate the allegations against him. The report of the committee stated that they had ‘seen no evidence that Dr Knox or his assistants knew that murder was committed in procuring any of the subjects brought to his rooms, and the Committee firmly believe that they did not’. However, although Knox’s school acted no differently from any of the other schools in receiving disinterred bodies, they criticised his for ‘laxity of the regulations under which bodies were received into his rooms’.

The treatment Knox received at the hands of the Edinburgh Medical Establishment, the press the public and some public figures alike culminated in Knox being eased out of his job as Conservator of the Museum of the Royal College of Surgeons of Edinburgh, and he was black-balled from Chairs in the University of Edinburgh and Glasgow.<sup>1</sup> Reinforcing the notion that it was Knox’s character that was reviled as much as the acts he was accused of in relation to buying bodies is the fact that, despite the extreme opprobrium that came Knox’s way, his chief assistants, who aided in securing the bodies from Burke and Hare, Robert Fergusson and Thomas Wharton-Jones, both escaped with unblemished reputations. Fergusson went on to become President of the Royal College of Surgeons of England and the Queens Surgeon and was knighted, whilst Wharton-Jones became a famed anatomist and Professor of Ophthalmic Medicine and Surgery at University College, London. With Knox’s income suffering from falling



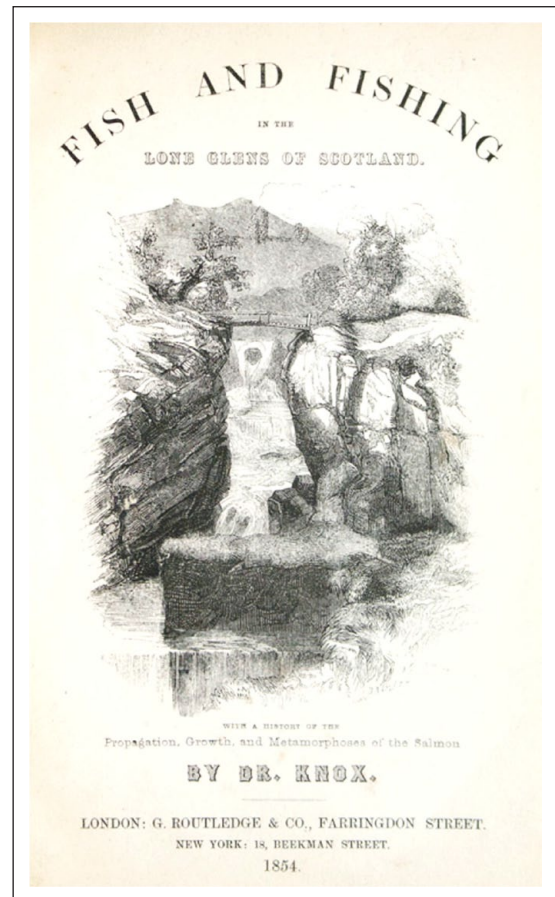
**Figure 1.** Sketch of Dr Robert Knox (Public domain image courtesy of Wikimedia Commons).

student numbers in his anatomy school at ten Surgeons Square<sup>1</sup> and in the wake of his wife's death from puerperal fever in 1841, which devastated him,<sup>3</sup> and at the age of 50, Knox left Edinburgh for London to try and make a living there. Eventually his licence to teach anatomy was taken away by the Royal College of Surgeons and finding it increasingly difficult to make a living, he took to writing books and giving public lectures.<sup>3</sup> Eventually towards the end of his life, in 1856, Knox did procure a job as pathological anatomist in the London Cancer Hospital; he died of a stroke in 1862, aged 69.

### Fish and Fishing in the Lone Glens of Scotland

Amongst books on various aspects of anatomy, Knox wrote one book that stands out as being very different to the others, entitled 'Fish and Fishing in the Lone Glens of Scotland' (hereafter referred to as 'Fish and Fishing').<sup>5</sup> Knox was a keen angler and according to Rae,<sup>1</sup> the book was written in a period of desolation following the death of his son Robert from a heart attack, aged only 22. 'Unhappy in London at any time, he turned from his sorrow to his memories of home, and produced a little 1 shilling volume on "Fish and Fishing in the Lone Glens of Scotland" which became an instant success'.<sup>1</sup>

'Fish and Fishing' is an often-beautiful evocation of the lowland Scottish landscape, along with interesting, sometimes sentimental reminiscence of his angling adventures. Along with providing descriptions of Lowland Scottish rivers and lochs and details on the biology and anatomy of



**Figure 2.** Frontispiece of Fish and Fishing in the Lone Glens of Scotland.

salmon and other fish, the book contains recollections of places and people, tall tales and poetry. However, of greater interest here is the fact that Knox, the great thinker, cannot help allowing his thoughts and opinions on matters unrelated to fishing to 'leak' into the book. So although 'Fish and Fishing' is ostensibly about what its title asserts, it also provides insights into Knox's attitudes, beliefs, his science and his sense of humour. This article describes how these insights illuminate Knox's personality, a topic of singular opacity to those only peripherally acquainted with Knox through the traditional Burke and Hare narrative, or from fictional accounts of his life as portrayed in Robert Louis Stevenson's 'The Body-Snatchers' and James Bridie's 'The Anatomist' (Figures 1 and 2).

### Knox's attitudes as revealed in 'Fish and Fishing'

#### *Fishing and nature*

Knox has the highest regard for fishermen, or more strictly speaking Scottish fishermen, and the business of fishing in Scotland, he has little regard for fishing in England. For example – 'A true angler, I am persuaded, must be born such; he cannot become so by education. There is no education in it – it is all romance. A love of the lovely, the wild

and solitary, characterize the northern angler' (p. 59; the page numbers provided following quotes indicate where they occur in 'Fish and Fishing in the Lone Glens of Scotland'). Knox uses fishing to escape modernity, which he seemed to detest:

'What fills us with ennui, with satiety, is the so – called nature of civilized man; the nature as fashioned by the citizen, the utilitarian, the man of the day. Everything he does smacks of the shop, the counter, the banker's book, the means and end'.

He believes that 'all of this will pass away. . .but Nature, ever young, ever fresh, ever beautiful, will still remain' (p. 60). Knox's reverence for nature identifies him as an adherent of the Romantic movement, which was at its peak in Europe at that time. Romanticism is also clearly seen in Knox's overtly emotional response to nature and his identification of heroes like Cuvier and Geoffroy and with the romantic poetry of Robert Burns (see later). Whilst Knox generally thought that Scottish anglers were the salt of the earth, his description of a man of the church on an angling expedition in England is tainted by Knox's low opinion of both clerics and fishing in England. The surroundings landscape is described as 'deep, rank and marshy' with 'little to relieve the listlessness and monotony of the scene'; the churchman himself was 'in accordance with the scenery' (p. 2). Knox mocks him – 'He seemed weighty enough to be an archdeacon' and 'a reverend pastor of the class of which Paley was the type'. . . 'a boy carried his angling apparatus and a seat for him to rest occasionally'. William Paley (1743–1805) was a philosopher and priest writing towards the end of the eighteenth century. He espoused creationism and argued for an intelligent designer God in his classic text 'Natural Theology or Evidences of the Existence and Attributes of the Deity'.<sup>6</sup> In particular, Paley used creationist arguments to explain the anatomical relationships of muscle and bones in joints. This no doubt irked Knox, who saw the true evolution of joints from his comparative anatomical studies. Paley's famous 'Finding a watch' or 'The Watchmaker analogy', still used today by some believers to contradict evolution (e.g., see Dawkins<sup>7</sup>), ignores the ability of Natural Selection to produce complexity from simplicity.

'Fish and Fishing' was written whilst Knox was in London, a place he hated, longing for the freedom of the Scottish countryside. At one point, he equates the freedom he finds in angling with his time in the Seaforth Highlanders serving in the wilds of South Africa during the Xhosa wars.<sup>1</sup> These were fought between colonists and the natives of the Eastern Cape between 1779 and 1879, and Knox looked back on his military service there with great affection:

'I write . . . for him whom the carpeted room, the morning paper, the ample library, the well-supplied table, the pleasant social converse of educated friends have ceased to please' . . . 'I would rather dwell, as I once did, amidst the wild and now desolate dells of the Anatolo, leading at the base of the beauteous Boschberg the life of the wandering Caffre, than listlessly pace London's idly busy streets'. (p. 11; Boschberg, now named Bosberg, is a mountain range and nature reserve of

great natural beauty in the Eastern Cape of South Africa where Knox served with the Seaforth Highlanders. Anatolo may be an eccentric spelling of the Natal (now named Kwa Zulu Natal) region, which is to the North East of Bosberg; the authors could find no place with the name Anatolo in South Africa)

Elsewhere he describes London as,

'that monstrous assemblage of bricks and mortar, commonplace and sham, London, where all is sham' (pp. 67–68) with its 'miles of hideous brick walls, with holes in them called doors and windows. Odious commonplace! you mask humanity, and mar the better part of human nature'. (p. 11)

Knox's love of the outdoors does, however, seem to be almost entirely confined to fishing, and he is sarcastic regarding the type of person who enjoys hill climbing, equating them with those who enjoy bellringing!

'mountain climbing I have ever found to be a most unprofitable business, although I am aware that in skilful hands who know how to ring the changes dexterously on bells, which have been often played, a mountain ascent is by no means an unprofitable speculation'. (p. 45)

### *Transcendental anatomy, evolution and science*

The transcendental anatomist in Knox is never far from the surface, and he speaks of how a fish in a Scottish stream carries within it, evidence of its evolutionary history – 'Look at that tiny fish. . .just escaped from below the gravel. . .study it deeply; mark its forms; For they are vestiges of a former world' (p. 7; the use of the term 'vestiges' was most likely no accident, echoing as it does the title of the famous book 'Vestiges of the Natural History of Creation' (1844) written by Robert Chambers (1802–1871), with which Knox was no doubt familiar. This flawed classic was one of the first to advance a theory for evolution in a changing earth's surface and in animals, albeit without the sound arguments, backed up with data, that Darwin later brought). In Knox's time, the accepted understanding of the origins of life was the creation, as described in Genesis, where all animals were created by a God on Day 6. Underwritten, in Scotland, by the powerful Scottish Kirk, few people risked the Kirk's opprobrium by suggesting that the description in Genesis might be wrong. However, by the early nineteenth century, belief in some sort of evolution and change in species was taking hold amongst biologists. This was especially true amongst the transcendental anatomists, like Knox, whose study of comparative anatomy revealed to them a process of increasing complexity, that is, evolution, over time in extant species and in the fossil record.<sup>3</sup> It was in fact clear to them that there was a chain of complexity from the lower animals, culminating in the apes and humans. However, they were hesitant in suggesting that there was evolution of one form to another, especially when it came to humans. They could not be forthright in stating the obvious, that species changed and evolved,

largely because it would be in contradiction to an all-powerful Church. Knox, though, came close to admitting that there was, in fact, evolution of one species to another in 1850, 9 years before 'The Origin of Species'<sup>9</sup> when, in his book 'The Races of Man'<sup>8</sup> he states that 'simple animals. . . may have produced by continuous generation, the more complex animals of after ages' and 'the fish of the early world may have produced reptiles, then again birds and quadrupeds: lastly man himself?'

In seeking a mechanism for evolution, transcendental anatomists like Knox believed that in the embryo could be found remnants of all animals of the past and also those yet to come into being – 'Thus in the embryonic changes or metamorphoses of man and other animals, are shadowed forth, more or less completely, all other organic forms. This is man linked by structure and by plan to all that has lived or may yet live. One plan, one grand scheme of nature; unity of organisation; unity in time and space'.<sup>8</sup> This 'unity of form' was central to the transcendentalist view of how and why homologous structures could be seen across all vertebrates. It was also seen as the source of consistency of form between parent and offspring at a time when neither the genome nor the mechanism of its replication during gametogenesis was known. The idea that the embryo passed through stages reflecting various bestial forms also explained congenital abnormalities as unusual cases of 'arrested development' at one of these early stages.

As a figure of the Scottish Post-enlightenment and a scientist, Knox was an ardent empiricist. It is therefore not surprising to find him criticising angling 'experts' who merely gained their knowledge of angling from having read about it. Knox suspected Izaak Walton (1593–1683) author of the popular book 'The Compleat Angler'<sup>9</sup> of just such a crime. Knox sarcastically berates Walton for describing the unique traits of the Fordich trout, such as very white meat and the angle that they rise to the fly, yet – 'not make one journey to discover what might be the reason for this. Happy contented Izaak! You were never troubled with the desire to discover the unknown in the past nor the present: sufficient for you was the fact that it is so' (p. 8).

Knox was interested in the electric organs of some fish and in mentioning them in 'Fish and Fishing' he takes the opportunity to promote empiricism. In a short discussion, Knox mentions that electric fish were known to the Romans and Greeks, but 'no-one thought of inquiring into the causes of the phenomenon' (p. 17).

### *Race and racism*

Knox was considered an expert on race and his book 'The Races of Men' was a best seller.<sup>8</sup> By today's standards, his racist opinions are obnoxious, even though such opinions were generally held and accepted in the mid-nineteenth century. Knox's thinking and writing on human races was extensive, and he had a pessimistic world view seeing the spectre of race war, 'The views I had so long adopted of human nature, human history, and the future, had led me long ago to foresee the approaching struggle of race against race'<sup>8</sup>. In various parts of 'Fish and Fishing', Knox

criticises, in purely racist terms, the Saxons (i.e., English), Scandinavians and Jews. However, he reserves particular loathing for the Celts of Britain, that is, the Welsh 'Cymbri', the Scottish Highland Celts (Gaels) and the Irish Celts. Knox identifies Scotland as being composed of two distinct parts with two distinct races – Scotland, by which he means Lowland Scotland and 'Caledonia', by which he means the Highlands. He then states that 'A very common mistake of both queens and subjects is the confounding (of) Scotland with Caledonia – Scottish men with Celts – these countries are very, very distinct' (p. 54). He has some respect for lowland Scots, like himself, but none for the Highland Gael whom he castigates for a range of supposed faults. However, Knox reserves special hatred for the Irish Celts whom he seems to fear and despise above all other races.

In criticising other races Knox finds them generally wanting in industry, but he does have reservations about personal industry, which he finds to be a poor substitute for genius – 'Industry is a great thing. . .but genius is greater' (p. 17). This is a false dichotomy, but he builds on it going on to condemn the way that the new working class of the industrial revolution, which occurred during Knox's lifetime, are exhorted to work towards the greater wealth and stability of the country – 'Industry! labour! order! Excellent claptraps, which admit of translation into taxation, slavery, discipline' (p. 18). This sounds socialist in its leaning, but it is hard to say what politics Knox espouses from his statements and it is likely that, as with most of Knox's personal philosophy, he constructed his own politics with little regard for traditional political thought.

### *Edinburgh surgeons and anatomists*

Knox argued and fell out with almost all of Edinburgh medical society and never missed a chance to criticise and mock them. Much of this occurred prior to the West Port Murders but was much worse after 1829. In 'Fish and Fishing', he suggests that unusually for him, he never argued with Sir Charles Bell (1774–1842). Bell was a famous Edinburgh surgeon who left Edinburgh and became even more renowned in England and who had, at the time that Knox wrote his book, been dead for more than 10 years. At the very beginning of his career and fresh out of medical school, Knox had served with Bell in the aftermath of the Battle of Waterloo. In an army field hospital near Brussels, Knox had served as Bell's surgical assistant in treating French prisoners of war from the battle. In addition, one of Knox's first jobs on becoming Conservator of the Surgeons' Hall Museums had been to oversee the purchase and safe transfer of Bell's huge pathological specimen collection from Bell's Great Windmill Street Museum, London to Surgeons' Hall Museums in Edinburgh. Knox seems to have been amused to have heard that Bell's decamp to London had left him a 'cit' (the similarity between the word 'cit' and the common monosyllabic swearword for excrement that rhymes with it is, very likely no accident, this word being current from at least the sixteenth century), someone demeaned by living in a City, and so Bell had sought solace in angling. To add to the generally comic

picture, apparently Bell had been swathed in waterproof clothing, which Knox finds unaccountably risible ‘none I have ever tried proved to be waterproof’. Referring to Bell’s excessive use of waterproof clothes, Knox states that ‘Had he been made of sugar, which no one ever thought him to be, he could not more have dreaded the touch of water’ (p. 107). Knox reports that,

‘A friend told me that once, by a river side, he saw something stalking about strongly resembling the Ghost in “Hamlet.” On approaching the phantom, it was Charles Bell, cased to the eyes in waterproof! . . . Here was poor Sir Charles transformed from a man into a cit. He once said to me, “People say that you are the only person I never quarrelled with.” I told him that the world had said precisely the same of me. Peace be with him. His remains in repose, I think, in England. We met in Castle Street of Scotland’s capital for the last time. He was leaving for England, he said, resolved not to return. He never did’. (p. 12)

On at least one occasion, Knox appears to have gone fishing with Harry Goodsir, sometime Conservator in the museum of the Royal College of Surgeons in Edinburgh after Knox’s tenure. Harry Goodsir, like his more famous brother Professor John Goodsir, had been Knox’s pupil. Knox does not name Harry Goodsir, but in typical sarcastic fashion names him and likens him, rather cruelly given Harry’s story, to Alfred Jingle, the lovable rogue and confidence trickster in the *Pickwick papers*. The evidence that Jingle is Harry Goodsir is the following:

‘Jingle now sleeps, not with his fathers, but with Franklin, at the bottom of the Frozen Ocean, . . . He has with him, I believe, three or four feet cut from off the legs of Chinese women, and preserved in spirits. What future geologists will say of this I cannot imagine’. (p. 137; no doubt this refers to the folk song ‘Lord Franklin’ or ‘Lady Franklin’s lament’, which tells the story of the Franklin expedition and was popular round this time. The second verse begins ‘With one hundred seamen he sailed away. To the frozen ocean in the month of May’)

Harry Goodsir was indeed naturalist on the Franklin Expedition and died in the Canadian Arctic. It seems unlikely that Goodsir took any anatomical specimens with him to Arctic Canada, but we do have specimens of the feet of Chinese women deformed by the tradition of binding, in the Surgeons’ Hall Museums collection, where Harry Goodsir was conservator until he resigned to join Franklin in 1845. Having been the Conservator sometime before Harry, Knox was of course well-acquainted with the specimens in the Surgeons’ Hall Museum collection.

## The reformation and Scottish nationalism

In a section on fishing in the Ammond Water (now called the River Almond), which flows into the Firth of Forth North of Edinburgh, Knox reflects on his namesake John Knox, ‘The reformer’, from whom a local family claimed descent. Robert Knox himself claimed that he was related

to John Knox,<sup>4</sup> who led Protestant reformers against the dominance of the Catholic church in Scotland in the mid-sixteenth century, leading to the reformation. Robert Knox was clearly pro-reformation and shows anti-Catholic sentiment, praising John Knox as – ‘the man to whom Scotland owes her liberty, freedom of conscience, exemption from tithes and bishops, popery and prelacy, alike abhorred by Scot’ (p. 15). John Knox famously opposed Mary Queen of Scots, who was a Catholic and who sought to unify Scotland, England and France. Her son James VI achieved the Union of Scotland and England with the Union of the Crowns, effectively ending Scotland’s existence as an independent nation. This appears to be a matter of sad regret to Robert Knox who then goes on to misquote Burns famous hymn to nationalism ‘Scots Wha Hae’, not the only time he misquotes Burns in this book, forcing one to conclude that he must have been relying on his memory. He sadly dismisses the subject of nationalism as follows – ‘Scotland, by her own act, has been blotted out of the list of nations. The loss of national independence is a melancholy subject for reflection, and so I turn from it and from the Ammond water to other scenes and other streams’ (p. 15).

## Conclusion

Most people’s opinion of Robert Knox is entirely one-dimensional, superficial and misconstrued, prejudiced by their perception of his relationship with Burke and Hare. In fact, he was a brilliant transcendental and topographical anatomist and a complex and interesting individual who treated the wounded after Waterloo and served in South Africa as an army surgeon. He spent a year in Paris where, along with the finest and most forward-thinking UK surgeons, he learned the new science of anatomical pathology. He was a leading light in transcendental anatomy, the most intellectual form of anatomy that sought to understand how animals are structured the way they are. It is undoubtedly true that he was difficult, conceited and pugilistic in his professional life, and certainly his views on race are shocking and wholly unacceptable today, but none of these traits make him uninteresting. Although the Burke and Hare narrative is not in the remit of this paper, it’s impossible to write about Knox without referring to it. The authors’ opinion is that he was unlucky to become involved in Burke and Hare’s enterprise and was in no way complicit in the murders. In not looking closely into the murky source of his supply of cadavers, Knox’s school was no different to any of the other anatomy schools in Edinburgh or the UK. In his surprising book on ‘Fish and Fishing in the Lone Glens of Scotland’ Knox’s complexity and his range of interests, as well as his undoubted faults, emerge unexpectedly between sections of the main discourse, providing rare and we contend, insightful, glimpses into the mind of the unvarnished Dr Robert Knox.

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### References

1. Rae I. *Knox, the Anatomist*. Edinburgh and London: Oliver & Boyd; 1964
2. Rosner L. *The Anatomy Murders: Being the True and Spectacular History of Edinburgh's Notorious Burke and Hare and of the Man of Science Who Abetted Them in the Commission of Their Most Heinous Crimes*: University of Pennsylvania Press, Pennsylvania. 328 pp. 2009
3. Lonsdale H. *A Sketch of the Life and Writings of Robert Knox the Anatomist*. London: MacMillan and Co.; 1870.
4. Bates AW. *The Anatomy of Robert Knox: Murder, Mad Science and Medical Regulation in Nineteenth-Century*. Brighton: Edinburgh Sussex Academic Press; 2010.
5. Knox R. *Fish and Fishing in the Lone Glens of Scotland: With a History of the Propagation, Growth, and Metamorphoses of the Salmon*. London: G. Routledge; 1854.
6. Paley W. *Natural Theology: or, Evidences of the Existence and Attributes of the Deity*. 12th ed. London: J. Faulder; 1809.
7. Dawkins R. *The Blind Watchmaker*. New York, NY: W.W. Norton & Company; 1986.
8. Knox R. *The Races of Men: A Fragment*. Philadelphia, PA: Lea and Blanchard; 1850.
9. Walton I, Cotton C. *The Compleat Angler: or the Contemplative Man's Recreation*. London: Henry Kent; 1759.