

## Section of the History of Medicine

*President F F Cartwright FFA RCS*

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### Paper

#### **The Politics of Anatomy: Dr Robert Knox and Victorian Racism**

by M D Biddiss PhD FRHISTs  
(*Department of History, University  
of Leicester, Leicester, LE1 7RH*)

Were I a medical man I should certainly have felt honoured by an invitation to address this audience. Lacking a medical background, I feel doubly honoured and – quite properly – doubly awed as well. You may well wonder, then, how I come to be concerned at all with the racial anatomy of Robert Knox. Briefly, one of my main academic interests is the history of racist thinking in Europe during recent centuries. Before considering Knox's contribution to this development I must clarify the rather specific sense in which I shall be using 'racism'.

Here it will signify something narrower than prejudiced attitudes and discriminatory actions. I employ it to cover instead certain relatively systematic attempts at using race as the primary or even sole means of explaining the workings of society and politics, the course of history, the development of culture and civilization, even the nature of morality itself. This accords with the desire of Banton (1967, p 8) to use 'racism' primarily within a doctrinal sense; and, more specifically, to indicate 'the doctrine that a man's behaviour is determined by stable inherited characters deriving from separate racial stocks having distinctive attributes and usually considered to stand to one another in relations of superiority and inferiority'. None with real claim to scientific sophistication can any longer maintain such belief. We cannot still postulate the existence of supposedly pure races, capable of transmitting through successive generations characteristics that are both constant and self-evidently associated with particular cultural

attributes clearly distinguishing one breed from another. Certainly, as indicated by recent work from Jensen (1969) and Eysenck (1971, 1973), the controversy over the relative importance of nature and nurture is far from dead. But racist assumptions, as outlined above, cast no helpful light on the issues involved.

It is of course Nazism, ideologically committed to a global vision of racial hierarchy, that provides the most dramatic manifestation of this doctrine at work. I have no doubt that Hitler was sincere; but, equally, I have no doubt that he was thoroughly wrong and also utterly malevolent towards the bulk of humanity. Not least of the curiosities about the partially comparable doctrine of Knox is that this, while being no less sincere and scarcely less wrong, propounded a racism with substantial traces of benevolence. This quality, relatively rare and rather paradoxical in racist argument, is one of three main features about Knox that have fascinated me. The second is the high degree of systematization to which his racism aspires. Finally there is the fact that his contribution, developing between 1825 and 1850, comes remarkably early in the history of any fully-fledged European racist philosophy.

There is nothing surprising, in principle, about the involvement of such a medical figure. Indeed, it would have been more truly curious had any variety of racism – so dependent upon ideas about the physical constitution of man – survived for long without sympathy from many doctors. An outstanding example contemporary with Knox was the Frenchman Paul Broca, one of the pioneers of modern neurosurgery, who consumed much of his energy in the fashionable pursuit of correlation between skull-shapes and racial-cum-social qualities. Any history of nineteenth-century anthropology certainly remains very incomplete unless due allowance is made for the role of the medical wing.

Despite this fact, Knox's activities in the specifically racist field have been neglected for too long. The biography by his pupil and colleague Henry Lonsdale (1870) stresses how large these issues loomed. Yet the one modern life of Knox (Rae 1964) says little about this aspect; and his ideas about race have been generally overlooked or misunderstood by social scientists. In trying to redress the balance, I make no claim that in *other* ways Knox has been forgotten by posterity. Standard surveys of medical history (e.g. Guthrie 1945, pp 270-1) still remind doctors of his talent as an anatomical teacher. Nor before a much wider public will the memory of Knox entirely fade. For he will always be associated with a true-life melodrama – a *cause célèbre* which would lead to some later underestimation of his great professional gifts. It meant that the phrase 'Knox the Anatomist' would survive less as a compliment than as a monument to his unfortunate association with the villains Burke and Hare.

The tale is familiar, and an outline will suffice. During November 1828 the body of a Mrs Docherty was discovered in Knox's cellar at Surgeons' Square, Edinburgh. As this was the site of his private dissecting rooms there was, in itself, nothing surprising about the presence of a corpse! Yet the authorities had reason to doubt whether the cadaver had arrived there by any permissible method. Knox, like other anatomists, had immense difficulties in obtaining an adequate supply of subjects through such informally acceptable channels as poor houses and starving relatives. So, again like his peers, he tended not to query whether certain corpses had been 'resurrected' from their fresh graves through intervention that was human rather than divine. Such 'resurrectionism' – what Dickens' Jerry Cruncher called 'honest tradesmanship of an agricultoal nature' – was lucrative for its practitioners and of no small help to medical teachers themselves.

Burke and Hare's method was, however, more drastic still. They wanted profit – but, literally, without getting their hands dirty. It emerged that Mrs Docherty was only one of some sixteen subjects who had been, quite simply, murdered by suffocation. The state of post-mortem investigation was such that, especially after the victims had spent their last hours stewing in drink at the killers' behest, there was little positive reason for suspicion. When the truth emerged Edinburgh – indeed, Britain – was shaken. So too was Knox's reputation.

It seems clear, in retrospect, that he had been innocent of these crimes. He was not called at the subsequent trial, and he was cleared of all but a certain carelessness by an unofficial committee of inquiry. Still, many doctors and most of the

public simply bracketed him with the murderers. At Burke's hanging the crowd bayed for Knox's neck too. It was belatedly recognized that something must be done quickly about the general circumstances promoting the trade in bodies. A government committee had met already in 1828, and reported sympathetically about anatomists' difficulties. The need for reform was underlined by the arrest in 1831 of Bishop and Williams for 'doing a Burke and Hare' on King's College, London. The Anatomy Act of 1832 moved in the right direction. But Knox's own immensely promising career as anatomist could never be the same again.

Hitherto he had enjoyed success. Knox had been born in 1791, the son of a mathematics teacher. He derived from his father and from the Rector of Edinburgh High School, which he attended between 1805 and 1810, a lasting respect for some of the French Revolution's radical principles. In 1814 he graduated in medicine from Edinburgh, and next he spent a year in London at St Bartholomew's. Knox then became an army surgeon, whose first real task was to deal in Brussels with casualties following Waterloo. From 1817 to 1820 he served at the Cape of Good Hope, which gave him experience of relations between Briton, Boer and Kaffir. Technically he remained an army officer until 1832, but after 1820 his career actually moved into rather different channels. During 1821 he lived in Paris, the greatest centre of contemporary anatomical debate. There he became friendly with Baron Larrey, Napoleon's renowned Medical Inspector-General, and gained introductions to those two giants of comparative anatomy, Etienne Geoffroy Saint-Hilaire and Baron Cuvier.

When Knox returned to Edinburgh his own stock as an anatomical teacher rose dramatically. Throughout the 1820s he delivered to the city's learned societies papers that were remarkable in breadth of knowledge and curiosity. Soon the Royal College of Surgeons of Edinburgh approved his plans for a worthy Museum of Comparative Anatomy, and he was appointed founding conservator in 1826. That same year, on the death of his mentor John Barclay, he came into possession of Edinburgh's foremost anatomical school. After being licensed by the University, anatomists with their own private schools stood in open competition. Knox's provocatively rapid success, his apparent disregard for religion, and his clandestine marriage with 'a person beneath him in station' (Bettany 1892) encouraged professional antipathy. But students, at least, appreciated his worth. By 1828 he had a regular anatomical class of more than five hundred – the largest in Britain.

In and beyond the Burke and Hare affair Knox's pupils stood by him. They knew that the disaster could equally well have struck almost any other teacher. But Knox's peers tended more readily to make him a scapegoat. In 1831 he was virtually forced to relinquish his museum conservatorship, receiving no word of official thanks. He remained a scintillating lecturer, but appointment within the University was now effectively blocked. By the mid-1830s the University had introduced its own compulsory intramural courses on anatomy and thereby squeezed out the private establishments. Still more generally, Edinburgh's medical teaching was falling behind London's in popularity and prestige. For all these reasons, by the early 1840s Knox's career as an anatomical teacher in the Scottish capital was over.

He lived until 1862. Over the last twenty years of his life he found staple employment in the new market for medical journalism. He also wrote and translated works of anatomy and zoology useful to artists as well as doctors. There had been a brief period at the Glasgow medical school, but in 1847 Knox's teaching qualification was withdrawn after another scandal—concerning the not-uncommon offence of having wrongly certified during his Edinburgh days the class-attendance of a pupil. His offer to serve as a doctor in the Crimea went unaccepted. The only notable consolation that he received from distinctively medical circles was an appointment in 1856 as pathological anatomist to the London Cancer Hospital in Brompton. He combined work there with a small general practice based on his home in Hackney, and thus he lived out his last years. But, while the medical profession had tended to shun him, he had received notable recognition in another field. For the Hackney doctor had been made in 1860 an Honorary Fellow of the Ethnological Society of London, and in 1861 had become the first Foreign Corresponding Member of the Anthropological Society of Paris. I now aim to explain why.

From very early on Knox had been interested in racial questions. These had bulked large, for example, in his famed 'Saturday Lectures' on general anatomical topics. Lonsdale (1870, pp 292–3) records:

'Knox could not glance at a cranium for the common descriptive anatomy without speaking of its ethnological bearings... Even when walking along the streets, thronged with men and women, he was always on the *qui vive* for Race features. He could see at a glance what ordinary men could hardly distinguish at their leisure; if his eye was penetrative beyond most, his more gifted vision lay within an alert and discriminative mind. Previous to his time, little or nothing was heard about Race in the medical

schools: he changed all this by his Saturday's lectures, and Race became as familiar as household words to his students, through whom some of his novel ideas became disseminated far and wide, both at home and abroad.'

After the Burke and Hare affair this concern with racial matters was intensified in two ways. Firstly, Knox lost enthusiasm for detailed dissecting studies and his career as a pioneering discoverer of new comparative relationships tailed off. Instead, he dealt increasingly with wider questions, about the historical and social implications of human anatomy. Secondly, the scandal had brought the wolf to the door. Knox found that his talent for lecturing, as well as writing, had commercial value. From the 1840s he made speaking tours, and in them he came to elaborate quite fully the vivid ideas which commend him to historians of racist thinking.

It is likely that audiences were struck not only by the oratorical brilliance but also by the dramatic quality of the arguments themselves. Hearers would probably have had some grounding in the efforts made over the last few decades by anthropologists, archæologists, zoologists and others to debate the proper racial groupings of man. Knox's originality resided in his attempt to state so systematically a certain view of the social and political implications of these groupings. By the 1860s and 1870s such statements were much more commonplace. But, because he developed these ideas through the 1840s, Knox belongs to a band of remarkable and mutually independent pioneers of racist theory. It includes such figures as Gustav Klemm and Karl Gustav Carus in Germany and, still more famously, Arthur de Gobineau in France. This fascinating constellation cannot be discussed here (*see* Biddiss 1966; 1970, pp 103–111), but there is space to record the contribution of Knox at least.

He published the relevant lectures, entitled 'The Races of Men', in 1850. An enlarged text, subtitled 'A Philosophical Enquiry into the Influence of Race over the Destinies of Nations', appeared twelve years later. The book opens with this proclamation: 'That race is in human affairs everything, is simply a fact, the most remarkable, the most comprehensive, which philosophy has ever announced. Race is everything: literature, science, art—in a word, civilization depends on it' (p v). This thesis was founded on a form of 'transcendental anatomy', deriving from Geoffroy Saint-Hilaire's vision of the fundamental unity of all organic being. But Knox's applications of such anatomy were transcendental in a second sense too. For he extrapolated from physical qualities towards a whole series of speculations on the genius, instincts and temperament of the race. Thus he brought racial questions to the centre of

his discussion of society and politics by supplementing – indeed, overwhelming – science with mysticism (a point about racism developed generally in Biddiss 1975).

This transcendental extrapolation is crucial to the racist use of anatomy, so a typical and concrete example will be helpful. Knox writes of the Celt (pp 319–320):

‘War is the game for which he is made. Herein is the forte of his physical and moral character . . . limbs muscular and vigorous . . . step, elastic and springy; in muscular energy and rapidity of action, surpassing all other European races . . . Weight for weight, age for age, stature for stature – the strongest of men. His natural weapon is the sword, which he ought never to have abandoned for any other’

All this has a certain crude plausibility. Yet, in no time at all, Knox is plunging on into the most arbitrary extrapolations (p 320):

‘Jealous on the point of honour . . . admitting no practical jokes; an admirer of beauty of colour, and beauty of form, and therefore a liberal patron of the fine arts. Inventive, imaginative, he leads the fashions all over the civilized world . . . Irascible, warm-hearted, full of deep sympathies, dreamers on the past, uncertain, treacherous, gallant and brave’

And so he goes on – in a sustained flight of fancy which, at its apogee, has lost any real contact with the anatomical point of departure.

Such was the fundamental mode of argument employed by Knox in asserting not merely the differences but also the inequality between races. Although he admitted primeval human unity, he denied the utility of any social or political science structured predominantly in terms of common factors between men. This was a curious position for someone so sympathetic to the French revolutionary legacy! For Knox it was the distinctions between men and the innate dislike between races that had been paramount almost from the first. Here he also urged that the various races known throughout recorded history were, effectively, distinct species and that they must be ranged on a scale according to their civilizational aptitudes. No race was incapable of some civilized life, yet a vast gulf stood between the limited attainments available to the negroid and to most mongoloid stocks on one hand and the much greater past achievements and future potential of white men on the other. The Black differed from the White in everything else as much as in colour: ‘He is no more a white man than an ass is a horse or a zebra’ (p 245).

This last remark was not formulated as a gratuitous insult. It was a calculated derivation from Knox’s general principle that, notwithstanding the fundamental organic unity of

nature, the stability and immutability of species dominates recorded history. Here he salvaged what was convenient from Cuvier, and applied it to man. It followed that human hybrids could not remain self-supporting for long (pp 65–6):

‘Nature produces no mules; no hybrids, neither in man nor animals. When they accidentally appear, they soon cease to be, for they are either non-productive, or one or other of the pure breeds speedily predominates, and the weaker disappears.’

The operation of this mechanism of reversion to separation and purity, as the sole alternative to extinction, is fortified by the complementary work of an associated principle. It embodies Knox’s belief that each race is properly adapted to one single habitat. An exotic climate or environment cannot alter the qualities of a particular stock, yet in time it may be able to achieve something still more radical – the race’s destruction. Attempts at foreign colonization can thus succeed only if there are massive and continuing influxes of the colonizing breed. The burden on the homeland usually proves insupportable in the end. Then, withdrawal from the colony is the sole alternative to racial suicide.

These contentions obviously affect Knox’s view of the relations between Europeans and coloured stocks. But, first, let us note the more neglected fact of his still greater insistence that the implications of his racial doctrine be explored within the context of Europe itself. He claimed that contemporary work in cognate fields tended to concentrate unduly upon external physical differences, especially of pigmentation. Conversely, inadequate attention was paid to no less relevant distinctions which were manifested more clearly in ‘morale’ than in physiognomy. He wrote, for example, that, ‘Englishmen cannot be made to believe . . . that races of men, differing as widely from each other as races can possibly do, inhabit not merely continental Europe but portions of Great Britain and Ireland’ (p 24; *see also* Beddoe 1885, Curtis 1968, *passim*). He derided the contemporary European obsession with nationality, substituting the profounder matter of race. Until scholars and statesmen acknowledged their misunderstanding of such points they would be unable to explain or control events.

Knox adapted his lectures for publication so as to show that the recent revolutionary events of 1848–9 dramatically confirmed his criticisms. He treated the pandemic turmoil of those years as the most recent and vivid symptom of racial war. As a radical in many respects, he regretted that the revolutionaries particularly had not yet realized the true nature of their conflicts with repressive dynasticism. As Lonsdale (1870, p 291) records:

'The actions of men . . . were to Knox like a game of chess: here were kings and pawns . . . and castles behind which sheltered statecraft and priestcraft; the knights might be military, diplomatic, or revolutionary, but ever sought to top over the pawns or to crush the people; and all the movements obtained direction from Race.'

Knox believed that once this was all understood the oppressed could throw off the three greatest curses of humanity – kings, nobles, and priests.

Four European races bulk largest in his analysis. Once equipped with the self-awareness that Knox was preaching, the Saxon or Scandinavian race seemed destined for a period of dominance – though attachment to the idea of very specific habitat limited the extent to which such domination could be profitably considered in terms of territorial expansion. He sees the bulk of Saxon population concentrated in Britain, northern Germany, and Scandinavia. Though qualities of strength and courage are prominent, the picture of the Saxons is far from consistently flattering. Their talents for the mechanical and their pursuit of order are manifested principally in a cultivation of wealth, comfort, and immediate expediency. Identifying himself with them, Knox vividly depicts their resentment at subordination to hereditary domination. Even so, once in power, they refuse to extend their vaunted principles of freedom and justice to any other stocks.

The Saxons' principal enemies are the Celts. These have still less understanding of liberty, being incapable of applying ideas of freedom either to themselves or to others. Celts are concentrated in France, Spain, parts of Italy, most of Ireland, and in the west of mainland Britain. Where they become governors they impose despotic forms on themselves and aliens alike. In every setting, whether they are dominant or not, they show themselves as the most bellicose of breeds. Further east is the third main race – the Slavonian, which in certain respects obtains Knox's high regard. Despite physical deficiencies, its members have great intellectual and political potential. Currently they suffer beneath the various dynastic tyrannies of Habsburg, Brandenburg, and Romanov. None the less, once equipped with a leadership conscious of the racial issues involved, they might still liberate themselves. Last among the major stocks is the Sarmatian or Russ. He is incapable of real achievement in literature or science, and unable even to conceive of the advantages of personal freedom. His blind obedience to any established power is a threat to liberty in Europe and farther afield.

This is the framework for Europe's many racial problems. In Britain, which still languishes under the legacies of Norman domination, the question of race remains at the heart of a con-

tinuing battle between freedom and the tyranny of hereditary privilege. The matter is also germane to a second conflict, between Saxon and Celt in Ireland. Knox even envisaged the possibility of an independent Ireland dominated not by Celts but by those Saxons who despair of attaining freedom on the British mainland. He saw the Irish conflicts as one facet of a larger racial war between Saxon and Celt, which had already been won by the former in Canada and had been prominent in many European troubles. Here the position of Celtic France was especially important. Though largely sympathetic to the Revolution, Knox believed that French history since the 1790s had merely demonstrated the Celtic taste for despotism.

In the German setting the racial analysis is equally insistent. Knox does, however, dismiss any idea of a unitary 'Germanic' race, arguing instead that there is popular confusion between three components: Saxon in the north, Slavonian in the east, and a Gothic stock epitomized by the Habsburgs themselves. The Austrian Empire is thus a tyranny of Goth over mainly Slavonian stocks, though it also subjugates Hungarians who as an intrusive and 'exotic' race cannot much longer survive. Prussia is also a seat of racial competition – this time between Saxon and Slavonian, with a smaller non-German 'Pruss' stock introduced as third party. On this remarkable ethnic map the East is full of threatening Russian Sarmatians, the Mediterranean is populated by varieties of degenerate Latin, and nearly everywhere there are Jewish minorities devoid of artistic or literary potential that batten parasitically on the labour of others.

In the wider world Knox rejects any important role for the stagnant and uninventive mongoloid and has nothing substantially favourable to say about the physically and mentally inferior breeds of still darker men. Yet, because of his law of habitat and also possibly because of his very peculiar political radicalism, Knox is not writing an imperialist's charter. Migrants to the United States are warned that its Saxon-dominated polity will survive only while the European inflow can be sustained. Meanwhile the so-called Americans are criticized for enslaving Negroes who are still human beings, albeit inferior ones. Nor does Knox welcome European interference in Africa or India. These continents might be held by force but they could never be, in any true sense, colonized: 'Withdraw from a tropical country the annual fresh influx of European blood, and in a century its inhabitants cease to exist' (p 108). In the light of contemporary tropical medicine this was not altogether an unreasonable conclusion (Curtin 1964, pp 343–362; Cartwright 1972, pp 140–1).

Despite these warnings Knox felt that, due to the greed which Saxons and Celts shared, a conflict between European stocks for African domination was inevitable. The French would move southwards from Algeria, only to be met and probably defeated by British, Dutch, or even German forces. Amidst all this the natives would be on every side pursued, and often exterminated without respect for their human status. Here European professions of humanitarianism would be hollow. But so too would be any dream of lasting empire. The efforts would have been made in pursuit of a dominion which, whether the African survived or not, must be marked by impermanence on account of the inexorable laws of race.

The political implications of Knox's thesis are confused. Racism is not easily combined with his brand of radicalism. Despite the panache of the latter, it is evident that Knox's contempt for rulers is complemented by dislike for the mass of men in Europe and elsewhere. His support for democracy is, at best, reluctant and geographically limited. The benevolent implications of his radicalism normally lose out to his conviction that the innate hostility between races will always make it politically unrealistic to preach Equality and Fraternity across their boundaries. Was each race meant to arrange itself in a hermetically sealed unit working out its own independent conception of political ideals? Perhaps it was only under such improbable conditions that the intimations of radicalism might be pursued.

Arguing in this manner, Knox devoted much of the energy of his last years to the Ethnological Society of London, founded in 1843. His influence was clearest upon its secretary, Dr James Hunt. In the year after Knox's death, Hunt led a secession movement away from the Ethnological Society's relatively mild stand on the social significance of racial differences and thus he became the leading figure within the new Anthropological Society (Burrow 1966, pp 101–136). The latter's proceedings were suffused with many typically Knoxian assumptions. By the end of the 1860s, in Britain and in much of Europe, anthropology and racial determinism were closely entwined. Often all that remained at issue was whether the inferior races could aspire to any significant degree of improvement. Even though his scorn for imperial mission tended to be neglected, Knox's stress on the social relevance of ethnic hierarchization was becoming commonplace. It was, moreover, a relevance both fundamental and dominant. The basis for such views was less that race constituted merely one of the important influences on man in society than that

it provided the overweening determinant of character and culture, of individual and collective behaviour, alike – thus presenting the key to social, political, and historical explanation.

Knox had been purveying, like many in his own time and even in ours, an excessively simple and monolithic solution to problems raised by the sheer diversity and complexity of social phenomena. Not for nothing was he Karl Marx's contemporary. In his own endeavour to unravel the riddles of the social universe Knox exploited his great anatomical learning and the remnants of his once formidable medical prestige. Thus what my account of his racist ideas may have illustrated above all are the profound responsibilities associated with the possession and utilization of knowledge and reputation – especially in the field of medicine, the most social of sciences and the most practical of arts. Perhaps from a study of the past I have managed to underline that point at least. If so, I shall feel content at having temporarily diverted you from the highroad of medical history proper into the sort of instructive byway represented by Robert Knox's politics of anatomy.

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