

Body Snatching: A Grave Medical Problem¹

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The activities of the 18th century body-snatchers are among the most lurid and entertaining episodes in the history of medicine and have been cataloged exhaustively by scholars and popularizers of all kinds. Today, however, when the ethics of research on humans has become a critical problem in medical philosophy and when relations between the public and the profession appear to be deteriorating, it is instructive to take another look at this period of medical history, when many current ethical problems first became issues of widespread concern. Both a cause and a product of the frictions that existed between physicians and the public in 18th century England, the resurrection trade may be viewed as a bizarre example of what can happen when a profession and a society find themselves at cross-purposes during a period of rapid scientific advance and far-reaching social change.

LEGAL BACKGROUND

The history of the English body-snatchers begins with the introduction of human cadaver dissection into the study of anatomy during the 14th century in the University of Bologna. Although the study of anatomy in ancient times had included human dissection, after the fall of Rome the practice was forbidden by the Church and abandoned in favor of animal dissection, accompanied by the study of ancient texts. As long as monks controlled the practice of medicine, the interdict was obeyed, but in the 11th and 12th centuries medicine became a more secular calling.

The first recorded dissection in western Europe was performed around 1300, in Bologna. The first body-snatching scandal occurred in 1319, with four students there arrested for grave-robbing (1).

Dissection in Europe gained acceptance slowly. In Italy, by the 15th century the practice had come under legal regulation and was restricted to two public demonstrations per year. A hundred years later, Leonardo da Vinci still found it necessary to pursue his study of human anatomy at night in newly constructed tombs and was compelled to keep his notebooks so well hidden that they were not discovered for over 300 years. Gradually, however, the skeleton came out of the closet, and dissection began to occupy a central place in European medicine. As the demand for bodies grew, it became customary in most countries for officials to turn over to the universities the bodies of executed criminals and those of people dying in almshouses and hospitals who otherwise would have been buried at public expense.

In England, however, the situation was more complex. Medical education was controlled, in London at least, not by the universities, but by the guilds of Barbers, Surgeons, and Apothecaries. In 1540, the former joined forces to become the Royal Company of Barbers and Surgeons, and in 1541 Henry VIII granted this group the exclusive right to four executed felons a year to be dissected. Elizabeth I

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acknowledged the right of the College of Physicians to perform dissection with a four-felon grant in 1564, and Charles II increased Henry's original grant to six in 1663 (2).

Outside the area dominated by these chartered institutions, the English common law provided the anatomists with the bodies of executed murderers. As long as the Barber-Surgeons Company and the College of Physicians could maintain their monopoly on dissection in London, the royal grants, supplemented by the provisions of the common law, were sufficient. By the beginning of the 18th century, however, the strength of the monopolies was failing. The great London hospitals of St. Thomas and St. Bartholomew were teaching anatomy, and private schools run by former hospital lecturers soon appeared in their wake (3). The demand for anatomical subjects grew proportionately.

In 1752 the common law provision for the dissection of murderers was made statutory law by George II, for the reason that "the crime of murder has been more frequently perpetrated than formerly. . . and. . . it is thereby become necessary that some further terror and peculiar infamy be added to the punishment of death" (2). Far from being an acknowledgment of the growing scientific importance of dissection, this act made the idea even more repugnant to the public and fuelled its determination to protect other possible sources of cadavers from desecration.

By 1760, it had become customary in the anatomical schools for students to dissect for themselves. It was also mandatory for those applying for licenses from the Royal College of Surgeons (the successor to the Barber-Surgeons Company) to attend two full courses of anatomy, with dissection, in London. The result was a spiralling demand for anatomical material for which, even in 18th century Britain, the supply of convicted murderers was insufficient. In 1793 there were over 200 medical students in London and over 1000 in 1823. Practicing surgeons liked to operate at least once on a cadaver before approaching a difficult case, and they, too, required subjects. The surgeons and the students were competing for less than 100 corpses legally available each year (3).

This is not to say that plenty of people were not dying from causes other than public execution. The situation was intolerable; the demand for bodies was rising, and the medicine of the day did much to hasten the ill to their graves, yet this plentiful supply of material was being wastefully carted off and buried unexamined. Moreover, through a quirk of English law, to steal a shroud or a coffin was considered a crime against the property of a dead man's heirs and subject to stiff punishment, but a man did not own his own body. He could not will it as property, nor was the theft of a body a crime, unless for the purpose of witchcraft. In such circumstances it would have been surprising had grave-robbing *not* become a common medical practice.

GROWTH OF THE RESURRECTION TRADE

"In the early days of British anatomy, all the body-snatching was done by gentlemen" (3). At first the grave-robbers were mostly amateurs, medical students or hospital porters who stole for their own use, or their professor's. An anatomy professor in Dublin, for example, on hearing of the death of a giant named Corney Magrath, told his class:

Gentlemen, I have been told that some of you in your zeal have contemplated carrying off the body. I earnestly beg you not to think of such a thing: but if you should be so carried away with your desire for knowledge that thus against my expressed wish you persist in doing so, I would have you remember that if you take only the body, there is no law whereby you can be touched, but if you so much as take a rag or a stocking with it, it is a hanging matter (3).

The students, needless to say, managed to spirit the giant away from his own wake and shortly had him completely dissected.

Body-snatching by medical students, and their professors, continued throughout the 18th and early 19th centuries. At the same time, however, there grew up a class of men known as resurrectionists, who made their living by exhuming corpses and selling them to the schools for dissection. At first these men were mostly cemetery watchmen, aided by a few independent desperadoes. In the early 19th century, however, several well-organized gangs of grave robbers had appeared in London and other large cities. Before they were finally put out of business by the Anatomical Act of 1832, these men had elevated their racket to the status of a criminal profession, with diversification into import and export and extortion from the surgeons they served.

A typical group of resurrection men was the London Borough Gang, which operated from approximately 1802 until 1825. This comprised a shifting, and shifty, membership of petty criminals, sextons, and gravediggers, led by a former porter at Guy's Hospital named Ben Crouch. Crouch was "a powerful, overbearing man with a pock-marked face and filthy temper. He had risen to command of the gang because he was of superior intelligence and did not get drunk as often as the others" (4). In its heyday the gang numbered at least six men. The group stayed together after Crouch left, under the leadership of an even more unsavory character named Patrick Murphy.

For many years the Borough Gang supplied several of London's biggest anatomical schools, including that of Sir Astley Cooper, a great surgeon and professor of anatomy at Guy's Hospital. Cooper was so dependent on Crouch and his cronies that he exerted his influence to keep them out of jail on numerous occasions, and, if a member did run afoul of the law, Cooper paid his family a pension while the breadwinner was serving his term.

In return for this powerful protection, Crouch and the rest provided skilled professional service. Various memoirs by doctors and testimony given during Parliamentary hearings about grave-robbing yield a vivid picture of the resurrectionists' activities. Typically, a member of the gang, or his wife, would spend the day loitering in a likely graveyard waiting for a funeral. The spy might even join the mourners in order to take careful note of the appearance of the newly dug grave and of any booby traps set by the family. This was an important precaution, for, during the last years of the resurrection era, public feeling ran high. All sorts of infernal machines were devised by families anxious to protect their dead. There is one report of a father who filled his child's coffin with gunpowder and fused it so that it would explode if disturbed (5, pps. 79-80).

At night, two members of the gang would appear and, carefully laying a sheet on the ground, would uncover the head portion of the grave, dumping the loose dirt on the sheet. The body would be pulled from the coffin head first with ropes, the shroud stuffed back into the grave, and the dirt carefully replaced. The grave-robbers then would cart the body off to the dissection rooms and hand it over to a porter, for a price adjusted according to the size and condition of the corpse.

One member of the gang, Joseph Naples, kept a diary in 1811 which was discovered and published many years later. From it we get an idea of the economics of the operation. A typical entry reads:

At 2 a.m. got up, the Party went to Harps, got 4 adults and 1 small, took 4 to St. Thomas. Came home, went to Mr. Wilson and Brookes. Dan got paid £8/8/0 from Mr. Wilson. I received £9/9/0

from Mr. Brookes. Came over to the borough, sold small for £1/10. Received £4/4/0 for adult. At home all night (5, p. 147).

These were standard prices, although there was wide variation. For example, John Hunter once paid £500 to procure the body of a giant named O'Bryne, whose 8-foot skeleton Hunter wanted for his anatomical museum (3). At the end of the resurrection era, the going rate for an adult corpse in good condition was £9/11. Many of the resurrection men made considerable fortunes this way, though most eventually drank up their funds and died in poverty.

Relations within the gang and between rival gangs were not always amiable, and the smooth practice of the trade was often ruffled by quarrels and bizarre reprisals. Crouch, for example, was not above denouncing a fellow resurrectionist to the police, particularly if the man were a free-lance operator who might be recruited to work for the group after leaving jail. Naples fell in with them this way. There were also occasions when gang members would deliberately desecrate a graveyard, advertising their presence by standing empty coffins on the walls and leaving rifled graves unfilled. The public fury aroused by such a display could be counted on to render such a graveyard unsafe for weeks, putting rival resurrectionists out of business.

Nor were the surgeons immune from the persecutions of their unscrupulous henchmen. The schools' position was particularly vulnerable, since embalming was an almost unknown art in the 18th century. Vessels might be injected with wax, or bodies packed in salt, but the viscera were not preserved. Bodies spoiled rapidly during the school year, which lasted from October to June; at least two were needed for each dissecting group. The surgeons, then, needed a lot of bodies, but they could not buy when the supply was plentiful and store them for future use. It was a sellers' market, as Crouch's successor Murphy astutely realized.

In 1816, Murphy organized the first successful strike against the St. Thomas Hospital School, refusing to supply any corpses until the price was raised 2 guineas. The school bought what they could from free-lance operators, until members of the gang broke into the dissecting rooms brandishing knives. They threatened the students and mutilated the recently purchased specimens. The police were called, but to avoid publicity the surgeons were forced to bail their assailants out of jail and reopen negotiations.

In later years, Murphy's extortion was more systematic. He devoted the first few weeks of the term each year to driving rival operators out of business, denouncing them to the police, spoiling their cemeteries, and the like. Then, when his monopoly was established, he would force the surgeons to sign an exclusive contract with the Borough Gang, a contract which included 50 guineas of "starting money" and "finishing money" (supposed to be used for bribing officials, but really just an added fee) and a high set price for material. Murphy was also known for other unsavory practices, such as selling bodies to one hospital, then stealing them and reselling them to another, and so on.

The Borough Gang could be vicious in their animosity toward individual surgeons. One who crossed them was a private teacher of anatomy named Joshua Brookes. Brookes was, according to a colleague, "without exception the dirtiest professional person I have ever met with; his good report always preceded him and his filthy hands begrimed his nose with continual snuff. I really know no dirty thing with which he could compare—all and every part of him was dirt (4,p.39)." Brookes' only other claim to distinction was that he practiced a kind of embalming, injecting his cadavers with a nitrogenous compound that made his dissecting room smell like a ham shop. As a consequence, his was the only school to remain open in the summers. Brookes

had frequent troubles with the resurrectionists. Murphy harassed him at every opportunity, once leaving two putrefying corpses on the anatomist's doorstep. Two respectable young ladies tripped over the remains and in their hysterics drew a crowd that would have probably killed Brookes if the police had not intervened. Another time, Murphy sent Brookes an unconscious man in a bag in lieu of a corpse. The trick was only discovered when Brookes sought to roll the body down the cellar stairs, whereupon the man leaped up and ran from the house.

Since the resurrectionists' safety depended on their discretion, such pranks did them great harm. Even when they tried to avoid notice, scandals often occurred, for the trade eventually reached massive proportions, with all the mishaps to which large organizations are prone. More than once, for example, large shipments of bodies from the public graveyards in Ireland packed in piano cases or kegs were left unclaimed on the docks of Liverpool, a circumstance which could not fail to attract public notice. During the later years of the resurrection era, public indignation seriously threatened the exhumation trade.

Opposition to the body-snatchers took many forms. Mourners often set spring guns and other booby traps over fresh graves to discourage the body-snatchers, and it was not uncommon for relatives to mount a night watch over a fresh grave for 2 or 3 weeks until the body had decomposed sufficiently to be useless for dissection. At times merely keeping watch was not enough; there are accounts of pitched battles that took place between citizens and grave robbers. The report that follows appeared in an Irish newspaper in 1830.

DESPERATE ENGAGEMENT WITH BODY-SNATCHERS—The remains of the late Edward Barrett, Esq., having been interred in Glasnevin churchyard on the 27th of the last month (January), persons were appointed to remain in the churchyard all night, to protect the corpse from the 'sack 'em-up gentlemen,' and it seems the precaution was not unnecessary, for, on Saturday night last, some of the gentry made their appearance, but soon decamped on finding they were likely to be opposed. Nothing daunted, however, they returned on Tuesday morning with augmented force, and well armed. About ten minutes after two o'clock three or four of them were observed standing on the wall of the churchyard, while several others were endeavouring to get on it also. The party in the churchyard warned them off, and were replied to by a discharge from their firearms. This brought on a general engagement; the 'sack 'em-up gentlemen' fired from behind the churchyard wall, by which they were defended, while their opponents on the watch fired from behind the tombstones. Upwards of 58 to 60 shots were fired. One of the assailants was shot—he was seen to fall; his body was carried off by his companions. Some of them are supposed to have been severely wounded, as a great quantity of blood was observed outside the churchyard wall, notwithstanding the ground was covered with snow. During the firing, which continued for upwards of a quarter of an hour, the church bell was rung by one of the watchmen, which with the discharge from the firearms, collected several of the townspeople and the police to the spot—several of the former, notwithstanding the severity of the weather, in nearly a state of nakedness; but the assailants were by this time defeated, and effected their retreat. Several of the head-stones bear evident marks of the conflict, being struck with balls, &c. (5, 7, pps. 73-75).

A resurrectionist caught by the police might hope for lenient treatment; many a burglar escaped arrest by claiming to be "only a body-snatcher," but one who fell into the hands of the mob could be in serious trouble. Crowds maimed or killed perhaps a score of body-snatchers during the resurrection era. Usually the victims were amateurs, medical students and porters, rather than the hardened professionals.

Others felt that an ounce of prevention was worth a pound of prosecution and sought to make their graves or vaults burglarproof. In 1818, for example, an undertaker named Edward Lillie Bridgeman patented a special kind of coffin, which he advertised in the newspapers:

Many hundred dead bodies will be dragged from their coffins this winter, for the anatomical lectures which have just commenced, the articulator, and for those who deal in the dead for the supply of the country practitioner and the Scotch schools.

. . . The violation of the sanctity of the grave is said to be needful for the instruction of the medical pupil, but let each one about to inter a mother, husband, child, or friend say 'shall I devote this object of my affection to such a purpose?' If not, the only safe coffin is Bridgeman's PATENT WROUGHT IRON ONE, charged the same price as a wooden one, and is superior substitute for lead (6).

Other undertakers peddled similar wares, or recommended a kind of iron fence called a mort-safe that could be placed over the grave.

These devices created a serious problem for sextons and cemetery keepers, for only the graveplots of the very rich were owned in perpetuity. The rest were customarily used over and over, and wrought iron coffins made this impossible. Many burial grounds refused to accept bodies in metal coffins, and one poor woman lay above ground for 3 months while the courts argued whether or not the cemetery had a right to refuse to accept the body (4, pps. 44–50). All proceedings took place in the public eye and aroused strong feelings.

MURDER FOR ANATOMY

Public indignation reached a fever pitch in 1828, following a terrible anatomical scandal in Edinburgh. At that time, the situation in the Scottish capital was much the same as in London. The prestige of medicine was at a low ebb. Teaching in the university, once brilliant, had deteriorated into mediocrity, and medical education was being offered throughout the city in small private schools. These were supplied with cadavers by professional resurrectionists, who faced opposition from a furious, and violent, public.

A much safer way of earning a fee in the disorganized, poverty-stricken slums of Edinburgh was to acquire the body of a pauper before it was buried and sell it to the schools at the going rate for an exhumed specimen. It was only a matter of time until someone conceived of a further refinement on this practice, that of acquiring the bodies of paupers before they were dead.

This happy thought occurred, almost by accident, to two Irishmen in the city, William Burke and William Hare (7). Hare owned a flophouse in the middle of the city and Burke, a sometime cobbler, rented his back room. One day one of the tramps for whom Hare provided lodging happened to die on the premises. Hare, claiming that the man owed him 4 pounds, enlisted Burke's help in selling the body to recoup the debt. They first carried the body to the University, but a student there directed them to the private school run by Robert Knox, who paid the enormous sum of £7/10 for it.

Shortly thereafter another opportunity presented itself. A man took sick in the lodging house, and Burke and Hare lost no time in smothering him with a pillow and selling the body to Knox. This time the price was £10, and Knox remarked politely that it was good to have a specimen "so fresh," an unfortunate comment in light of later events.

Burke and Hare now began to practice murder on a grand scale. Their method was quick and serviceable. A likely victim would be invited home for a drink and, when stupefied with liquor, would be smothered with pillow by the two entrepreneurs, one holding it on while the other sat on the person's legs to prevent a struggle.

Apart from this rather specialized skill, Burke and Hare apparently lived ordinary, peaceable lives. Hare, by all accounts, was the more vicious of the two. He was described as "an evil man of evil looks, the black eyes of a snake set at different

levels, hollow cheeks creasing into deep gullies when he went into bouts of unamused laughter, a vicious and dangerous man (4, p. 108)."

Burke seems to have been a rather pious, genial soul, of sufficient sensibility that, when he and Hare decided to smother a house guest who was a relative of Burke's wife's first husband, Burke, while willing to countenance the murder, asked to be excused from sitting on the woman's legs until she was partly suffocated. "She being a distant cousin," Burke explained at his trial, "I did not like to begin first on her."

At least twice in the course of 16 murders, Burke and Hare skated on the thin edge of discovery, choosing as victims young, healthy people, fairly well known in the city. These were a prostitute, Mary Patterson, and a simpleton known as Daft Jamie. Both were recognized by students at Knox's school, who remarked on the odd circumstance that two such healthy folk should have died for no apparent reason. Still, people "died of drink" every day in Edinburgh, and Knox's suspicions were not aroused.

Burke and Hare's undoing was the murder of a Mrs. Docherty, whom they dispatched, appropriately enough, on Halloween night, 1827. Burke picked up the woman in a bar, persuading her to come to his rooms by posing as a distant relative. He was then living with a family named Gray, whom he sent off to stay at Hare's lodging house for the night. Burke then plied his victim with whiskey. Mrs. Docherty, however, proved to be a happy drinker and insisted on visiting and jollying up another of Burke's neighbors, a Mrs. Connoway. Other people saw her with Burke, including Mrs. Gray, who had returned to retrieve some belongings. With all the drinking and excitement, Burke was thoroughly rattled by the time he and Hare had done their work. They were unable to dispose of the body that night, however, and Burke hid it in a pile of straw in his room. When the Hares, the Grays, and the Connoways all showed up for breakfast the next morning, Burke lost his head, afraid someone would smell the corpse. He threw whiskey over the straw and shouted at Mrs. Gray for lighting a match near the pile. This aroused her curiosity, and later that day she and her husband returned, discovered the body, and denounced Burke and Hare to the police.

The public was so enraged by the story of the murders that the judges hearing the case felt there could not be a fair trial unless the police provided incontrovertible evidence of the prisoners' guilt. After some debate, they offered Hare immunity from prosecution in return for a full confession.

Most of our information about the murders comes from Hare's testimony at the trial and Burke's confession after he was found guilty. The trial was a cause célèbre, with two of Scotland's chief lawyers arguing the case. Despite the best counsel, Burke was convicted, and executed, January 28, 1828. Afterwards, his body was publicly dissected at the College of Surgeons. Popular feeling ran so high that to avoid riot his cadaver was then displayed for a day, to be viewed by several thousand people. His skull, still on exhibit in the anatomical museum in Edinburgh, became a favorite subject for phrenologists, who were able to divine all sorts of evidence of criminal tendencies from its shape (6). Hare was released, reluctantly, by the court but did not escape retribution. He went to work as a laborer, but, when his mates discovered his identity, they threw him in a trough of lime. After that, it is said that he lived as a blind beggar in London for 40 years longer.

After the trial, murders for anatomy were known as Burking. Later the word acquired its present definition of murder by suffocation. Several cases of Burking were subsequently discovered in London, the most notorious a series of several murders by

the trio Bishops, Williams, and May (4). As in the case of Burke and Hare, the ones found guilty were hung and ultimately dissected.

THE ANATOMICAL ACT OF 1832

The people of England and Scotland, already angered by the resurrection trade, were enraged by these murders for anatomy. Moreover, they directed their fury impartially against the murderers and the surgeons who bought bodies from them. The depth of their bitterness can only be appreciated when one realizes the deep antagonism that laymen felt for the medical profession as a whole during this period. In this they were supported by large faction on the fringes of the medical establishment, who sought reform of the corruption and patronage that governed promotion and practice at the center.

The schools of the great London hospitals, although they had been founded in answer to decadence and corruption in the Royal Company of Barbers and Surgeons, were by this time themselves riddled with decay. Desiring to protect their position, the hospital surgeons tried to restrict licensure by the Royal College of Surgeons to hospital graduates, essentially a declaration of war against the independent teachers. Meanwhile, the quality of teaching in the hospital schools was declining, thanks to promotion on the basis of influence rather than ability.

The prototype hospital surgeon was Sir Astley Cooper, the man who dealt so extensively with the Borough Gang and used his influence to protect them from the authorities. Cooper was a brilliant figure, famous for his surgical lectures at St. Thomas's and later at Guy's. He once said a surgeon should have "an eagle's eye, a lady's hand, and lion's heart (4, p. 19)," and he was himself quite fearless, being the first person to ligate the common carotid artery and to amputate at the hip. When King George IV required surgery for an infected cyst, Cooper performed the operation.

In 1827 Cooper, who was beginning to show signs of heart disease, wanted to retire from his hospital posts. He had inherited his full professorship from an uncle and sought to have his nephew, Bransby Cooper, succeed him. Bransby, however, was a far less talented man, unfit to hold the post. Opposition to the appointment was overwhelming. This controversy, along with many others, had the great hospitals at odds with each other, the hospitals and the Royal College of Surgeons at odds with the independent practitioners, and Cooper at odds with practically everybody.

Scandal flourished in this atmosphere of envy and distrust, and all of it was made public by the journal *The Lancet*, established in 1823 by Thomas Wakley. This journal, which is still published, criticized the established surgeons relentlessly (6, p. 67). Moreover, Wakley made whatever capital he could from the relations between the surgeons and the resurrectionists, and encouraged the public to lay the blame for the trade on the profession's doorstep. This they were only too willing to do. The tide of opinion ran so high that in 1828 several doctors were successfully prosecuted for receiving and dissecting stolen bodies (5, p. 95-98).

It was this, more than the riots or the Edinburgh murders, that finally stung the London surgeons into action (4, p. 86). Since 1810, a small Parliamentary lobby had campaigned ineffectually for reform of the laws governing dissection. Suddenly, however, the reformers found themselves backed by powerful men in high places. Parliament held hearings in 1828 to collect evidence about the resurrection trade. It was there that Cooper made his famous statement that the body-snatchers were

the lowest dregs of degradation., I do not know that I can describe them better. There is no crime that they would not commit; and as to myself, if they would imagine that I should make a good subject,

they really would not have the smallest scruple, if they could do the thing undiscovered, to make a subject of me. . . There is no person, let his station in life be what it may, whom, if I were disposed to dissect, I could not obtain. . . The law only raises the price, it does not prevent the exhumation (4, p. 88).

Cooper also pointed out, most eloquently, that the public could not have good surgeons without the widespread study of human dissection. Other witnesses appealed to British patriotism, showing that English medical students often went to study in France, where bodies were cheaper and more plentiful.

The mills of Parliament grind slowly but they grind exceeding small, and the enquiring committee was not content to hear only the surgeons' view of the matter. Wakley, of *The Lancet*, testified before the committee, and the investigation broadened to include abuses within the Royal College of Surgeons and the hospitals, matters unrelated to the doctors' unwilling support of the resurrection trade. The surgeons, fearing that legal reform might be directed against their own activities, ceased to pressure for a new anatomy bill. As a result, although proposed by Warburton in 1828, the bill was not finally passed until 1832, in the wake of public outcry against the London Burkers Bishop, Williams, and May.

The Act finally adopted

provided that the Secretary of State for the Home Department in Great Britain and the Chief Secretary in Ireland, were empowered to grant licenses to practice anatomy to any members of the Royal College of Physicians and Surgeons, or to any graduates or licentiates in medicine, or to any Professor of anatomy, medicine, or surgery, or to any student attending any school of anatomy, the application for such license being countersigned by two Justices of the Peace; and persons licensed may receive or possess for anatomical examination, or examine anatomically under such license and with such permission as aforesaid, any dead body.

By this Act it is provided that the executor or other person having lawful possession of the body of a deceased person, and not being entrusted with it for interment only, may permit the body of such person to undergo anatomical examination, unless in his lifetime the deceased shall have expressed, in such a manner as in the Act specified, a wish to the contrary; or unless the surviving husband or wife or known relation of the deceased shall object (6).

The Act also revoked the previous legislation requiring the dissection of murderers. Thus it at once put an end to a highly disruptive criminal racket, struck a blow against the monopolistic ambitions of the powerful and corrupt hospital surgeons, and elevated dissection from a means of punishment and desecration of the bodies of executed felons to the status of a legitimate medical practice.

RESURRECTION IN AMERICA

The history of the acquisition of bodies for dissection in America is shorter and less gruesome than what happened in Great Britain, though many of the problems were the same. The first recorded dissection to take place in the colonies was performed by Drs. John Bard and Peter Middleton in New York in 1750 (2). Dr. William Shippen offered the first organized medical instruction in the colonies in 1762. Three years later Shippen was the target of a mob riot protesting his activities. Similar riots occurred in Baltimore in 1789 and 1807. The latter forced the just-opened University of Maryland School of Medicine to close again for 7 years. Dissection was not a part of the curriculum there until 1832, and even then had to be carried out in secrecy, Maryland having no dissection law until 1882, and no adequate law until this century. In New York in 1788, a riot started when a thoughtless student left a leg hanging out of the window of the dissection room to dry, and five people were killed before the tumult subsided 2 days later. (6, p. 201-203).

Although the legal status of dissection in the American colonies, and then in the

states, was similar to the English situation, the demand for bodies never rose as high here as it did in England, most of America's prospective doctors traveling to Europe for their medical education. The grave-robbing that took place here was undertaken by medical students and porters. Public fury, in consequence, was directed against the medical schools they attended, as in the famous Connecticut dissection riot of 1824.

The event precipitating this outbreak was the theft of the body of Bathsheba Smith from a grave in West Haven. Her father, Laban Smith, complained to the local constable, Erastus Osborn, who searched the medical school building on Grove Street. He wrote his father an account of what he found:

we searched from bottom to top. found just as I suppose usually to be found at such Institutions and concluded further search would be unavailing however we determined to be thorough and I took 5 or 6 West Haven and New Haven Men with me and at length in a small low Cellar, we came to a place in the pavement (the Cellar being paved with large flat stones) which looked generally like the bottom of the Cellar throughout but appeared to have a trifle of fresh dirt lying scattered about, hardly however discernable. I scratched with the end of my walking stick and the more I examined the more suspicion was created. we soon found the dirt appeared fresher between the stones and finally took up a large flat stone where we discovered a white bundle, apparently a bundle of cloathes. we examined and found a human Body doubled up in a heap entirely covered up with the grave cloathes. we took it out and it was immediately known to be the Body of the Young Woman we was searching for.

The Father was present and was almost distracted, but greatly rejoiced at the discovery. Doctor Knight says he knew nothing of its being brought to the College or being there at all. the hole it was found in was about 3 feet deep and about 2 in diameter—Doctor Knight sent home for a sheet and Cap had the face washed and the sheet and Cap put on, and with a great deal of difficulty the Father and others consented to put the Body into a Waggon to remove it to West Haven. people had collected from West Haven and New Haven about the College, which was kept fastened. the Waggon about noon moved down College Street, then down Chapel Street on to the lower green where crowds of People had collected to view it. then to the corner near Mr. Beecher old stand. two or three Bells all the while tolling people were wrought to a great pitch and the Town is full of stories. hardly a person here has lost friends for Months back but what has been to inquire of me if I did not see them at the College—toNight I understand the Medical Students have armed and shut themselves up in the College with what they can muster from the other College, expecting an attack. the West Haven people, a great number, have come over and New Haven has mustered a large company. a Drum has beat and the Streets are crowded with the army preparing for the assault. I intend to keep at Home and let the ferment have vent or subside. the Grand Juror has had a large number of Medical Students and others summoned to testify. one man connected with the Medical College as an assistant has just been committed to Jail I understand for contempt of Court in withholding testimony (8).

Most of the windows in the Medical School were broken in the riot. Two students left hurriedly before they could be accused of the crime, but after the trial one of the anatomical assistants, Ephraim Colbert, was nearly tarred and feathered by the enraged townsmen.

The fate of the body deserves mention. She was reinterred in her father's garden, at which time, the New Haven paper reports, "The Rev. Mr. Stebbins who assisted at the funeral solemnities made an address, peculiarly adapted to the mournful occasion."

Massachusetts enacted a reform dissection law in 1831(2), a year before the English Anatomy Act, but other states were slow to follow, and dissection scandals occurred in America well into the 1880's. In Ohio in 1878, Benjamin Harrison, later to be president, came upon the body of his father, John Scott Harrison, a former senator and the son of President William Henry Harrison, in the dissection room of the Ohio State Medical College (6, pp. 206–207). A case of Burking occurred in Baltimore in 1888 (6, pp. 204–206), while the opening of the Johns Hopkins Medical School in 1893 was delayed 3 days for lack of anatomical subjects. The meager four

bodies first available were mysteriously supplemented with anonymous donations left in the lab until a sufficient number was on hand for the school to open (3).

Connecticut enacted a liberal dissection law in 1832 but repealed it in 1834, leaving the 1824 law against body-snatching the sole legal contribution to the study of anatomy until 1871. The 1871 act provided for dissection the bodies of those who would otherwise be buried at public expense. These were to be used only for the advancement of science, and the act stipulated that bodies could not be transported across state lines. Embalming, introduced between 1875 and 1890, made it possible to keep bodies for long periods, lowering and regularizing the demand. However, not until 1893, when Connecticut passed a law making the reporting of available bodies mandatory rather than optional, was the problem of obtaining material for dissection solved.

ETHICAL IMPLICATIONS

One hundred fifty years ago, the morality of human dissection was the central ethical issue raised by the resurrection trade. Today, this aspect of the question has been largely resolved, and the practice is accepted almost universally as a legitimate and necessary part of medical education. Certain more fundamental issues, however, remain unsettled. If anatomy is considered the first research discipline in medicine, this business of the body-snatchers may be looked on as the first ethical conflict to be caused, at least in part, by a thirst for knowledge that has no immediate practical application, and hence seems excessive to a public interested only in receiving treatment. Medicine, as a serving profession, is accorded great license, permission to inflict all sorts of pain and indignity on patients, doing bad in order to prevent worse, in hopes of curing disease. Not only is the doctor allowed this freedom, he earns public admiration for exercising it.

The physician engaged in research, whether in the 18th century or in modern times, is trained in this tradition, and the temptation exists to apply the ethics derived from service to the pursuit of knowledge, on the grounds that the more we know, the better service we will give. But the conditions of research are different, for now the person whose values and sensibilities are outraged by a particular practice is not the same one who will benefit from the result. In the treatment situation the physician may ignore many conventions, but he flaunts public opinion in research at his peril.

Seen in this light, the history of the body-snatchers makes sense in modern terms. We understand, for example, why the public sought to blame the surgeons as much as the resurrectionists for grave-robbing, and why the surgeons were so surprised by this attitude. The public thought Cooper and Knox were arrogant, godless men; the surgeons considered their antagonists ignorant hysterics, incapable of understanding that good surgery requires the anatomical knowledge that can only be gained through cadaver dissection.

Two hundred years later historians try to sort out these questions and parcel out responsibility for the excesses of the resurrection era. A favorite topic is the extent to which Knox, who was ultimately driven from Edinburgh by the force of public outrage, was really responsible for the murders committed by Burke and Hare. Where, in his case, do we draw the line between ignorance and criminal negligence? Or the pride of Astley Cooper, though it may have been justified by his great ability, surely it was wrong of him to extend his own privileged disregard of public sensibility to his criminal associates, never pressuring them to be more discreet and never exerting his considerable influence for reform until his own interests were threatened.

If these questions are difficult to resolve, it is because similar problems exist with regard to research practices in our own day. This is not to minimize the important differences between the situation in 18th century England and the present. The surgeons were indeed the victims of circumstance in choosing their suppliers; the law, the great poverty in the growing cities, and the disregard for life inspired by the frequent sight of death from violence or disease, all contrived to put them in a situation where dealing with the resurrectionists was unavoidable. And certainly they cannot be held accountable for the practice of murder for anatomy; that refinement was Burke and Hare's own invention. Despite these important differences, the point remains that the ethical conflicts engendered by research are not new to our age but are as old as research itself.

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