

Tunnel vision? The history of the Thames Tunnel and narratives of technology

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In 1818, Marc Isambard Brunel and Thomas Cochrane patented a technology that influenced tunnel engineering to the present day – the tunnelling shield. By supporting the weight of the surrounding material while the tunnel lining is being built, the shield allows tunnels to be constructed through soft and unstable rock and soil. The first demonstration of this technology, under the direction of Marc Brunel and his son Isambard, came with the commencement of the Thames Tunnel project in 1825. Connecting Rotherhithe and Wapping in London, this is believed to be the first successful tunnel to be constructed beneath a navigable river, although it took nearly twenty years and numerous setbacks before it was completed.

It would be easy to focus on the technical achievement of this endeavour as a confirmation of the capacity of technology to prevail against the odds. Such histories of heroic technical struggle are common and, taken together, have helped to support the sort of technological hubris that Hughes (2004) cautions against. What is interesting, however, is that accounts of the Thames Tunnel, both contemporary and more recent, present a story that is about much more than the narrowly technical. This provides a clear illustration of how the engineering practices of the project were closely embedded in a series of social and political relationships that helped to shape how the scheme unfolded – the struggle to finance the project; the influence of investors on its direction; negative portrayals in the media (where it was satirically described as “the great bore”); attempts to enrol powerful political actors, such as the Duke of Wellington; managing difficulties with the labour force; and so forth.

These give an image of *realpolitik* and muddling through that is quite at odds with the ideals of order, control, planning, and instrumental rationality presented by more recent discourses of project management (Hodgson and Cicmil, 2006). Indeed, the project offers a useful parable of the limits of instrumentality: although it achieved the narrow aim of creating a tunnel under the River Thames, it failed in its broader social aim of providing a means for cargo to cross the river. With no more money left to construct the ramps needed for horse-drawn carts to descend into the tunnel, it became a briefly popular visitor attraction for pedestrians before ultimately being sold, 20 years after its completion, to the East London

Railway Company in 1865. The paper considers what such stories have to tell us not only about the writing of project histories, but also about how they are consumed. This allows us to explore the apparent paradox between the trend towards abstraction of the technical in engineering practice and the availability to the engineering imaginary of socially rich histories of endeavours such as the Thames Tunnel.

References

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About the presenter

Nick Marshall is a Senior Research Fellow in the Centre for Research in Innovation Management at the University of Brighton. His research and publications are primarily in the area of organisational knowledge, learning, and innovation, especially in project-based and other temporary settings. He has been involved in several major research projects funded by the ESRC, EPSRC, and European Commission. Before joining CENTRIM in 1999 Nick was a Research Fellow at Warwick Business School. His first degree is in geography from the University of Oxford and he holds a PhD from King's College London.