Information Pack 1: The Discovery of Richard III and Scientific Identification of his Skeleton

Richard's Remains on Display

In August 2012 the University of Leicester Archaeological Services, in collaboration with the Looking for Richard project and Leicester City Council, began the archaeological search for the 'lost grave of Richard III'. You can read more about their work: the archaeology, the history and the science on their website. The excavation revealed the Franciscan Friary; and within its choir, archaeologists uncovered a 'battle-scarred skeleton with spinal curvature'. On 4th February 2013, following thorough scientific analysis, it was announced that these were indeed the remains of King Richard III.

The positive identification of Richard III's remains generated huge public interest worldwide. The University therefore suggested that they might be put on public display in Leicester Cathedral prior to their reinterment so that members of the public could experience the discovery themselves. This proposal led to the first of the controversies associated with the discovery and reburial of the late king. Some members of the Looking for Richard team, such as Dr David and Wendy Johnson, felt that it was inappropriate to exploit Richard III's "publicity value" and there was further negative reaction, from Leicester Cathedral, the Richard III Society and Philippa Langley. The local newspaper, the *Leicester Mercury*, ran a poll asking "Should Richard III's remains go on display?", to which 68% of respondents answered 'No'. Liz Hudson, a spokeswoman for Leicester Cathedral, stated that while "scientists may have a reason for seeing them, that is different from public display in the cathedral". In response, the mayor of Leicester, Sir Peter Soulsby, suggested that Leicester's Richard III Museum, then in development, could be a potential site for the display of the remains, though instead Professor Russell Harris, head of the Loughborough University's Additive Manufacturing Research Group, led a project which produced a replica of Richard III's skeleton for the new visitor centre using 3D-printing technology.

Opposition to the public display of Richard's skeleton argued that it would be disrespectful, both to a former monarch and to a human being, for the bones to be put on public display. The issue is certainly connected to a generally increasing awareness of the sensitivity with which human remains, sometimes thousands of years old, should be displayed in museums. It is important to consider what circumstances, if any, make the display of human remains ethical. The timespan since the individual's death? Their social

standing? Their religious beliefs? The need to treat Richard's remains sensitively was underlined by his historic status: as Dr John Ashdown-Hill commented, "Richard is not a lab specimen or an unknown individual. He is a member of the royal family and a former head of state!" This was especially significant since the 'Looking for Richard' project had recognised Richard's historical importance from the outset, and had always intended to honour him "as an anointed king with living descendants" [sic], including "an interment conducted with dignity and due respect for his religious faith". As Philippa Langley later stated, "I made it very clear that the ethos in the 'Looking for Richard' project was that he wouldn't be treated as a scientific specimen or resource or relic or object". Philippa Langley argued that the Written Scheme of Investigation for the Archaeological Evaluation provided that once the remains had been identified, they would be transferred to a religious site to await reburial. The University of Leicester took these reactions into account when deciding what would be best for Richard's remains and after careful consideration of both the public response and the original plans for Richard's reburial, the university subsequently decided not to move forward with the proposal to publically display the skeleton.

The Scientific Examination of Richard III's Remains

A year after the identification of Richard's remains, geneticist Dr. Turi King announced that she would lead a £100,000 project to create "the world's first complete genome sequence from a known historical figure", which would tell us about Richard III's physical traits, such as hair and eye colour, as well as contributing to discussions about "how our DNA informs our sense of identity". The research was funded by the University of Leicester with support from the Wellcome and Leverhulme Trusts. It was also felt that Richard's genome would represent a future research source, perhaps one day even offering an insight into the king's "abilities as a military commander". Careful to ensure that the project was handled appropriately, the ethics committees at the University of Leicester (consisting of National Health Service, university and lay members) reviewed the proposal before research was conducted, concluding that it was in the public interest and would be undertaken ethically.

The analysis resulted in some surprising discoveries. The investigation of the genome sequence enabled researchers to conclude that there was a 96% likelihood that Richard had blue eyes, and a 77% chance that he was blonde, at least in childhood. This is completely at odds with an early sixteenth-century painting of Richard, housed in the collection of the Society of Antiquaries, which depicts him with brown hair and grey eyes, and which until now

informed our view of Richard's appearance. By analysing the isotopes preserved in Richard's bones, researchers could also determine what he ate and drank, and where he lived at various stages of his life. For example, differences between his hip bone, which matured during adolescence, and his ribs, which reflect the last years of his life, showed a significant increase in "feasting and the consumption of imported wine" once Richard had become king.

The nature of the scientific analysis, in particular the process in which very small samples of Richard's bones would be ground to a powder, caused concern for some Ricardians. In particular, Dr Ashdown-Hill was resolute in his personal belief that further tests to establish a genome sequence by destroying part of a person's body without consent were "ethically wrong", adding "very little to scientific knowledge" and breaking "agreements made with Buckingham Palace". Subsequently, the Looking for Richard team called "for an immediate halt to scientific testing", arguing that the University of Leicester had broken a contractual agreement wherein they would assist with the discovery and identification of Richard's remains before they were handed over to Philippa Langley to be housed in a religious site while awaiting reburial. Instead of letting Richard rest, the team accused the university of performing "destructive" tests on his remains, in a "lack of respect and absence of consent". This resistance was bolstered by two online petitions begun by Dr Ashdown-Hill calling for an immediate end to the university's research, which garnered 333 and 195 signatures respectively. It is noteworthy, however, that this stance was different from the official position of the Richard III Society which, seeking to remain neutral, reminded its membership that among its stated aims was the desire "to promote in every possible way research into the life and times of Richard III".

What of other historic cases?

What precedent does the case of Richard III's rediscovery, and the scientific analysis of his remains, set for the future? Throughout the research process scientists such as Dr Turi King were keen to stress the unique nature of this opportunity, that they believed was unlikely to ever be repeated. Clearly, our approach to the scientific analysis in such cases has come a long way since the accidental discovery of Anne, Duchess of Mowbray's (1472-1481) coffin in 1964. When her remains were taken by scientists for analysis, the media, public and House of Lords responded in "horror and disgust". As a result, her remains were reburied within six months, before scientists had concluded their investigations. The difference, it has been argued, is that Anne of Mowbray's coffin was named meaning

research for knowledge's sake was disrespectful, while DNA testing was essential to confirming the identity of Richard III's remains. Nonetheless, the potential for DNA to unlock past mysteries and confirm (or deny) the identity of our ancestors has encouraged demand for other historic individuals to be put to similar tests.

Most of all, the confirmation of the identity of Richard's remains provoked requests for the suspected remains of his nephews, Edward V and his brother Richard of Shrewsbury (commonly called the 'Princes in the Tower'), kept in an urn in Westminster Abbey, to be subjected to DNA testing to prove their identity. The demand is particularly sensitive, especially as Richard III has been historically accused of murdering his nephews to acquire the throne, and in response to the events of 2013 three parliamentary petitions were produced showing a renewed impetus behind a DNA test on the remains in the urn, with one receiving 329 signatures. The Richard III Society had already tried twice, in 1993 and 1995, to have the urn opened for examination, but both times the request had been rejected, in part because the DNA test would require a comparison from one of the princes' relatives, which according to Dr King would have meant the opening of a second tomb. Her Majesty The Queen has refused the exhumation of any individuals buried on her properties, and the issue placed the then Dean of Westminster, the Very Rev. Michael Mayne, under considerable moral pressures. If the identity of the bones as the princes was disproven, was he to be expected to keep them or remove them? Moreover, the Dean rejected the idea that a confirmation of their identity would bring us any closer to the truth of their disappearance. Nonetheless, the discoveries established through testing Richard's remains have led to calls for the remains of other historical figures to be examined, even those of whose identity we are certain, such as Henry VIII. If our attitude towards the testing of human remains has changed significantly in the time since Anne of Mowbray's discovery, could it be even more different in another fifty years?

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