

Title: Richard's Back: Death, Scoliosis, and Myth-Making

Author: Dr Mary Ann Lund

Address: School of English
University of Leicester
University Road
Leicester LE1 7RH
UK

Email: maejl1@le.ac.uk

Tel: +44 116 2525262

Keywords: Richard III, scoliosis, spine, Shakespeare, therapy

Wordcount: 4690

Abstract: The body of a medieval monarch was always under scrutiny, and Richard III's was no exception. In death, however, his body became subject to new forms of examination and interpretation: stripped naked after the battle of Bosworth, his corpse was carried to Leicester and exhibited before being buried. In 2012, it was rediscovered. The revelation that Richard suffered from scoliosis prompts this article to reevaluate the historical sources about Richard's physique, and his posthumous reputation. This article argues that Richard's death and his myth as 'crookback' are inextricably linked, and traces attitudes to spinal curvature in the early modern period. It also considers how Shakespeare represented Richard as deformed, and aspects of performance history which suggest physical vulnerability. It then considers Richard's scoliosis from the perspective of medical history, reviewing classical accounts of

scoliosis and arguing that Richard was probably treated with a mixture of axial traction and pressure. It demonstrates from the evidence of Richard's medical household that he was well placed to receive hands-on therapies, and considers in particular the role of his physician and surgeon, William Hobbes. Finally, it shows how the case of Richard III demonstrates the close relationship between politics and medicine in the period, and the contorted process of historical myth-making.

RICHARD'S BACK: DEATH, SCOLIOSIS, AND MYTH-MAKING

On July 6 1483 in Westminster Abbey, Richard III was crowned king. At the most sacred part of the coronation ceremony, the anointing, he went up to the high altar and removed his robes, except for a silk tunic and a shirt specially designed for the purpose. The tags of this were undone so that his clothes were, as the order of service the *Liber Regalis* describes it, 'opened lower down beneath the chest and between the shoulders' ('*apertas profundius usque subter pectus et inter scapulas*', p. 91).[1] Having been thus 'unarrayed and unclothed', Richard knelt down and was anointed by the Archbishop of Canterbury 'on his brestes in the middes of his back, on his two shulders, on his two elbowes and on his head' (p. 232).[1] Then his body was dried, his clothes retied, and – dressed in ceremonial robes – he was given each of the *regalia* that represented his rule: the crown, sceptre, and rod. The careful ritual to consecrate the body of the monarch was an old one, and has been little modified since. Indeed, the English manuscript account of Richard's coronation (known as the *Little Device*) was reused for Henry VII's coronation on October 30 1485: at the point when the people are invited to give their assent to the new monarch, and cry 'yea, yea, yea, so be it', 'Kinge Richard kinge Richard kynge Richard' was crossed out in the manuscript, and replaced by 'kynge Harry kynge Harry kyng Harry' (p. 229).[1] For the purposes of ceremony, the tremendous political shift from the House of York to the House of Tudor was registered only in a change of name. To become a divinely ordained monarch, the king must reveal his human body, but only in carefully controlled conditions. As Richard was anointed, four Knights of the Garter held a pall, or canopy, over him, so that the sacred moment was concealed from the congregation.

In another church, two years and nearly two months later, Richard's body was exposed in altogether different circumstances. There was little stateliness in the treatment of the king's corpse after the battle of Bosworth on August 22 1485. Unlike the carefully planned ceremonial of Westminster Abbey, this was an improvised affair, ordered although perhaps not orchestrated by the newly declared King Henry VII. In the version told in the early Tudor London chronicle the *Great Chronicle*, the last Plantagenet monarch was 'dyspoylid [despoiled] to the skyn, and nowgth beyng lefft about hym, soo much as wold covyr his pryvy membyr he was trussyd behynd a pursevaunt callid Norrey as an hogg or an othyr vyle beest, and soo all to besprung wyth myyr [mire] and ffylth was browgth to a chirch/ in leycetyr ffor all men to wondyr uppon, and there lastly Inreverently buried' (p. 238).[2] 'Norrey' was the man who had served Richard since he was Duke of Gloucester in the heraldic position of Blanc Sanglier pursuivant (the white boar was Richard's personal device); he was the son of John More, Norroy King of Arms, and known by that name. Both father and son would have taken part in the 'solemn procession' (p. 195) at Richard's coronation;[1] now Richard's own pursuivant was charged with taking his naked corpse to be exhibited by his conqueror. The treatment of Richard's body was the antithesis of reverent ceremony, as the numerous accounts hostile to Richard take pains to show: the Crowland Chronicle mentions that 'many other insults too' ('multasque alias contumelias', p. 182) were made to it, and adds the details that it was carried with a rope around the neck on horseback to Leicester.[3] Richard's body was shown for two days in Grey Friars church in Leicester, then – as an early account by John Rous (c. 1420-92) describes it – 'he was buried in the choir of the Friars Minor at Leicester' ('apud fratres Minores Leicestriae in choro est sepultus', p. 218), on 25 August 1485.[4]

This essay considers how the treatment of Richard III's dead body is related to his later historical and literary reputation as 'Crookback Richard', and from these accounts

moves backwards in time to gather evidence on potential medical treatments of his living body. Stage history has re-incarnated Richard as monster, villain, and clown, but recent events have helped us to reevaluate these physically defined depictions and strip back the cultural accretions that have surrounded his body. For the exhibition of Richard's body in 1485 in Leicester was not the last momentous occasion on which Richard's body was revealed. In September 2012, archaeologists at the site of Grey Friars excavated a skeleton: the location of its burial in the choir of the church, the signs of battle injuries, the dating, and DNA evidence all contributed towards a positive identification of the body as that of Richard III.[5] One of the most notable revelations from Richard's remains is that he had idiopathic adolescent-onset scoliosis (a sideways spinal curvature) of the thoracic spine, with a Cobb angle in the range of 70°-90° (Figure 1).[6] An effect of his scoliosis, a raised right shoulder, tallies with an early posthumous description by John Rous that Richard had 'unequal shoulders, the right higher and the left lower' ('Inæquales humeros, dexter superior sinisterque inferior', p. 216).[4]

No mention of Richard's distinctive physique survives from during his lifetime, perhaps out of deference to a reigning monarch; one man who did leave an account of meeting the king, the Silesian nobleman Nicholas von Poppelau, described him as slim and lean, with fineboned limbs ('ganz subtile Arme und Schenkel', p. 365),[7] observations that we now know correspond with the gracile build of Richard's body (p. 1).[8] It is highly likely that Richard took care to control his public image. The body of the king was part of the propaganda of power, and as we have seen, even when it was revealed in order to be anointed, it was simultaneously concealed. Tailoring probably kept the signs of his scoliosis hidden to spectators outside the royal household of attendants, servants, and medical staff who dressed, bathed, and tended to the monarch's body. The stripping of Richard's corpse at Bosworth made his physical shape noticeable to many hundreds of witnesses, perhaps for the

first time. As Delius Singer has noted,[9] the spiral configuration of a scoliosis is exhibited in a protuberance in the back when the patient bends over, which would have been evident when, as the early Tudor historian Polydore Vergil put it, ‘Richard’s naked body was slung over a horse, its head, arms and legs dangling’ (‘Ricardi corpus, cuncto nudatum vestitu ac dorso equi impositum, capite et brachiis ac cruribus utrinque pendentibus’, XXV, 25).[10] The evidence of Richard’s remains may thus indicate how far his posthumous reputation was linked to the early moments after his death. ‘For a miserable spectacle the space of two dayes [he] lay naked and unburied, his remembrance being as odious to all, as his person deformed, and lothsome to be looked upon’ (p. 725):[11] John Speed’s early seventeenth-century account of the treatment of Richard’s corpse tellingly makes the connection between the viewing of Richard’s body and his physical appearance explicit. For Speed, the act of memorialising Richard and that of revealing his ‘lothsome’ figure are causally related, as they would continue to be in historical and stage representations.

Crookback Richard

Richard’s body came to be notorious for its misshapen appearance during the Tudor period, although until the discovery of his body it was never clear whether this was pure fabrication to render accounts of his character and actions all the more extreme. The earliest known reference is in 1491, when the Mayor of York heard how, in the course of some lively post-Christmas festivities that turned violent, a schoolmaster called William Burton allegedly said that Richard was ‘an ypocrite, a crochebake, & beried in a dike like a dogge’ (p. 221).[12] It is interesting that, as in Speed, Richard’s physical appearance and the treatment of his corpse are linked. According to testimony in the York records, John Paynter replied to Burton that ‘he lied, for the Kynge[s] good g[ra]ce hath beried hym like a noble gentelman’. Another witness statement has Paynter saying that ‘hit pleside [i.e. it pleased] the Kynge[s] grace to bery him in a worshipfull place’ (p. 224).[12] This further illustrates how the fate of

Richard's body had reputational implications for Henry VII. Even Paynter, defending the Yorkist Richard against a calumniator, was careful to show his Tudor successor in a good light. Loyalty to a dead king was not incompatible with loyalty to the man who usurped him. We hear in this account something like the popular voices described in the coronation manuscript, cheering King Richard and King Harry in equal measure.

Burton's term of abuse, 'crochebake', is worth pausing over. It suggests 'crouchback', the posture of kyphosis in which the spine bends outwards, but it is also closely related to 'crookback', a word used in the sixteenth century for all kinds of spinal deformities. Seventeenth-century medical textbooks used the term specifically to describe scoliosis.[13] Yet commentators also exploited its associations with moral crookedness and dishonesty. One Tudor writer cited the Italian physiognomer Bartolomeo della Rocca's (1467-1504) view that 'he sildom saw any person, being crooke backed, which were of a good nature: but that these having the like bearing out, or bunche on the shoulders, were rather trayterous, and verie wicked in their actions' (pp. 160-61).[14] In Richard's case, this purported link between physique and character was frequently underlined, and as the Tudor regime became established, his image became more distorted – he gained a withered arm and unequal limbs, none of which are evident on the skeleton – to fit his blackened reputation. Thomas More describes Richard as 'croke backed' (p. 7) in the English version of his history of the king (the Latin version is more specific about Richard's shape: 'extanti dorso' (p. 8), with a projecting or prominent back).[15,13] Shakespeare's Richard is explicitly hunchbacked. In *Henry VI, Part 3*, he claims that nature made 'an envious mountain on my back, / Where sits deformity to mock my body' (3.2.157-58),[16] while in *Richard III* Queen Elizabeth calls him 'that foul bunch-backed toad' (4.4.81).[17] Interestingly, in the second printing of this play – the second Quarto – 'bunch-backed' becomes 'hunch-backed'. The *Oxford English Dictionary* cites this as the earliest example of the word, which might suggest that a printing

error was responsible for the introduction of this now-common term, although the spelling was not corrected in later editions.[18] We can see how a brief description derived ultimately from More (via Shakespeare's immediate source, the mid-Tudor chronicles of Ralph Holinshed) becomes, in Shakespeare's hands, a defining feature of the king. In the first printing (1594) of the earliest Shakespeare play in which Richard appears, *Henry VI Part 2*, a stage direction refers to him as 'crookbacke *Richard*' (sig. H1^v),[19] while in Part 3 he is called 'crookback' three times (1.4.75, 2.2.96, 5.5.30).[16] The name would become common: a now-lost 1602 play by Ben Jonson was entitled *Richard Crookback*, while a catalogue of paintings for sale in 1691 advertised a picture of 'Crookback Richard on board' (p. 9) alongside renderings of dogs, pheasants, and the Virgin Mary.[20] Shakespeare's play may have been responsible for this nickname. Certainly, Thomas More's history provided the basis of the widely popular Shakespearean silhouette. Challenges to this image of Richard were rare. George Buck cast doubt over the evidence for his physical (and moral) deformity, but also argued from ancient precedent that 'without any doubt men of deformed bodies may have very beautiful minds, and may have lesser and fewer vices than the fair and comely persons' (p. 131),[21] a learned corrective to the widely-cited claim among modern commentators on Richard that physical disability was universally held to be synonymous with evil in early modern England.

Shakespeare's history plays make much of Richard's physique: on his very first appearance on the stage, he is addressed as 'heap of wrath, foul indigested lump/ As crooked in thy manners as thy shape' (5.1.157-58).[22] Yet his experience of it is mainly shown to be moral and psychological, not least in the insults he receives from others. There is only one moment in *Richard III*'s performance history when the possibility of genuine physical pain from his condition may be suggested. When Richard meets the young princes after their father Edward IV's death, Richard, Duke of York remarks of his elder brother that 'Because

that I am little like an ape/ He thinks that you should bear me on your shoulders' (3.1.130-31).[17] Theatrical tradition has Richard react with rage: in the 1912 silent film – a great repository of inherited Victorian dramatic practice – the American actor Frederick Warde lashes out at the boy in front of the assembled court,[23] a response echoed in Laurence Olivier's glare of undisguised malevolent fury.[24] Richard Loncraine's 1995 film goes one step further, with the boy jumping on Ian McKellen's back from behind, and causing him to fall to the ground in a spasm of agony.[25] The text, however, is silent on this response. It is also telling that, unlike other Shakespearean monarchs and consorts – King Lear, Pericles, Lady Macbeth, the King of France in *All's Well that Ends Well* – Richard is never seen receiving medical care. It may be that physical vulnerability is (paradoxically) not in keeping with the self-proclaimed 'deformed, unfinished' (1.1.20) Richard who is such a charismatic, commanding stage presence.[17] For similar reasons, perhaps, Shakespeare avoids any reference to the fate of Richard's corpse after the battle of Bosworth, a surprising omission given that the prominence accorded to it in the chronicle histories; another anonymous play of the same period, *The True Tragedie* (1594), has the victorious Henry personally command that Richard's body should be 'drawn through the streets of *Lester*,/ Starke naked on a Colliers horse let him be laide' (sig. I^v).[26] The corporeally defined 'Richard Crookback' of Shakespeare's invention is a resilient, fighting figure, not one to be tended or, finally, humiliated.

Scoliosis and Medical Treatment

The discovery of the body, and the physical truth it reveals about the historical Richard, prompt further consideration of those undepicted scenes from his life. If posthumous accounts of Richard are not interested in the medical dimension of his condition, what can be recovered about how he would have been treated, and how was his condition regarded from a medical rather than a broader cultural perspective? To answer this, it is necessary to turn to

the ancient foundations of medieval learning, since their understanding of the spine's structure and deformities underpinned approaches to it in Richard's time. The spine held a particular importance as a mark of mankind's uniqueness in the animal world: only humans had an upright posture. For the first-century Greek physician Galen, the spine was 'the keel of the body' (p. 570).[27] Acting as 'a base or foundation stone for the instruments necessary to life' (p. 573), a pathway and a safeguard for the spinal cord, and an instrument of motion, the spine demonstrated Nature's perfect and intricate construction of the body. The shape of individual vertebrae, their number, their arrangement to create firmness, strength and flexibility: all of these revealed, as Galen repeatedly avowed, that 'Nature does nothing in vain' (p. 588).[27]

While the spine's perfection was praised, its various abnormalities were encountered and categorized. Both Hippocrates and Galen used the term 'scoliosis' (which in English is inherited directly from the Greek) for spinal curvature, the latter using it specifically to denote sideways bending, as distinct from 'lordosis' (inward bending) and 'kyphosis' (outward bending).[28] Hippocrates noted that an abnormally curved spine could cause a number of related problems, including difficulty breathing because the ribcage did not expand properly, and that though some patients lived in good health until old age, most were short-lived. A lateral curve was often caused by the growth of a mass on the spine, but it could also be related to the position in which the patient tended to sleep (p. 282-83).[29]

For spinal curvature, Hippocrates recommended as a trustworthy and effective treatment that the patient should take a hot bath, then lie face down on a board. Assistants would tie cloth bands around the patient, under the armpits, at the legs, and at loins; each band would then be fixed with ropes to levers set at head and foot end. By pulling on levers, the assistants could stretch the patient's body to correct the curve; meanwhile someone else would push down on the hump (if there was one) with his hands. 'This reduction method,'

Hippocrates added, 'is very harmless; indeed it will do no harm even if one sits on the hump while extension is applied, and makes succussion by raising himself; nay, there is nothing against putting one's foot on the hump and making gentle succussion by bringing one's weight upon it.' He recommended a wrestler for this task. In a further variation, 'the most powerful method', a plank fixed at one end to the wall was pushed down at the other end onto the prone patient's hump, all while he or she was being stretched out. Hippocrates commented that such apparatus is 'easy to regulate as regards greater or less force, and has such power that, if one wanted to use such forcible manœuvres for harm and not for healing, it is able to act strongly in this way also', a chilling reminder that torture equipment such as the rack worked on the same principle (pp. 296-301).[29] He also described an ancient form of treatment for spinal curvature that he felt was over-used by showmen physicians and charlatans, but nonetheless acknowledged could be valuable. The patient should be laid down on a padded ladder and tied to it at the ankles, knees and hips, and more loosely round the upper body. Then, he instructed, 'lift the ladder against some high tower or house-gable' with the patient upside-down. Assistants should let the ladder down with ropes 'smoothly, neatly, vertically, and at once' (pp. 285-86).[29] If the curvature is near the neck, the patient should be bound to the ladder at the chest, and positioned head-up when the ladder was suspended.

The primary medical textbook of the Middle Ages, the *Canon of Medicine* of the Persian polymath Avicenna (Ibn Sina, died 1037), repeated and elaborated on Hippocrates' techniques for treating spinal luxations through axial traction and reduction: the patient's spine should be stretched with ropes attached to levers or wooden rollers at the patient's head and feet, while any protusion was pushed down. Avicenna further recommended various herbal treatments and the massage techniques of the Turkish bath, or hammam, as well as the wearing of a back support made of wood or lead (p. 894).[30,31] No ancient or medieval sources considered surgery. No known surviving evidence records the specific medical care

Richard received, but the strong likelihood is that his scoliosis was treated using the Hippocratic methods advanced by Avicenna, of axial traction accompanied with pressure. One further hint may be found in Thomas More's account of Richard, allegedly on the authority of 'such as wer secrete with his chamberers', that after he had ordered the murder of the two princes in the Tower of London 'he never hadde quiet in his minde' and 'where he went abrode, his eyen whirled about, his body privily fenced, his hand ever on his dager' (p. 87).[15] More's intention here is to portray a paranoid tyrant, fearful of assassination attempts and wearing hidden body protection ('privily fenced') such as a mail shirt. Yet the secondhand evidence from his 'chamberers' (that is, his personal attendants or valets) may point to a different possibility, that Richard was wearing a metal back support of the kind recommended by Avicenna to correct his spinal deformity, and which appeared to be a protective device.

The methods by which Richard's scoliosis would have been treated must be seen in the context of those who treated him. As a member of the nobility, throughout his life Richard would have received the attention of elite practitioners, well trained and up to date with the latest theory and practice. Upon becoming king, he appointed as royal physician William Hobbes, who had long been in the service of Richard's father, Richard, Duke of York, and his brother, Edward IV. Hobbes had trained for his Bachelor of Medicine (1459) in Oxford, an institution steeped in the medical theory of Hippocrates, Galen and Avicenna;[32] three years later he was permitted to incept as Doctor of Medicine at Cambridge. Hobbes is a particularly interesting medical professional because he was both a physician and a surgeon, and thus trained in theory while also skilled in hands-on care.[33] Clearly, the latter expertise was useful to a noble family in a time of civil war. Appointed sergeant surgeon to Edward IV from 1461, Hobbes' major duty was to follow the king into battle in order to treat his injuries; in that capacity, as part of a team of eight surgeons, Hobbes accompanied Richard as

Edward's deputy during the military campaign to Scotland in 1482 (p. 2).[34] The role meant that he would also have been present at the battle of Bosworth, waiting on hand to treat Richard's wounds. Another duty of the serjeant surgeon was to embalm the monarch's body (p.3),[34] as he would have done for Edward IV. An account from 1483 of the ordinance to be observed 'at the deth and buryall of an annoynted king' explains that, after the body has been washed and dressed, it should be laid out on a board covered with gold cloth 'and so shewid to his nobles by the space of ij. days and more if the weather will it suffre' and then, 'when he may not goodly lenger endure, take hym away, and bowell hym and then eftsones bame [embalm] hym' (p 3).[35] The body should be wrapped in rich cloth and placed in a lead coffin. In the case of Edward IV, 'first the corps was laide upon a burde [board], all naked saving he was covered from the navyll to the kneys, and so laie x. or xij. ours' to be viewed (p. 4).[35] Clearly, however, Hobbes was not able to perform this last duty for Richard. After the two days' exhibition of the body, Henry ordered its immediate burial in the choir of the friary church 'without royal solemnity' ('sans solemnité royale', p. 409), as one French account put it,[36] and there are no signs that the body was laid out. Indeed, Richard seems to have been buried with his hands bound, and without a shroud; his body was found disarranged and in a grave that was roughly cut and too small for the body (pp. 533-5).[5]

Hobbes's record of service to the family accounts for his appointment as royal physician to Richard, but he was also better equipped than non-surgical practitioners to treat Richard's scoliosis. Unlike the professional physicians, surgeons performed practical tasks themselves: not simply operations such as amputations, but also bone-setting, tooth extraction, administering purgatives, and physical manipulation. In short, Hobbes's experience as surgeon trained him to perform the classical treatments on the spine personally, not just to direct and observe them. It seems indeed that Richard's family favoured surgeons: Edward IV incorporated the Barbers Guild into a Company in 1462 by a royal charter which

gave it supervisory powers over all surgeons within London. A later London history records that William Hobbes and Jacques Fries (another physician to Edward IV) petitioned him for this charter; Edward and the ten-year-old Richard, Duke of Gloucester were named its founders (p. 339).[37] Hobbes remained loyal to Richard and his family, even after Richard's death in 1485 when it was dangerous to do so. His will made in 1488 directed that his tomb should be inscribed with the words 'Here lies William Hobbes, once physician and surgeon of the most noble Lord Duke of York, and his sons the most noble kings Edward IV and Richard III, to whose soul, and to whose souls, may God be merciful, Amen' ('Hic jacet Willelmus Hobbes quondam medicus et Sirurgicus Illustrissimi domini ducis Eboracencis ac filiorum suorum regum Illustrissimorum Edwardi iiiij^{ti} et Ricardi tercii quorum anime et animabus propicietur Deus amen', p. 591).[38]

Hobbes' preeminent position and Yorkist loyalty make him of chief interest in considering the treatment of the monarch's body, but he did not attend Richard alone. All royal households had a team of medical practitioners, and a few would have trained in major continental medical institutions such as Padua and Bologna (pp. 1-16).[39] One of these has further resonances for Richard's reputation: we know that Edward IV's sons were tended in the Tower of London by John Argentine, a Cambridge-born physician who had studied in Italy in the 1470s; he may have treated Richard at some stage. The example of Argentine highlights the distinctive and politically delicate nature of the contact that royal medical personnel had with their patients: he was a major eyewitness source for the Italian Dominic Mancini's account of the princes' disappearance shortly after Richard was crowned. Seemingly, he was one of the last people to see the young Edward V alive, reporting that the boy believed he was soon to face death[40] (interestingly, one of William Hobbes's successors as sergent surgeon, John Knight, witnessed the exhumation of some bones which were discovered under a stairway in the Tower of London in 1674, and assumed to be the

remains of the princes (p. 22)).[34] Argentine was patronised by King Henry VII, who chose not, however, to retain the services of the staunch Yorkist Hobbes.

The examples of these medical figures remind us that the link between royal medicine and politics was intimate in the period and could be highly sensitive. One further example underlines this. Along with Argentine, another established physician Henry VII rewarded was Lewis Caerleon, whom Richard III had imprisoned in the Tower of London because of his involvement in the uprising led by the Duke of Buckingham. Caerleon reportedly took messages from Henry's mother, Margaret, Countess of Richmond, to Edward IV's widow Queen Elizabeth, and is alleged to have assisted in negotiations for the marriage between Edward's daughter Elizabeth and Henry.[41] Caerleon was able to aid the conspiracy because, as Polydore Vergil put it, 'being a physician, he could act as a go-between [. . .] without arousing any suspicion' (XXV, 11).[10] Thomas Legge even chose to dramatise this intervention in his Cambridge Latin play on Richard, *Richardus Tertius* (1579), having the character 'Ludovicus Medicus' (Lewis the physician) comment that he can help persuade Queen Elizabeth to allow her daughter to marry Henry because, 'as a trained doctor, I can mix in with my medical advice talk about this holy alliance' ('ut qui peritus arte medicorum fui/ foedera medelis sacra miscerem meis', pp. 244-5).[42] If the medical figures surrounding Richard himself are never dramatised, the stage presence of Lewis suggests the status of the royal physician as someone intimate with power, capable of intrigue, and relied upon to be discreet. William Hobbes, the longstanding employee of Richard's family, would have been trusted to keep the details of both Richard's physical condition and his treatment carefully veiled. The potency of his scoliosis as a weapon in the hands of his detractors was no doubt recognised, in a period when physical deformity was open to ridicule as well as to an interpretation of inward corruption.

Conclusion

In death, Richard's exposed body became open to layers of new and hostile readings, and Shakespeare drew on the dramatic potential of chronicle accounts in order to stamp him as 'crookback'. Even as he did so, he made the stage Richard fully conscious of his own powers to self-invent, creating a figure who can 'add colours to the chameleon,/ Change shapes with Proteus' (3.2.191-92).[16] As this article has suggested, Richard's body in life was simultaneously public and concealed, its image carefully controlled as all monarchs' were. The care he in all probability received for his scoliosis from his surgically trained physician was large in scale: traction and manual manipulation needed specially designed equipment, space, and assistants. Yet it may have been only a relatively small group of people in Richard's trusted circle who knew of his condition. The absence of contemporary testimony does not prove this, however. What is certain is that, after his death, the exposure of Richard's body went beyond the two days of its exhibition in Leicester. That moment after Bosworth inaugurated a longer and more brutalising process, in which an ever-more twisted physique was revealed to the public eye, his own body becoming deployed as a major tactic in the rhetorical strategy against him. When Shakespeare's Richard boasts of his shape-changing potential, he registers too the bending course of history and myth-making.

NOTE

The author would like to thank Sarah Knight, Paul Lazarus and Bob Woosnam-Savage for their helpful comments.

FIGURES

Figure 1. Richard III's spine. © University of Leicester.

REFERENCES

1. Legg L (ed.). *English Coronation Records*. London: Archibald Constable; 1901.
2. Thomas A, Thornley I (eds). *The Great Chronicle of London*. London: George W. Jones; 1938.
3. Pronay N, Cox J (eds). *The Crowland Chronicle Continuations: 1459-1486*. London: Alan Sutton; 1986.
4. Rous J, Hearne T (ed.). *Historia Regum Angliæ*. Oxford; 1716.
5. Buckley R, Morris M, Appleby J, *et al.* "The King in the Car Park": New Light on the Death and Burial of Richard III in the Grey Friars church, Leicester in 1485. *Antiquity*, 2013;86: 519-38.
6. Appleby J, Mitchell P, Robinson C *et al.* The Scoliosis of Richard III, Last Plantagenet King of England: Diagnosis and Clinical Significance. *Lancet* 2014;383: 1944.
7. Stenzel G (ed.). *Scriptores Rerum Silesiacarum*, 17 vols. Breslau: Josef Max & Komp; 1847.
8. Appleby J, Ruttly G, Hainsworth S *et al.* Perimortem Trauma in King Richard III: A Skeletal Analysis. *Lancet*, 2014;385:253-9.
9. Singer D. Richard III. Letter to: *Times Literary Supplement*. March 15 2013: 6.
10. Vergil P, Sutton D (ed.). *Anglica Historia (1555 Version)*. Trans. Sutton D. <http://www.philological.bham.ac.uk/polverg/25eng.html> (accessed October 27 2014).
11. Speed J. *The Historie of Great Britaine*. London; 1611.
12. Davies R (ed.). *Extracts from the Municipal Records of the City of York, During the Reigns of Edward IV. Edward V. and Richard III*. London; 1843.
13. Knight S, Lund M. Richard Crookback. *Times Literary Supplement*. February 8 2013: 14-15.
14. Hill T. *The Contemplation of Mankinde*. London; 1571.

15. More T, Sylvester R (ed.). *The Complete Works of St Thomas More: Vol. 2*. New Haven: Yale University Press; 1963.
16. Shakespeare W, Cox J (ed.), Rasmussen E (ed.). *King Henry VI Part 3*. London: Arden Shakespeare; 2001.
17. Shakespeare W, Siemon J (ed.). *King Richard III*. London: Arden Shakespeare; 2009.
18. 'hunchbacked, adj'. *OED Online*. Oxford University Press: September 2014.
<http://www.oed.com.ezproxy3.lib.le.ac.uk/view/Entry/89457> (accessed October 27, 2014).
19. Shakespeare W. *The First Part of the Contention Betwixt the Two Famous Houses of Yorke and Lancaster*. London; 1594.
20. Anon. *At the Kings-Arms Tavern, over against St. Clements Church in the Strand*. London; 1691.
21. Buck G, Kincaid A (ed.). *The History of Richard the Third (1619)*. London: Alan Sutton; 1982.
22. Shakespeare W, Knowles R (ed.). *King Henry VI Part 2*. London: Arden Shakespeare; 1999.
23. Keane J (dir.). *Richard III*. USA; 1912.
24. Olivier L (dir.) *Richard III*. UK; 1955.
25. Loncraine R (dir.). *Richard III*. UK; 1995.
26. Anon. *The True Tragedie of Richard the Third*. London; 1594.
27. Galen. *On the Usefulness of the Parts of the Body* Trans. May M. Vol. 2. Ithaca, NY: Cornell University Press; 1968.
28. Vasiliadis E, Griva T, Kaspiris A. Historical Overview of Spinal Deformities in Ancient Greece. *Scoliosis* 2009;4: 6., doi:10.1186/1748-7161-4-6. (accessed 24 February 2014).

29. Hippocrates, *On Joints*. In: *Hippocrates*, trans. Withington E. Vol. 3. Cambridge, MA: Harvard University Press; 1959.
30. Avicenna, *Liber Canonis*. Basel; 1556.
31. Aciduman A, Belen D, Simsek S. Management of Spinal Disorders and Trauma in Avicenna's *Canon of Medicine*. *Neurosurgery* 2006;59: 399-400.
32. Getz F. The Faculty of Medicine before 1500. In: Catto J, Evans R (eds.) *The History of the University of Oxford Vol. II: Late Medieval Oxford*. Oxford: Clarendon Press; 1992. p373-405.
33. Rawcliffe C. Hobbes, William (d. 1488). *Oxford Dictionary of National Biography*. Oxford University Press, 2004 www.oxforddnb.com/view/article/52673. (accessed February 24 2014).
34. Thompson H. Sergeant Surgeons to their Majesties. *Ann R Coll Surg Engl* 1960;26: 1-23.
35. Gairdner J (ed.). *Letters and Papers Illustrative of the Reigns of Richard III. and Henry VII: Vol. 1*. London; 1861.
36. Molinet J, Buchon J-A (ed.). *Chroniques de Jean Molinet, Vol. 2*. Paris; 1828.
37. Stow J, Munday A. *The Survey of London*. London; 1633.
38. Sharpe R (ed.). *Calendar of Wills Proved and Enrolled in the Court of Husting, London, A.D. 1258-A.D. 1688*, 2 vols. London; 1890.
39. Lane Furdell E. *The Royal Doctors, 1485-1714: Medical Personnel at the Tudor and Stuart Courts*. Rochester, NY: University of Rochester Press; 2001.
40. Rhodes D. The Princes in the Tower and their Doctor. *English Historical Review* 1962;77: 304-06.
41. Kibre P. Lewis of Caerleon, Doctor of Medicine, Astronomer and Mathematician (d. 1494?). *Isis* 1952;43: 100-08.

42. Legge T, Sutton D (ed.). *The Complete Plays Volume 1, Richardus Tertius*. Trans.

Sutton D. New York: Peter Lang; 1993.