

# ROBERTSON IN MADRID

Wendy Bird

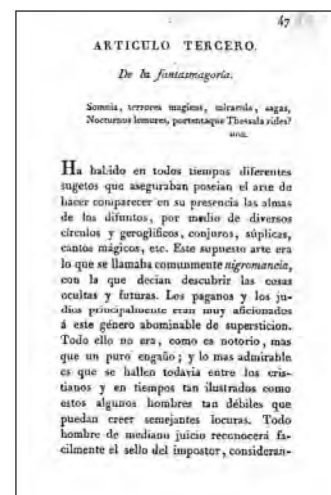
IN OCTOBER 1820 Etienne-Gaspard Robertson presented his *fantasmagorie* at the Teatro de la Cruz in Madrid.<sup>1</sup> An advertisement of January 1821 mentioned that he had already performed before the Spanish Royal Family<sup>2</sup>

Coinciding with these events a booklet, which probably served as a form of advertising for the performances, was published in Madrid. It appears that the only copy of this booklet extant in Spain is in the Biblioteca Nacional (National Library) in Madrid. It constitutes three articles, the first two covering the tricks of an Indian conjuror and a description of 'talking machines', and the third dealing with the phantasmagoria.<sup>3</sup> The extract on the phantasmagoria is translated into English here for the first time. As a result of my location of this booklet, the exact date of Robertson's performance at the Royal Palace is now known: this event took place on the night of Thursday 14 December 1820.

The booklet originally included one illustration (*una lamina*), which is unfortunately missing from the Madrid copy. The text was published by Imprenta del Censor, Carrera de San Francisco, Madrid. *El Censor* was a kind of journal in which appeared advertisements and *noticias curiosas* ('curious information' or 'curious news'). It was on sale at *la librería extranjera* ('the foreign bookshop') in Calle de la Montera, Frente San Luis. This suggests that it was of foreign origin, translated into Spanish.



Title page of the original Spanish booklet.



First page of Article Three, 'On the Phantasmagoria.'

Although the author appears to be someone who has lived in Paris, his knowledge of the history of phantasmagoria, the curious French poem and the desire to promote Robertson's phantasmagoria as 'almost as perfect as can be', suggest that the author might be none other than Robertson himself. In any event, he appears to be the source of at least some of the information; another explanation could be that it was the result of an interview or a collaboration with a local author to publicise the show at the Teatro de la Cruz.

## CURIOUS INFORMATION

about Mr Robertson's Spectacle,

Indian Tricks, Talking Machines, The Phantasmagoria and more Witchcraft of this type

By an Enthusiast of White Magic

### Article Three: On the Phantasmagoria

Somnia, terrores magicos, miracula, sagas,  
Nocturnos lemures, portentaque Thessala rides?

Horace<sup>4</sup>

There have always been certain types of people who insist that they possess the art of making the souls of the dead appear in their presence; through the use of diverse circles and hieroglyphics, spells, invocations, magical chants, etc. This so-called art has been commonly termed *necromancy*, and through this art, it is said, things of the occult and the future are revealed. The pagans and the Jews were the principal enthusiasts of this type of abominable superstition. As is notoriously known, all of that was no more than pure deceit, and the most astonishing thing is, that amongst the Christians and in such enlightened times as these, men are still found who are so weak that they can believe such madness. Every man with half a mind will easily recognise the mark of the impostor, considering the arrangements that these false conjurers make for their apparitions. They invariably choose the night; that fecund mother of the imagination, error and dreams. Our fantasies are exalted in the darkness and so we allow ourselves to be taken in more easily. Also, these charlatans make their preparations in the dark, or in the sparse light of some lamp, with the intention of better hiding the springs and wires of their devices. This is always preceded by their personal means of terrorising the spectators and in that way rendering them incapable of discovering the deception. The room is upholstered in black, the tables covered in skulls and other bones, flames, lightning, mists, thunder and other strange noises are roused, and all this frightens the spectator, stirring up his imagination and rendering it susceptible to receiving all the impressions that the miracle-worker desires to convey. Some of them set the rooms up in such a way that it is difficult to detect anything. When the necromancer appears in good faith, he is more likely to urge us to carefully examine the room and its functions; then we must accept that he is an astute rascal who has concealed his fraud so well that he believes us incapable of being able to discover it.

Finally, if we remind ourselves of the most celebrated conjurers of spirits and their mysterious operations, we will find that all these stories carry the mark of the fabulous, the extravagant and the absurd.

Schwedenborg,<sup>5</sup> who lived in the middle of the eighteenth century, brought a lot of attention on himself in the north as a conjurer of spirits. This man was really a madman and a visionary, who played, like Mahommed, the role of missionary sent by the Lord, because, they say, he had been shown Heaven. According to him souls lived in Heaven, where one could see woods full of rose-trees, beautiful countryside, an abundance of cereal crops, houses, etc. Schwedenborg, in his ridiculous dreams, saw things in Heaven the same as in his country: rooms with windows, stoves, men with dressing gowns and fur caps, etc.

Schroepfer,<sup>6</sup> in Leipzig, also pretended in almost the same period and in the same way to possess the art of bringing souls out of the other world. A hussar since his youth, and straight afterwards a café-owner, he ended up as a magician. He deceived the world, ran into a lot of debts, and in the end killed himself with a pistol shot. The phantasmagorical apparitions of this impostor made a stir in Germany and it appears that he possessed the art of realising this type of illusion with almost as much perfection as they do nowadays. Still, he did not very often make the shadows of dead people appear in their original forms, as he was asked to do, and if he did, it was just in the form of vapour, imitating only their voice, perhaps through the art of ventriloquism.

In the end it was Cagliostro,<sup>7</sup> the thaumaturge, the miracle-maker, or better said, the charlatan par excellence, who played the most brilliant rôle almost until the present day. It is not known for sure which country he was from: some believed him to be Spanish, others Jewish or Italian, and others finally proposed that he was an Arab who had persuaded an Asiatic prince to send him to Europe with one of his sons, whom he murdered on the high seas in order to make his riches his own. What is certain about this extraordinary man, is that he was believed to be a magician in Russia and in other countries, though he was so badly received at first that he saw himself obliged to move into the

theatre. Arriving in Strasbourg he joined the freemasons with the object of separating himself from them once he had acquired the credibility he needed. He was not long in winning the favour of the Cardinal of Rohan, and through his influence that of the French Court. He came to Paris where he performed the most admirable feats of charlatanism of all types; they imprisoned him in the Bastille, from where he escaped to England, but these philosophical people made complete fun of the adventurer. In the end he found himself implicated in a number of quarrels in Rome, and condemned to life imprisonment in the castle of Santo Angelo.

The most common motives for which some men decide to dedicate themselves to necromancy are sloth and the love of wealth. They sometimes disfigure their bodies and faces in such an odd way as to make superstitious people believe that they have a certain connection with otherworldly souls; exalted imagination and credulity complete the illusion. One day, a young man from a certain society said that he knew how to conjure up devils, and on the request of some of those present began to perform his folly. He made a loud noise, and immediately they all left the room, except for one only, and on their return, they declared unanimously that they had seen the devil and he had scowled at them.

All this pretended art of making the dead appear is no more than a chimera or pure fraud. God has not given man power over the souls of the living or the dead; if this were not so there would be no secrets whatsoever in the world; the lives of royalty and governmental peace of mind would be in continuous danger. We give thanks to the Supreme Being that such an art does not exist.

Ever since physics and chemistry have been included among the subjects of a refined education in all the cultured nations, there are very few people imbued with this dangerous form of superstition, and if there are still some, they are always from the most ignorant classes. Today every sensible person knows that all the supposed magic arts have natural causes, but very often they cannot explain them. As a general rule this occurs when they are ignorant of the principles of physics or chemistry. Therefore, the more a good education is extended, the very much rarer false magicians, like alchemists, fortune-tellers, etc., become, because the mother that bore the foolish children died, as they say. But there are a great number of physicists, artists and enthusiasts that continually ply their trade, imitating by physical means the supposed prodigies of the ancient magicians, reuniting all the resources that the sciences and the arts offer to entertain and pleasantly surprise people with curiosity, without attempting to deceive them, since they do not say that their undertakings are supernatural, as Schroeffer, Cagliostro and other charlatan impostors insisted theirs were. Such an art has nothing reprehensible about it and sometimes it is called *white magic*. I call it art, because, seriously speaking, there is nothing scientific about it, though in general all the methods used have their origins in physics, mechanics or chemistry. Many of these mysterious people, these artists, adopt the titles of physicist, or professor of recreational or occult physics, or of white magic; and as such are Comus, Perrin, Erckartshausen, Bienvenu, Olivier, Robertson, Garnerin the younger, Lebreton, Mantilla, etc. etc.<sup>8</sup>

These titles are unimportant when one knows of the subject's profession and his form of exercising it: nevertheless it is not desirable, as frequently occurs, to place them in the same class as swindlers and other various types of performers, whose only merit consists in sleight of hand, who perhaps know nothing more of physics and chemistry than the names.

The *phantasmagoria* or the art of making phantoms, spectres and other spirits appear through artificial means, is one of the most beautiful experiences of recreational physics, when it is done with all the illusions that optics, mechanics, electricity, acoustics and chemistry can provide. It is known that Schwedenborg, Schroeffer, Cagliostro and other impostors, and probably even more so the Egyptian priests and the Jews,<sup>9</sup> have employed these more or less perfect illusions to make the multitude believe that they are in communication with the spirits; but clearly, these supposed necromancers took great care not to reveal the mysteries of their operations. It is even easier to impose upon ignorant, weak and superstitious people, availing themselves of this type of illusion. It does not happen like that with instructed

people: they look at it differently, admiring the artist's work. They are sometimes amazed, suspending judgement, but they never take these experiences for more than what they are in reality.

In my youth, over more than thirty years ago, I saw the illusions of the *phantasmagoria* very well done; and these experiences, which were new for me, made a strong impression on me, as I can see now. As such were those of Mr Melber and Mr Breitrück<sup>10</sup> which are well known in Germany, and which had travelled some years before throughout the most important countries of the north with a beautiful collection of recreational physics devices, mostly with a variety of mechanical and magnetic pieces. I came to Paris, where I saw with even greater pleasure the *phantasmagoria* of Mr Robertson, during whose stage show I saw for the first time the beautiful effects of the *megascop* of Mr Charles.<sup>11</sup>

Robertson's *phantasmagoria* was one of the best to be seen in Paris during the last twenty years, and without doubt the most fashionable. Indeed, there will be few people in that capital city who have not been often to see this spectacle, which was at one time advertised in great letters on the walls of the ancient convent of the Capuchin monks. I remember a period in which the *phantasmagoria* had become so fashionable, that the ladies, instead of talking about dresses, dancing, strolling and plays, filled their social gatherings and dreams with spectres, sylphs and nocturnal visits, reading with incredible ardour the lugubrious novels of Mrs Radcliffe,<sup>12</sup> and generally all those in which are found not only the spirit [*de l'esprit*] but the spirits [*des esprits*]. A wily dolt made a metaphorical summary of all the pagan gods that existed in that capital city, in the following verses, and the allusions will be easily understood by those who have ever lived in Paris for a while.

J'ai vu Neptune aux bains Vigier,  
Bacchus à la taverne;  
Apollon chez la montansier,  
Pallas à la cazerne,  
Mercure au perron;  
Puis chez Robertson  
Pluton et ses furies;  
Au quartier d'antin  
Plutus et Vulcain,  
Et Mars aux Thuilleries.<sup>13</sup>

Although Robertson's *phantasmagoria* was almost as perfect as can be, many people went with just as much pleasure to see that of Lebreton, an intelligent painter who also entertained the public with physics experiments during the same period, and had established his *phantasmagoria* or *Pyschagogia* in a basement on the hill which was said to be that of the famous and cruel *Fredegonda*.<sup>14</sup> Garnerin the younger had also bought a *phantasmagoria* device, which he showed to the public for money in rue de Richelieu, along with many other physics experiments, confusedly presented in more or less the same way as the *saboyanos* [i.e. Savoyards] show the magic lantern in Paris and the blind men show the peepshow in Madrid. This famous aeronaut's brother, accompanied by his incomparable female cousin, gave to all Madrid proof of his skill and knowledge; though his fame eclipsed in a short time, for private reasons which I will perhaps explain on a more appropriate occasion. Moreover, all the *phantasmagorical* experiments, explained without any mystery, could be seen in Paris, in all the physics courses and still can be seen in the house of the expert engineer, Mr Dumotiez,<sup>15</sup> and in those of many other enthusiasts.

It is known that the spectres of the *phantasmagoria* are not, seriously speaking, more than the amplified images of a large and perfected magic lantern, in which all the light is intercepted outside the contour of the figures, hiding from the spectator all parts of the device, with the exception of the canvas or curtain over which are painted the phantoms. Gradually magnifying the size of these images, the spectator, as a consequence of the optical illusion, believes he can see the ghost running towards him, and vice versa, diminishing in size. This same phenomenon can produce a much more surprising effect using a great concave mirror. The room, painted and hung in black, the sepulchral light, the bones, the artificial storm, the sounds of the harmonica, and other lugubrious circumstances which commonly accompany the apparitions, are ingenious



contrivances which serve to complete the illusion. The figures that are employed for the phantasmagorical experiences are, in general, painted onto glass blackened over all the areas which are not to shine onto the canvas; though for this effect diverse opaque objects with a relief design can also be used; paintings on tin, busts and other sculpted figures and even animated objects, which produce a beautiful effect on the backdrop. In this case the magic lantern is also called a *megascop*, and the combination of the lenses will be different from that used for transparent objects. Otherwise, these experiments may be executed not only in lamplight, but also in that of the sun, artfully introduced into a dark room.

Apart from the spectres, angels, devils, mythological figures, etc. that are commonly represented on the phantasmagorical screen, another type of phantom which causes great surprise is also frequently seen in these spectacles, and whose construction is founded on a very different principle. They are a type of transparent mask which can be lit up and darkened from inside as one wishes, by means of a *linterna sorda*,<sup>16</sup> which is passed around secretly throughout the audience. As such is the mechanism of the skeleton presented by Mr Robertson, and that of the nun, which can be found in the Royal Physics Cabinet.<sup>17</sup>

The illusion known as the *dance of the witches* is even more simple and is executed using one or more figures cut in strong opaque paper, or painted on glass, and moving different lights behind them. In this case each one produces a luminous image on the screen: the size and number can be increased and reduced as desired, and they can be made to dance everywhere. I will say nothing of quite an old type of phantasmagoria which may be used by day and by night, because it is used very little generally and because the details would take too long to explain. All the devices adapted to the illusions I have just mentioned are sold in Paris by Mr Dumotiez, maker of physics equipment; and better still are those sold in Nuremberg by Mr Gütle,<sup>18</sup> professor of physics and mathematics, to whom we owe the most beautiful inventions of recreational physics. All these are also found in the Physics Cabinet of His Majesty.

The way the phantasmagoria is represented in France is not very different. But the German physicists and enthusiasts have advanced much more in this type of industry, and the phantasmagoria experiences of Mr Eckartshausen and Mr Gütle etc. are capable of surprising even the most educated people. This perfection is the result of an ingenious combination of various mechanical, physical and chemical effects, the causes of which are hidden from the spectators' view. Those readers who have never been to see this type of spectacle may judge for themselves the impression that must be made, on a credulous person who has no idea of the phenomenon of physics, by the mere account of a phantasmagorical apparition adorned with all its devices, similar to those that Mr Eckartshausen sometimes used to perform to entertain his friends or surprise the ignorant.

When a magician wants to call up the devil or the soul of a dead person, it is first of all necessary, eight days before the apparition, to ask the people who want to come to the function, to name and describe what has to appear. He must never admit more than four or five spectators to these apparitions. They are ordered to immediately abstain from all worldly commerce during these eight preparatory days, to read and meditate certain spiritual features every day and to eat little (if they are foolish enough to do it). At the end of eight days the apparition must take place, at night, for which those present must be prepared in the following way. On the day of the experience the necromancer goes to the people's houses, and asks them if they are still decided to come to such a solemn act. If they say yes, he asks them to tell a story from the life of the deceased, making sure to observe carefully the circumstances which seem to be of particular interest to the person telling the story. He tries to exalt the imagination, ordering the person to fast from midday onwards. The hour of the apparition will be from twelve o'clock at night; it must be dark, with neither moon nor stars, and if there is a strong wind suggesting that the elements seem to be fighting in a fury one against the other, the time [or weather – translator] will be more appropriate for the experience. The thaumaturge, dressed as a magician, leads the people to the first black-lined room lit by a sepulchral light. In there will be seen the skulls, the bones, bats, hieroglyphics and other lugubrious

objects; and it is here where the necromancer directs his speech towards the spectators, making use of those flowers of rhetoric that have so much power over the soul. In the end he makes them drink a glass of punch and leads them to the second room. From when they enter they see lightning accompanied by thunder, rain, hail and all that which characterises a violent storm; at the same time vapours rise to form a thick aromatic cloud. In the middle of the room is seen a luminous circle (which can be drawn by the magician himself with a stick full of some phosphorescent liquid) and in this all the people are seated. Two candles burning on the table are spontaneously extinguished, announcing the arrival of the spirit: a green and blue flame rises above the table and the phantom appears in the middle of the room, suspended in the air. It comes towards the circle of spectators, speaking with sadness and majesty, responding to all the questions they ask; its breathing is warm, and its physiognomy similar to that of the desired person. If one of the company is so bold as to dare to touch it or injure it with a sword, an invisible power will throw it immediately to the ground, and the phantom will disappear with a sound of thunder.

To conceive the possibility of such an illusion without going into details, it is enough for me to draw to my educated readers' attention that the images of the magic lantern are capable of being represented not only onto canvas, like the common phantasmagoria, but also onto mist, smoke or fixed vapours conveniently condensed. Through two large parallel concave mirrors a distant voice can be made to be heard, and produce heat in the middle of the air. This same mirror possesses the singular property of representing in the air in front of its surface all the objects seen in a certain position; and using a flask charged with electricity the most robust man can be brought down. All the other circumstances are easy to explain, and the experience has been perfectly imitated by Mr Gütle and many other enthusiasts. Even when the physicist has not been able to obtain for himself a portrait of the deceased in order to paint him onto the glass of his magic lantern, and has only been able to execute it according to the information that he may have been able to acquire, the imagination of those present will normally make up for this in such a way that rarely will the lack of semblance be noticed: moreover, the most educated people have been deceived sometimes by this beautiful experience. On such an occasion bravery disappears, even when we are persuaded that our senses are prone to be deceived, and principally the organ of sight, whose pupil, very dilated in the darkness, always sees things as brilliant and gigantic. On seeing the phantom in front of us flying through the smoke, and hearing its hoarse, sepulchral voice, all philosophy disappears and we tremble in the circle instead of laughing at the majestic calm of the miracle-worker.

Let us see another ingenious modification of this illusion, also owing to Mr Eckartshausen. This ingenious physicist was walking one dark night with some of his friends. Arriving at a solitary place near to some ruins, he said to them: 'Here's a perfect spot for an apparition; if you like I shall make a spirit appear.' Immediately he hit the ground with his walking stick, and in that very instant a great flame rose up; a phantom came out of the earth and those present ran away. It was indeed difficult to conceive such an experience with no apparent preparation. But although the place really was without any preparation at all, the same could not be said for the pocket and the stick with which the experience was realised. The first contained a little magic lantern which was lit by sulphur of phosphorus and was put out when required whilst the stick was prepared in an similar way and moreover it had a wick soaked in wine spirits with *pez griega*<sup>19</sup> like the torches of the furies in the theatres.

Other enthusiasts, by means of similar illusions, made phantoms come out of the graves of the cemeteries, or filled the atmosphere of those same places with a great number of phantoms and skeletons, appearing to rise out of their tombs, so that the surrounding observers saw before them the solemn image of the resurrection of the dead. This last experience can only be executed on a cloudy and tranquil night, but the effect on the imagination of those present can be terrible.

One should realise that the real object of all the experiences of which I have spoken is diversion; that charlatanism and bad intentions have frequently abused this to make credulous and superstitious people hallucinate, and consequently it is good to



know the details so as not to let oneself be deceived by those that, even nowadays, want to make use of what they themselves condemn in the ancients. Various artists, amongst others Don Francisco Lorenzo,<sup>20</sup> skilful engineer of this court, have made ingenious and instructive applications of this kind of optical illusion, substituting the spectres and phantoms for images of the celestial bodies which belong to our planetary system, and these images, animated by ingenious mechanical movements, are projected onto a large backdrop, representing the principal astronomical phenomena in an instructive way.

To finish that which is relative to the spectacle of Mr Robertson, who suggested these lugubrious digressions to me, there only remains for me to mention his *fuegos pírricos*<sup>21</sup> which really are very fine. But considering that this agreeable optical illusion has become as commonplace as the Chinese shadows with which they have some analogies, and since many enthusiasts possess this type of device, at least a small one, I thought that it was useless to detain myself with this theme.

## NOTES

1. See J.E. Varey, *Cartelera des los títeres y otras diversiones populares de Madrid 1758–1840: Estudio y documentos* (London: Tamesis, 1972), 88.
2. *Diario de Madrid*, 22 January 1821: ‘the celebrated professor of experimental physics, Mr Robertson, recently arrived from Paris, and who has had the honour of appearing before the Royal Families of Spain and France. Mr Robertson is well known for his balloon ascents; but we can be sure that he is much better known for his invention thirty years ago of the phantasmagoria.’ Quoted in J.E. Varey, ‘Robertson’s Phantasmagoria in Madrid, 1821’ Part I, *Theatre Notebook* Vol. 9 No. 4 (July–September 1955), 93.
3. According to the first article in the booklet, the conjuror Coussol swallowed a sword that night in the presence of their majesties, who ‘watched the spectacle very seriously’, though the princess, La Infanta Francisca, had to look the other way.
4. Quintus Horatius Flaccus (65–8 BC), the famous Roman poet. This quotation is from his *Epistles*, Book 2 Epistle II: ‘Do you despise / Dreams, terrors magical, and prodigies, / Witches, nocturnal goblins, sorceries / Of Thessaly?’ (trans. A.F. Murison).
5. Emanuel Swedenborg (1688–1772), a Swedish naturalist, mystic visionary, occultist and early theosophist. Those who followed his doctrines were called Swedenborgians, though they preferred to call themselves The New Jerusalem Church.
6. Johan Georg Schröpfer of Leipzig (1730–74) was known as a *Geisterbeschwörer* or ‘ghost-raiser’. See David Robinson, Stephen Herbert and Richard Crangle (eds), *Encyclopaedia of the Magic Lantern* (London: Magic Lantern Society, 2001) [hereafter *EML*], 268.
7. Giuseppe Balsamo of Palermo, ‘Conte de Cagliostro’ (1743–95), an Italian adventurer and charlatan who professed to have lived in various centuries and offered everlasting youth to all who would pay him for his secret. He was prominent in Paris just before the Revolution, where he practised the ‘black arts’ and was possessed of great confidence and seductive powers. Reported to the Roman Inquisition by his wife, he was condemned to life imprisonment, though it was said that he strangled his confessor in his cell and escaped wearing his robes.
8. Comus was the stage name of the Prisian physician Nicholas Philipe Ledru (1731–1807). He was famous for his prestidigitation and demonstrations of experimental physics. He also presented a phantasmagoria. Louis XV employed him as physics professor to the Princes of France and he also taught in the Faculty of Medicine at the University in Paris where he experimented with curing nervous illnesses through electricity. He also ran a workshop at the Institute of Physics. No information on Perrin has been found.
9. Karl von Erckartshausen (1752–1803) studied at Munich and went on to read law and philosophy at Ingolstadt. He wrote some 69 books on literature, science, natural philosophy, theology, alchemy, magic and other subjects. In his famous work *Fortgesetzte Magie* (1788–91) he explained various magic tricks and the use of magic lanterns, mirrors and other apparatus.
10. Bienvenu (fl. 1787–c.1805) was an ‘engineer of scientific instruments’ of Paris. See *EML*, 35.
11. Olivier is probably M. Oliver, a Polish magician and phantasmagoria showman. See *EML*, 214.
12. Robertson, of course, is Etienne-Gaspard Robert (1763–1837); possibly the author of this booklet. See *EML*, 256–8.
13. Garnerin is Andrés Jacobo Garnerín (1769–1823), a French balloonist and disciple of Jacques Charles (see note 11 below) who accompanied the French Army to observe enemy lines from the air and who made a celebrated parachute jump from a balloon in 1797. His elder brother Jean Baptiste Garnerín (1760–1849), with his daughter Elise, realised numerous experiments with parachutes in Europe and America.
14. Lebreton or Le Breton (fl. 1806–31) was a painter who became a showman.

All of these are also found in the Royal Cabinet.

Although the greater part of the experiences which this skilful professor presented were not new for their majesties, nevertheless their satisfaction was complete, and Mr Robertson may congratulate himself by saying with Horace:

*Principibus placuisse viris, non ultima laus est.*<sup>22</sup>

If Robertson the younger wishes, as he has promised, to present us with an aerostatic ascension next spring, a happier one than that of Miss Garnerin, he will perhaps supply us with new material to entertain or annoy readers with some aerial stories.

Translated from the Spanish by Wendy Bird.

**Dr Wendy BIRD** is a freelance art historian based near Girona in Spain. Her article on the influence of the phantasmagoria and other optical media on the work of Goya appeared in the previous issue of *NMLJ*.

He exhibited a ‘psychagogie, or evocation of shadows and fantasmagoria’ at the Abbey Saint-Germain, Paris in 1806. In his popular science book of 1811 he claimed to be the inventor of the phantasmagoria.

Juan González Mantilla was a Spanish showman who bought the phantasmagoria of Mr Martin (possibly Martin Aubée, formerly assistant to Robertson) from one Bernardino Rueda, and presented it as a machine ‘of lawful recreation and honest diversion’ in December 1816. See Wendy Bird, ‘Optical Entertainments in Madrid in the time of Goya’, *NMLJ* Vol. 9 No. 2 (Summer 2002), 20.

9. Here the original document includes the footnote: ‘Who is not reminded here of the spirit of the prophet Samuel conjured up by the witch of Endor?’

10. Melber and Breitrück were showmen who travelled throughout Germany and Switzerland with a *Mechanische Kunstkabinett* (‘mechanical cabinet of arts’) and phantasmagoria at the end of the eighteenth century and the beginning of the nineteenth. See *EML*, 44.

11. Jacques Alexandre César Charles (1746–1822), French musician, mechanic, painter and tax inspector. His interest in electrical phenomena led him to study physics and together with Robertson flew a hydrogen-filled balloon named *Charlière* in the Champs de Mars, Paris, in 1783. See *EML*, 62–3.

12. Ann Radcliffe (1764–1823), English author of popular Gothic novels. Her most famous work is *The Mysteries of Udolpho* (1794), considered to be a precursor of Romanticism.

13. This poem, referring to Robertson’s *fantasmagorie* in Paris (‘then at Robertson’s / [I saw] Pluto and his Furies’), may well be taken from a newspaper.

14. Fredegonda or Fredegunda has the reputation of being one of the most cruel and astute women who ever lived. She was the concubine and wife of Chilperic I, King of the Franks. In her lust for power she was responsible for numerous atrocities and murders, including those of her stepchildren. Around AD 584 she fled to Paris with her treasures and died there in 597.

15. Louis-Joseph and Pierre-François Dumotiez (fl. 1770s–1810s), Parisian magic lantern and optical instrument makers. See *EML*, 96.

16. The English name for this would be ‘dark lantern’, meaning a lantern which allows the person using it to see without being seen and to shut out the light at will by means of a little door or a metal sheet. The Spanish term translates literally as ‘deaf lantern’ whilst the Italians, perhaps more appropriately, use the term ‘blind lantern’.

17. It appears that the author of the pamphlet had been shown the Spanish *Real Gabinete de Física* (‘Royal Physics Cabinet’), perhaps by its curator, as he was aware of its contents. This collection is now lost, but the present author is currently engaged in preparation of a book which deals with its history and contents.

18. Johann Konrad Gütle (1747–c.1814), German demonstrator of physics apparatus who settled in Nuremberg and sold ‘all the necessary instruments for ghost appearances’. See *EML*, 129.

19. *Colofonia* (in English, ‘colophony’): a transparent, brownish, flammable solid resin made from the residue of the distillation of turpentine. It was originally made of pine tree resin from the Greek city of Colophon, where it was commercialised in ancient times. It is used in pharmacy and chemistry and is rubbed on the bows of string instruments.

20. Don Francisco Lorenzo was a Spanish court engineer and astronomer, employed in the Royal Observatory.

21. The *fuegos pírricos* of Mantilla (see note 8 above) must refer to the device known as ‘artificial fireworks’ or ‘feux pyriques’: an optical box containing a clockwork mechanism which rotated a perforated sheet in front of one or more candles. For a description and illustrations of this device see *MLS Newsletter* 68 (June 2002), 1.

22. Horace, *Epistles*, Book 1, Epistle XVII: ‘Tis no small praise / The plaudits of the foremost men to raise’ (trans. A.F. Murison).