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## ARTICLES

### The Magic Lantern: Hogg and Science

Valentina Bold

To open this discussion of 'The Magic Lantern: Hogg and Science' I would like to quote David Brewster's account of an 1802 *Phantasmagoria* show in Edinburgh, conducted by M. Philipstal:

The small theatre of exhibition was lighted only by one hanging lamp, the flame of which was drawn up into an opaque chimney or shade when the performance began. In this 'darkness visible' the curtain rose and displayed a cave with skeletons and other terrific figures in relief upon its walls. The flickering light was then drawn up beneath its shroud, and the spectators in total darkness found themselves in the middle of thunder and lightning. A thin transparent screen had, unknown to the spectators, been let down after the disappearance of the light, and upon it flashes of lightning and all the subsequent appearances were represented. This screen being half-way between the spectators and the cave which was first shown, and being invisible, prevented the observers from having any idea of the real distance of the figures, and gave them the entire character of aerial pictures. The thunder and lightning were followed by the figures of ghosts, skeletons, and known individuals, whose eyes and mouth were made to move by the shifting of combined sliders. After the first figure had exhibited for a short time, it began to grow less and less, as if removed to a great distance, and at last vanished in a small cloud of light. Out of this same cloud the germ of another figure began to appear, and gradually grew larger and larger, and approached the spectators, till it attained its perfect development. In this manner the head of Dr Franklin was transformed into a skull; figures which retired with the freshness of life came back in the form of skeletons, and the retiring skeletons returned in the drapery of flesh and blood.

The exhibition of these transmutations was followed by spectres, skeletons, and terrific figures, which, instead of receding and vanishing as before, suddenly advanced upon the spectators, becoming larger as they approached them, and finally vanishing by appearing to sink into the ground. The effect of this part of the exhibition was naturally the most impressive. The spectators were not only surprised but agitated, and many of them were of opinion that they could have touched the figures.<sup>1</sup>

Hogg was fascinated by manifestations of what Brewster termed

'Natural Magic': both technical innovations, and wonders from the natural world. By exploring selected passages from Hogg's prose and poetry, in the light of contemporary experiences, I hope to show he used scientific allusions as transformational devices, straddling both reason and tradition.

The name 'Magic Lantern', perhaps, attracted Hogg by its combination of associations with the black arts (a charge its operators often refuted) and illumination. It was defined by *Encyclopaedia Britannica* (1810) as 'An optic machine, whereby little painted images are represented so much magnified, as to be accounted the effect of magic by the ignorants'. Hogg's description of the trickery of Roger Bacon—arguably first to foresee the Magic Lantern—in Aikwood, is very close to Brewster and Robertson. Attention is drawn here to the reaction of 'the ignorants'. Hogg, characteristically, mingles rational explanations and supernatural beliefs.

The room was darkened; the friar went into a small alcove, and, by the help of a magic lantern, a thing never before seen in Scotland, he raised up a tremendous and horrid figure on the wall. It was of a gigantic size; its eyes, lips, and paws moved; and its body was thrown into various contortions ... After the apparition had gone through its various evolutions, all apparently at the farther end of the apartment, it fixed its eyes, clenched its teeth, and, stretching forth its claws, it appeared to make a spring forward at the party.

'Ah! L—d be there!' cried Charlie in a trumpet voice, and threw himself flat down behind the rest... 'Lair him, lair him, friar!' cried he, 'or, od I's be about your lugs some day for this ...' The friar went on with his phantasmagoria. The figure, after giving a shiver or two, was parted into three, all of the same form and size, but all making different motions, and different contortions of feature. The three were afterwards parted into six, which, among other grotesque feats, danced a reel, and, on running thro' it, every one threw itself heels-over-head. The group of onlookers laughed outright at this ... When the friar had concluded this feat, he put out his small lantern, took the machinery out of it, concealing it beneath his ample frock, and again opened all the windows.

Comparing this with Brewster's account shows Hogg's first hand knowledge of the magic lantern, put to good fictional use. The realism of his account makes it tempting to speculate this is as much documentary as fiction. It would not reflect badly on the Borderers if some people reacted like Charlie Scott. Etienne Gaspard Robertson (1763–1837), inventor of the Phantasmagorie, referred to the 'prodigious effect' his 'spectral shades' had even on the 'gay and frivolous' Parisians.<sup>2</sup>

The passage is, of course, vital to the action of *The Three Perils of Man*. Michael Scott, as a learned man, realises the images are 'a delusion ... calculated to astonish women or children'. He is spurred into competitiveness, cloning his visitors and, after the further 'optical delusion' of splitting Cope-Law into three, splitting the Eildon hills into three. Furthermore, the clash of Charlie Scott's traditional beliefs, and optical innovation, allows Hogg to exploit the situation to its full comic potential. The responses of his characters invest them with psychological realism, from the 'waggish' friar, to the gullible Charlie Scott and the overweeningly proud 'Master' Michael Scott. Incidentally, other writers, by the 1820s, had used the Magic Lantern as a literary device. E. T. A. Hoffmann talks of projecting portraits on glass in *Die Bräutwahl* (1820); the image was used satirically in George Cruikshank's 'The Magic Lantern or the Green Bag Plot laid open' (1820), dealing with the 1817 suspension of Habeas Corpus. Later, the opening of the Liverpool and Manchester railway was compared to a magic lantern show by *Blackwood's* (1830).<sup>3</sup>

From his accurate description, Hogg was familiar at first hand with the magic lantern and its workings. This knowledge could have come from a number of sources. *Britannica* provides instructions 'To produce the Appearance of a Phantom upon a Pedestal placed on the middle of a Table'. Probably Hogg witnessed itinerant lanternists' performances in the Borders; such shows occurred in rural areas during the early nineteenth century. Almost certainly he saw performances in Edinburgh. Lantern shows were a feature of the city entertainment scene in the early nineteenth century and it is worth stressing this, given their impact on Hogg. The *Edinburgh Evening Courant* offers pertinent evidence at a time when Hogg began his literary career in earnest, following the publication of *Scottish Pastorals* (1801). There is, for instance, a hyperbolic advertisement for a spectacular show in the *Courant* of 11 March 1802:

PHANTASMAGORIA,  
THE MANNER OF  
RAISING GHOSTS AND SPECTRES.

Practiced in former times by Sorcerers and Magicians.

A NOVEL and SURPRIZING EXHIBITION commenced, exhibiting this day, Thursday March 11th at the Panorama Rooms, No. 44 South Bridge Street, in addition to the BATTLE OF COPENHAGEN [a panorama show].—Admittance every hour, from Eleven to Eight, at one shilling each.

\*\*\*In this new exhibition will be introduced, to parties of ten or more, the Phantoms or Apparitions of the Dead or Absent, in a way more

illusive [*sic*] than has ever been before presented to the eye of the public; as the objects freely originate in the Air, and unfold themselves under various forms and sizes, such as Imagination alone has hitherto painted them, occasionally assuming the Figures and most perfect Resemblance of the Heroes, and other distinguished characters of the past and present times.

This SPECTEROLGY, which professes to expose the practices of Imposters and pretended Exorcists, and to open the eyes of those who will still foster an absurd belief in Ghosts or Disembodied Spirits, will, it is presumed, afford also to the Spectator an interesting and pleasing entertainment.

I like the way 'pretended Exorcists' and those with 'an absurd belief in Ghosts' are dismissed: presumably this, typically nineteenth-century, scoffing at the supernatural dispelled any worries of an irrational show. This parallels the tolerantly superior attitude Hogg found it necessary to adopt towards ingenuous audiences in *The Three Perils of Man*.

The Phantasmagoria was re-advertised on 13, 18, and 20 March. However from 25 March there was competition in the Edinburgh magic lantern market:

#### ROYAL CIRCUS, EDINBURGH

The Public are respectfully acquainted, THAT the SKIAGRAPHEMIA, which has been performed with such astonishing applause the last few years in Paris, under the title of PHANTASMAGORIE, The Philosophical Fire-Works and Mechanism, Apparatus to form an Evening-Entertainment, has been lately brought to England by Mons. MONTPELIER, who will exhibit his surprising Optical Illusions in the beginning of April next—it is unnecessary to enlarge on a performance which has been received in Germany, France, and Great Britain, with so much approbation; and the public may rest assured, that no pains or expence will be spared to render an Evening's Entertainment at this place worthy of their patronage. (page 1, column 1)

This Phantasmagoria was advertised again on 1 and 3 April but on 8 April the original show hit back with a new attraction at the 'Panorama and Phantasmagoria Room', South Bridge. Instead of the Battle of Copenhagen, it was now possible to see a Panorama of the 'City of Norwich' for 'a short time'; this, a 'more variegated view, than any before exhibited ... cannot fail to please the eye of all ranks' (page 1, column 1). The Phantasmagoria and Panorama of Norwich was advertised again on 10 April but on 17 July had moved to Hunter Square, at the back of the Tron Church, re-advertising on 19 and 26 July. On 31 July, however, they announced 'the Last Week' of the Phantasmagoria at Hunter

Square. The 'exhibition of GHOSTS and SPECTRES ... will be enriched with NEW MATTER, never before exhibited' (page 1, column 1). An announcement of 2 August emphasised this was the last week. By 27 September a new show—perhaps the one Brewster recalled—was in town, probably in the building recently vacated by the Hunter Square theatre:

#### OPTICAL THEATRE.

*The original*  
PHANTASMAGORIA,  
from

*Vienna, Paris, and London,*  
Is arrived at this place, and will Open at the new theatre,  
*opposite the South Side of the Tron Church,*  
this and every Evening, with

#### CURIOUS DECEPTIONS IN OPTICS, And a Brilliant Display of ARTIFICIAL FIRE-WORKS.

Opens at 7—Begins at 8.

For particulars, refer to the Bills.

Observe particularly, that this Exhibition has no kind of connection with any other which has been in this city or elsewhere, excepting in *Vienna, Paris, and London.* (page 1, column 1)

The stress on novelty and artifice would, no doubt, strongly appeal to the rational curiosity of Edinburgh audiences.

Perhaps Hogg's playful reactions to magic lanterns drew on phantasmagoria advertisements; these frequently mocked those who misunderstood their devices. See, for instance, this announcement, on 4 November 1802, of a forthcoming 'Hallow Fair' event at the (by now established) Optical Theatre:

In this Novel, and truly astonishing Exhibition, the Various Delusions which have been practiced on Mankind in every Age of the World, under the appellation of  
THE BLACK ART

are explained, by a Series of Beautiful Experiments, and a variety of Effects are produced, which in the Blind Ages of Superstitions would have been Supposed to owe their Origin to *Supernatural Agency!* to the *Powers of Magic!* and the *Incantations of Witchcraft!* (page 1, column 1)

Eight years later Edinburgh's most notorious lanternist (and much more), Signor Belzoni, extended such rationalism to give a distinctly scientific flavour to his publicity. Significantly Hogg, living in Edinburgh that year, lists Belzoni as a gentleman's amusement in *The Spy*. Belzoni

performed in the capital between July and September 1810 and, because of Hogg's interest in this entertainer, I would like to take a detour to consider this celebrity. The multi-talented Belzoni, perhaps, was a prototype of Hogg's eccentric, much-travelled 'Marvellous Doctor'. On 26 July the *Courant* announced this coming attraction:

THEATRE ROYAL, SHAKESPEARE SQUARE.

On SATURDAY the 28th instance, and EVERY EVENING during the Races.

S. BELZONI begs leave to acquaint the nobility, gentry, and the public of Edinburgh and its vicinity, that he has been preparing his apparatus for that elegant exhibition of HYDRAULICS and HYDROSTATICS, in which he has much improved, and which, in point of novelty, he hopes will obtain their patronage. At some time it is necessary to adjust the apparatus, S. BELZONI is happy to announce that he has engaged the celebrated MISS NORTON, who will dance between the acts.

His exhibition will commence with several select tunes on the MUSICAL GLASSES, which, for sweetness of tone and harmony, excel all other instruments.—After which, several PHILOSOPHICAL EXPERIMENTS in Hydraulics and Hydrostatics, or a grand display of Water Works.—the water will change its natural colour to different ones during the experiments.—After which, his inimitable FEATS OF STRENGTH AND STRIKING GROUPES, among which he will carry a pyramid of SEVEN MEN

in an erect attitude, without any mechanical assistance. He will likewise display the various *passions of the mind*, by appropriate attitudes and gestures, from the designs of the late Monsieur le Brun. Signor Belzoni is the only person who has ever attempted to imitate the passions of this illustrious author. (page 3, column 5)<sup>5</sup>

The cost of attending this spectacle ranged from four shillings for a box to one shilling for the poorest seats. By 2 August Belzoni had engaged Miss Rock to dance with Miss Norton. He had, in addition, acquired a comic command of Scots, referring to the dancers as 'ill par'dous' [pardoos being a thump]. Notice was given on 6 August of the last night (a benefit for Miss Norton); the *Courant* of 9 August announced Belzoni's absolutely last night (a benefit for Miss Rock) on 11 August.

Belzoni was then engaged to perform at the Theatre Royal, Shakespeare Square, along with Miss Norton. He gave his 'admirable performance of the water works' there, announced on 13 September. On 20 September, Belzoni advertised his benefit on 25, including 'Hydraulics and Hydrostatics'. His many qualities were stressed on 22 September in an advertisement for 'Hercules, Signior Belzoni, in which he will intro-

duce his celebrated Herculean Attitudes'. On 24 September the *Courant* announced Belzoni's benefit on 25 would include a 'serious pantomime', 'feats of strength', 'passions' after M. le Brun, and, of course, the 'Water Works'. Furthermore, the *Courant* of 27 September announced the arrival of S. Belzoni, Senior, 'The Patagonian SAMSON' and 'strongest man in Europe' whose feats included 'carrying a pyramid of *ten men* at one time; and, what is more astonishing, he will have his hand at liberty'. This seems to have been the last appearance of the Belzonis in Scotland; the Theatre Royal closed for redecoration and, after re-opening (profiled in the *Courant* of 1 November), there was no more mention of them.

The travelling show continued. There is an 1813 playbill highlighting Belzoni's 'Grand and Brilliant Display of OPTICAL ILLUSIONS ... the AGGREGOSCIPIUS' at the Blue Boar Inn, St Aldgate's, Oxford. This performance culminated with a magic lantern show: 'The objects which are represented in the Optical Illusion will change their postures, and so far will they seem animated to the Spectator, that some of them will actually change their countenances'. According to the *Gentleman's Magazine* of 1819—which had announced Belzoni's death in 1818—the entertainer, a 'native of the Papal States' had, after leaving Edinburgh, enjoyed success in Ireland, the Isle of Man, and Lisbon. He was 'six feet seven inches high, remarkably strong, and having an animated prepossessing countenance'. Belzoni performed for the Court at Madrid and built an irrigation machine for the Pashaw of Egypt, which broke the operator's leg. This led to a career move into archaeology; by 1819 the strong man was on an expedition in Nubia.<sup>6</sup>

Belzoni's memorable performances surely fuelled Hogg's sustained appetite for magic lanterns. The writer flirted with the device for a second time in 'The Bogle o' the Brae' (1831). The *Three Perils of Man* motif is comically recycled and elaborated here, as two suitors, Davie and Jock, face a horrific obstacle to courting the Bell sisters. Initially their experience is presented as an oral-style horror story. The traditionalist Davie tells 'educated' Jock he witnessed a ghastly spectacle: 'a man o' fire, as if he had been made of a thin lowe ... bolting forward, gurning and glowing as if he wad hae swallowed me up. Then away back again, sae far that I could hardly ken him'. The experience would 'hae put the maist part o' folks out o' their reason'.<sup>7</sup> While Davie is convinced of the bogle's existence, Jock takes the stance it was a delusion; giving rise to comedy as Davie interprets his protective words—'*In te Domine speravi*'—as 'ca'ing the spirit an in-tae'd dominie' (p.239). Both rational and traditional attitudes are presented, then, as co-existent in this transitional

period of Ettrick culture. Paradoxically, it is Jock who is terrified, and makes a speedy exit, during a subsequent sighting in front of the Bells' house.

'The Bogle o' the Brae' shows a keen sense of the grotesque aspects of magic lantern performances:

The night was pitch-dark, and the windows all closed; but nearly where they judged the door ought to have been, they perceived a dim, glimmering light ... the dim light rushed forward upon them, and there stood up immediately before Jock, a hideous sight indeed. There was the evident appearance of a female corpse, dressed in dead-clothes, with its white eyes turned up, its white lips grinning far apart, and its pale hand clenched, and waving in a threatening attitude; while, at the same time, the whole form of the apparition was involved in a ball of thin flame ... the whole was the operation of a moment—of the twinkling of an eye. (pp.239–41)

The visual details are wholly plausible. As Brewster's account (cited above) implies, 'pitch-dark' was necessary for the effective projection of images; Hogg's 'dim, glimmering light' is the flame of a candle, used at this period for a light source; the progressing and receding 'threatening' figures initially seen, were typical of the phantasmagorie. The whole is reasonably interpreted, by those who have not seen the device, as 'the bogle of the brae'.

There is equal authenticity to the 'phantom's' next appearance, this time to terrify the Bells' ugly love-rivals, the Curror sisters, with a demonic visitation:

they perceived a dim light as if deep in the wood ... out of that dim light the devil came rushing upon them like a tremendous lion, all on flame, his fierce blood-shot eyes rolling most furiously. 'Yell!' quoth the mother, and 'yell!' screamed the daughters, all with one squall. Down they tumbled together, and over and over in a tangled heap, they rolled, never letting one yell abide another, until at last they landed all in a coil on their own little parlour floor. (pp.241–42)

There are two more sightings of the supposed bogle; one forcing the Curror girls into flight, the second by old Andrew Geddes, leaving them in a midden hole (pp.255–57). Years later, the narrator discovers the cause, while visiting Jane Bell. She explains 'two young clarks o' the law' had come from the city for sport, and initially terrified the Bells with their 'Majic Lanthorn'. When the Bells realised the deception, they utilised the 'apparawtus' to scare off unwanted suitors. The narrator,

informed the machine was portable—'not larger than a pair of bagpipes, for that the screen was as fine as a lady's veil' (a fair comment)—claims to be 'neither satisfied nor pleased' with this explanation of a 'fine ghost-story' (p.264). The attribution of the 'crime' to townies perhaps expresses country prejudices but I am intrigued by Hogg's tongue-in-cheek reluctance to accept a materialistic explanation over the traditional; it hints at the writer's often divided loyalties.

It is not surprising to find the Ettrick Shepherd relished a device allowing illusions, given his interest in visual perceptions. *Confessions*, abounding in references to 'lights', 'vision', and 'sight', hinges on optical ambiguities and, in this context, observing natural sciences in action becomes an access point to knowledge, including religious illumination. There is the Brocken-spectre (an effect which fascinated Brewster) as Colwan ascends Arthur's Seat, analysed in a way which affords insights into Hogg's view of science:

he beheld, to his astonishment, a bright halo in the cloud of haze, that rose in a semi-circle over his head like a pale rainbow. He was struck motionless at the view of the lovely vision; for it so chanced that he had never seen the same appearance before, though common at early morn. But he soon perceived the cause of the phenomenon, and that it proceeded from the rays of the sun from a pure unclouded morning sky striking upon this dense vapour that refracted them. But the better the works of nature are understood, the more they will be ever admired. That was a scene that would have entranced the man of science with delight, but which the uninitiated and sordid man would have regarded less than the mole rearing up his hill in silence and in darkness.

There are moral implications too, behind the hideous distortion of Wringham 'diluted to twenty times the natural size' on Arthur's Seat and the visual 'doubling' of the suicide. Hogg provided rational explanations for all these effects in 'Nature's Magic Lantern'. There, the writer confesses to a delight in the 'shadows of realities' visible in the hills. This is attributed to the pleasure, at the age of twenty-one, of having seen a Brocken-spectre and of reading a German account of the phenomenon, in translation, at the age of forty.<sup>8</sup>

Scientific and divine truths consummately mix in the title poem of *Pilgrims of the Sun* (1815). Astronomy fascinated Hogg: he claims one of his earliest compositions as 'Reflections on a View of the Nocturnal Heavens' and the topic is returned to here. The title poem mixes visionary elements, akin to Ramsay and Burns, with traditional motifs, medieval and contemporary astronomical theories and biblical material. The



theme of interplanetary travel was well worn. Eighteenth-century precursors include Haydn's comic opera *Emperor of the Moon* (*Il mondo della luna*, 1777) and Blake's essay 'An Island in the Moon' (MS ?1784). There are similarities of outlook with Blake; perhaps Allan Cunningham introduced Hogg to the then obscure engraver poet's work, as Blake features in *Lives of the Most Eminent British Painters, Sculptors and Architects* (1829–33). Otherworldly journeys were gaining new impetus as a creative force too after Henry Cary's blank verse translation of Dante's *Commedia: The Vision* (1814, parts 1805 and 1806). Scott, Coleridge and Byron alluded to this literary event; Hogg was quick to borrow popular ideas. Perhaps, too, viewing panoramas, along with magic lantern shows, encouraged a comprehensive approach to real and imagined landscapes.<sup>9</sup>

The solar system of *Pilgrims* is idiosyncratic. Mary Lee from Carelha (Tam Lin's Carterhaugh) makes a spiritually perfecting journey with her angelic 'wight', Cela, to a place where 'there was no up, there was no down, / But all was space' (Part I, ll.251–52). There is a trace of Ptolemy as stars and moon move west from the pilgrims. Globes circle the Sun, after the mediæval celestial spheres which bore Sun, Moon and planets round the earth. Hogg is comfortable with geometric patterning, an oral schema unlike the literate's lineation (*Three Perils of Woman* (1823) too, would be structured by progressing circles). Mary and Cela see the 'motioned universe' wheel 'in fair confusion' surrounded by 'Worlds beyond worlds' which all 'from one particular point of the sun's orb, / Seem pendent by some ray or viewless cord' (Part II, ll.58–60). The 'God of Nature', embodiment of light, is in an orb amidst this Newtonian schema. The travellers' passage, furthermore, is near gravitational. The solar circles of *Pilgrims* have physical and visionary existence, reflecting contemporary notions of plural worlds by analogy. The theory is explained in the first edition, Edinburgh-produced, *Britannica* (1771), almost certainly in the Blackhouse library:

the Almighty ... acts with infinite wisdom .... From what we know of our own system, it may be reasonably concluded, that all the rest are with equal wisdom contrived, situated, and provided with accommodations for rational inhabitants ... there is a general analogy running through, and connecting all the parts into one great and universal system.

Comets, too, were thought to be populated during Hogg's lifetime. Extending such reasoning, even William Herschel (1738–1822), the great innovative astronomer, thought the sun inhabited, with a protective dust cloud to minimise heat. Poignantly Mary, anticipating McDiarmid's

questing in *A Drunk Man Looks at the Thistle* (1926) wonders: 'has a living God/ Bled in each one of all these peopled worlds!' (Part II, ll.153–54).<sup>10</sup>

Hogg's imaginative depictions of the planets, equally, draws on contemporary scientific accounts. He includes the land of 'the Evening and the Morning Star' where lovers live after death. This is Venus: morning star when West of the Sun, rising before it; evening star East of the Sun, rising after sunset (reinvoked in the 1822 'Russiade'). Venus is presented naturalistically with pleasant groves, long days and nights. *Britannica* explained Venus's days and nights equalled twenty four and one-third of ours; that the sun rises twenty two and one-half degrees North East to prevent too great heat; Hogg's land is illuminated by a 'broadened sun'. Mars, wearing a 'deep vermilion shroud' follows *Britannica's* model: 'a fiery red colour ... accompanied by a very gross atmosphere', with a year of 667 and three-quarter days. Drawing on the long days and nights associated with Mars, the 'pilgrims' find 'Mighty warriors' living amidst 'drums and trumpets' until they begin the millenia-long process, 'in darkness', of learning peace. Mary and Cela watch as warrior spirits prefigure 'deids of weir': 'So linked are souls by one eternal chain' (Part III, l.263), destinies 'rolling like a vast machine'. This allegorises contemporary notions of heavenly order expressed, for example, in Lagrange's *Mécanique Céleste* (1799–1822).

Astronomy, in Hogg's lifetime, had moral undercurrents. Possibly this is reflected in the repeated comparisons of Mary and Cela to comets (used interchangeably with meteors), like the 'heavenly meteors' of transcended lovers' souls in *Paradise VIII*. Significantly, *Britannica* comments on comets:

some are of the opinion that they [comets] are so many hells for tormenting the damned with perpetual vicissitudes of heat and cold. But when we consider, on the other hand, the infinite power and goodness of the Deity ... it seems highly probable, that such numerous and large masses of durable matter as comets are, however unlike they be to our earth, are not destitute of beings capable of contemplating with wonder, and acknowledging with gratitude, the wisdom, symmetry and beauty of the creation; which is more plainly to be observed in their extensive tour through the heavens.

While Revelations 21.10 provides the impetus for Mary's observations in 'holy ecstasy' on solar mountains, a tolerant Christianity mingles with notions of Purgatory, progress and biological determinism here. Forms pass through increasingly pure worlds until 'after a thousand years they/ Stepped on the confines of that land of life' (Part II, ll.198–

200). While Cela and Mary stay in outer heaven, the centre hosts saints 'of all creeds, / Features, and hues!' (Part II, ll.224-25). Soon, despite religious teachings, Mary realises the 'Almighty's love' could not be limited to 'single sect'. This harmonious vision is tempered as an 'wandering globe' passes, a 'meteor world' severed from 'the golden cord ... That hung it to the heaven' (Part II, ll.430-31); the association of comets with sin is pertinent. Cela predicts a similar end for the earth.

Knowledge of 'natural magic' is hard won. Significantly, Mary's return to her body is problematic. Her pilgrimage has universal relevance, teaching appreciation of God in nature and within a mechanistic universe. The numinous is appreciated in the mundane: flowers, birds, 'wandering spirits' integrated as part of a Newtonian world-view. Cela, the celestial teacher, has an earthly equivalent: Mary's future husband and the ideal Norwegian shepherd-poet Hugo (purposefully similar to Hogg). Hogg's innovative blend of science and tradition provoked mixed reactions among contemporaries. The *Augustan Review* (1815) recognised the wealth of allusions, and 'sublime' blank verse. The *Scots Magazine* (1814) found *Pilgrims* 'bolder' than previous works but preferred Hogg on 'the mythology of his own country'. Hogg asserted, 'I never met with any person, who really had read it, that did not like the piece'.<sup>11</sup>

Science provided Hogg with a point of contact between factual experiences and the fantastic. He relished juxtaposing rational and supernatural elements to various effects from the comedy of *The Three Perils of Man* and 'The Bogle of the Brae', to the terrifying moments of the *Confessions*. Then there is the cerebral journey, anchored in science, of *Pilgrims of the Sun*. Looking at 'Hogg and Science' opens up a new field of topical studies which I fully intend to explore. There is the interest in ballooning of 'Dr David Dale's Account of a Grand Aerial Voyage'; hypnosis in 'The Marvellous Doctor'; mesmeric theories in *The Three Perils of Woman*; the polar 'Surpassing Adventures of Allan Gordon' who wishes he had been 'a man of science'.<sup>12</sup> From the late 1820s onwards Hogg was captivated, too, by electricity. Hogg's enthusiasm for the Magic Lantern, artificial and natural, provided him with a rich and provocative source of dramatic images and ideas.

## NOTES

- 1 When this paper was delivered at the James Hogg Society Conference at Aikwood in August 1995, an illustrative extract was shown from "Thank you, Mr. Robertson" ... from *Magic Lanterns to the Movies*, a videocassette directed by Pierre Levie (Brussels, 1986, 003.44-005). This shows a reconstructed magic lantern show, of about 1800, by Etienne Gaspard Robertson.

- David Brewster, *Letters on Natural Magic, Addressed to Sir Walter Scott, Bart.* (London, 1834), pp.80-82.
- See *Encyclopaedia Britannica*, fourth edition (Edinburgh, 1810). James Hogg, *The Three Perils of Man: War, Women, and Witchcraft*, edited by Douglas Gifford (Edinburgh, 1989), pp.178-79. Herman Hecht, *Pre-Cinema History. An Encyclopaedia and Annotated Bibliography of the Moving Image before 1895* (London, 1993), p.138. I am grateful to Alison Morrison Low, of the National Museum of Scotland, for drawing my attention to Hecht.
- The Three Perils of Man*, p.182. Hecht, pp.127, 137.
- Britannica* (1810), 'Dioptics' XIII. *Edinburgh Evening Courant*, page 1, column 1: references to this newspaper are hereafter given in parentheses within the text.
- 'The Spy's Account of Himself', *The Spy*, 1 September 1810, pp.1-8 (p.4). I am grateful to Gillian Hughes for drawing my attention to Hogg's mention of Belzoni. 'The Marvellous Doctor', *Blackwood's Edinburgh Magazine*, 22 (September 1827), 349-61.
- Hecht, p.127. *Gentleman's Magazine*, 89 part I (April 1819), p.349.
- James Hogg, 'The Bogle o' the Brae. A Queer Courting Story', *The Club Book, Being Original Tales, &c. by Various Authors*, [edited by Andrew Pickers], 3 vols (London, 1831), III, 231-64 (pp.237-38). References hereafter are given within the text in parentheses.
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