

CLOSE-UP ON A DRAWING BY GEORGES MÉLIÈS FOR *THE MAN WITH THE RUBBER HEAD*

FROM THE DRAWING TO THE FILM

A short history of the drawing

Presentation of the drawing:

The drawing done by Georges Méliès for the preparation of *The Man with the Rubber Head* dates from 1901, the year of the shooting of this 'trick film'. Jacques Malthête¹, Méliès' great-grandson, describes it as follows: 'Chemistry laboratory, at the centre of which is an enormous bearded head on a table, connected, on the right, to a bellows activated by a bearded man.'²

This set draft with characters is drawn in ink and coloured pencil, the pencils forging an undeniable sympathy between the drawing and the viewer.

The technique used confirms that this is not a drawing that Méliès might have executed in the 1930s at the request of Henri Langlois, co-founder of the Cinémathèque française. In fact, for that 'commission', Méliès used only ink and signed in capital letters.

This preparatory document was done on the back of a sheet of headed notepaper from Méliès' *Manufacture de films pour cinématographes*. As often, he used all types of media to execute his numerous drawings with a nimble hand.

The black star, symbol of his brand, appears above Méliès' head when the drawing is held up to the light. On the side, one also notices a 'Star Film' in relief, the paper marked by the dry stamp.

The restoration of the drawing

The drawing, initially glued to a larger-sized piece of cardboard, was restored in 2002. Steamed off the cardboard, it was lined with Japanese vellum. The document has returned to its original format: 19.7 x 26.8 cm. Traces of glue remain on the right edge of the drawing. After dusting and flattening the paper, it was agreed with the restorer to fill in the gap located in the lower left and upper right with Japanese vellum.

For Méliès, as with most art directors, the drawings were above all tools that could be handled roughly or even disappear after the filming.

¹ Jacques Malthête is a researcher at the CNRS (National Scientific Research Centre) and author of numerous contributions on the beginnings of cinema and on Georges Méliès.

² In the online catalogue of the Cinémathèque française collections, *Ciné-ressources*.

This is the sole known preparatory drawing for the film *The Man with the Rubber Head*.

The set

A precise draft

This very precise set draft is reproduced almost identically in the film: both the framing, which also adopts the overall view opening onto a laboratory, and the slightest details that make it up, a few exceptions aside attesting that it is indeed a preparatory drawing.

The drawing focuses on the heart of the action in *The Man with the Rubber Head*; elements intervening at the beginning or end of this short film like a second stool, put away near the door by a pseudo-scientist at the beginning of the film, do not appear.

In the final analysis, the film's set, built in the studio, deviates very little from its graphic preparation. The arrangement of the furniture and accessories, already planned, is shown almost down to the last detail. In the end, a slight difference in configuration is due to a variant of the room's proportions: the space round the door in the rear is wider on the right than on the left in the drawing and inversely in the film. In fact, the laboratory entrance is on the other side in the film. But, in both cases, the door at the rear is located exactly in the centre of the frame.

The perspective also differs slightly: the table being located further forward in the drawing, the gigantic head appears at the edge of the floor whereas in the film, it is placed higher, at the centre of the door. The difference is explained by the choice of a lower table in the drawing than the one that would be used in the filming and probably, above all, on account of the complex realisation of the special effect.

Amongst the variants observed between the film and the drawing: the position of the stool on which the mad scientist sits in the film to blow up his head is inverted in relation to the drawing.

Finally, Méliès did not draw the 'Star Film' carton, placed on an upside-down still in the film's décor. This trademark of his Manufacture de Films pour Cinématographes, fixed on the film, is meant to protect it from plagiarism. His logo, displaying the symbol of the star at a time when one was not yet speaking of film 'stars', would be changed more than fifteen times between 1896 and 1911. *The Man with the Rubber Head* is the first film whose title-card features 'Star Film – Paris' in white on a black background, framing the white five-pointed star.

The laboratory

This set designed by Méliès for his film is the den of science, workshop of all types of experimentations. A 'Laboratory' sign above the door straightaway sets the scientific context that makes possible the incredible trick of the cut-off head, inflated and deflated as wished.

The door at the rear, the site of the trick, already open and here coloured in blue, forms a setting round the gigantic head. Its semi-circular arch, the arrangement of the bricks and the windows of the top are precisely drawn. Typical of the architecture of the period and recurrent in Méliès' special-effects films, it is the exact replica of that in the film.

The unusual inflating system -- a wooden support connected by a tube to a bellows sitting imposingly on the table -- occupies a central position in the foreground.

The scientific accessories are concentrated in the background: a number of phials in display cabinets, diverse instruments hanging on the walls, tub and basin, a shelf of varied containers, boxes and other manuals that are doubtless eminently scholarly. A cliché accessory of the chemistry laboratory, the still is filled for a distillation underway or spilt and also attests to the place's activity.

These tools, of indeterminate speciality and sometimes improbable, are piled up in fanciful bric-a-brac. The background, uniting these emblematic objects of science, suggests an artificial-looking backdrop borrowed from the theatre. This background of a cheap reality where the absurd reigns gives the place its zany tone.

Does the framework imagined for *The Man with the Rubber Head* again take up the cinematographer's earliest, more seriously scientific objectives? Here, its respectable initial functions are ridiculed by the monstrous experiment that veers towards farce.

On several occasions, Méliès humorously exploited these places of medical or occult sciences.

The surgery in *Une indigestion or Chirurgie fin de siècle* ('Up-To-Date Surgery', 1902), with its shelving loaded with containers, is similar to the setting of *The Man with the Rubber Head* with its door that one imagines leading to another experimentation room, its auscultation table and rudimentary medical instruments.

The laboratory of *L'Hydrothérapie fantastique* ('The Doctor's Secret', 1909) also has a door similar to the one in *The Man with the Rubber Head*. Shelves filled with stills and doomsday machines with elaborate mechanisms complete this unlikely scientific décor.

In *Hallucinations pharmaceutiques* ('Pharmaceutical Hallucinations', 1908), the dispensary overflowing with jars of various drugs and stills is of the same style.

Stills are also to be found in Méliès' witches' or alchemists' dens, like the gigantic one in *La Cornue infernale* or *L'Alchimiste Parafaragaramus* ('The Mysterious Retort', 1906).

A stage illusion

The frontal stage arrangement, the set looking like a backdrop, forms a symmetrical composition centring on the curious gigantic head on the table, and the planks on the floor depicted in the drawing (but not visible in the film), give this project a theatrical look.

Presented like a stage, the space is arranged so that the spectator is a favoured, front-row witness at the experience. The theatrical proximity makes his adherence even more effective. This theatrical aspect brings a near-documentary realism that contrasts with the fantastic whilst making it credible.

The arrangement of the furniture contributes to making the project look like a magic trick, inherited from conjuring shows staged by Méliès at the Théâtre Robert-Houdin. An accessory of the illusionist, the table on which the head sits, is located at the centre of the scene, like a pedestal for the highlight of the show. It is surmounted by the inflation apparatus, which also serves as a display. In a more rustic style than in the film, it also refers to fun-fair attractions, well known by Méliès, who sold his productions to fairground people. This recurrent element in the stage design of his trick films, built on the model of the conjuring trick, is found again in *Un homme de têtes* ('The Four Troublesome Heads', 1898), *Le Menuet lilliputien* ('The Lilliputian Minuet', 1909) and *Le Roi des médiums* (1909).

The bellows, connected to the inflation apparatus, is the indispensable accessory that provokes the special effect; replacing the magic wand, it concentrates the fantastic power. A larger-sized bellows would be used in the film.

The characters

From the drawing to the film

Although the composition of the project is faithfully reproduced in the film, the characters present a few nuances, such as the joyful attitude of the head, opposed to the much more recalcitrant one in the film. The representation of the protagonists in the drawing nonetheless clearly expresses the film's fantastic, comical spirit.

The third character of *The Man with the Rubber Head*, the assistant responsible for the final explosion, does not appear in the drawing. All the same, his absence, doubtless due to the given moment, raises a question: had Méliès decided on the punch line of his film at this stage? He already imagined himself in the dual leading role of the rubber head and the mad scientist, which was complex to film.

Although discreet on the stage of the Théâtre Robert-Houdin, Méliès played in most of his films, either as in real life or made up. In some, such as *L'Homme-orchestre* ('The One-Man Band', 1900) and *Le Mélomane* ('The Melomaniac', 1903), he appears with increased faces and bodies.

The mad scientist

Apothecary or chemist depending on the synopses by Méliès himself, the sole human character in the drawing embodies a pseudo-scientist hard at work as attests the white apron constituting his uniform.

The bearded scientist in the drawing activates a bellows, kneeling at the foot of his creature. In the film, he sits on a stool after comically bustling about the room, placing his stool at the centre and decanting one bottle into another before putting everything away to install his inflatable head.

The comic theme of the more or less mad scientist whose distraction provokes diverse catastrophes, was one of which Méliès was particularly fond, both on stage

and in his films. Inventors, astronomers, apothecaries or doctors inherited from Molière run through his filmography. These fairground pseudo-scientists are often assisted by a character fully as catastrophic, such as the distracted, explosive assistant in *The Man with the Rubber Head*. We again find the scientist in *Le Chimiste repopulateur* ('A Maiden's Paradise', 1901), *Voyage dans la Lune* ('A Trip to the Moon', 1902), *L'Éclipse de soleil en pleine lune* ('The Eclipse', 1907) and *L'Hydrothérapie fantastique* ('The Doctor's Secret', 1909).

Science is often the pretext for mistreating bodies, and the head, the noble part, does not escape. In *Une indigestion ou Chirurgie fin de siècle* ('Up-To-Date Surgery', 1902), an improbable surgeon gets ready to saw off the head of a supine patient whilst an assistant holds the legs, which have already been cut up. This type of absurd operation was already to be found on the stage of the Théâtre Robert-Houdin: in *Le Charlatan fin de siècle* (1892), members of the medical profession prepare to open the skull of a seated man.

The Man with the Rubber Head lies within a scientific context where the body is also subjected to the worst experiments. His scientist, descended from the charlatans working in fairs, is already present in Méliès' *Chicot, dentiste américain* (1896-97) and *Le Chirurgien américain* (1897). His acting, always demonstrative, also refers to the carnival barker. A chatty character, he communicates with the double of his head, with his assistant and, quite a bit, with the audience. Primarily acting head-on in the film, looking directly at the spectator, he emphasises every action with mimic and speech. This expressive pantomime is recurrent in Méliès' films, made without insert titles.

The exuberance of the acting, the frontal position and addressing the spectator, inherited from the stage, also evoke the conjurer. For the smooth-talking scientist in *The Man with the Rubber Head* also borrows from the illusionist whom he imitates as he lays out his equipment before the spectator to prove that nothing is faked. This mad scientist presents his experiment like a magician performing his act for the spectator, with whom he establishes a contact, looking him straight in the eye before starting the trick. His stylised body movements are typical of the conjurer. With a gesture, he accentuates that the head he has just suddenly made to appear from a box is indeed the double of his own.

Méliès again interprets the illusionist, one of his favourite roles, in *Un homme de têtes* ('The Four Troublesome Heads', 1898), *Bouquet d'illusions* ('The Triple-Headed Lady', 1901), *Une bonne farce avec ma tête* (or *Un prêté pour un rendu*, 'Tit for Tat', 1904) and *Les Cartes vivantes* ('The Living Playing Cards', 1905).

The gigantic head

The challenge of the show, the enormous head connected to the bellows operated by its double, stands imposingly at the centre of the laboratory. Very much alive, this gigantic head appears like a close-up of the mad scientist's. The jovial, pink-cheeked head, smiling broadly and casting an amused glance at its creator, is far from the sad fate of the one in the film. Its joyous expression gives the drawing an air of

misleading advertising for a carnival attraction whilst announcing the comic dimension of the film.

In the film, the cut-off head, helpless on the table, ostensibly displays its displeasure, outraged at being exhibited like a sideshow freak. The inflating provokes eye-rolling, desperate cries, grimaces and mimics. This demonstrative reaction of the rubber head contributes to the comical aspect of this absurd experiment.

The scientific context

The strange experimentation falls humorously within the continuation of research carried out in the 19th century by surgeons and physiologists on the possible autonomous life of a head separated from its body. In the first half of the 1880s, shortly before Méliès took possession of the Théâtre Robert-Houdin, a series of *post mortem* experiments was carried out on criminals executed by decapitation. The work of Charles-Édouard Brown-Séquard³ and Jean-Baptiste Vincent Laborde⁴ was the subject of reports describing pupil reflexes, contractions of the tongue and other colorations after blood transfusion. In this scientific context, which nourished Méliès' theatrical and film work, the executioner of the Republic, Deibler, intrigued by the illusion, attended several performances of *Le Décapité récalcitrant* (1891).

The film's trick

The effect of the trick

The Man with the Rubber Head (1901) verifies the principle that structures Georges Méliès' trick films. This film in a single tableau, presented in his catalogue as a 'great novelty', relies on a 'great principal effect'. This effect is provoked by the curious scientist, interpreted by Méliès, who succeeds in inflating and deflating the double of his own head, cut off but very much alive, up to the explosion, which constitutes the 'climax'.

The preparatory drawing shows the imagined effect but mentions no detail of the special effects techniques that Méliès was, moreover, always reticent to reveal, remaining mysterious like any good magician.

Technique of the trick

Méliès' film relies on a double trick, cinematographic (a simple double-exposure against a black background) and mechanical (a dolly mounted on tracks). In 1901, this special effects pioneer experimented widely and brilliantly with multiple exposure, but here he pulled off the feat of enlargement. This technical innovation made the

³ Doctor of medicine, physiologist and neurologist (1817-1894).

⁴ Doctor and physiologist (1831-1903).

shooting complex, necessitating considerable preparation then a final stage of cutting and splicing, down to the individual frame.

The final explosion was more simply obtained by a pyrotechnical effect that Méliès was already exploiting on the stage of the Théâtre Robert-Houdin since 1888.

The simple principle of multiple exposure is based on two shots filmed separately but printed on the same film. The film exposed during the first shot is rewound before filming the second, each having been precisely choreographed beforehand.

The black background (or black *réserve*) is a set-up inherited from the stage.

A black background does not expose the film and thereby allows for reserving a sensitive surface area that can in turn be exposed.

This chemical property was going to facilitate the assembly of the two shots, the one of the setting in which a black background was planned, the other of the head, filmed against a black background. In his film *Le Grand Méliès* (1952), Georges Franju supposes that the scene of the head, the most complex, was shot first. He reconstitutes the shooting of the film as follows:

The setting in which the mad scientist bustles about is filmed in a general shot.

At the centre of the frame, the front door, draped with a hanging of black velvet, turns out to be an ideal marker for linking up the two multiple exposures and giving the illusion of a spatial and temporal continuity. As on stage, Méliès plays on the proximity of the trick to make it even more credible.

The same central door covers a black reserve, under the spectator's very nose, in *Le Diable géant* ('The Devil and the Statue', 1901), *Le Menuet lilliputien* ('The Lilliputian Minuet', 1904) and *La Cornue infernale* or *L'Alchimiste Parafaragaramus* ('The Mysterious Retort', 1906).

The head inflated and deflated was shot against the black background. The rubber effect is obtained by using a dolly mounted on tracks, made by Méliès himself. A sort of reverse travelling, it involves advancing not the camera towards the rear of the set but the character on the dolly; as for the camera, it remains totally immobile. Thus, a magnifying effect is produced when the dolly advances towards the lens or, inversely, a shrinking effect by pulling back. Dressed in black, so that only his head is visible, Méliès is placed in a cabin also covered with a black cloth and secured to the dolly. In order that his head remain at the same level (in the end, after the double exposure, it must be placed on the table) and that the advancing or retreating movement go unnoticed, the dolly is set on a slope (rising towards the camera) whose incline was precisely calculated.

As the dolly progresses, the focussing of the lens is modified so that the image remains sharp, and for that, marks are drawn on the ground. Finding the presence of nearly a dozen cuts during the double exposure, Jacques Malthête supposes that the focusing was done in successive stops.

The absence of reference points due to the black background contributes to masking the dolly's movement. The only thing remaining is the illusion of magnifying or shrinking. The head seems always to sit imposingly on the table.

Once these two shots were filmed, Méliès again carried out a few cuts and splices on the double-exposed film so that the effect integrates perfectly into the main scene

with the greatest fluidity. This final touch, characteristic of Méliès' special effects, ensures the illusion of one single action played in the same time and same space.

A unique trick

Although Méliès widely exploited the theme of the cut-off head, doubling and change of scale, the trick in *The Man with the Rubber Head* remains unique in his oeuvre.

He plays with his own head, duplicated or detachable, in the same offhand way in *Un homme de têtes* ('The Four Troublesome Heads', 1898), *Évocation spirite* ('Summoning the Spirits', 1899) and *Le Mélomane* ('The Melomaniac', 1903). By their subject, other trick pictures also evoke *The Man with the Rubber Head*: *L'illusionniste double et la Tête vivante* ('The Triple Conjuror and the Living Head', 1900) and *Une bonne farce avec ma tête* (*Un prêté pour un rendu*, 'Tit for Tat', 1904), in which an illusionist, portrayed by Méliès, also mistreats a double of his head. Often recalcitrant, sometimes mischievous but always very much alive, these unusual talkative heads are inevitably comical, like the one in *The Man with the Rubber Head*, whose clear annoyance makes the special effect all the more comical.

Change of scale is also recurrent in Méliès but is carried out in several sudden steps, without the continuity of the magnifying or shrinking movement obtained in *The Man with the Rubber Head*. Thus the key in *Barbe-Bleue* ('Bluebeard', 1901) grows larger in four phases. Similarly, the abrupt growth of the still in *La Cornue infernale* (*L'Alchimiste Parafaragaramus*, 'The Mysterious Retort', 1906) is due to a simple cut. The effect is also jerky in *Le Diable géant* ('The Devil and the Statue', 1901), *Nain et géant* ('Dwarf and Giant', 1901), *La Danseuse microscopique* ('Marvellous Egg Production', 1902) and *Le Menuet lilliputien* (1905), whose special effects rely on a series of double-exposures against a black background.

Méliès experimented with close-ups in *L'Île de Calypso* ('Ulysses and the Giant Polyphemus', 1905) and advancing effects in *Voyage dans la Lune* ('A Trip to the Moon', 1902). The small aquarium in *La Sirène* ('The Mermaid', 1904), which grows until it fills the whole screen, also recalls James Williamson's *The Big Swallow* (1901). In that short film, based on an advancing movement, a man refusing to be filmed moves closer and closer to the camera, his face getting larger until his mouth occupies the whole screen. Opening wide, he swallows the camera and its operator, then moves back, chewing.

The ingenious but complex stroke of inspiration in *The Man with the Rubber Head* would not be used again by Méliès, or even by his contemporaries. A head grows larger in Albert Capellani's *Le Pied de mouton* ('The Talisman', 1907), with special effects by Segundo de Chomón, but the trick, a fake head moved towards the lens, is less elaborate than the one in *The Man with the Rubber Head*, which is 'one of the rare tricks thought up by me that could never be copied,' Méliès asserted⁵.

⁵ To Georges-Michel Coissac in his *Histoire du Cinématographe*, Editions du Cinéopse, Librairie Gauthier-Villars et Cie, Paris, 1925.

His trick is akin to a film extravaganza⁶ of 1896, *La Biche au bois*⁷, in which an actor's nose grows until it explodes. That optical effect, obtained by a double lantern projection on a black background, is close to the double-exposure of *The Man with the Rubber Head*.

The phantasmagorical origins of the trick

The macabre themes of 18th-century phantasmagorias inspired Méliès' universe (albeit without their horrific blackness) both on the stage and in the cinema, and he referred to them in *Illusions fantasmagoriques* ('The Famous Box Trick', 1898) and *La Lanterne magique* ('The Magic Lantern', 1903). Certain special effects processes used by Méliès stem from phantasmagorical techniques, such as the one in *The Man with the Rubber Head*.

Preceding phantasmagoria, *Art trompeur* ('Misleading Art'), born in the 17th century from physical science and optics, already prefigures Méliès' mad decapitations. In 1659, with a magic lantern, the Dutchman Christiaan Huygens projected the animated plates of a skeleton playing, in sinister fashion, at removing and putting back his own skull.

At the end of the 18th century, the impressive yet upsetting apparitions of spectres created by *phantasmagores* played on the occult register and caused quite a stir in Europe.

Philidor, a mysterious physicist, was at the origin of the authentic phantasmagorical technique, obtained using a lantern equipped with a new type of lens, hidden behind a screen and mounted on tracks. By pulling the lantern back, the projected image grows and inversely, by advancing, the image is reduced. This system revolutionised the projection of images under way at the time. In 1793, a phantasmagoria show of Philidor's featured a form growing until it turns into a phantom that comes forward threateningly towards a terrified audience before suddenly disappearing in the shadows. Even though the special effect here relies on the advancing movement and the lantern moving on the dolly (the opposite of Méliès' film where the camera remains immobile), the special effects set-up on tracks nonetheless recalls that of *The Man with the Rubber Head*.

Some of Méliès' films, and in particular *The Man with the Rubber Head*, are particularly close to the spectacles of another *phantasmagore*, Étienne-Gaspard Robert, called Robertson. This Belgian aeronaut-physicist organised his first performances in 1798, before opening a phantasmagoria theatre in 1799. His Fantoscope or Phantoscope, patented in March of that year, projected fixed or animated images on a transparent screen. Mounted on a dolly allowing for modulating its distance in relation to the screen, the device varied the dimension of the image.

Unlike his predecessors and a number of his successors, Robertson revealed the mechanical details of his illusions. In the first volume of his *Mémoires récréatifs*,

⁶ A theatre play that also included projection, of which Méliès was a fervent spectator.

⁷ Based on an extravaganza by the Cogniard brothers in 1845, directed by Edmond Fleury, at the Théâtre du Châtelet in Paris.

scientifiques et anecdotiques, published in 1831, he describes a special effect similar to the one in Méliès' film: Lit by a silver reflector, an artificial head, set backwards on a dolly, is reflected in a concave mirror which inverts the image. The head advancing on the dolly seems ready to leap at the spectators, who see only the mirror. Beyond the analogy with the head, the set-up, which also relies on a dolly, an inclined plane and a black sheet, is akin to the one in *The Man with the Rubber Head*. Robertson sometimes used two lanterns, one for the setting, the other for a character, prefiguring the double-exposure process of which Méliès was fond.

The film

Georges Méliès himself summarises his film as follows: 'A chemist in his laboratory places his own head, very much alive, on a table. Then, attaching a length of rubber tubing and a bellows to this head, he begins blowing into it with all his might. Straightaway, the head increases in volume and, grimacing the whole time, ends up taking on colossal proportions. The chemist, afraid of making it burst, opens a tap placed on the hose; straightaway the head deflates and returns to its natural size. He then calls in his assistant and informs him of his discovery. The assistant, wishing to see it for himself, takes the bellows and begins to blow into the head with all his might. Reaching a gigantic size, the head explodes with a crash, knocking the two operators over. The furious chemist grabs his assistant and heaves him out the window.'⁸

ON THE WORK

Méliès the magician

Before being a pioneer in trick films, Méliès was a great magician and director of the Théâtre Robert-Houdin from 1888 to 1920. His film successes doubtless eclipsed a fine career as a illusionist, pursued in parallel.

Discovery of magic

Méliès discovered conjuring in 1884. A trainee at a London department store, he frequented Egyptian Hall, run by John Nevil Maskelyne, a reputed illusionist. Fascinated in particular by the tricks of magician David Devant, Méliès became involved in conjuring as an amateur when he was 22 years old. Beginning in 1886, under the name of Mélius, he performed conjuring acts at the *Cabinet fantastique* of the Musée Grévin and appeared at the Galerie Vivienne in Paris.

A great fan of the shows of the illustrious conjurer Jean Eugène Robert-Houdin (1805-1871), which he attended for the first time at the age of 10, Georges Méliès sold his share in the paternal company to his brothers to buy out, in 1888, the

⁸ Georges Méliès' explanatory text from the French catalogue of Star Film, 1902, p. 13

operating rights of Robert-Houdin's Paris theatre⁹. He became director of the Théâtre Robert-Houdin on 1st July, inheriting Robert-Houdin's magic apparatuses and automatons that established the reputation of his shows. Méliès got the most out of the subtle backstage installations, taking the greatest care of them whilst increasing their effects.

As the magician's worthy successor, in December 1888 he initiated a new type of act with *Stroubaïka persane*. Méliès' first magic sketch already attested to a sense of spectacle that would mark his films. He was the author, and sometimes performer, of 33 scripted conjuring tricks, and his great exotic and fantastic illusions, with their ever-meticulous presentation, would imbue his film production. *Les Farces de la Lune* (or *Les Méaventures de Nostradamus*, 1891) already prefigures his most famous film: *Voyage dans la Lune* ('A Trip to the Moon', 1902).

The spectacles of cut-off heads

A number of Méliès' shows relied on decapitation. The head of Jehanne d'Alcy, his future wife and star of his films, had the lead role in *La Fée aux fleurs* (1889) and *La Source enchantée* (1892). In *L'Enchanteur Alcofrisbas* (1889) and its second version, the legendary *Décapité récalcitrant* (1891), the decapitated run after their own unruly heads. *Le Charlatan fin de siècle* (1892) also shows a head that is cut off but quite alive, after an explosion. Up until 1910, with the flying heads of *Les Fantômes du Nil*, Méliès exploited on stage the subject that also inspired a series of trick films. Inversely, for *Les Phénomènes du spiritisme*, a conjuring act of 1907 in which heads appeared in bubbles, Méliès reprised a trick from his film *Les Bulles de savon animées* (1906).

This theme in vogue triumphed on the stages of conjuring theatres. Certain tricks are listed by Albert A. Hopkins in *Magic: Stage Illusions and Scientific Diversions, Including Trick Photography* (1898). The illustrations are edifying, such as that of *Another Decapitation* in which a headless man, seated at a table before his own head, gets ready to eat. In France, the Musée Talrich's *Le Décapité vivant* and *Le Décapité parlant* also attest to the success of these tricks, most of them achieved through stage decoration consisting of mirrors, hangings and special-effects accessories.

These illusions are descended from the *Art trompeur* of the 17th century, then from the phantasmagorias of the 18th and other spectacles of animated plates (chronophotography) and magic lanterns (such as the projections of living spectres that would follow in the 19th), on which numerous magicians drew, including Robert-Houdin. But Méliès eschewed all macabre blackness in his sketches so as to also reach a public of children. Although he had numerous competitors, his *Soirées fantastiques* successfully distinguished him for his rampant imagination, an even more amazing ingenuity and all the poetry for which he is known.

⁹ Located at 8, Boulevard des Italiens.

Cinema at the Théâtre Robert-Houdin

Before going over to cinema, Méliès introduced the Kinetograph at the Théâtre Robert-Houdin.

The projections constituted a new attraction that illusionists, in France as in England, combined with their shows. As of 1896, Méliès' films supplied the Théâtre Robert-Houdin film programme. His film production became greater than his theatrical creations, and evenings were gradually given over to film showings up until the theatre's closing on the eve of the Great War. When the theatre reopened in 1915, magic shows took place on Thursday and Sunday, the other days being devoted to film projections.

On 13th July 1920, Méliès presented his last *Soirée fantastique* at the Théâtre Robert-Houdin, which would be demolished in 1923 to make way for Boulevard Haussmann.

L'Académie de prestidigitation

In 1891, Méliès founded the *Académie de prestidigitation* (Academy of Conjuring), which protected itinerant magicians and awarded prizes and diplomas, with members swearing an oath to never reveal their tricks.

Méliès himself always refused to reveal his illusionist's secrets to the uninitiated and in particular, in 1893, to let himself be chronophotographed in the middle of an act by Georges Demeny¹⁰. The Académie became the *Chambre Syndicale de la Prestidigitation* (Employers' Conjuring Federation) in 1904, and Méliès served as president until 1934.

Méliès the draughtsman

Georges Méliès was born with the 'demon of drawing', which he practiced in varied media as a leisure activity as much as for his professional activities. His drawings and paintings helped him in preparing his magic shows and films.

The practice of drawing

Beginning in childhood, Georges Méliès sketched and caricatured, amongst others, his friends. The quality of a portrait of his maths teacher, which the subject deemed quite successful, thus avoided his dismissal. In 1880, Méliès decided on a painting career and to enrol at the Beaux-Arts, but his father, an industrialist who manufactured luxury shoes, preferred seeing him continue in the family business like

¹⁰ Alfred Binet, assistant director of the physiology laboratory of the Sorbonne, solicited him for a study on 'the physiology of conjuring'. Arnould and Raynaly, conjurers at the Théâtre Robert-Houdin, accepted.

his two other sons. Between 1882 and 1887, Méliès joined the paternal factory without, for all that, ceasing to draw and paint.

Director of the Théâtre Robert-Houdin beginning in 1888, Méliès relied on his own diagrams and drawings in preparing his scripted illusions, as much for the execution of the tricks as for evoking the chosen universe.

From 1917 to 1923, although he had ceased his film activity, he proceeded in the same way for the performances at the Théâtre des Variétés Artistiques in Montreuil, outside of Paris.

From August 1889 to January 1890, Méliès was an illustrator for *La Griffé*, a satirical anti-Boulangier¹¹ weekly, founded and financed by his first cousin. In it he executed a multitude of caricatures under the name of 'Géo Smile'.

The preparation of the films

In 1896, shortly after venturing into cinematography, Méliès drew up plans for his first studio in Montreuil-sous-Bois then for a second in 1907.

He continued resorting to drawing for the ever-meticulous preparation necessitated by his films, preferring graphic studies to written notes. Faithful to the films, his drafts of special effects, costumes, accessories and sets bear witness to the fact that Méliès controlled every aspect in advance. The sets were the object of various studies, from ink sketches to highly finished drawings. Some very detailed models stem from the production illustration.

Sometimes Méliès did the preparatory drawings in colour for films that he planned on having coloured, thereby indicating the desired hues. In the case of *The Man with the Rubber Head*, only a black and white version of the film exists. Very carefully executed, this drawing presents the special effect in its context. The precise setting, with accessories already present, proves that, even before shooting, Méliès had the film in mind down to its slightest details.

The special effects also benefit from a more or less in-depth graphic preparation. In a preliminary drawing for *Nain et géant* ('Dwarf and Giant', 1901), Méliès concentrated on the special effect in a décor barely sketched out, which nonetheless gave prominence to the disproportion of the characters.

He sometimes based himself on a pre-drawn cut-out for films in a single scene in order to study the different stages of the effect. To prepare *Le Mélomane* ('The Melomaniac', 1903), he executed a series of sketches showing the main phases of the trick, obtained by seven double-exposures. His sketches are already a veritable storyboard.

¹¹ A French general born in 1837, Georges Boulanger was at the origin of the Boulangist, movement that emerged in 1886 and threatened to overthrow the Third Republic. Nicknamed General Revenge owing to his hostility towards Germany, Boulanger knew partisans of diverse opinions (nationalists, republican revisionists, Bonapartists, monarchists...). Supported by Clemenceau, he was Minister of War from 1886 to 1887. In 1889, accused of plotting against the State, Boulanger fled to Belgium before committing suicide in 1891.

Drawings and trick films

Drawing inspired a few of Méliès' trick films. We see him at work in *Le Roi du maquillage* ('Untamable Whiskers', 1904), sketching caricatures in chalk on a blackboard before taking on the appearance of the drawing.

In 1933, filmed by Jacques Brunius and Jean Aurenche, Méliès again offered a few drafts in chalk on a blackboard to the camera, on the occasion of a substitution game. This short sequence is reprised in *Violons d'Ingres* (1939).

Drawings again come alive in *Le Chevalier mystère* ('The Mysterious Knight', 1899), *Le Livre magique* ('The Magic Book', 1900) and *Les Cartes vivantes* ('The Living Playing Cards', 1904).

The drawings of Montparnasse and Orly

Having had to stop producing films and shows, in 1925 Méliès joined the sweets and toy shop of the Montparnasse railway station run by his second wife, actress Jehanne d'Alcy. Méliès would portray himself chained behind the counter of his uncomfortable shop where he remained until retiring in 1932.

In the early 1930s, solicited by various personalities endeavouring to clear his name, he executed a series of illustrations for the historian Maurice Noverre. These ink drawings, reinterpreting some of his films, often bear captions and were done on paper salvaged from the sweets boxes of his shop.

During that period, he also filled notebooks with numerous realistic renderings of Breton and Norman landscapes, done during holidays.

Méliès continued drawing and painting during his retirement at the château d'Orly, the property of the Mutuelle du Cinéma, which he joined in September 1932. There, up until January 1938, shortly before his death, he executed portraits and landscapes in pencil, gouache and watercolour.

In the spring of 1937, for his brand-new Cinémathèque française, Henri Langlois invited him to do some sixty drawings based on his films. Méliès thus took inspiration from them, for which he had already sometimes produced drawings. Contrary to some preliminary studies in colour, the drawings redone in Orly were all executed in India ink and often provide a different point of view. Méliès thus reprises the end of *The Man with the Rubber Head* in a sort of freeze-frame on the explosion of the head.

Méliès the art director

Jack-of-all-trades, Méliès practiced theatrical set design for his conjuring shows before turning to cinema. Already fascinated by the décors of Egyptian Hall, the magic theatre he frequented during a stay in London, Méliès fully participated in the creation of varied stage universes for the Théâtre Robert-Houdin, beginning in 1888.

The staging of illusions obviously depends on the setting. This experience would serve his films, with its ever more spectacular and ingenious sets, like those of *Voyage dans la Lune* ('A Trip to the Moon', 1902).

Theatre set

After having restored the auditorium and backstage area of the Théâtre Robert-Houdin in 1888, Méliès became interested in set design. A complete artist, we owe him painted backdrops in his scripted illusions, with plans aside and borders.

Theatre programmes credit him as, amongst other things, the author of the sets that, at the time, relied on pictorial perspective and hid scientific machinery. Optical and mechanical illusions (black backgrounds, trap doors, pulleys, cables, dolly, tracks or jointed sets) held no secrets for Méliès.

From 1917 to 1923, Méliès continued his activity as art director at the Théâtre des Variétés Artistiques in Montreuil, which he set up by transforming his Studio B, no longer able to produce films. Thus, with his son André, he was responsible for numerous sets designed for the operettas, dramas and comedies performed at this neighbourhood theatre. Their extraordinary, inventive sets charmed the spectators.

In 1924, called upon for the restoration of a large theatre in Sarrebruck, Méliès rebuilt the sets and restored the machinery. Finally, studies dating from the late 1920s to the early 1930s show that Méliès was still working on set projects, doubtless for theatre tours reviving his repertoire.

Film sets

When he embarked on his cinematic career in 1896, and after a few films shot on location, Méliès designed sets for his first fantastic fictions. He initially drew the models then painted and built them himself outdoors so that productions remained affordable. Certain set elements were sometimes used again in different films.

Although he often exploited the same special-effects techniques, Méliès constantly created new universes to refresh his style. His imagination gave rise to prestigious decoration and remarkable aesthetics, as much for his extravaganzas and trick films as for his epic plays. Much more detailed than for the theatre, his film sets were the object of meticulous graphic preparations, such as the drawn project for *The Man with the Rubber Head*. Up until the arrival of panchromatic film¹², studio sets (in wood and canvas) were painted in different shades of grey for reasons of the rendering of colours linked to the use of orthochromatic film.

¹² Appearing in 1923, panchromatic film began to come into general use as of 1924 and imposed itself as of 1925. This black and white film with a rapid emulsion was sensitive to the whole chromatic range and allowed for reproducing all the shades of grey, unlike orthochromatic films, whose rendering of colours was inexact.

The earliest film sets were still akin to theatre sets. Often consisting of a main backdrop, they took up settings in trompe-l'œil, connected to real objects or painted backgrounds used on stage. As in the theatre, film sets were painted with paste and built on the same stretchers as for the stage until they began to be mass-produced in 1903.

Méliès' first studio in Montreuil, Studio A, used in the early months of 1897, was named the *Théâtre de Prises de Vues* (Theatre of Film Shots). Designed with the same proportions as the auditorium of the Théâtre Robert-Houdin, it relied on machinery inherited from the Théâtre and its backstage. Starting in 1902, Méliès hired theatrical art directors, all the while continuing to participate in the conception of his sets.

In 1907, he built a second studio in Montreuil. Studio B had better decoration equipment, with panoramic unrolling sets, false streets, miniature models and storage space for sets.

The conception of the set, the final step before shooting after selecting the trick and costumes, was no less important in Méliès' eye.

Always framed in a distant shot, front-on, by a fixed camera, the set occupies a central place. His short one-scene films, like *The Man with the Rubber Head*, consist of a single *plan-decor* or set-shot, which can be considered Méliès' film unit. His second film with multiple scenes, *Jeanne d'Arc* ('Joan of Arc', 1900), is made up of the same number of set-shots as of scenes. Moreover, his set models are numbered like so many paintings, even though the set-shot can, in the final analysis, be cut into several scenes in his catalogue.

Méliès' trick films

Méliès' speciality

In more than five hundred films shot between 1896 and 1913, Georges Méliès explored various genres: extravaganza, realistic drama, science-fiction, historical spectacle, reconstructed current events, burlesque and advertising. The magician of Montreuil even tried his hand at documentaries. It is to him that we owe the first feature-length films with multiple scenes linked by fade-outs, like *Cendrillon* ('Cinderella', 1899) or *Jeanne d'Arc* ('Joan of Arc', 1900). But out of his varied film production, it is above all the short trick films, which quickly became his speciality, that remain in the mind.

These films are often structures centred on a single type of special effect: 'For each film, my primary concern was to find original tricks, a great principal effect and a final apotheosis. I didn't bother about the script until lastly¹³. The special effect, often motivated by some supernatural power, is frequently provoked by magicians, mad scientists, enchanters or even the devil. In his 'fantastic views', as Méliès described

¹³ *Vues cinématographiques*, an essential text by Georges Méliès, published for the first time in 1907 by Plon (Paris).

those films, apparitions, disappearances, split personality, reduction, dismemberment, disproportions and transformations of all types are legion: fantasy inherited from the phantasmagorias and other magic lantern shows, but not lacking in humour.

Undertaken in the continuation of a career as an illusionist practiced over the previous ten years, Méliès' trick films also took inspiration from the stage of the Théâtre Robert-Houdin, which he was managing at the same time. They were frequently presented as magic shows and sometimes inspired by pre-existing numbers (*L'Armoire des frères Davenport* / 'Cabinet Trick of the Davenport Brothers', 1902). Méliès often portrayed illusionists in them (*Les Cartes vivantes*, 'The Living Playing Cards', 1905) and sometimes reused sets and costumes from his theatre.

Although film special effects replaced certain stage subterfuges, Méliès, like some of his other contemporaries, regularly resorted to mechanical and optical illusions. The combination of cinematography and theatrical machinery enabled him to increase the effects and always try something new.

Special effects: from the stage to the cinema

The thematic kinship with his conjuring shows and the borrowings from stage effects did not make Méliès any less of a filmmaker. His skill as a conjurer was different from the ingenuity that he demonstrated with his camera. Through his technical innovations and masterful use of special effects, he became a veritable sorcerer of the image. With the cinema, he attained crazier, more incredible tricks that would be impossible on stage.

In 1896, after having already shot 69 films, Méliès allegedly discovered special effects by substitution whilst filming a documentary. Following an accidental blockage of his camera, an omnibus suddenly turned into a hearse. He applied this effect by stopping the camera in *Escamotage d'une dame chez Robert-Houdin* ('The Vanishing Lady', 1896), thereby replacing the trap door used on stage.

Special-effects processes

Méliès continually experimented with new, increasingly complex special-effects processes. As of 1898, he was already trying his hand at most special effects, which he often combined, putting them at the centre of his films. A special-effects virtuoso, he manipulated camera and film to give life to a universe made up of cut-off heads and bodies that are flattened, re-inflated, reduced, minuscule or gigantic (*Le Voyage de Gulliver à Lilliput et chez les géants* / 'Gulliver's Travels', 1902), and varied metamorphoses.

Halting the camera allows for abrupt set or costume changes and instantaneous appearances and disappearances. This special effect, a matter of simply cutting the camera while the substitution is made, is at the origin of a good number of Méliès' decapitations.

The dissolve also provides appearances, disappearances and progressive transformations. It relies on a camera stop before the closing then the opening of the aperture and necessitates a double-exposure. Méliès used it for his drawings coming to life (*Les Cartes vivantes*, 'The Living Playing Cards', 1905).

Another prolonged special effect, the double-exposure brings about apparitions of phantoms, dismemberments or doublings. Two shots are exposed on the same film, rewind after the first shot, for a simple double-exposure. This technique, one of Méliès' favourites, is used in *The Man with the Rubber Head* (1901) and *Les Hallucinations du baron de Münchhausen* ('Baron Munchausen's Dream', 1911).

The principle can be pursued several times for a multiple-exposure. A character splits into three in *Un homme de têtes* ('The Four Troublesome Heads', 1898), into four in *L'Équilibre impossible* ('An Impossible Balancing Feat', 1902) and into six in *Le Chimiste repopulateur* (1901). Méliès would go as far as the sextuple-exposure with *L'Homme-orchestre* ('The One-Man Band', 1900) and *Le Mélomane* ('The Melomaniac', 1903).

The double-exposure is often realised against a black background to facilitate the assembly of two distinct shots and can give rise to changes in scale as in *The Man with the Rubber Head, Nain et géant* ('Dwarf and Giant', 1901) and *Le Menuet lilliputien* ('The Lilliputian Minuet', 1904).

These special effects carried out during the shooting are always reworked to perfect the continuity down to the frame. Free from traditional editing, Georges Méliès' short, single-scene films nonetheless contain cutting and splicing, indispensable for the trick to go unnoticed in the motion. Thus, *Le Mélomane* ('The Melomaniac', 1903) contains some thirty splices. Examination of the film shed light on Méliès' technique, on which, as a good illusionist, he did not elaborate.

Méliès and his contemporaries

Méliès versus Lumière?

Before getting involved in the fiction film, Méliès began with documentaries: *Une partie de cartes* ('Playing Cards', 1896, his first film), *L'Arroseur* and *Arrivée d'un train gare de Vincennes* ('Arrival of a Train at Vincennes', 1896), filmed in his garden, took inspiration from, respectively, Louis Lumière's *La Partie d'écarté* (early 1896), *Arroseur et arrosé* ('The Gardener', 1895) and *Arrivée d'un train en gare de La Ciotat* ('Arrival of a Train at La Ciotat', 1895).

Inversely, Lumière tried his hand at special effects: *Le Squelette joyeux* ('The Skeleton of Joy', 1897) is the product of shooting a simple trick. He would go no further.

Unlike Lumière, the manufacture and sale of cameras did not interest Méliès. A visionary, he glimpsed the potential of the film show. Scriptwriter, director, grip, art director, wardrobe master, actor, make-up artist, editor, producer, distributor, cinema owner and exporter, his total involvement distinguished him from most of his contemporaries.

Operational as of 1897, his Montreuil studio was the first to have complete film-making machinery. His competitor Charles Pathé built the first large ultra-modern studio in Vincennes in 1903.

Before specialising in special-effects films, Méliès filmed magic tricks (*David Devant*¹⁴, 1897) like other contemporaries, magicians included. The illusionist Maskelyne¹⁵ was filmed by Robert William Paul (*Mr Maskelyne Spinning Plates and Basins*, 1896), a British precursor of special effects to whom Méliès owed his first camera; Maskelyne then made a few trick films himself. Also a magician-filmmaker like Méliès, Walter R. Booth, another English special-effects pioneer, made *The Devil in the Studio* (1901), *The Enchanted Cup* (1902) and *The Motorist* (1905).

Méliès and the Americans

The American producer Thomas Edison preceded Méliès in using the camera halt for a trick by substitution: the decapitation in *Execution of Mary, Queen of Scots* (Alfred Clark, 1895) is cinema's first known special effect¹⁶. Although Edison's use of this effect predates Méliès' – who inaugurated it in *Escamotage d'une dame chez Robert-Houdin* ('The Vanishing Lady') in 1896 –, the Edison Manufacturing Company would unscrupulously pirate *Voyage dans la Lune* ('A Trip to the Moon', 1902), which had enjoyed worldwide success.

Faced with the massive pirating of his films, Méliès set up in New York in 1903. The Georges Méliès Manufacturing Company, represented by his brother Gaston, defended his rights up until 1914. Beginning in 1898, with the star of Star Film integrated into the set then directly on the film, Méliès initiated the principle of the logo, meant to discourage counterfeiters. Pathé followed with the emblem of the rooster, Gaumont with the daisy.

Méliès plagiarised

Méliès was plagiarised considerably, sometimes unscrupulously, but without the virtuosity and poetry. His sets, like his technical innovations, were repeated, often with less brio, and his competitors turned out to be less inspired than the filmmaker from Montreuil, who was constantly trying new things.

At the time, plagiarism was common practice, everyone seeking to reproduce the success of the other, both in France and abroad. For his *Cartes vivantes* ('The Living Playing Cards', 1905), Méliès himself took inspiration from a film by one of his known imitators, Gaston Velle. He also revived his own successful tricks (such as reduction by multiple-exposure).

Méliès and his contemporaries relied on similar popular themes, as much for reconstructed current events and comical and historical films as for trick films, in

¹⁴ Magician at Egyptian Hall, a London magic theatre.

¹⁵ Also an Egyptian Hall magician.

¹⁶ A decapitated mannequin and a fake head are substituted for the actor who portrayed the queen during the camera halt.

vogue at the time. Air travel, dismemberment and other dislocations pervaded the early days of cinema, often from a comic angle.

The Lumière and Gaumont companies imitated Méliès. Pathé also took inspiration from his catalogue and, above all, attempted to compete with his trick films. Beginning in 1905, Pathé productions were less expensive than those of Méliès who, experiencing financial difficulties, made six films for Pathé in 1911, including *À la conquête du pôle* ('The Conquest Of The Pole').

Ferdinand Zecca made or supervised a large number of films for Pathé Frères, many of which drew on the successes of Méliès, like *Les Cartes transparentes* (1905) and *Rêve à la Lune* (*L'Amant de la Lune*, 'Dream of the Moon', co-directed by Gaston Velle, 1905). In 1903, Zecca oversaw a pale copy of Méliès' *Voyage dans la Lune* ('A Trip to the Moon', 1902), without even changing the title. The title *Transformations élastiques* (*Les Vêtements cascadeurs*, Jean Durand, 1908), which he supervised, refers to *The Man with the Rubber Head* (Méliès, 1901). Inversely, Méliès seems to have been inspired by *À la conquête de l'air* (Zecca, 1902) for his *Voyage à travers l'impossible* ('The Impossible Voyage', 1904).

With Gaston Velle, another plagiarist of Méliès, working for Pathé, *Les Métamorphoses d'un papillon* ('A Butterfly's Changes', 1904), *L'Écrin du Radjah* ('The Rajah's Casket', 1905) and *Les Fleurs animées* ('Living Flowers', 1905) evoke Méliès' stage and film universe. For *Les Invisibles* ('Invisible Thief', 1906), he took inspiration from a scene in Méliès' *L'Enchanteur Alcofrisbas* ('Alcofrisbas, The Master Magician', 1903). *Le Voyage autour d'une étoile* ('A Voyage Around a Star', 1906), the flat replica of *Voyage dans la Lune* ('A Trip to the Moon', 1902), takes up the principle of the female heads each appearing in a starry box of the set.

Between 1905 and 1911, the Spaniard Segundo de Chomón was hired by Charles Pathé to compete with Méliès' trick films. Of all of Méliès' counterfeiterers, he came closest to the original with his creativity and technical quality. Scriptwriter, director, cameraman and pioneer in stop-motion special effects, he founded with Pathé a branch in Barcelona. Author, like Méliès, of some five hundred films, sometimes coloured by stencil, he practiced stop-motion shooting as of 1905 for *El hotel eléctrico*. His titles evoke those of Méliès: *Satan s'amuse* ('Satan at Play', 1907), *Cuisine magnétique* ('Unusual Cooking', 1908), *La Table magique* (1908) or *Les Jouets vivants* (1909). *Le Chevalier mystère* ('The Mysterious Knight', 1906) is a homonymous title of a Méliès' film dating from 1899, while his *Voyage au centre de la Terre* ('Inside the Earth') and *Voyage sur Jupiter*¹⁷ ('A Trip to Jupiter'), shot in 1909, sought to exploit the triumph of Méliès' *Voyage dans la Lune* ('A Trip to the Moon', 1902). The opening of *En avant la musique* ('Music, Forward!', 1907) is copied from *Le Mélomane* ('The Melomaniac', 1903).

¹⁷ Also known under the title *Une excursion sur Jupiter*