MOVEMENTS IN FILM
1912-40
There were two distinct ways in which artists first came to use film in the early twentieth century. Some saw it as a chance to explore pure graphic abstraction in a time-based form, while others seized on the unique properties of the lens and montage editing to produce a 'new vision' of reality.

The first might be called the path of 'visual music', a term coined by the English art critic Roger Fry in 1912 to define a new and 'purely abstract language of form' in the advanced art of his time. His friend the painter Duncan Grant approached this idea in his semi-cinematic Abstract Kinetic Collage Painting with Sound 1913–14, a sequence of scrolling coloured rectangles made from cut paper, viewed through an aperture and accompanied by a Bach concerto.

This modest experiment was perhaps a modernist counterpart to the earlier Symbolist inspired 'colour organs' of Alexander Scriabin, Wallace Rimming and other composer-researchers who believed that musical notes had colour equivalents, and that the tones of sound and vision could evoke each other. This is sometimes called 'synaesthetic' art, because it linked or synthesised the eye and the ear, one sense stimulating the other. Leading European moderns like Wassily Kandinsky, the pioneer of non-figurative painting and its leading theorist at the time, and the avant-garde composer Arnold Schoenberg also planned ambitious stage works that combined abstract colour, drama and sound around 1909–13. Schoenberg wanted to film his opera The Lucky Hand (1913) in a style 'of the utmost unreality', but like many other imaginative proposals for artists' cinema in the silent era, it was never made.

The second route to artists' cinema was more pictorial, and not based on an analogy with music. Rather than the goal of pure abstraction, this kind of film art was inspired by the fragmented optics of the Cubists, which had exploded the single point of view and substituted for it an unstable but also dynamic sense of vision. New aspects of the image were revealed by the camera eye and then reassembled in editing the shots. While painting remained the master-code for the new film art, it here took a different post-Cubist swerve into the new objectivism of such multi-media modernists as László Moholy-Nagy. For this strand, film was also a token of modernity: a new art for the new age. Abstract in a different sense, this path leads to the film poem with its representational content, but also to the avant-garde documentary with its political and radical aspiration.

These distinct paths overlapped, since essentially they were two kinds of abstract cinema that largely ignored the conventions of the acted film or 'screenplay'. But there were differences. The first route, Fry's 'visual music', aimed to bring together image, sound and colour in film, often to fuse them into one sensory experience. The second route, that of post-Cubist film, broke more radically with the musical analogy and the synthesis of seeing and hearing. Here, the shot, edited in fragments even down to the single film frame, led to a wholly new kind of film art, more analytic than synthetic.

Nonetheless, both paths were historically related in complex ways, since each had emerged from their shared origins in Symbolist art of the 1880s. That background was developed and refined in the synaesthetic cinema, and rejected by those who followed the Cubists, but was nonetheless entwined in the trajectories of individuals and movements for the next century and beyond. Examples include Fry himself, or cinema's greatest theorist Sergei Eisenstein, whose early montage films like Strike 1924 and Battleship Potemkin 1925 were succeeded by the radical melodrama of his late work such as Ivan the Terrible 1944–6. But these waves or pulsations in the history of art would have come to nothing, as far as film is concerned, without the scientific experimentation that had led to the invention of the 'cinema effect' in the 1880s and 1890s, in the same era as Symbolist art.

The science of motion was investigated in the photographic studio by Eadweard Muybridge and by painters such as Thomas Eakins, in the USA, and
Fernand Léger
*Ballet mécanique* 1924
35mm film, silent
in the stricter conditions of the laboratory by Étienne Jules Marey and his team in France. Using a multi-camera set up, Muybridge’s projects broke down motion into a sequence of stages that led directly to the invention of the cinema. Muybridge himself contrived a zoetrope, or ‘wheel of life’, to animate and even project the rapid flicker between static images of a running horse or an athlete. Marey ingeniously caught the motion of fencers, athletes, soldiers, birds and animals on a single photographic plate, to track or diagram their actions as a linear sequence. Towards the end of his career (he died in 1904) Marey pre-empted abstract art in a series of vivid photographs of sound vibrations, patterns in water and geometrical figures. The results were startlingly close to the early abstract paintings of such artists as František Kupka and Robert Delaunay. Marey also made some astonishing motion picture films himself, with the aid of a more showman-like collaborator, Georges Demeny.

A direct line is often and rightly traced from Marey to the Cubists and Futurists, who took from his science of chronophotography the raw material for a newly fragmented vision that literally shattered the harmony of appearances. But at the same time, the scientific exposure of a hidden world of abstract motion and form also directly fed the Symbolist imagination. These currents were mixed. Speculations about a ‘fourth dimension’ (and beyond) figured in the thinking of ‘spiritual’ artists like Piet Mondrian and Kandinsky as well as of ‘materialist’ artists such as El Lissitzky and Alexander Rodchenko, in their evolution from late nineteenth-century aesthetics through to the new art of the 1920s and 1930s.

The very first attempts by artists to make films reveal these mixed origins. Pablo Picasso’s friend, the Polish-born painter Léopold Survage, planned an ambitious abstract film in 1912–14 that was never made – the paintings for it, on paper, are in the wrong format for the screen – called Colour Rhythms. It expressed an impulse to create an abstract light-play finally achieved a generation later by film artists such as Oskar Fischinger. At the same time, the Italian Futurists, brothers Arnaldo Ginna and Bruno Corra, painted abstract shapes of stars and circles in colour on the filmstrip itself. These too do not survive, but are fully described by Corra in his 1912 essay ‘Abstract Cinema – Chromatic Music’.

From the Futurists also came the first ‘humoresque’ films such as Vita Futurista 1916, or a short love story told exclusively by filming the feet and legs of the three protagonists, which set off yet another avant-garde genre, the burlesque or parody film. These acknowledge the impact of the commercial popular cinema, then graduating from side-shows and music halls to the more sophisticated film theatres sweeping the USA and Europe. Thus, from the same Futurist milieu, before the First World War, came two major forms that dominated the early film avant-garde: the wholly abstract film and the comic/lyric film. But while a visionary Futurist manifesto of 1916 looks ahead to a new art of cinematic ‘polyexpressiveness’ (‘synthetic, dynamic, free-wording ... immensely vaster and lighter than all the existing arts’), at this time artists had only limited means with which to make films at all and their first steps were relatively primitive. This is why the Cubist cinema associated variously with artists from Fernand Léger to Walter Ruttmann and Hans Richter in the mid-1920s was only able to develop a decade after the Cubist painting that inspired it (c.1912–15), when film-making became a more widespread if still limited option.

Man Ray and Marcel Duchamp were ahead of the game in purchasing small ciné-cameras in New York in 1920. With these they made their first experiments, which led to such classics as Duchamp’s Anémic Cinéma 1926 and Man Ray’s Étude Bakfia 1926. Léger, on the other hand, was asked to collaborate on a film with American cinematographer Dudley Murphy, who wanted to work with a modern artist. Murphy’s first attempt, with Man Ray, did not succeed, but some of their footage survives in the now-famous film made with Léger, Ballet Mécanique 1924. This is perhaps the key work of the ‘Cubist cinema’, a prismatic collage of
ciné-effects in a rapid montage of urban life, dancing machines and abstract forms. By this time, in Germany, Walter Ruttmann, an architect-painter and studio animator for Lotte Reiniger, had made his abstract 'Opus' series (1921–5), which inspired Oskar Fischinger. Hans Richter and Viking Eggeling, from the Dada-Constructivist movement, experimented with scroll drawings and then films, from around 1919 through to the mid-1920s.

This set the pattern that lasted for the next decade, and survives in our own time. A few of these artists made their films more or less on their own, while others worked with professionals or at the margins of the major film and animation industries. For some, film was an additional medium to add to their practices in – or across – different media. Traditional barriers were being crossed, as by Duchamp, and film had the added excitement of its sheer newness. In general, they made only a few films, if highly significant ones. Other artists, such as Fischinger, took up film as their primary if not sole medium, but this trend did not fully emerge until after the Second World War. The artists of this generation, and many later ones, continued to paint, sculpt or work in other media whether or not they continued to make films. Ruttmann is a major exception, turning exclusively to documentary in the late 1920s.

The films themselves have had a long-lasting impact, especially after abstraction blended with Surrealism (with the ex-Dadaists Man Ray and Richter) or bred a counter reaction (as with Buñuel/Dali and Artaud) towards the end of the 1920s. Duchamp’s Anémic Cinéma is very simple in form, and more critical than celebratory of its medium, as the title suggests. It intercuts sensual, rotating spirals with similarly turning and ungraspable punning texts, heralding conceptual art by a half-century. The wholly abstract films of 1920–8 made in Germany have a different status, as examples of pure cinema, albeit also based on the amalgam of graphic art with time-based media.

Around 1919, in the transition from Zurich Dada to its politicised rebirth in post-war Berlin, Richter and Eggeling first attempted to make their linear, organic scroll drawings unfold and develop in time by proposing to film them. They achieved this, separately, after 1921. Richter became a prolific filmmaker during the Weimar period, his 'Rhythm' series a landmark of the abstract cinema. The interacting and overlapping frames and squares of such films as Rhythm 21 (probably made in 1924–6) anticipate the digital age when, as Lev Manovich put it, 'the avant-garde became incorporated into the computer'. At the same time they are integral works that reveal form, motion and temporality as their sole and sufficient filmic content. The more professionally accomplished Opus 1–4 abstract cycle by Ruttmann also begins with organic imagery, as in the conflict between blobs and spirals with hard-edged points and lines in Opus 1 and 2. In the last two films of the series, the curves have become sinuous, while the rectangles and lines make up a dazzling and rapid flicker pattern that pre-empt Op art and digital streaming.

Eggeling's austere Diagonal Symphony 1924, his only completed film before his early death in 1925, takes the organic theme into cerebral but also intuitive directions. Unlike his peers, he was uninterested in colour, sound or spatial
illusion, so that (in contrast to the visual dynamics and push-pull recession and displacement of forms in Ruttman and Richter) his graphic lines and wedges curve and interact purely on the flat screen surface. Eggeling’s intense and serious personality, as well as his search for a ‘ground bass’ theory of ‘the rules of plastic counterpoint’ (in the words of his friend Jean Arp), impressed modern artists such as Paul Klee, Lissitzky and Theo Van Doesburg, the last two of whom publicised and developed his ideas in the 1920s.

But by the end of the 1920s and into the next decade, as political tensions grew in Germany, Italy and Russia, many filmmakers on the left adopted ‘the social imperative’, as Richter called it. This was the central platform of the second major international conference of avant garde filmmakers from Europe and Japan, held in Belgium in 1930. In contrast, the first – at La Sarraz, Switzerland, 1929 – had focused on the abstract cinema. It also reflected a growing awareness of the new Soviet cinema, led by filmmakers forged in the crucible of Futurist painting, poetry and architecture, such as Eisenstein, Dziga Vertov and Vsevolod Pudovkin. Their mentors in painting went further. Kasimir Malevich exhorted Eisenstein to abandon drama altogether, as Vertov had, while artists such as Lissitzky foresaw a new age of abstract electrical mechanical art. But Soviet montage itself, especially in Battleship Potemkin and Vertov’s Man With a Movie Camera 1929, became a prime model for the non-realist codes of fast, elliptical cutting and pace that promised a fusion of political radicalism with experimental cinema.

Celebrating all kinds of experimental film were a host of journals and a smaller number of books, notably by Jean Epstein, Richter and the English writer Winifred Ellerman, known as Bryher, companion of H.D., the American poet. Bryher was an editor of the magazine Close Up (1927–33), published in Switzerland, that enthused about the new cinema from abstraction to Soviet montage, documentaries to scientific films. Its contributors included Man Ray, Dorothy Richardson and Eisenstein himself. Typically, film journals were more wide-ranging than later factional accounts of the avant-gardes might imply, embracing the best of Hollywood as well as the international Art Cinema of Carl Dreyer, Jean Vigo, Georg Pabst and Abel Gance, to take film into subjects and styles beyond the commercial norms.

Nowhere was this stronger than in France, where the avant-garde aspiration turned from post-dada abstraction in the early 1920s to a more lyrical and neo-symbolist direction by the end of the decade. This passage – which is also roughly that from Cubism to Surrealism – can be traced in the careers of such prolific directors as Germaine Dulac. Her output includes wholly abstract films made in the wake of Léger’s Ballet mécanique but also the pointedly feminist Smiling Madame Beudet 1923, whose dream sequences evoke the state of mind of a woman oppressed by bourgeois marriage. The French pioneered a second artists’ avant-garde, less concerned to transform abstract painting into graphic motion (as did the Germans, for example) than to explore the new optic or ‘photogenic’ unleashed by the camera lens. This seemed to offer a route to a visual cinema that followed on from the lessons of modern painting, from Impressionism to Cubism and the colour-synchrony of Delaunay and his wife Sonya. Her cinematic designs with Blaise Cendrars (Trans-Siberian Express 1913), also indicated the important presence of poets and writers in the French film milieu. Guillaume Apollinaire, founding spirit of dada and Surrealism, was among the first film enthusiasts before his early death in 1918. Survage’s drawings had been printed in his own journal, along with many other impassioned hymns of praise to the birth of the ‘New Art’ of cinema.

The French journals inspired by Louis Delluc and other publicists were like the international ‘little magazines’ in the rest of Europe that similarly recorded the advances of new abstract films, but in France were more focused on cinema itself than on its relation to the other arts. It was, in a sense, more medium specific,
partly because the French film production system encouraged or allowed such innovative talents as Gance, Marcel L’Herbier and Jean Epstein to make full-length films of great complexity and ambition. In addition, and again like the rest of Europe, the French film clubs – especially in Paris – were cultural centres to promote independent cinema. Some even had the idea – repeated many times over the course of the rest of the century – of making new independent films with funds generated by screenings.

They also published a remarkable quantity of advanced film theory, comparable to the abstract and Soviet school. Along with the sadly short-lived Henri Chomette (brother of René Clair), whose lyric films of urban life and natural imagery include *Five Minutes of Pure Cinema* 1925, Epstein was one of the subtlest exponents of ‘photogenie’, in which the meaning of an object is transformed by the camera lens. His cheerfully titled 1921 book *Bonjour Cinéma!* sums up an era of first-wave optimism. The works of this French school – in parallel with artists’ films by Léger and Man Ray – have had a long life. Gance’s *Napoléon* is an epic of modern reconstruction (by British historian Kevin Brownlow) as well as a widely screened epic film in its own right, while the art journal *Octobre* has influenced many of Epstein’s visionary writings.

But the very successes of this group – sometimes known as the ‘impressionists’ – were also a limitation. The terse and intensive abstractions of Richter, Eggeling, Man Ray and others, made with minimal professional aid, are personal, authored works that continued to inspire artist-filmmakers in later decades. The films of the French school, by contrast, were often lavishly executed with complex interiors, extras, costumes and even racing cars. L’Herbier, for example, could draw on the design skills of Léger and Robert Mallet Stevens for the sets of *L’Inhumaine* 1924. Moments of rapid and visionary montage punctuate his films, and determine the extraordinary non-linear sequencing of Epstein’s *The Mirror Has Three Faces* 1927. But the films are also bourgeois melodramas, driven by the central erotic and emotional fantasies of a power crazed protagonist, sometimes evoking a quasi-symbolist aesthetic that is closer to the turn of the century than to the heady 1920s.

Cinematic impressionism in France was ultimately crushed by two tendencies – realism and Surrealism – that seemed opposite to each other but actually turned out to have more in common as the 1930s turned into an age of political upheaval. An emblematic moment was the uproar that greeted Dufuc’s film of a screenplay by the Surrealist Antonin Artaud, *The Seashell and the Clergyman*, in 1928. It is sometimes said that the Surrealists despised Dufuc’s film because of their misogynistic belief that the poet’s original savage vision in this dadaist psychodrama had been weakened by her lyrical and impressionist interpretation. The reality was more complex, and Artaud’s response to Dufuc (whom he continued to respect) more subtle. It confirmed, however, his intransigence; the cinema had to be fundamentally negative, not summoning up the reassurance of the dream or image, and it had to be founded on fracture or ‘shock’ (a theory also espoused by Walter Benjamin) rather than associative montage (as in Dufuc’s film).

Artaud’s anti-ocular polemics, and those of Surrealism more generally, were expressed concretely that same year in an independent film by Luis Buñuel and Salvador Dalí, two young Spaniards in their late twenties, both friends of the poet Lorca. Their first film, *Un chien andalou* 1928, was made outside the official Surrealist group, but was quickly adopted by the movement along with the directors themselves. The shot of an eye sliced open by a razor is still an iconic statement of Surrealist film, a physical assault on the spectator’s sight in the very act of viewing. Composed of abrupt changes of time and space, its dislocated editing is post-cubist and disruptive. Motifs circulate without explanation (a striped box, a severed hand), characters turn into each other, linear time is
interrupted. Above all, death and fetishism upturn the boy-meets-girl plot that the film sardonically parodies and absorbs from the commercial (and impressionist) cinema. A static camera and degree-zero stylistics, based wholly on the framed shot and the interrupted cut, make the starkest possible contrast with the dynamics and flow of abstract film as well as 'Art Cinema'. Tangos intercut with Wagner comprise the equally sardonic soundtrack.

In parallel to these overt assaults on the cinematic imagination, the films of Man Ray offer a more playful but also insidious and oblique alternative. His first film, partly made up of fragments shot on the camera he bought with Duchamp, was Return to Reason 1923, requested by Tristan Tzara at short notice for a performance that turned out to be the last manifestation of Paris Dada before the Surrealist takeover a year later. Overnight, Man Ray filled out the few shots of his paintings, a fairground at night and the model Kiki, with filmstrip 'rayograms', made by placing objects and materials directly onto the celluloid. The result is one of the most astonishing and forward-looking films of the classic avant-garde. Opening with grain in motion (in fact, salt and pepper), then with nails and sawblades imprinted in graphic outline, it moves into sculptural and rotating space before ending with Kiki's nude body outlined against a window. The final shot is, in fittingly Dada style, in negative.

The elliptical and non-linear structure continues in May Ray's more elaborate films such as Étoile de Mer 1927, mostly shot through a stippled lens, and the interplay of human and machine or prosthetic parts of Einak Bakia. The last film he made in this era, Les Mystères du Château de Dé 1928, is a study of absences and non-events. The camera tracks at low-level through the empty rooms of a modernist house (designed by Robert Mallet-Stevens for the film's wealthy sponsors) while inter-titles triumphantly report 'Personne!' or 'No one there!' The film is a model for our contemporary fascination with vacancy, architecture and virtual space.
During the 1930s the French cinema metamorphosed into the classic films of Jean Renoir (son of the painter), Sasha Guitry and René Clair, along with the later films of L’Herbier, Gance and Dulac. Their impact on painters and writers, and the achievement of a serious cinema independent of Hollywood, is part of another history that extended across Europe, and constituted an Art Cinema that still survives today in world cinema aspirations to national and socially oriented film-making. The impulse to a purely experimental cinema, as an integral part of the wider arts rather than – as with Art Cinema – an addition to them, took different directions in the avant-garde. But two careers, a long one in the case of Jean Cocteau and a tragically short one in the instance of Jean Vigo, represent the cusp or turning-point of this historical moment.

Cocteau’s reputation as a cinéaste and director really belongs to the post-Second World War Art Cinema, but his early film Blood of a Poet 1930 is best seen in relation to the radical avant-garde. It established the theme of the psycho-drama, the subjective and fragmented narrative that reveals inner life and conflict, with shared roots in the Expressionist films of F.W. Murnau and Robert Wiene such as The Cabinet of Doctor Caligari 1919, but coming to fruition for the avant-garde in the US after 1943. The protagonist of Cocteau’s film, who is tellingly a painter poet, undergoes a series of visions and trials that end with death and transfiguration. Suspending the film between two moments of time, the interrupted collapse of a chimney, Cocteau’s sardonic conclusion shows the poet embalmed with laurels and turned into a bloodless monument. But the iconography is close to Surrealism, as in the mouth placed in the poet’s hand by the Muse (played by Lee Miller), the transvestite imagery, the emphasis on childhood trauma (a fatal snowball fight), spirals and masks, and most memorably the leap of the poet into a mirror to reach across time. This ambitious sound film stands somewhat apart from the sophisticated ironies of Cocteau’s postwar films where myth and the everyday are reconciled and the occult is framed within a realist space, akin to the later Buñuel if in a different spirit.

Vigo completed only two drama-films, Zéro de conduite 1929 and L’Atalante 1934. Their lyrical realism, with anarchist undertones, have had a far-reaching impact on the cinema since Vigo’s early death at twenty-nine. His two short documentaries, A Propos de Nice 1929 and Taris 1930, are more experimental in style. The first is a Vertov-like dissection by montage of the bourgeois beach resort, replete with carnival masks and the body on display. The second stars the eponymous champion swimmer, first shown as an almost Magritte-like figure in his black suit and bowler hat, but then turning into an emblem of freedom when he swims unrestrained in his element. Taris employs a fluent film-language that includes fast and slow motion as well as near-mythic shots of the body in water.

Vigo’s blend of social critique and poetic montage links his two short films to one of Buñuel’s last films from pre-war Europe, made after the ambitious L’Age d’or (also with Dalí, 1932), an anti-imperialist drama of doomed love and social alienation that took disjunction of sound and image to new heights and which outraged the French right wing. This was Land Without Bread (1932, but reissued as a Republican fundraiser in the Spanish Civil War after 1936). Here, the poverty of Spanish peasants is coupled with a voice-over commentary that effectively subverts the naturalism of the images so that the viewer is left in critical and productive doubt about the veracity of the film medium as a record of truth.

The social documentary absorbed many of the talents of the experimental or avant-garde artists up to the start of the Second World War in 1939. Most of them belonged to the radical left, with the major exception of Ruttmann, who drew increasingly closer to the Nazi regime in Germany while his peers Richter and Fischinger chose exile to the US. Richter was in fact working on a documentary in Russia, produced by Eisenstein’s companion Pera Attasheva, when Hitler’s regime took power in 1933. By then he had successfully expanded his abstract style to
include a new lyrical or surreal ethos, pursued in his own experimental films as well as in special effects and trailers for the industry.

*Film Study* 1926 is an exceptionally crafted abstract film with powerful figurative icons, from birds flying in reversed slow motion, a repeated shot of a sledgehammer that cuts the screen into a wedge, eyeballs adrift in film space to Fritz Lang-like 'searchlight' paths cut by triangles of light. The film-poem is given a Dada-Surrealist makeover in *Ghosts Before Noon* 1928. Here, objects rebel against their masters (as in dancing bowler hats), a figure endlessly climbs a ladder (like the looped washerwoman ascending a staircase in *Ballet mécanique*), and the time-based theme is underscored by a count-down clock. The visual dynamics of these films, the last of the Weimar avant garde, are echoed in Richter's set piece inserts for feature films, such as *Inflation* 1928, a rapid-edit montage vision of multiplying banknotes and social misery.

Throughout this period, lively film clubs, journals and film-making groups appeared in Hungary, Czechoslovakia and especially Poland, where Constructivism blended with Dada Surrealism in the films of Stefan and Franciszka Themerson (later the founders of the avant-garde Gaberbocchus Press in London). The international experimental film in Eastern and Central Europe often combined the scientific (lightplay) and the documentary (city life) to create a new kind of film-poem, as in the Themersons' *Europa* 1932, their 'humoresque' social satire *Adventures of a Good Citizen* 1937 or their ad for an electricity company, *Short Circuit* 1935. Constructivist graphics and book designs were 'cinematised' in layout and photomontage, pioneered by Lissitzky and Rodchenko in Russia and internationally by Moholy-Nagy. Moholy-Nagy's projects include graphic schemes for city films, an abstract film of his light-sculpture and numerous documentaries, such as a study of the old port of Marseilles and another about the architecture of London Zoo (a modernist icon).

In Britain, film culture was led by the London Film Society (1925–39). Its members included artists like Frank Dobson, Roger Fry, E. McKnight Kauffer and Edmund Dulac, as well as Virginia Woolf and Alfred Hitchcock. The LFS premiered such radical new films as *Battleship Potemkin* and Vertov's *Enthusiasm* (Vertov turned the speakers up to full blast for his sound-collage of factory noises and neo-electronic music). The Close Up group, with strong UK connections, made two films, notably a social drama of racial tension, *Borderline* 1930, in a strong style marked by German Expressionism and starring H.D., Bryher and Paul Robeson. But apart from a few brave independent directors such as Richard Massingham, and some left-wing campaign films like *Peace and Plenty* 1939, the heart of radical film production was centred in an unlikely institution – the Post Office. Here, and in other state-run organisations such as the Empire Marketing Board, the pioneering producer John Grierson led a team of young filmmakers to establish a documentary movement that remains a key British contribution to international film culture.

Radicalised by his experience of the new science of mass communications in the US during the 1920s, Scottish-born Grierson's mission was to spread social education through the film medium. He opposed the US-led entertainment cinema, and used the up-to-date techniques he had learnt while cutting the English-language version of *Potemkin* for the Film Society. His team was largely gathered from a generation of Cambridge-educated writers and cinéastes whose wider circle included Jacob Bronowski, William Empson, Basil Wright, Humphrey Jennings, Julian Trevelyan, Kathleen Raine and many other leading figures in British culture through to the television age. Many of them also took part in Mass Observation, an idiosyncratic fusion of anthropology, Marxism and Surrealism dedicated to the study of everyday social behaviour. Some, including Jennings and the poet David Gascoyne, were signed-up members of the Surrealist movement led by André Breton.
Sheltered and funded by a variety of British organisations, Grierson produced a major output of informational films that went well beyond their didactic brief, exploring and expanding the language of cinema. Many, of course, were conventional or bland, although even such straightforward mini-dramas as *The King's Stamp* 1935 or the comic musical burlesque *The Fairy of the Phone* 1936 contain imaginative montage-editing by the painter William Coldstream and other tyros. But several films made by the Post Office and similar corporate agencies go well beyond this, most famously *Night Mail* 1936, with its stunningly rapid-paced final section accompanied by Benjamin Britten's music and a breathless voiceover verse commentary written by W.H. Auden.

Grierson hired untamed spirits from the cinema and the arts to liven up the unpromisingly sober genre of social documentary. They included the veteran Robert Flaherty and (more successfully) the young Brazilian Alberto Cavalcanti, who had made now-classic films such as *Rien que les heures* 1926 in France. Cavalcanti pillaged GPO stock-footage and employed Britten and Auden for the chanted, multi-tracked sound-score of the intensively montaged *Coal Face* 1935, probably the most Brechtian film made in the UK. It celebrates the miners' labour but does not shirk the grim statistics of death and industrial injury. Likewise, *Housing Problems* 1935 by Edgar Anstey, made for a gas company, has direct-to-camera statements by working-class participants, mixed with statistics, diagrams, models and social realism that anticipate the future style of television. It was partly directed by Grierson's sister Ruby (killed at sea in 1940), who is said to have exhorted Bethnal Green tenants: 'The camera is yours, the
microphone is yours. Now tell the bastards what it is like to live in the slums.'

The two major talents nourished by Grierson’s film units were Humphrey Jennings and Len Lye, friends who collaborated on at least one film but who took different directions as Surrealists and filmmakers. Famously named by Lindsay Anderson as ‘the only real poet the British cinema has yet produced’, the Surrealist painter Jennings cut his teeth on GPO films like Spare Time 1939, before maturing to the wartime ‘home front’ documentaries such as the legendary Listen to Britain 1942 and A Diary for Timothy 1945 (scripted by E.M. Forster). Spare Time, with a spare commentary by the poet Laurie Lee, is a visual-music documentary evocation of leisure-time in three working towns in England and Wales. Perceptively depicting a soon-to-be lost proletarian world in the street, at home and at play, its mixture of lyricism and sharp irony was taken further in Jennings’ war-time propaganda films. Listen to Britain famously has no voiceover at all, but follows Vertov and anticipates Peter Kubelka in a sound montage that ranges from factories, airfields, a Mozart concert in the National Gallery and Flanagan and Allen chanting ‘Underneath the Arches’ to a sing-along audience of servicemen and women.

Jennings’s main collaborator was an intense young Scots editor, Stuart McAllister, a first-class graduate of painting at Glasgow School of Art, and fellow student of Norman McLaren, another of Grierson’s most imaginative acolytes. McLaren explored every facet of animation, except conventional cel techniques, to produce a vast corpus of lyrical abstract films, later joining Grierson in Canada to form its pioneering National Film Board. Such films as Synchrony 1957 explore synaesthetic colour and abstract form by using the image to generate the sound-track directly.

Len Lye’s career as an experimental animator began after the young New Zealander moved to Britain and showed his paintings with such radical London art groups as the Seven and Five Society. His Tusalava 1928 is an organically visual abstract film whose biomorphic imagery is partly drawn from Oceanic cultures. It was made in great poverty over two years, but Lye’s palette expanded wildly when he was taken on by Grierson for lavishly coloured – but still firmly handmade – GPO productions such as Colour Box 1935 with Latin music rhythms and painted directly onto the filmstrip.

Rainbow Dance 1936 expands into figuration, experimental solarisation and negative colour, while the elaborate Trade Tattoo 1937 plunders and colourises stock GPO footage to construct a dynamic vision of industry, city life and luscious graphic art. In live-action films such as N or NW 1937 – ostensibly a reminder to use the right post-code – Lye pre-empts the flicker edit techniques of later artists from Stan Brakhage to Scratch Video. His influential later films of the 1970s, made in the USA, are composed of austere but vibrant black and white marks directly scratched onto the film surface (and set to African music), but his GPO films are an inexhaustible anthology of experimental devices and colour rhythms long before the digital age and the music videos that they in part predict.

Full abstraction and synaesthesia were the hallmark of Oskar Fischinger, who sustained and expanded the art of graphic animation into colour and sound throughout the 1930s and beyond. A contemporary of Richter and Ruttmann, and of the light-play experiments by Bauhaus artists, he explored three-screen and overlapping projection as early as 1926–7. With his brother Hans and wife Elfriede, Fischinger made adverts, as in the delightful parade of cigarettes in Muratti Gets in the Act 1934, as well as entertaining abstractions of swirling lines and curves set to popular classics by Brahms and Liszt. Leaving Nazi Germany in 1936, as a ‘degenerate artist’ and opponent of the regime, he had a brief and chequered career at the Disney, Paramount and MGM studios, where he felt his ideas were misunderstood and vulgarised.

With occasional patronage from the major studios and the redoubtable
Len Lye
Rainbow Dance: 1936
35mm film, sound
Baroness Rebay of the Guggenheim Foundation, he nonetheless completed some astonishing films of pure colour imaging. The unfolding layers of flat colour and spatial play in films like An Optical Poem 1937, Allegretto 1936–43 or Radio Dynamics 1942 (actually a silent film) look ahead to the rise of colour-field painting a decade later. Living in Los Angeles, home to many wartime exiles from Arnold Schoenberg and Thomas Mann to Kurt Weill and Bertolt Brecht, Fischinger's abstract modernism was fused with synaesthetic mysticism. His interest in Eastern philosophy, archetypes, Buddhist mandalas and Goethe's colour symbolism made him a foundational figure of West Coast abstract film in the postwar period. By then a hero to younger artists like Jordan Belson, he was restricted by lack of funding and later illness to one last major film work, Motion Painting No. 1 1947, laboriously executed on Plexiglas to a Bach concerto, but he continued to paint until his death in 1967.

Fischinger was one of many artists—including Lye and McLaren—who initially found support at the fringes of the animation cinema, where the norms and codes of the dominant mainstream were more relaxed. Occasional makers of films such as Anthony Gross, the English printmaker, as well as professionals such as Berthold Bartosch (who animated the woodcuts of Frans Masareel) or the husband and wife team Alexander Alexeieff and Claire Parker, funded their films in this way. Alexeieff and Parker invented an extraordinary pin-board system that permitted them to draw with reflected light, rather like mezzo-tint printmaking, in fluid, dissolving motion (as in Night on Bare Mountain 1933).

Although an American avant-garde rose rapidly in the postwar years, Fischinger's frustrated career suggests that the time was not yet ripe for a fully-fledged experimental cinema that could challenge the hegemony of Hollywood or connect to the wider arts. In much the same way, and for similar reasons, American modernists between the wars still looked to Europe as a lodestone. Back in 1912, the American painter Stanton Macdonald-Wright had experimented with light projection ideas in Paris that were not finally realised until he combined three-strip colour film strips with drawing in his hand-operated 'colour organ', the Kinaidoscope, in the 1960s. A few dissident independent films were made at the fringes of Hollywood, as in the sarcastic The Life of 4913—a Hollywood Extra 1929 by Robert Florey and Slavko Vorkapich. Then as now, the US mainstream soaked up and adapted modernist styles, such as commissioning classic 'dream-sequences' from Dali for Hitchcock's Spellbound, or silently absorbing the influence of the international avant-gardes into Hollywood's expanding visual language.

The space that was left was occupied by the radical documentary, as in Europe, and by a similar plethora of adventurous journals to promote the new cinema, including the Soviet films of Eisenstein, Vertov and Pudovkin. Impelled by economic injustice and the approach of war, the film avant-garde gravitated to the social front opened by Roosevelt's New Deal, as did many painters and other artists who took part in federal-funded cultural projects, from mural painting to collecting folk songs among native communities and migrant workers. The documentary films produced by Pare Lorentz and others were an equivalent to Grierson's movement in the UK (itself inspired by an American model of mass media culture), although mainly with higher production values and an unparalleled visual flair and rhetoric. They had learnt from Eisenstein, just as Eisenstein himself had learnt from D.W. Griffith. Paul Strand, best known as a pioneer fine-art photographer, shot many films in this period. His camerawork underpins an early film (The Wave, made in Mexico, 1936) by the young Fred Zinnemann that dramatises the plight of poor fishermen, as well as the vivid portrayal of American society in Native Land 1942, with voice-over by Paul Robeson.

With only a few native and relatively isolated pioneers of abstract film in
the 1930s, such as Douglas Crockwell (a free-form painter of liquid-motion harmonies) and Mary Ellen Bute (an early champion of electro-acoustic experiment), what would be a postwar explosion of the film avant garde in the USA was still nascent and barely visible, until the San Francisco 'Art in Cinema' screenings from 1947. Two earlier exceptions, both obscure at the time, indicate quite literally the shape of things to come. The first was Harry Smith, self-styled eccentric visionary and an assiduous collector of folksongs as well as a model of the freewheeling bohemian artist. Smith began painting on film in the 1940s and then expanded to include every technique he could imagine. Using a variety of hallucinogens to enhance his sense of colour, he synchronised the films to the new bebop jazz of Dizzy Gillespie (although he reissued the 'Early Abstractions' in the 1960s with a Beatles soundtrack instead). Some of the abstractions are wittily figurative, as in the animated dream-dancers of the Méliès-like Bellhop and the Indian Princess, but most consist of colour explosions made by painting, scraping or batiking the film surface.

The second exceptional heralds of a new avant-garde were the brothers John and James Whitney, composer and painter respectively, who also explored radical film ideas in the 1940s, notably in their five Abstract Film Exercises 1943–4. On John's return from studying in Paris (1938–9), where he had imbibed Schoenbergian tone-row systems and other modernist ideas, the two brothers set out to reinvent the abstract cinema. They critiqued abstract animation for its hand-drawn graphics, which they claimed were taken over from other media rather than being cinematic as such, and hence were only illustrative of abstraction on film. Instead, the Whitneys generated abstract shapes directly from light filtered through a series of stencils. These were less images than manipulable units, more intrinsic (they claimed) to the film medium than animated drawing, or painting on the filmstrip, and anticipating the pixel matrix of the computer. Shaping light in points and swathes with stencils, and synchronised to random sound that was generated by pendulums, the films compose their own sound, with colour added in an optical printer.

Here, the Whitneys not only freed cinema from its roots in other art forms, but also laid the ground for an audio-visual culture that later expanded from film technology and process to embrace video and digital media. The Whitneys soon pursued separate paths, the one (John) towards computerised imaging, the other (James) to the mandala-trance forms that typify West Coast abstraction, as in the pin dot stencils of Yantra (1950–7). Their early perception that films could be shaped by points of mapped light led ultimately to the digital matrix, independent of either lens or brush. Their synaesthetic experiments also reinvigorated an early avant-garde aspiration towards primal forms and visual music. But waiting in the wings, in the 1940s and the postwar world, a very different avant-garde was also in formation. This was to re-establish the camera-eye and subjective vision as the core of the film vanguard, leading to a massive and influential expansion of the medium by North American artists from Maya Deren and Kenneth Anger to Stan Brakhage and Hollis Frampton. In Europe, meanwhile, a new combination of abstract art and metrical structure led film away from synaesthesia to radically break the bond between sound and image.