they justifiably asserted, 'it is absolutely impossible to introduce real life or natural motions and expressions in those dull mechanic figures', whereas the ergascopia displayed 'graceful acting apparitions, not to be distinguished from real life.'[39] Their *pièce de résistance* was a scene, in which a treasure seeker, with a spade in one hand and a real burning candle in another, appears in the distance and walks towards the audience. He then puts his lantern on the ground and begins to dig, looking around fearfully. A spirit suddenly emerges from the hole, lights a candle and waves it about in front of the audience before it vanishes. Judging from this description, and Schirmer and Scholl's contempt for the magic lantern, their 'masterpiece of optical illusion', would appear to have been a sophisticated camera obscura projection or some device involving mirrors and lenses akin to the catadioptrical phantasmagoria described by David Brewster in 1832. Brewster echoed Schirmer and Scholl's critique of the magic lantern's shortcomings, observing that

> to perfect the art of representing phantasms, the objects must be living ones, and in place of chalky ill-drawn figures mimicking humanity by the most absurd gesticulations, we shall have phantasms, of the most perfect delineation.[40]

The shock and awe of the phantasmagoria was bound to wear off after a few years and new developments were needed to keep thrill-seeking audiences interested. One innovation was to give the illusion that the spirits raised by the lantern also spoke. Sound effects and ghostly voices had long been used to heighten the atmosphere in projection displays, but not to provide synchronised speech. Johann Schröpfer may have been the first to marry the phantasmagoria with that other popular form of illusion of the time – ventriloquism, but it was Robertson who first used it in public exhibitions. He employed the talented practitioner of the belly-speaking art Fitz-James. As we have seen, he was no stranger to resurrecting the voices of the dead. The partnership seems to have initially prospered, but in 1802 Fitz-James was lured by an offer to perform in London, and engineered a bust-up with Robertson. In retaliation Robertson replaced his performance with a flea circus. Around the same time a conjuror and ventriloquist named Mr Comte set up his own competing talking phantasmagoria in Paris, which borrowed heavily from Robertson's show.[41] Andrew Oehler was particularly ingenious in creating synchronised speech by marrying ghost projection onto smoke with a technique borrowed from the Invisible Girl illusion, which was one of the most celebrated attractions of the early nineteenth century. In his memoirs he explained how he had a tube placed through an adjoining room that matched the spot where the ghost's

mouth would be seen by the audience. An assistant spoke through the tube and, as Oehler explained, the speech 'coming out of the end of the tube, drives the smoke a little apart, and makes an appearance like the moving of the lips of a person when he speaks.'[42]

Lantern ghost shows were presented as more than just entertainment; they were an enlightenment instrument for exploding the belief in spirits – a triumphant force of science over 'superstition'. In Revolutionary anti-clerical France, Philidor opened his performance with a rationalist speech:

> I shall show you no spirits, because there are none, but I shall produce before you simulacra and pictures such as spirits are supposed to be, in the dreams of the imagination or in the lies of charlatans.[43]

In an account of a visit to Philipsthal's show in London, the chemist and inventor William Nicholson (1753–1815), was critical of the lighting and poor quality of the slides, but appreciated 'the attempt to explain the rational object or purpose of the exhibition … unfortunately for the audiences his English was unintelligible'.[44] Robertson claimed he was supported by the Revolutionary Central Bureau 'to destroy the enchanted world that owes its existence solely to the magic wand of fanaticism'. He was, he stated, a physicist and an optician, not 'a magician, a necromancer, in an age in which all marvels have succumbed to human reason'.[45] Adverts in the London press for St Clair's phantasmagoria underlined that it was 'intended to do away with the superstitious idea of ghosts and spectres by unmasking the artifices practised by certain pretended magicians on the minds of the weak and credulous'.[46] One of the first phantasmagoric displays in America, in 1803, was advertised as exposing the fallacy of ghost beliefs and aimed to 'destroy the absurd opinions which prevailed in the last ages'.[47] Yet as one academic has pointed out, everything 'was done, quite shamelessly, to intensify the supernatural effect'.[48] Consider, for example, a newspaper advert for Philipsthal's phantasmagoria display at the Lyceum in the Strand in October 1801. This show of 'spectrology', it stated, 'claims the merit of unmasking artful impostors and pretended exorcists, and of opening the eyes of those who still foster an absurd belief in Ghosts', yet at the same time the advert emphasised the verisimilitude of the experience. Philipsthal, it boasted, 'will, by his skill in Physics, produce the Phantoms or Apparitions of the dead or absent, in a way more complete and illusive than has ever been offered to the eye on a public Theatre'.[49]

By the end of the eighteenth century the once delicate margin between the practice of natural and demonic magic, which had exposed ghost illusionists to accusations of satanism, had, in intellectual terms, become a concrete

boundary. After an ardent and, at times vitriolic period of debate during the late seventeenth and early eighteenth centuries, an intellectual consensus slowly emerged that the age of miracles was definitely over, that both God and the Devil had withdrawn from earthly affairs. Although the old view of imminent satanic threat was by no means rejected wholesale, the intellectual environment of the eighteenth century was such that magic lanternists were free to mimic the demonic magician for theatrical effect without risking accusations of dabbling in the Black Arts. Consider, for instance, the following account of a *Gespenstermacher*'s performance in Leipzig in 1784:

> The supposed magus leads the assembly of the curious into a room whose floor is covered with black cloth and in which is an altar painted black with two flaming torches and a skull or a funerary urn. The magus draws a circle in the sand around the table or altar, and begs the spectators not to step outside the circle. He begins his conjuration by reading from a book and burns resiny mastic for good spirits, stinking things for bad. At a stroke the lights go out of themselves, with a loud detonation. At that moment, the conjured spirit appears.[50]

Most exponents of the phantasmagoria did not go so far; they may no longer have need feared being tainted with diabolism, but they still attracted accusations of promoting 'superstition' amongst the uneducated. Yet numerous lanternists still resorted to depictions of necromancy as a promotional gimmick. A common illustration in advertisements for phantasmagoria shows portrayed an appropriately attired magician standing in a magical circle conjuring spirits. Thus a poster produced for Philipsthal's stint at the Lyceum shows a gowned magician, wand in one hand, incense burner in the other, standing within a magical circle with a skull and candles, conjuring up the shrouded figure of a female ghost. Twenty-five years later the playbill for a show by the illusionist and lanternist M. Henry at the Theatre Royal, Haymarket, contained a similar but slightly updated engraving.[51] The inspiration for these images was a woodcut that, for several centuries, adorned popular publications telling the story of the notorious Dr Faustus, which depicted him in a magical circle conjuring the Devil.

While it was safe to play the necromancer in enlightenment Europe and America, one had to be careful elsewhere. The German-born adventurer and showman Andrew Oehler deeply regretted putting on an awesome Robertson-like ghost show in Mexico City in 1806. In a room bedecked with black tapestry and skeletons, he set a large altar on top of which he placed a skull. A brazier of burning coals stood beyond it. His influential guests, who included the

Governor of Mexico City and senior government leaders, were led into the sepulchral room where Oehler announced that he was going to raise a departed spirit. He asked members of the audience if there was someone in particular they would like him to summon. One man said he would like to see his late father once more. Oehler then uttered some incantations, placed some chemicals on the brazier and stepped aside as a thick pall of smoke arose. Then, by means of a hidden magic lantern beam projected via an angled mirror, a venerable face appeared in the smoke and began to speak. As Oehler recalled:

> in an authoritative voice [I] demanded of him to tell from whence he came; whether from the dismal and deep! The infernal pit! Or from the happy regions of the endless felicity above! He immediately told us he came from above.

Shortly after the vision faded and the room was suddenly lit up. As the audience left, the mood was uncharacteristically subdued. In the early hours of the morning Oehler was arrested by soldiers, charged with raising spirits, and imprisoned in a deep pit. He was kept there for several months and fed on bread and water. He was only released after a Spanish marquis, who was evidently familiar with the phantasmagoria, heard of his plight and explained to the authorities that he was no diabolic magician but a scientific illusionist. The Governor apologetically explained that he had been imprisoned to placate 'the clamours of the Spanish monks and friars'. Oehler returned to New Jersey and vowed never to act the conjuror again.[52]

THE ST JAMES'S PARK GHOST

In January 1804, a few days after the Hammersmith ghost tragedy, at a time when the popularity and influence of phantasmagoria shows were at their peak, another sensational ghost appeared to strike fear into the capital's population. The Hammersmith ghost had quickly proven to be a mix of hoax and mistaken identity, but the St James's Park ghost was more perplexing. As we shall see, considering the probity of the witnesses, the usual explanations for seeing apparitions did not seem to apply. Perhaps the magic lantern could shed some revealing light.

On Friday 13 January 1804, *The Times* reported that a soldier in the Coldstream Guards stationed in St James's Park had, a few nights before, seen the ghost of a headless woman wandering the place between one and two o'clock in the morning. Only a few days before, when reporting on the shooting of the

Hammersmith 'ghost', *The Times* had assumed that the panic was the result of the 'Christmas tricks' of 'some very silly and thoughtless person' walking around in a ghost disguise. Because a Coldstream Guard said he saw one, however, *The Times* took the sighting more seriously, especially when the soldier asserted he was 'sure it was not a person dressed up in a white sheet'. The soldier was so shocked by his experience that he had to be taken to hospital the next day. A couple of nights later a comrade, a hardened war veteran, when on guard at the same spot, also saw the headless women enter the park from the end of Queen Street. He described later how he was so frightened his jaw locked and he was unable to demand 'Who comes there?' He deserted his post and subsequently fell into fits and joined the first soldier in hospital. Several others saw it walk over the park, paling before vanishing. *The Times* ended its report with the equivocal statement: 'it is an undoubted fact, that two sentinels have been sent there [hospital] from the effects of fright, whatever may have been the real cause of it'.

To corroborate its story, though not out of any sense of supporting the reality of the ghost, on the Monday *The Times* printed a signed declaration by one of the soldiers who had seen the ghost, which it obtained from the adjutant of the Coldstream Regiment:

> I do solemnly declare, that, whilst on guard at the Recruit House, on or about the 3rd instant, about half past one o'clock in the morning, I perceived the figure of a woman, without a head, rise from the earth, at the distance of about three feet before me. I was so alarmed at the circumstance, that I had not power to speak to it, which was my wish to have done; but I distinctly observed that the figure was dressed in a red striped gown with red spots between each stripe, and that part of the dress and figure appeared to me to be enveloped in a cloud.
>
> In about the space of two seconds, whilst my eyes were fixed on the object, it vanished from my sight. I was perfectly sober and collected at the time, and, being in great trepidation, called to the next sentinel, who met me about half way, and to whom I communicated the strange sight I had seen.
>
> Signed GEORGE JONES,
>
> Of Lieutenant-Colonel Taylor's Company of Coldstream Guards.

Another guard, Richard Donkin, also signed a declaration recounting the strange noises and eerie feeble voice he heard emanating from an uninhabited house near the haunted spot.[53] On 16 January, Jones was also taken to Bow Street magistrates' court where Sir Richard Ford questioned him as to what he had seen. Jones repeated his belief that he had encountered a ghost.[54]

What to make of it all? Jones was questioned as to 'whether his imagination had received any impressions from reading any dismal story'. He replied in the negative. A correspondent to the *Morning Chronicle* suggested that it was a trick played by someone clad in white with black crape around his head: 'if the night be moderately dark … Argus himself would not be able to discern the head, though all the rest of the person would be visible.' 'I think, Mr Editor, I have hit the right nail on the head', he smugly concluded.[55] An investigation launched by *The Times* reached a different conclusion. The paper found that the ghost had been created by 'an application of the Phantasmagoria' by two Westminster School scholars, who had set their equipment up in an empty house near the Bird Cage Walk where the headless woman had been seen.[56] This explanation seems, at first, rather far-fetched. Still, it is possible that it really was an elaborate lantern hoax. Consider, for instance, George Jones's statement that the ghost appeared 'to be enveloped in a cloud'. Anyway, if the St James's Park ghost was created by a phantasmagoria it was a classic example of the way in which new technology could be used to enforce the belief in ghosts as well as debunk it. So impressive was the ghostly vision seen by the guards that they were prepared to state publicly, on oath, a belief in ghosts, at a time when the most appropriate media response was to scoff.

SPIRIT PHOTOGRAPHY

Histories of spirit photography usually begin in the 1860s as an aspect of the story of spiritualism. An American jewellery engraver and amateur photographer named William Mumler is regularly credited as the first person to produce a photograph of a spirit – that of his young female cousin, who had died twelve years before. He published the photograph in 1862 and the media sensation it provoked inspired him to give up engraving and set himself up as a 'Spirit Photographic Medium'.[57] In Boston and then New York, he prospered by servicing a clientele desperate for comforting confirmation that the spirits of their deceased loved ones hovered around as guardian angels. But Mumler's thriving career was interrupted in 1869 when he was charged with fraud. He was acquitted due to lack of evidence, despite it being proven that one of the supposed spirits photographed was actually still alive.[58] His defence was predicated on the supposition that the spirits of the dead *did* appear to the living, and therefore there was no reason for Mumler to fake his photographs. Despite 400 years of theological and rationalist explanations for the impossibility of the Witch of Endor's powers, the spirit of Samuel was once again raised by Mumler's lawyers in the service of their client. As part of their defence case

they cited the Bible story, and speculated, rather absurdly, that if a camera had existed at the time it would have captured the image of the prophet.

Spiritualist photography was surprisingly late to appear in England, with the first examples emerging from the studio of Frederick Hudson in 1872.[59] In March that year the celebrated medium Elizabeth Guppy and her husband, who was an amateur photographer, posed for Hudson. To their amazement, when the photographs were developed a veiled figure, more material and less translucent than Mumler's ghosts, was perceptible behind Mr Guppy. Shortly after, on Elizabeth Guppy's suggestion, the painting medium Georgina Houghton began a series of sittings with Hudson during which various spirit manifestations were captured on film, including the ghost of a rabbit. Houghton and Hudson were quick to realise the commercial prospects of these sensational photographs and had large numbers of reproductions printed, which were sold via retail outlets. Others soon jumped on the bandwagon, even though exposés of how such images could be faked were swiftly published in a spiritualist magazine and a photographic periodical.[60] In 1875 the young French spirit photographer Edouard Buguet, who had opened a studio in Baker Street the previous year, was prosecuted for fraud in Paris. Buguet made a full confession which was widely reported in the French and English press. He described how he simulated the spirits by making a preliminary photographic exposure of a wooden doll wrapped in gauze, to which he attached photographs of faces stuck on cardboard, of which police found some 240 examples.[61]

Yet despite the understandable preoccupation with spiritualism, ghost photography has more innocent origins in the early history of photographic experimentation. In the 1850s an amateur photographer had produced ghostly images by photographing one person behind a plate-glass window and another in front. The result was an image showing a faint figure reflected through the glass encountering the substantial figure of the person standing in front.[62] But another basic technique was to prove more impressive. The long exposure times, often hours, required by the earliest cameras meant that people or animals that moved out of shot at some point would appear as a vague, transparent image on the glass plate. It was Sir David Brewster who recognised in the early 1850s that this exposure problem could be used to *deliberately* create ghostly images. He came across the idea after seeing a calotype (the name for Fox Talbot's patented paper coated with a film of silver iodide) of York Minster, taken in 1844, in which a boy had sat on the steps of the Minster for a while during the long exposure and consequently appeared as a translucent ghostly figure on the plate.

In 1856 Brewster published *The Stereoscope*, which provided an account of his lenticular stereoscopic device that gave depth to an image by viewing two