FRAME : TWO

Early Cinema and Animation

6th May to 21st May 2025
The Platform Gallery,
Leeds School of Arts Building (Upper Ground),
Leeds Beckett University, Portland Way, Leeds

Curated by:
Professor Rob Shail
Irfan Shah

Booklet written by:
Irfan Shah

https://www.leedsbeckett.ac.uk/research/larc/early-cinema-research-group/

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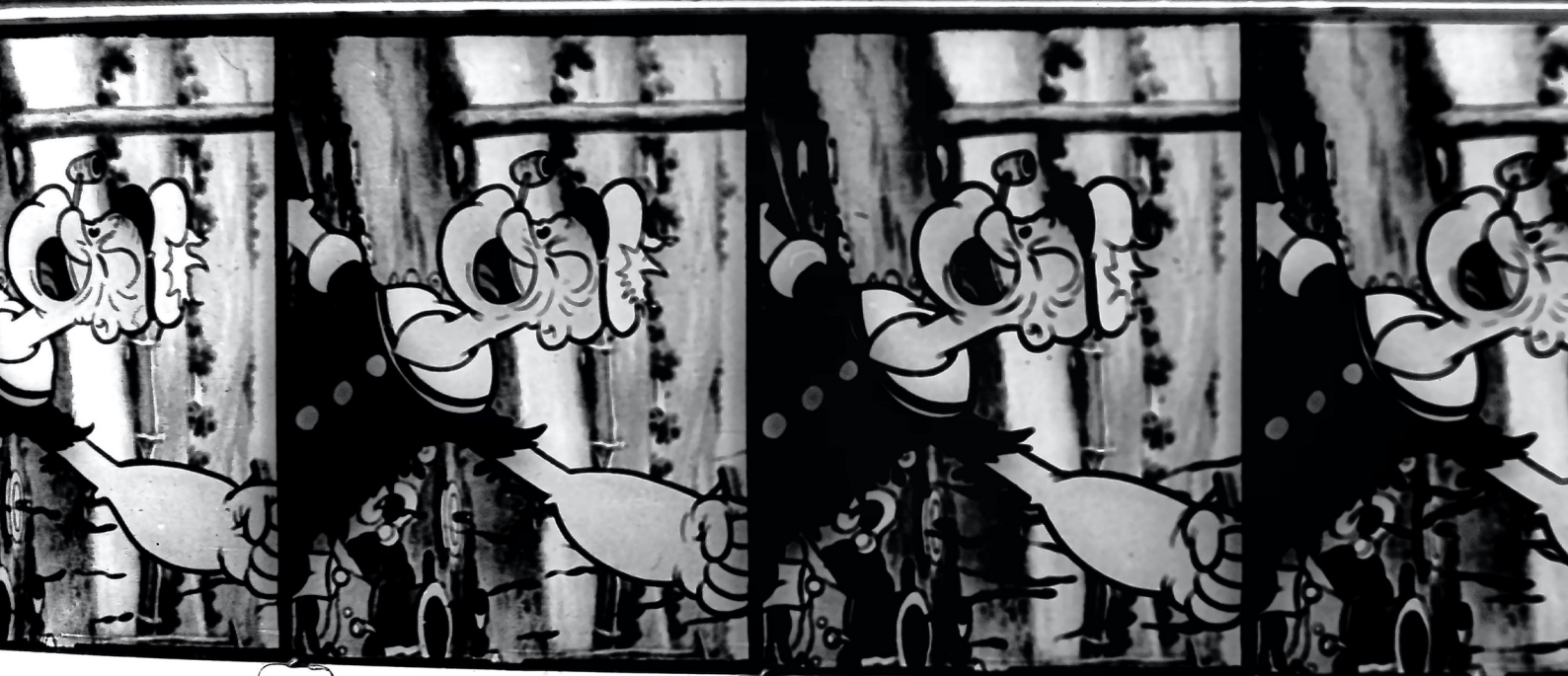


INTRODUCTION

Frame : Two – Early Cinema and Animation, is the second exhibition by the Early Cinema Research Group, and is again based on material from its recently acquired Stephen Herbert Archive.

The archive, consisting of over five hundred books as well as files of original research by historian Stephen Herbert, covers all aspects of motion picture (and television) history. *Frame : One* (December 2024 - January 2025) was an introduction to the archive, and an attempt to encourage researchers to use it as a resource. The concept behind it was exhibition as *wunderkammer*, a cabinet of curiosities that contained a wide range of artefacts representing a wide range of topics. *Frame : Two* has slightly more focus, concentrating on aspects of animation, its history, technologies and cultural significance.

This came about simply by allowing various artefacts in the archive to lead us to the next subject. These artefacts, specifically, were: a reel of replica film made for a reconstruction of Émile Reynaud's Théàtre Optique of 1892 – each frame of the reel painstakingly hand-painted by animator, Julien Pappé; some smaller strips of six-seven frames, again of sequences originally by Reynaud, mounted in cardboard frames; a book on animation pioneer, Émile Cohl; a book on chronophotographic pioneer, Eadweard Muybridge by Stephen Herbert himself; and two folders – *Popeye 1* and *Popeye 2*, which revealed to us Stephen's deep and abiding love for the cartoons of Fleischer Studios.

Added to this, were a handful of original cels of the first Welsh animation series, *Jerry the Troublesome Tyke*, already in the possession of curator, Professor Rob Shail. Out of all this came the idea for *Frame : Two*.

What is important to note is that neither the exhibition nor this booklet (nor, in fact, the accompanying talk and screenings) are meant to provide a definitive account of any aspect of animation. Rather, the Early Cinema Research Group is presenting artefacts and papers to the world as we find them – explaining what we have found, what we know about them so far, and describing the ideas that they have inspired in us. We hope that this will be enough to persuade other researchers to discover more for themselves in an ongoing collaboration between the ECRG and anyone curious enough to visit the archive.

Finally, at the end of the booklet, and as a slightly mischievous way of initiating discussion, we have presented inventor, Émile Reynaud's *Pantomimes Lumineuses* of 1892 as the world's first cinema. We hope that this will provoke debate on the history – and historiography – of cinema, and amuse and enthuse animators and fans of animation everywhere.

ÉMILE REYNAUD

From an early age, Émile Reynaud (1844-1918) had been involved with visual technologies. He had been apprenticed to a precision engineer in Paris before working on the preparation of magic lantern slides, and in 1877, he patented his invention, the Praxinoscope, a device which improved on existing optical toys such as the Zoetrope and Phenakistoscope (these were machines which, by spinning a series of sequential images around, brought to life brief sequences of movement.)

In Reynaud's Praxinoscope, a band of hand-drawn or painted coloured images of a subject in various stages of movement was set around the inside of a cylinder. In the centre of this was a central drum of small, outward facing mirrors. As the Praxinoscope was spun around, the images appeared to come to life in the mirrors.

In 1888, he patented his Théâtre Optique, which took the technologies behind the Praxinoscope to a new level of complexity and effect, and helped create the world's first cinematic performances. The Théâtre Op-

tique incorporated feed and take up spools which meant that the Praxinoscope could break free from limited numbers of images producing brief bursts of movement looped over and over and instead, incorporate extended strips of pictures. This allowed for sequences which contained real narrative substance – sequences which could now tell stories.

The images which made up each story were painted, frame by frame, onto gelatines squares which were held by long leather bands. The sequence, *Pauvre Pierrot!* for example, consisted of five hundred painted images on a thirty-six metre gelatine strip.

In the Théàtre Optique, the picture strip was fed past the condenser lens of a projecting lantern. What was significant was that this was done with pins (effectively early sprockets) engaging perforations in the strip. This is generally acknowledged as the first time that perforations were used in the succesful projection of moving images. This strip could be moved forwards or backwards by the projectionist, for example, a scene in *Pauvre Pierrot!* at one point involved figures moving in reverse.

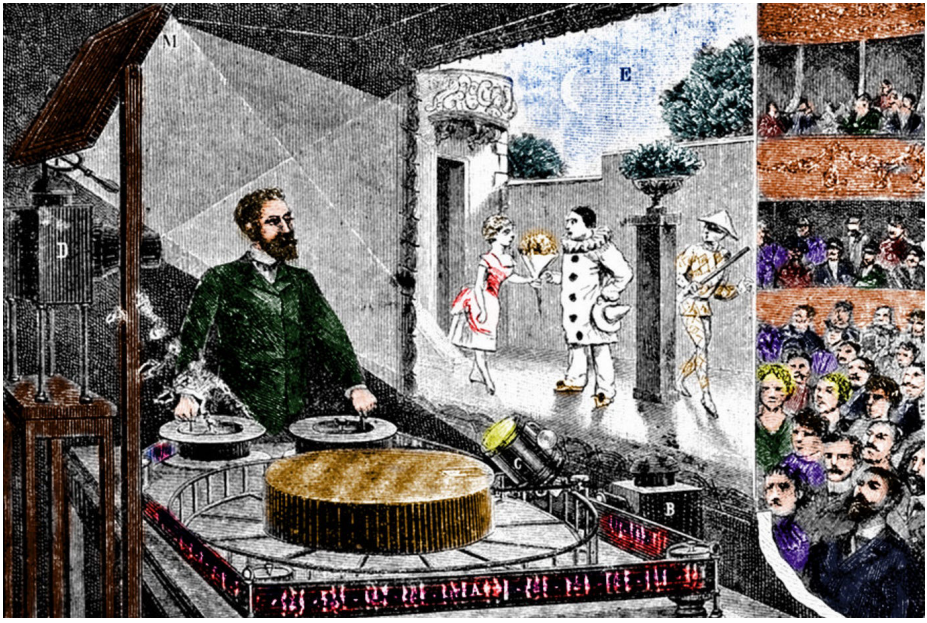
The projector's light beam shone through each of the passing images, which were then reflected off the rotating 'cage of mirrors' (as in the Praxinoscope) and, via more mirrors and mechanisms, through a lens onto a screen. The background to the scene (which of course was stationary) was projected separately to the moving subject by a second lantern and the moving subject projected onto this background. Another lantern could be used for titles.

In addition to the visuals, simple sound effects were incorporated into the scenes. Attached along the long band of images were small silver strips which triggered an electromagnet, which in turn activated an electrical noise generator. This enabled rudimentary effects (in *Pauvre Pierrot!* for example, the sound of Harlequin hitting Pierrot with a stick) to be synchronised with the action. Reynaud therefore offered his audiences shows featuring colour, movement and sound.

Eventually, as motion pictures using photographic sequences emerged

and cinematic technology advanced, Reynaud was left behind. He sold off his equipment including all but one of his Théàtre Optique devices. Sometime around 1913, Reynaud, succumbing to a bout of despair, smashed his machine and thew five of his seven film strips into the River Seine. Only two were saved - *Pauvre Pierrot!* and *Autour d'une Cabine.*

While Reynaud's brilliance (and his early use of perforations) is usually acknowledged in histories of film, his *Pantomimes Lumineuses* is seen more as a pre-cursor to cinema than as cinema itself. However, there are those, such as animator Norman MacLaren, who maintained that 'what he [Reynaud] made was true cinema,' and those, such as historian Laurent Mannoni, who lament the fact that when photographic motion pictures first arrived, 'shaky grey images chased away..[Reynaud's] stunning colours.'



FRAME : TWO

In Reynaud's Théâtre Optique, the background to the scene was projected separately to the moving subject (which was projected onto the background.) The Stephen Herbert Archive possesses replica frames from the sequence *Pauvre Pierrot!* (above) made by Julien Pappé and shown at the Musée Grévin in Paris in the 1990's. The archive also possesses a reel of replica frames used by Stephen Herbert for his own reconstructions at the Museum of the Moving Image, London, in the 1990s.

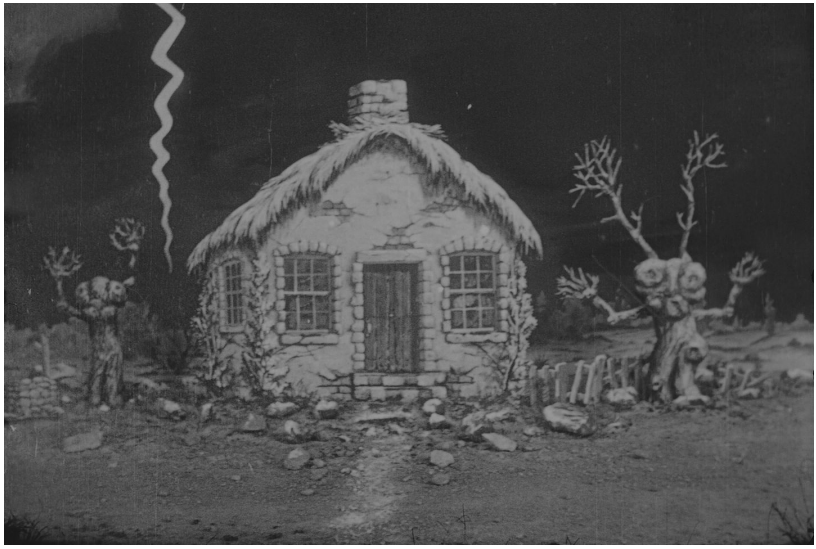
Julien Pappé restoring *Pauvre Pierrot!*

J STUART BLACKTON

There is a Yorkshire connection with one of the earliest pioneers of animation: James Stuart Blackton, cartoonist, conjurer and filmmaker, was born in Sheffield on 5 January 1875, although he and his parents emigrated to the USA was Blackton was just ten years of age.

Blackton would go on to make such groundbreaking animations as *The Enchanted Drawing* (1906), *Humorous Phases of Funny Faces* (1906), *Lightning Sketches* (1907) and *The Magic Fountain Pen* (1909) and co-founded the famous Vitagraph studios which produced such classic films as *Raffles the Amateur Cracksman* (1905).

The Enchanted Drawing is believed to contain the first animated sequences recorded on standard picture film, but it was Blackton's *The Haunted Hotel* in particular, which would prove such an influence on animators worldwide, containing as it did, stop motion sequences (and making enough money to persuade studios that animation was a commercially viable form). It appeared in Paris in 1907, one year before Émile Cohl's seminal *Fantasmagorie*.



The Haunted Hotel

Humorous Phases of Funny Faces

ÉMILE COHL

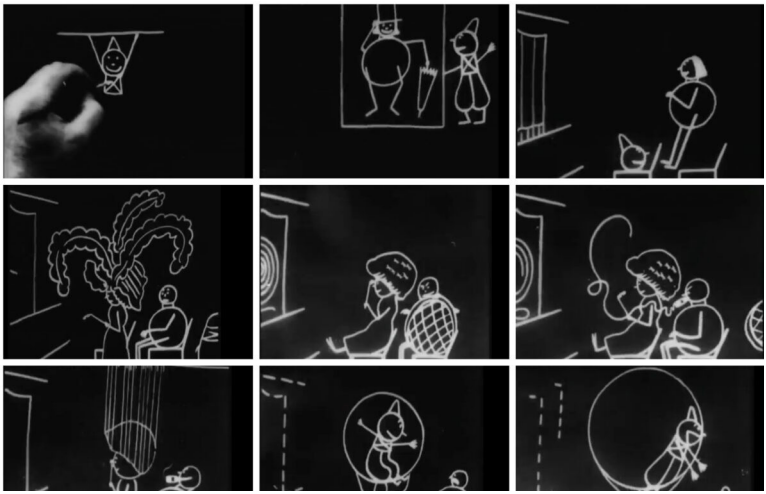
Émile Cohl (1857-1938) is considered the father of animation and his seminal work, *Fantasmagorie* (1908), is perhaps the first *wholly* animated film. Made up of seven hundred drawings and running for just over a minute, it is a relentless stream of ideas. Cohl would create around seventy short films and animations, many of which, like *Fantasmagorie*, would be cinematic examples of *L'Art Incoherent*, a short-lived movement which anticipated the iconoclastic elements of the avant-garde and anti-art movements such as Surrealism, Pataphysics and Dada.

Cohl first achieved fame as a caricaturist, often satirizing the cultural and political figures of the day. He later began to work for Gaumont Studios directing chase-films, comedies, *féeries* (supernatural tales involving fairies) and pageants. The success of J Stuart Blackton's *The Haunted Hotel* in Paris in 1907, spurred studios in France to create their own animated films, and it was these that became Cohl's speciality.

Fantasmagorie was drawn with black-lined illustrations on white paper, photographed a frame at a time, the negatives of which were then reversed to create the effect of chalk lines on a blackboard. In the short running time was packed a plethora of visual transformations creating a

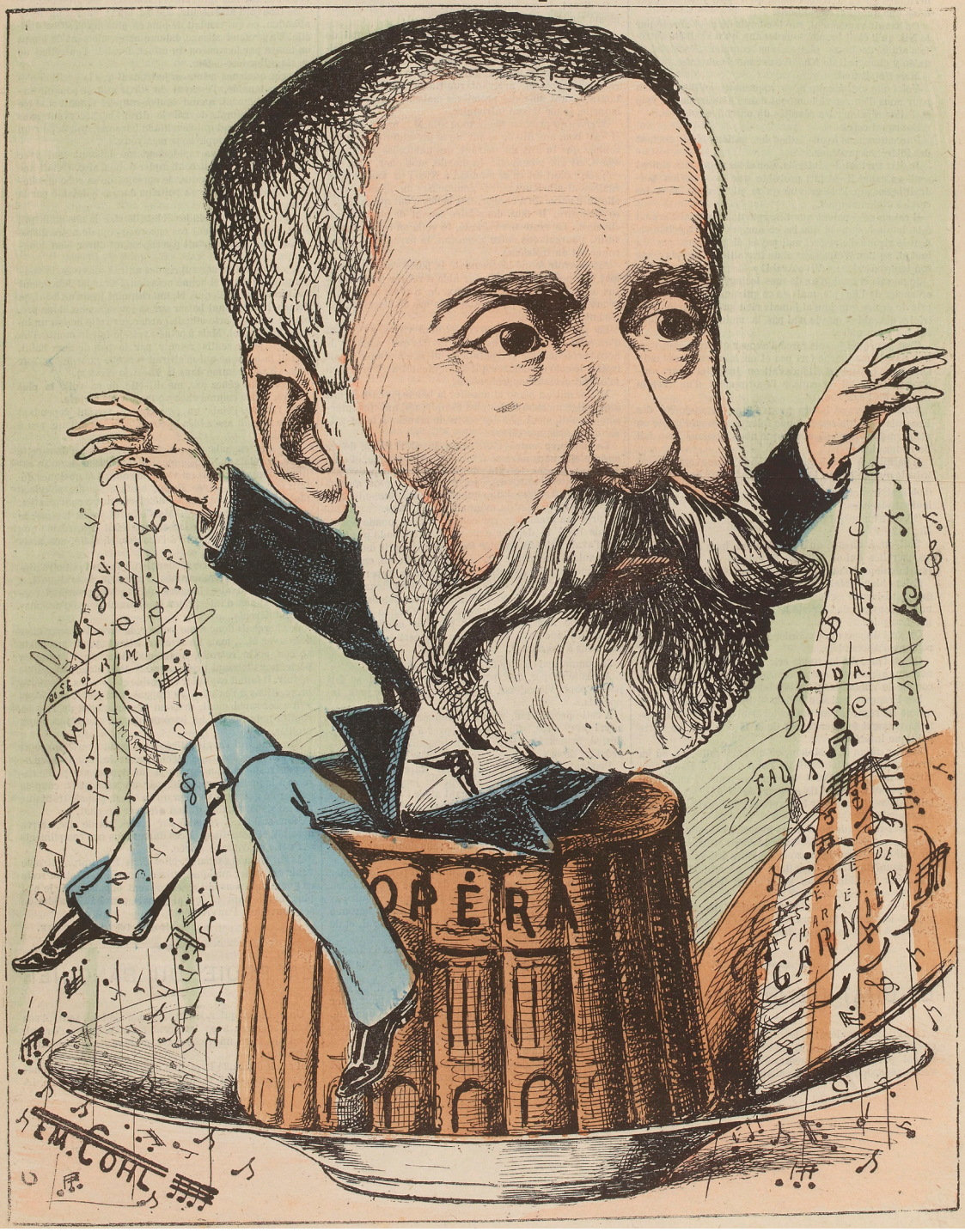
light-hearted and surreal stream-of-consciousness non-story. Two more short films in a similar style followed before Cohl created a series of films (for various studios) using a variety of styles and techniques. These ranged from puppet animation to an ambitious matte effect whereby double-exposures and split-second timing helped live-action characters interact with animations (as in *Claire de lune espagnole*). A later series, *Les Aventures des Pieds Nickelés* (*Adventures of the Leadfoot Gang*) contained what were perhaps Cohl's most accomplished animations.

A series of misfortunes (such as a fire at one of the studios for which Cohl had worked) meant that relatively little of the animator's work survives – but what does, provides ample evidence of the astonishing wit, imagination and technical brilliance of this most innovative of animators.



Scenes from *Fantasmagorie*

M. VAUCORBEIL, par Em. COHL



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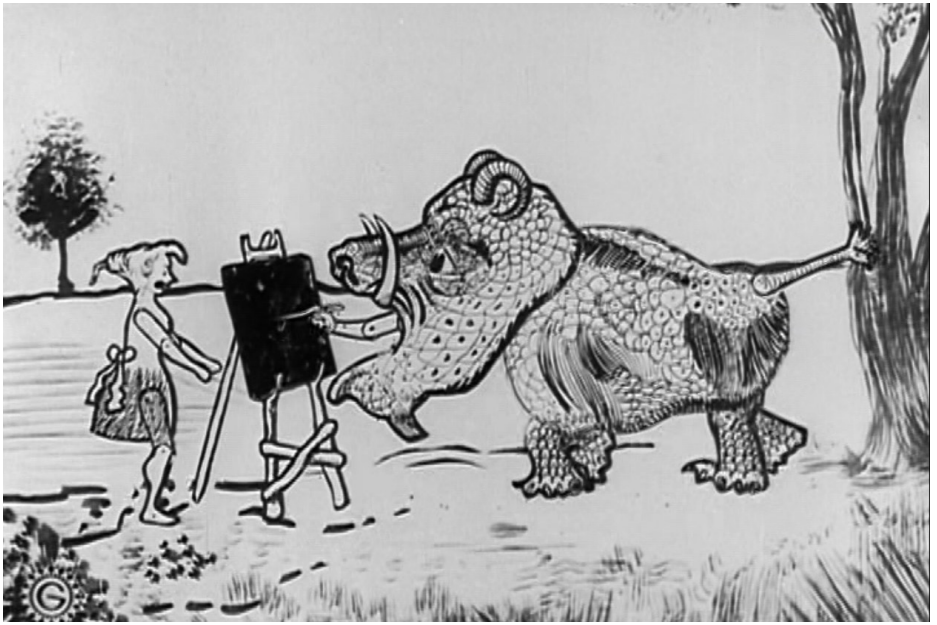


LES INCOHÉRENTS

Émile Cohl had been involved with *The Incohérents* (*Les Arts incohérents*), a short-lived French art movement founded by Parisian writer and publisher Jules Lévy in 1882. The *Incohérents* were unabashedly irrational and even juvenile, delighting in work that now might be considered 'anti-art' and which was infused with satire and iconoclasm. It was a forerunner of avant-garde movements such as Dada.

In addition to the playful anarchy that seems to characterise so much of Cohl's animation work generally, was a specific nod to *L'Art Incoherent* in a film that was one of Cohl's most famous during his lifetime, *La Peintre néo-impressioniste.* In it, an artist, going through each of his works, informs a potential buyer of their titles – a red canvas, for example, is called *A Cardinal Eating Lobster with Tomatoes by the Banks of the Red Sea*. This is a clear echo of work by an artist who, in real life, was closely aligned with the *Incohérent* movement: Alphonse Allais, one of whose paintings was a red canvas entitled *Apoplectic Cardinals Harvesting Tomatoes on the Shore of the Red Sea.* It seems clear that the artist in Cohl's film is not really a neo-impressionist – he is an *Incohérent.*


ÉDEN-THÉATRE RUE BOUDREAU
EXPOSITION
des
INCOHÉRENTS
ARTS
AU PROFIT
Œuvres de Protection de l'Enfance
TOUS LES JOURS DE 1H. DU SOIR A MINUIT
DU
18 Octobre au 19 Décembre 1886
LES DIMANCHES 24 & 31 OCTOBRE A PARTIR DE 10 H. DU MATIN
LES AUTRES DIMANCHES A PARTIR DE 6 H. DU SOIR
PRIX D'ENTRÉE
Dimanche 0fr 65
Semaine 1fr 05
Vendredi (jour réservé) 1fr 95
En semaine, à partir de 8 heures, les Spectateurs de l'EDEN peuvent seuls visiter l'Exposition.
Le Dimanche, une entrée spéciale est réservée au Public.
NB. Le Port de la Barbe est Facultatif

JERRY THE TROUBLESOME TYKE

Jerry the Troublesome Tyke, was the first animated series to be produced in Wales. Its 'star' was the eponymous Jerry, a mischievous dog whose misadventures, which mixed animation with live-action, stretched over forty cartoons in the late 1920's.

The series was thought lost until the original films were found in the vault of British Pathé in 2002. A joint restoration project undertaken by Pathé and the National Screen and Sound Archive in Wales, resulted in three newly-digitised episodes being screened, first at the Museum of Modern Art in New York, and then on BBC Wales with a live orchestra. More episodes can now be found online.

Jerry was a British response to the famous *Felix the Cat* series from Otto Messmer in the States – however, it was also part of a tradition of animation sometimes referred to as 'hand of the artist' whereby a human is seen drawing a character which subsequently comes to life and interacts with its live-action 'creator' (a famous example of this being the Fleischers' *Out of the Inkwell* series.) Historian Donald Crafton has suggested that this particular strand of animation is the cartoon equivalent of writing in the first person: 'Instead of saying 'here is my story' [the animator says] 'Here are my drawings."

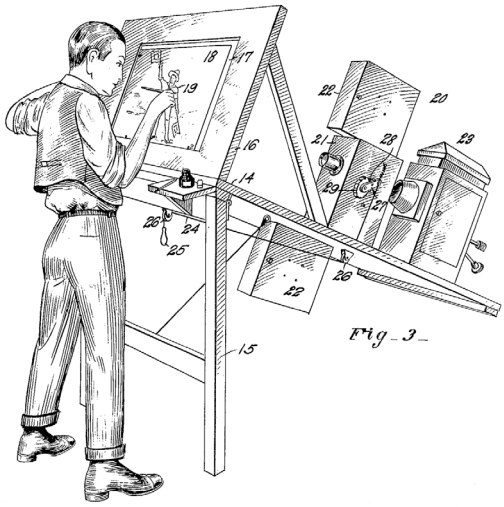
Several cels from the original series of *Jerry the Troublesome Tyke* will be displayed as exhibits in the Platform Gallery during *Frame : Two.*

FRAME : TWO


CONTRACT
BETWEEN
PATHE LTD
AND
MR JERRY
SALARY
500 BONES
WEEKLY.

ROTOSCOPE

The Early Cinema Research Group has been using the material in the Stephen Herbert Archive to provoke new ideas and formulate new lines of research, which has led to some serendipitous intersections of seemingly unrelated topics.



Take, for example, rotoscoping, a technique patented by Fleischer Studios in 1915 whereby an animator traces a subject in a photographic motion picture sequence, in order to give a hand-drawn character particularly realistic movement.

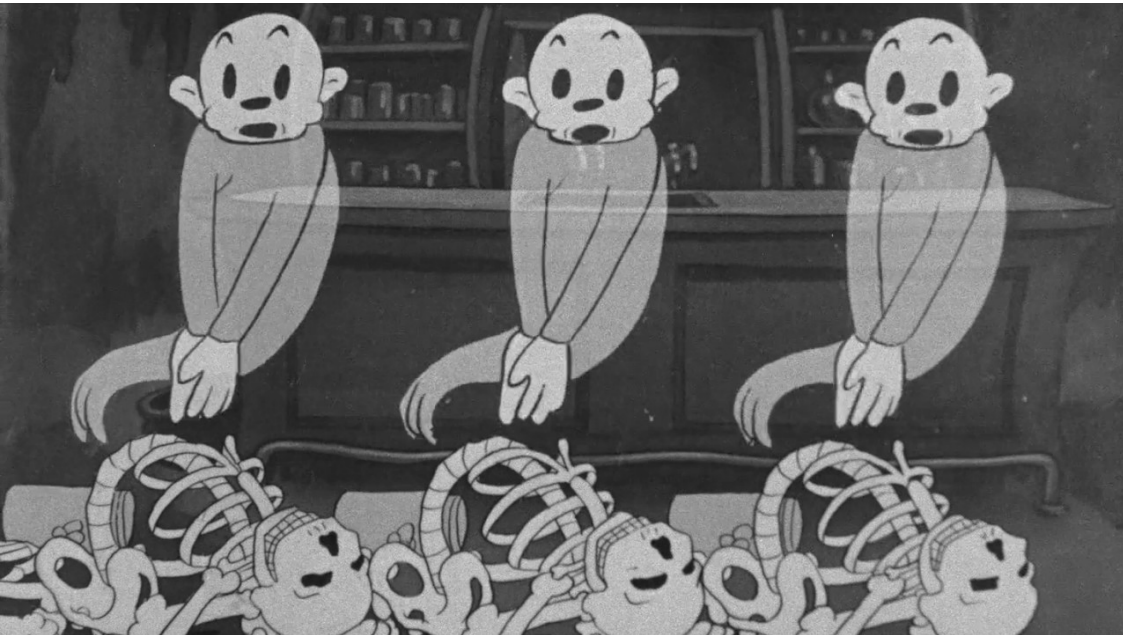
A similar technique was used by photographic pioneer, Eadweard Muybridge in the Nineteenth Century, who developed the process as a way of overcoming a particular problem he was having with the projection of images through his zoopraxiscope, namely a foreshortening of the image on the screen during playback. Muybridge employed artists to paint silhouettes over photographic images, elongating them slightly to compensate for the shortening on screen.

What is interesting to note is that Muybridge realised the creative potential of the technique and, liberated from the need to comply exactly with the underlying photograph, created more fantastical scenes (i.e. sequences that hadn't occured in real life), for example, a short loop of a boy somersaulting over a bull, a horse and rider galloping against a a tide

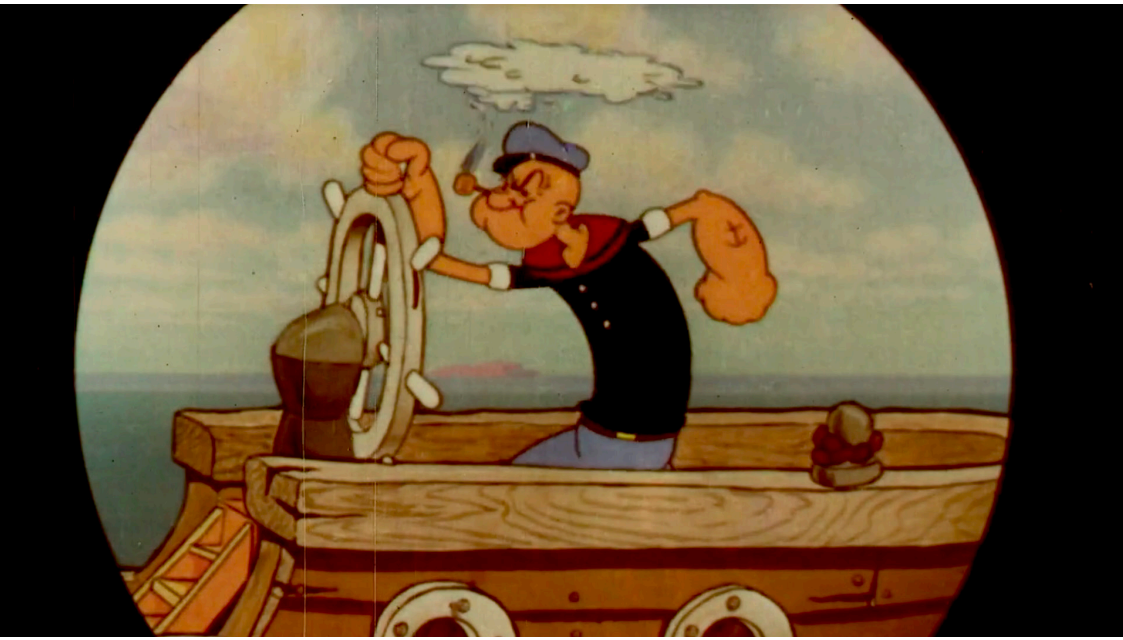
of oncoming horses, flocks of birds and an invented horse race. The idea that what began as a solution to a technical problem led to a new form of animation provides much scope for the study of creativity and its relationship with technology.

Note the difference in 'tone' between these two sequences. Painting the silhouettes of a subject and altering their length - which began as a solution to a technical problem - led to the creation of more whimsical sequences (below)

With these invented scenarios, the scientific value was negligible. Instead, Muybridge had, according to historian Harlen Hamilton, married 'the old mechanical technology to the new electrical world of cinematic dreams, romantic illusions and fantasy.'



Fleischer Studios *Minnie the Moocher* (1932) featuring Betty Boop used rotoscoping to great effect.



As did Fleischer's *Popeye the Sailor Meets Sinbad the Sailor* (1936)

FOLIMAGE

The Early Cinema Research Group will follow its explorations of archive material out into the wider world of cinema, forming partnerships with researchers, institutions and studios in order to learn more about the early days of animation. This will help us better understand and appreciate the artists who are continuing the tradition of hand-drawn animation today.

Folimage is a French studio who produced the feature length, Oscar-nominated, *A Cat in Paris (Une Vie de Chat),* inspired by the graphic style of Saul Bass.

Its work embraces new technologies whilst retaining the artisanal qualities that imbues its work with such charm.

LES PANTOMIMES LUMINEUSES - THE WORLD'S FIRST CINEMA?

When we think of the invention of cinema – of the cultural phenomenon whereby moving pictures are projected onto a screen to an audience - many of us might think of Thomas Edison, whose Vitascope threw its sequences onto a screen in 1896; or perhaps the Lumière Brothers, whose Cinématographe delighted audiences at its legendary commercial opening at the Salon Indien, in the basement of a Paris Café, in December 1895. Some might even mention the series of brief sequences a month earlier, by the Skladanowsky brothers Max and Emil, at the Wintergarden Theatre, Berlin, which played throughout November 1895.

How many of us would go back a further two years and mention Émile Reynaud, whose show of living pictures, the *Pantomimes Lumineuses* - in colour, with music and sound effects, no less - would delight thousands of people at the Musée Grevin in Paris, beginning in 1892?

The equipment on which Reynaud's films were played incorporated many of the mechanisms that would, for the next century, be understood as the constituent parts of film projection: a sequence of images of a subject in motion, on a long strip of flexible material; perforations along the strip to engage with sprockets that turn and move the strip along past a lens at a controlled rate; strong lighting behind the strip to ensure that images are 'thrown' through the lens and projected onto a screen. Moreover, Reynaud's sequences would play for up to fifteen minutes, far longer than anything that Edison, The Skladanowskys or the Lumières would present to the world until several years later. These were all achieved by Reynaud's Théâtre Optique, the device by which he gave his performances.

Considering the sophistication - and popularity – of Reynaud's work, it is curious why he is not better known – and why the *Pantomimes Lumineu-*

ses is rarely celebrated as the first cinema. The answer, perhaps, is that the Reynaud's sequences were not photographic. The subjects of each of his presentations were painted onto gelatine strip, frame by exquisite frame, and why this was considered of less significance in the story of cinema is a question that raises several interesting historiographical points about the nature of film and the malleable, subjective nature of history itself.

While there have always been champions of Reynaud's work, his name has so far failed to reach further than the bounds of specialist film histories – unlike say Edison or the Lumières. Moreover, the prevailing argument seems to be that the *Pantomimes Lumineuses* somehow fell short – or apart – from what is considered true cinema. Often, Reynaud's work is considered to be 'proto-cinematic' or in anticipation of cinema but not quite the thing itself. Perhaps there are two main reasons for this, one explicit and one implied.

The explicit reason is that, for many historians, the technology used in the Théâtre Optique was not sufficiently in line with the technology that subsequently became the bedrock of established cinema for the century that followed. True, much of it was there, for example, the series of sequential images, the perforated film strip, and the projection – but there were also differences: the use of more than one projecting lens (for fixed background; moving subjects; and intertitles) and significantly, the fact that the movement of the film behind the lens was not intermittent. Intermittency – the stop-start movement of film which involved the brief freezing of an image before the next frame wound on behind a closed shutter – was considered crucial for avoiding blur. Reynaud's Théàtre Optique did not offer this. However, (and this is evident to those who have viewed a Praxinoscope, whose basic principles it used,) it must still have been good enough - in fact it must have seemed marvellous to contemporary audiences. A small amount of teleological thinking will offer useful context. Anyone who compares the *Great Train Robbery* (1903) to Christopher Nolan's *Oppenheimer* (2023), might discern a noticeable disparity of effect, and might also list numerous imperfections with the former that have never – quite reasonably – undermined its claim to be a 'film.' Moreover, early films are in black and white with no sound. We accept

them as films nonetheless, even though they are undeniably lacking these aspects of reality. Twentieth century audiences tolerated a level of flicker, likewise nineteenth century audiences may well have tolerated a level of blur, a reminder that what we class as film remains subjective. Perhaps it boils down to what an audience is happy to watch. Hundreds of thousands of people paid to see Reynaud's sequences over a period of several years, and this should surely be taken as evidence of the success of his version of motion pictures. Moreover, in the past few years, digital film making has driven celluloid almost to the point of obsolescence. Consequently, a lot of the mechanisms and technological processes which have been used as criteria in the debate are themselves no longer relevant to the production of films. Therefore, they should also be discounted as reasons not to acknowledge Reynaud's primacy in the story of cinema.

This point is crystallised by the observation that today, in the case of a production by a studio such as Pixar, of a film made by CGI (computer generated images), the images will be produced in draft form by hand and then in their final form by computers - not cameras - which means that there is very little in terms of their production that fits within earlier definitions of film - and yet, audiences who go to watch such a feature, will quite clearly see themselves as going to the cinema.

The second, implied, argument against *Les Pantomimes Lumineuses* might be that animated motion pictures have been held in lower regard than those with photographic sequences. Animation has long been associated with low, or childish art. There have of course been dissenting voices, such as that of Alexandre Alexïeff, who wrote that 'it is legitimate to consider cinema as a particular kind of animation, a sort of cheap, industrial substitute…which was destined to replace the creative work of an artist, such as Emile Reynaud, with the photography of human models 'in movement." However, the prevailing view has often seemed to be that animation has dealt with less sophisticated stories and used less sophisticated techniques than 'true' film and as such, has been relatively overlooked by history. Perhaps this has affected Reynaud's legacy? If so, then might a change in attitude towards non-photographic motion pictures lead to a change in attitude to Reynaud's place in cinema history?

There has certainly been a re-evaluation of the artistic worth of animation over the last few years. This journey towards respectability has occurred alongside a similar one for comic books and graphic novels. In 1992, for example, Art Spielgelman's *Maus* won a Pullitzer Prize, demonstrating that serious subjects (in the case of *Maus*, the Holocaust) could be explored by graphic novels.

In the realm of animation, there has also been a growing respect for the technical wizardry behind such studios as Pixar working in CGI; the exquisite work of auteurs such as the Quay Brothers in stop-motion animation; and the more traditional but equally sublime animation of Studio Ghibli. Additionally, the CGI feature, *Toy Story 3* (2010), was nominated for an Oscar for Best Picture, and even respected directors known primarily for 'conventional' (i.e. live-action) films, such as Wes Anderson, have made stop-motion animations. Today perhaps, animation is held in high enough regard for us now to reassess the idea of the *Pantomimes Lumineuses* as the world's first cinema. If so, it offers an interesting historiographic perspective on this reassessment of Reynaud, as it is based not on new information about his work, but on changes in contemporary practice and attitudes, both of which alter our perspectives on the past.

There is another aspect of the debate that might be reassessed. Cinema is commonly defined as a theatre where people pay to watch a film. In other words, it is not the device which records or projects the film that is being referred to but the location and wider environment in which the film is being presented. It is the idea of cinema as a communal and commercial event which is at the heart of the concept. Of course, if one criteria of a cinema is that it plays film, then the definition of a film is a constituent part of identifying a cinema. However, debates around what cinema is, seem to emanate more from the production of the image than its consumption. Perhaps the idea of audience should be at the heart of the discussion?

And there is also another cinema - an abstract noun that embodies a world at one remove from location - the cinema of attractions, the cinema of oppression, world cinema and just *Cinema*, a word to attempt to

contain the quicksilver notions of the silver screen, not defined by the technology but understood viscerally in the experience of the thing. Perhaps it is in the velvet chairs, the dimming of the lights, and the tick-tick-ticking of film feeding through a projector?

We might conclude by returning to the existing arguments for and against the *Pantomimes Lumineuses* as cinema. First of all, the workings of the Théàtre Optique conformed to many of the apparent criteria for the presentation of film - the use of a strip of sequential images that, when played back, projected controlled, continuous movement on a screen for an audience. Where the technology was perceived to have fallen short, the 'failure' involved a difference in mechanisms from those later used in film e.g. the use of several lenses for projection, or the lack of intermittency in the movement of film - which resulted in (another failure) some blurring effect onscreen. Consequently, there are the issues of 'difference' and 'quality' to consider.

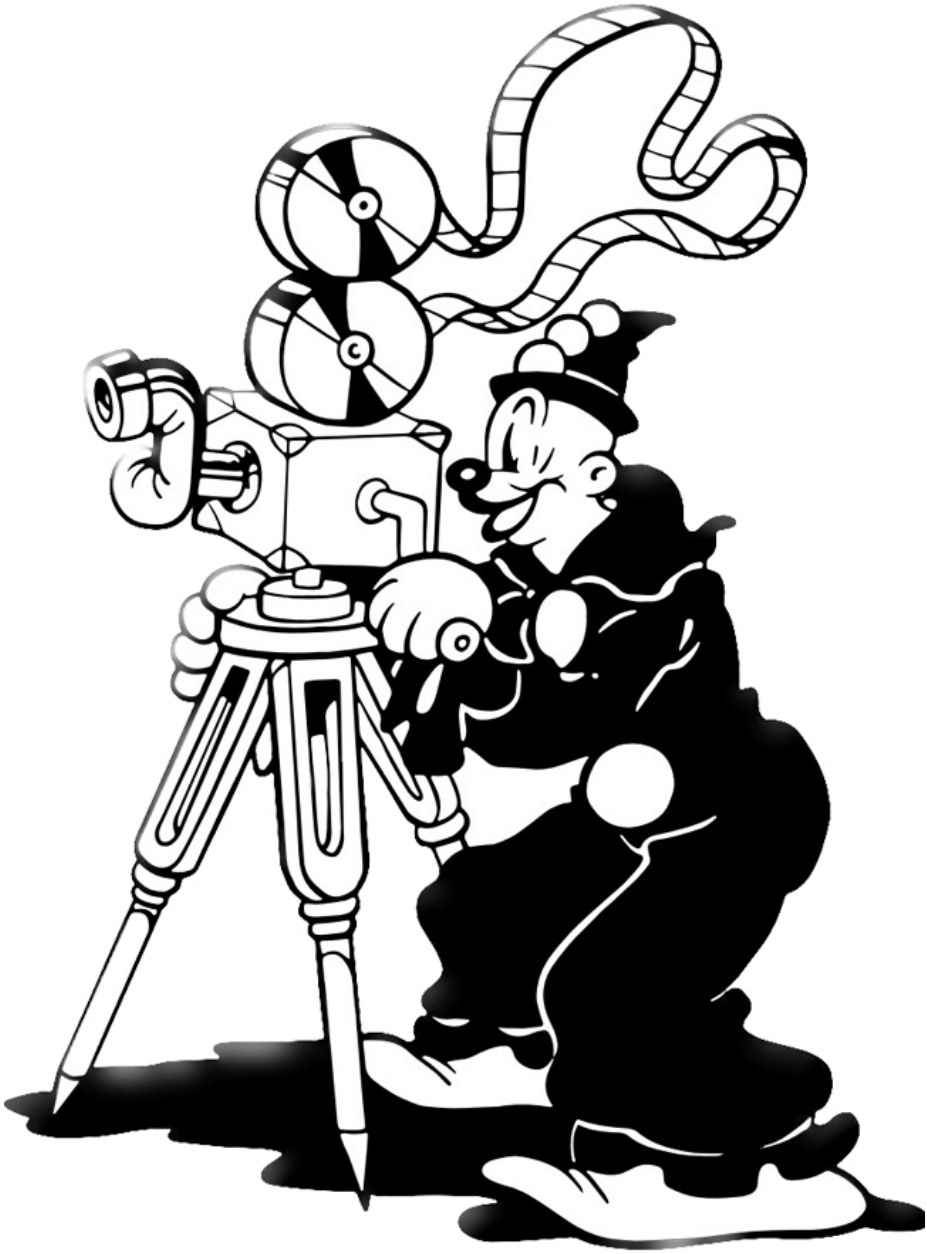
The fact of mere 'difference' is surely negated by the knowledge that today, most films are created in very different ways to what was once considered the norm, rendering this particular criticism irrelevent. As for the question of quality, there are two points to make. The first is that while the *Pantomimes Lumineuses* may have lacked some of the clarity of later technologies, it surely surpassed the quality of later sequences recognised as films, in terms of colour, length and sound. Secondly, any blur in the image should only disqualify a sequence as film if it rendered that sequence unacceptable to an audience. And just as we, even now, thrill to old black and white movies, despite their lack of colour and sound, their obvious flicker and their frame rates that render movement comically fast, so in the nineteenth century did audiences thrill to Reynaud's magical little tales. Perhaps the best refutation of this criticism is to point out that over a period of eight years, over half a million people attended the shows of the *Pantomimes Lumineuses*.

And so, all things considered, the *Pantomimes Lumineuses* of Émile Reynaud might now, finally be celebrated as the world's first cinema. A cinema that played animations. A cinema where each audience member sat

in breathless anticipation in velvet seats as the lights dimmed, and the tick-tick-ticking of the projector began...

Professor Robert Shail is Director of Research in Leeds School of Arts. As an established researcher, Robert has produced internationally recognised work on British cinema history and children's culture including comic books, films and television, and board games.

Irfan Shah is a writer and researcher and an Associate of Leeds Beckett University.



THAT'S ALL FOLKS!!!!