Robert Boyle reckoned that to be a credible scientist one had to be a good Christian gentleman, because experimental science relies on trust in its practitioners and faith in the integrity of its demonstration. Adriano Shaplin’s *The Tragedy of Thomas Hobbes* presents the story of the revolution in thought that culminated in the founding of Britain’s Royal Society by Boyle and his collaborators. The play sets pure reason, promulgated by the philosopher Thomas Hobbes, against the disinterested experimentation conducted by Boyle as opposing ways of exploring the ways the world works. Shaplin’s treatment reveals the breaking waves of real and cultural conflict at work in the British Isles the middle of the 17th century: the transitions of the civil wars that started in England in 1642 and continued past Oliver Cromwell’s death in 1658 to the restoration of the monarchy in 1660 under Charles II.

This history play is a spectacular windmill of ideas, and although it works less well as a piece of theatre it makes for provoking entertainment. Fortunately Shaplin (an American playwright and artistic director of the award-winning company Riot Group) and historian of science Simon Schaffer (University of Cambridge) were on hand at the Royal Society on 20 November 2008 to guide us through the action (I). Meanwhile, a performance of the play by the Royal Shakespeare Company (which, with the Massachusetts Institute of Technology, commissioned the work) was running in London’s East End at Wilton’s Music Hall. Some of the most provocative aspects of Schaffer and Shaplin’s conversation were their references to the modern practice of science. Their heterodox ideas might be bread and butter for historians or sociologists, but practicing scientists are unlikely to feel comfortable seeing themselves in the same light as these authors see Boyle and the early Royal Society.

First up, Schaffer was keen to reveal the parallels between theatrical performance and scientific performance. Most directly, he suggested that public demonstrations of experiments may have been replacements for the theatrical performances that had been abolished during the Puritan interregnum. Perhaps Shaplin’s modern play leaves a chaotic sensation because it works in the same way as one of Boyle’s experimental demonstrations. Thus, any sort of patronage. By 1660, they managed to wrest a Royal Charter from Charles II. But they found no financial backing from him—being a party animal, Charles was spent up. Money is why Boyle was so important.

The other major protagonist, Hobbes, was notorious for being an atheist. After the 1651 publication of his *Leviathan*, Hobbes was kicked out of Charles’s exiled court in France. He fled to Cromwell’s England, where his authoritarian ideas were less anathema. Schaffer drew attention to the fact that Hobbes’s views had been formed during a period of terrifying war and dislocation. Shaplin’s script interprets the effect of civil disorder on Hobbes by depicting him as a seeker of rigid certainty. He has Hobbes saying, “A real philosopher instantly Knows, he doesn’t do poking.” For Hobbes, Boyle’s experiments, which went wrong more often than they went right, were a confidence trick. Hobbes was only too aware of the manipulation and spin prevalent in politically tumultuous times, and he believed this true of the experimental demonstrations as well. The trouble with Hobbes’s method of unfalsifiable reasoning is that it depended on being clever to remain credible. Shaplin shows Hobbes’s knowledge under persistent bombardment by pamphlet, primarily from John Wallis (another member of the invisible college), who derided Hobbes for his lack of talent in mathematics.

By contrast, Boyle had it all. Boyle’s family owned land in Ireland. The wealth from this property funded Boyle’s laboratory and allowed him to think independently of any patron, to form democratic collaborations and discussion groups, to buy knowledge and expertise no matter the price, and, importantly, to be able to afford to acknowledge mistakes.
polymath, sampling everything from microscopy and evolution to architecture. This breadth of vision was also his undoing.

In the final twist, Shaplin brings on Isaac Newton as Hooke’s nemesis. Newton derided Hooke as a “mere smatterer” and was probably responsible for trying to erase Hooke’s record. Newton’s jealousy best explains why there is no surviving portrait of Hooke and why so little survives of Hooke’s ideas on evolution and many other topics. And so the play comes full circle: Hobbes’s absolutist reason- ing was left largely mystified, sometimes sleeping. The play is truly a mass of facts that fall and drift hypnotically like confetti. Unless theaters hand out copies of Steven Shapin and Schaffer’s Leviathan and the Air Pump (2) as a study aid, the director Elizabeth Freestone and the playwright Elizabeth Freestone and the playwright should have reined in the text, slapped a stronger structure on the story, and given the performance an emotional heart. I hate to fault a play that so rumbustiously turns over so many brilliant ideas. Go and see The Tragedy of Thomas Hobbes if you get a chance, but be prepared.

—Caroline Ash

BROWSINGS


These 116 early Audubons from the collections of Harvard University provide a perspective on the development of the artist’s mature style. In accordance with established ornithological presentation of the time, most of the birds are stiffly posed in profile with little or no background. Some drawings, however, show their subjects in action [e.g., the whip-poor-will, Caprimulgus vociferus, in flight (1812), right] or include details of diet or habitat—approaches Audubon took to portray specimens as “drawn from Nature” in his monumental The Birds of America. The watercolors and pastels of the European species were executed in France in 1805 and 1806, and those of the North American birds date from 1805 to 1821. The captions discuss when and where Audubon collected the specimens. Morris, Rhodes, and Edwards contribute essays on the history of the draw- ings, the artist’s life, and his science.


Renowned for their mastery of marine air and wide-ranging trips over the oceans, albatrosses may spend 95% of their long lives (which can extend beyond 60 years) riding the winds and waves. Being birds, the adults must return to land to nest and hatch the single large egg that they produce every other year. Traveling on a 13-m sailboat, natural history writer-photographers De Roy and Jones observed nearly all the albatross species at breeding sites. De Roy’s descriptions of their visits to these

Russell Brand–style vulgarian, complete with fluffy detachable head piece, did offer a frisson. Shapin’s stipulation that Boyle must be played by a woman has a lucky manifestation in Amanda Hadingue, who closely resembles Boyle’s portraits and has the suitably fastidious demeanor of the sickly man. (Shapin explained that the purpose was to emphasise Boyle’s special character: his collaborative instincts and his disengage- ment from the prevailing masculine brawling.) Jack Laskey is particularly good as the energetic and engaging Hooke. Unfortunately, Will Sharpe as Newton does not project dark enough foreboding and his soliloquy makes for a collapse rather than a finale. But, and it is a big but, despite the performance’s many pleasures, the audience was left largely mystified, sometimes sleeping. The play is truly a mass of facts that fall and drift hypnotically like confetti.

References and Notes

1. A Webcast of the conversation between Shaplin and Schaffer at the Royal Society event is archived at http://royalsociety.tv (look under the history of science offerings).


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To Make Aire Dance

Caroline Ash

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