A History of

FILM MUSIC

Mervyn Cooke
1 The ‘silent’ cinema

As has often been remarked, the cinema has never been silent: the so-called silent films which represented the first flowering of the medium from the 1890s to the late 1920s often used sound as a vital part of the filmic experience. Accompanying music was only one of a diverse range of sonic options available to exhibitors in the early years of cinema; yet the familiarity of the fairly elaborate musical provision characterizing the later years of silent film (c.1914–27) has tended to result in the assumption that music was both constantly used and deemed aesthetically viable well before this period. As Rick Altman has argued, however, during the early development of the moving picture (c.1895–c.1913) it was not uncommon for films to be projected with no organized sound component at all (Altman 2004, 193–201). Yet, by the start of the 1920s, film-music pioneer George Beynon could declare without fear of contradiction: ‘Allowing the picture to be screened in silence is an unforgivable offense that calls for the severest censure. No picture should begin in silence under any conditions’ (Beynon 1921, 76).

Why sound?

Altman’s careful research established that ‘silent films were in fact sometimes silent, . . . and what’s more it did not appear to bother audiences a bit’ (Altman 1996, 649); but audience noise and direct audience participation were more prominent at the turn of the twentieth century than they are in today’s cinema in the West, so to this extent films were never truly experienced in silence. When Andy Warhol made his almost static silent films in the 1960s he assumed the audience would supply sounds, thereby participating in the artistic event (Weis and Belton 1985, 369); and audience noise, though reduced in modern times, has remained part and parcel of the cinematic experience, most prominently in India. The desirability of masking or discouraging audience noise is one of the many possible explanations – some practical and others aesthetic – that have been advanced to account for the provision of some kind of sound element to accompany screenings of silent films.

Another reason for the provision of sound in the early years of cinema may have been to mask intrusive noise both inside and outside the projection venue, including the sound of traffic passing by and the distracting whirring
of the projector itself. Conventional modern projectors still generate a fair
degree of noise: the experimental film-maker Stan Brakhage, who attempted
to make genuinely silent films in the 1950s, attested to his irritation at having
neglected the fact that viewers would in effect never be able to watch his films
in total silence because the sound of the projector would always be present.
Mechanical quietness was used as a selling-point when some early projectors
were marketed: around 1900, for example, publicity for the Optigraph noted
that with rival projectors 'the noise is so great that, as a rule, it is necessary to
keep a piano or other musical instrument going while the motion pictures
are being shown, to prevent annoyance to the audience' (quoted in Altman
2004, 89). The issue of projector noise duly became a much-vaunted but
not entirely convincing theory for the origins of film music: as film theorist
Siegfried Kracauer pointed out, 'this explanation is untenable; ... the noisy
projector was soon removed from the auditorium proper [into a projection
booth], whereas music stubbornly persisted' (Kracauer 1960, 133).

In those silent films that purported to represent reality, the absence
of naturalistic sounds might have been considered a more serious impediment
to plausibility than the absence of dialogue. Yet even when films are
screened without any accompanying sound, the viewer will tend to imagine
noises that correspond to the images depicted. It is difficult to watch
the plate-smashing sequence in Sergei Eisenstein's silent classic The Battle-
ship Potemkin (1925) or the images of spoons striking glass bottles in Dziga
Vertov's The Man with the Movie Camera (1929) without 'hearing' the appro-
priate sound internally. (Vertov's sensory suggestiveness even extended to
implying a smell: he directly juxtaposed images of nail-polishing and film
editing, both of which use acetone.) Audiences responded appropriately to
such visual stimuli from the earliest years of cinema: at an early screening
of The Great Train Robbery (dir. Edwin S. Porter, 1903), silent images of
gunshots reportedly caused spectators to put their fingers in their ears
(Altman 1996, 648). MGM's trademark roaring lion was born in the silent
era as a result of the studio's desire for an arresting image that would 'sound'
loud. In 1929 French director René Clair, lamenting the use of gratuitous
sound effects in the early sound film, declared that 'we do not need to hear
the sound of clapping if we can see the clapping hands' (Weis and Belton
1985, 94). Such internalized sounds were believed by Brakhage to emanate
from a 'silent sound sense' (Brakhage 1960). This phenomenon, referred
to as subception or subliminal auditive perception by psychologists, was
exploited by numerous makers of silent films, who peppered their products
with visual simulations of sound ranging from simple knocks at the door
to graphically realized explosions. Some silent films, such as Franz Hofer's
Kammermusik (1914), placed a heavy emphasis on scenes of music-making
and on the act of listening to music, which may have a powerful associative
effect even if no music is heard by the audience (Abel and Altman 2001, 93,
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96–7, 102–6). Furthermore, a direct correspondence between images representing the production of music and other sounds, and the act of listening to such sounds, became after c.1909 a useful device – unique to the cinema – not only for implying the existence of diegetic space beyond the confines of the screen, but also a simple (and at the time novel) form of narrative linkage in the montage; thus some silent films came to have what have aptly been termed a 'virtual sound track' (Altman 2004, 214–16).

In real life, movement is never viewed in strict silence; indeed, without special acoustic facilities, total silence is a physical impossibility even when viewing static objects. In modern sound films, room tone (i.e. ambient sound appropriate to the location depicted on screen) is specially recorded so that it can be dubbed onto ostensibly silent scenes and thereby prevent the audience from simply assuming that the sound system has failed (Weis and Belton 1985, 395); it can also be used to replace ambient background noise lost during the process of dubbing dialogue. Actual silence on the soundtrack would be unrealistic in both cases, and unacceptable except in contexts where it is used deliberately as a means of disconcerting the viewer, as in the work of French director Jean-Luc Godard. When Alfred Hitchcock wanted to create a threatening silence in The Birds (1960), he preferred the use of a subliminal electronic humming noise rather than a complete absence of sound (Truffaut 1967, 225). As film theorist Béla Balázs observed, the silent film was a paradox: it could not of itself reproduce silence as an artistic effect, since silence is relative and can only be appreciated within a context of sounds (Balázs 1953, 205); thus, when a car is driven away in complete silence at the end of The Birds, the same vehicle having demonstrated its noisy engine in a previous scene, the effect is unsettling. In short, as French director Robert Bresson pointed out, 'the sound track invented silence' (quoted in Weis and Belton 1985, 323) – or at least gave it a value that it did not possess in the silent film.

Silence in a musical context, however, has since the earliest years been an important stock-in-trade of accompanists of silent films and film composers, who have appreciated the fact that the sudden cessation of music when the latter is expected to be continuous can have an enormous dramatic impact on an audience. The phenomenon was debated in the motion-picture trade press during the heyday of the silent film, with some commentators approving of a strategic use of silence and others advocating continuity at all costs: in 1912, Moving Picture World advised musicians that a maximum silence of ten seconds was a useful rule-of-thumb (Kalinik 1992, 49). Organist Dennis James related how, when his instrument malfunctioned during a live accompaniment to a modern screening of a silent Harold Lloyd comedy, one member of the audience afterwards praised him for interpolating so dramatic and unexpected a silence (McCarty 1989, 66–7). Even well after the advent of the sound film, Leonid Sabaneev anxiously warned film
composers against recouring to abrupt silence on the grounds that the device ‘gives rise to a feeling of aesthetic perplexity’ (Sabaneev 1935, 21), though a few years earlier the trenchant critic Harry Alan Potamkin – in the context of his general lambasting of the excessive use of music in the exhibition of silent films – praised a Paris showing of Abel Gance’s *J’Accuse* (1918) for the orchestra’s ‘terrific’ silence when the war dead come to life: ‘What vaudeville “fan” does not know the effectiveness of silence during an acrobatic feat? This is the point: since music is inevitable, we can make the best use of silence by selecting the intervals carefully at which the music will be hushed’ (Potamkin 1929, 295).

In silent comedies dependent upon slapstick, and to enhance the excitement of major sound events in serious silent films, real sound effects were supplied by special machines such as the Kinematophone or Allex, which might be located behind the screen to enhance spatial verisimilitude, or by performers using the kind of sound-generating paraphernalia still familiar in modern radio drama. In France, these sound-effects performers were known as *bruitistes*, and some commentators believed that, if handled creatively, an imaginative use of sound might correspond to the *bruit musical* developed by Italian futurist artists during the First World War (Lacome and Porcile 1995, 24–5). Unfortunately, no such high artistic aims prevailed in movie theatres, where the mindless use of sound effects was roundly criticized by many contemporaneous critics on account of its essential crudity and often excessive volume. This habit was in part responsible for the all-too-frequent recourse to unsubtle sound effects in modern commercial cinema, in which Foley artists (named after Jack Foley, who pioneered such techniques in his work on early sound films in Hollywood during the 1940s) habitually supply artificial and over-prominent sounds for virtually all noises in a film, no matter how trivial. Many are both redundant and somewhat condescending to audience intelligence, but sound-effect production had become so slick by the advent of the talkies that its retention in the sound film was inevitable. In the work of sound-sensitive modern film-makers, however, effects may be integrated with the musical score so that they work together in the soundtrack, the latter (as has long been overlooked, even in film scholarship) now being increasingly treated as an indivisible composite greater than the sum of its parts (Altman et al. 2000, 341).

**Why music?**

Music may initially have been supplied at film screenings simply because it has always been an inevitable adjunct to almost all forms of popular entertainment. Early moving-picture shows in the mid-1890s were little more
than show-booth attractions: fairgrounds, vaudeville and travelling shows have traditionally been noisy affairs, and for the latest novelty spectacle to have been presented without some kind of aural stimulation would have been inconceivable. In this regard, it is important to note that music was not necessarily performed inside an exhibition venue, nor at the same time as a film was being shown. Altman has drawn attention to the significance of music as a ballyhoo device for attracting custom before patrons had even set foot in the venue: live music might be played at the entrance, or recorded music blared out into the street through a barker phonograph horn (Altman 1996, 664, 674), and even the musicians inside the projection room might be instructed to play loudly so they could be heard in the street (Altman 2004, 131). As cinema music became more elaborate and of better quality, the live performance of musical numbers – again not necessarily related to, or played simultaneously with, the films being shown – could be as strong an attraction to customers as the moving pictures on offer.

The author of one of the first serious texts on film music stated that music had been specifically conceived as compensation for the absence of naturalistic sound (London 1936, 34). One of its early exponents, Max Winkler, opined categorically that music was added to film in order to fill the void created by the absence of dialogue: ‘music must take the place of the spoken word’ (quoted in Limbacher 1974, 16). But music was by no means the only medium that might be used for these purposes. Apart from sound effects, other techniques included live narration, which had been a prominent feature of magic-lantern shows and fairground moving-picture attractions when barkers had provided a simultaneous commentary on the images. Sometimes reciters (also known as ‘impersonators’) delivered lines in an attempt to synchronize with the lip movements of the film actors, an activity in which the comedian Leopold Fregoli specialized in the late 1890s (Prendergast 1992, 4). As late as 1908, an American venue secreted actors behind the screen and had them perform synchronized dialogue in an attempt to trick the audience into believing that the ‘talker’ film they were witnessing constituted a genuine technological miracle (Abel and Altman 2001, 156–66). The most celebrated live narrators were the Japanese benshi, who were star attractions in the silent cinema and survived well into the sound era (Dym 2003); elsewhere, however, verbal narration died out once film-makers had evolved editorial techniques sophisticated enough for the sequencing of the film’s visual images to carry the necessary narrative information (Fairservice 2001, 11).

As silent cinema developed, and especially after c.1912, music came to play a crucial role in shaping and conditioning the viewer’s response to moving pictures. Kathryn Kalinak has proposed that music, by its very physical presence, created a sense of three-dimensionality singularly lacking
in the projected image: while the film was projected from the rear of the hall to the screen at the front, so music played at the front was projected backwards over the audience and 'through a kind of transference or slippage between sound and image, the depth created by the sound is transferred to the flat surface of the image' (Kalinak 1992, 44). The process of humanizing the silent moving image with music was regarded by some commentators, notably Theodor Adorno and Hanns Eisler, as a quasi-magical process in which the spectator's fear of the irrationality of the ghostly medium was exorcized:

Music was introduced as a kind of antidote against the picture. The need was felt to spare the spectator the unpleasantness involved in seeing effigies of living, acting, and even speaking persons, who were at the same time silent . . . [M]usic was introduced not to supply them with the life they lacked – this became its aim only in the era of total ideological planning – but to exorcise fear or help the spectator absorb the shock.

Motion-picture music corresponds to the whistling or singing child in the dark. (Adorno and Eisler 1994 [1947], 75)

This view was echoed by Kracauer, who found soundless moving pictures 'a frightening experience' and that film music had a beneficial effect on them: 'Ghostly shadows, as volatile as clouds, thus become trustworthy shapes' (Kracauer 1960, 134–5). More mundanely, the use of exciting or tear-jerking musical accompaniments of an increasingly elaborate nature became perhaps the most effective mechanism for persuading spectators willingly to suspend their disbelief. As Claudia Gorbman has pointed out, this process – as familiar in the modern sound film as it was in the silent cinema – conveniently involved an abrogation of critical faculties, rendering the viewer 'an untroublesome viewing subject': 'When we shed a tear during a pregnant moment in a film melodrama . . . instead of scoffing at its excess, music often is present, a catalyst in the suspension of judgment' (Gorbman 1987, 5–6). Thus film-makers from the early days used music as 'their panacea for encouraging audience empathy' (Bazelon 1975, 13). This concept was expressed as early as 1926 by Paul Ramain:

all that is required of the orchestra in the cinema is to play harmonious background music with the idea not of being heard but of creating an atmosphere to sink us into our subconscious and make us forget the rustling paper, the shuffling feet, etc. in the auditorium . . . The role of music is therefore subsidiary, helping to put us in a trance with a vague background hum. (quoted in Mitry 1998, 248)

Cognitive psychologists have begun the daunting task of attempting to explain how the brain’s functions enable this to happen (Cohen 2000, 365–8).
The birth of film music

The origins of film music are traditionally traced to Paris in the early 1890s, where Emile Reynaud's animated *Pantomimes lumineuses* were presented in November 1892 with piano music specially composed by Gaston Paulin, and a showing of short films by the Lumière brothers in December 1895 received a piano accompaniment from Emile Maraval, and a harmonium accompaniment when their show opened in London in the following year. At the launch of Vitascpe in a New York music hall in April 1896, Dr Leo Sommer's Blue Hungarian Band performed. The experimental filmmaker Georges Méliès played the piano himself for the Paris première of his *Le Voyage dans la lune* in 1902. These ventures continued the long-standing practice of accompanying other types of popular entertainment, such as magic-lantern shows, vaudeville and melodrama, with appropriate music.

Many nineteenth-century lantern shows were elaborate affairs carefully sequenced for dramatic effect, and bolstered by narration and (even in the case of some illustrated scientific lectures) appropriate musical accompaniment. Illustrated songs, in which popular tunes were accompanied by lantern slides while the audience sang along, were one form of entertainment that was carried over directly into early cinemas, which in the first part of the silent era continued to provide a varied bill of vaudeville-style fare; early projectors combined both motion-picture and lantern-slide technology (Altman 1996, 660–7). So popular were illustrated songs in the USA — and so essentially different from the frequently melodramatic tone of imported European films in the early days of silent movies — that Richard Abel has plausibly suggested they were responsible not only for the initial success of the nickelodeon industry (see below) but also as an early example of a distinctively American psychology that would come to be important in the later development of a national cinematic style (Abel and Altman 2001, 150–1). Illustrated songs gradually disappeared from nickelodeons in 1910–13, perhaps in response to a widespread desire for movies to be taken more seriously: this new-found aura of respectability required silent contemplation on the part of the audience, and an avoidance of popular culture.

Although it would be decades before synchronized pre-recorded sound established itself in the cinema, several leading inventors attempted to combine image and sound in this way as early as the 1890s. Thomas Edison's Kinetograph, on which work began in 1889, was developed specifically to provide a visual enhancement to music reproduced on his already successful phonograph — a reversal of the more common subordination of music to visual image that soon came to dominate mainstream cinema. Both Edison's
Kinetograph (camera) and Kinetoscope (projector) were conceived with the aim of synchronizing image and sound, and it is now known that Edison took the credit for some technological marvels that had in fact been invented by others (Allen and Gomery 1985, 57–8); but, no matter who was responsible for it, the challenge of synchronization proved to be too ambitious for its time and the handful of Kinetophone sound films his team produced had unsynchronized accompaniments. After other devices for recording accompaniments on disc or cylinder were demonstrated at the Paris Exposition in 1900, some film-makers furthered the attempt to use pre-recorded sound; in Germany, Oskar Messter worked on his Kosmograph disc system from 1903 onwards and began to release Tonbilder films in 1908 with recorded music, and films of musical numbers accompanied by ‘an incredible gramophone synchronized to the pictures and driven by compressed air’ enjoyed popularity in Sweden in 1908–9 (Lack 1997, 14–15). These experiments were less than satisfactory on account of poor synchronization, lack of amplification and the need to change sound cylinders or discs every five minutes or so. The absence of a standardized system also meant that the initiatives were not commercially viable: apart from a short-lived revamping of Edison’s Kinetophone productions in 1913–14, such ventures had already dwindled in importance around 1910.

As the craze for moving pictures spread, the nature of their musical accompaniment varied considerably according to the context in which they were shown. Mechanical instruments were popular initially, and these preserved an audible link with the fairground; even as late as 1913, three-quarters of projection venues surveyed in San Francisco still had nothing but mechanical music, and close on 90 per cent had provision for it (Altman 1996, 685). Nevertheless, live music was always common, especially in cases where touring motion-picture attractions were presented in vaudeville theatres or music halls to the accompaniment of the venues’ resident ensembles. This appears to have been the case with tours of the Vitascope and Biograph shows and similar attractions in both the USA and Europe during the later 1890s; in Paris, café-concert and music-hall entertainments also came to include motion pictures, which formed part of the bill of fare at famous venues such as the Olympia and Folies-Bergère. The German entrepreneurs Max and Emil Skladanowsky toured Scandinavia with their Bioskop show in 1896, and the incomplete set of performing parts that survives reveals the musical accompaniment to have included both specially composed cues and an extract from Glinka for use with a sequence depicting a Russian dance. Another compilation, similar in function, was prepared by Leopold Wenzel for a royal cinematographic show at Windsor Castle in 1897 (Marks 1997, 30–50). The American touring exhibitor D. W. Robertson set out with a newly purchased Edison Kinetoscope in 1897 and by 1906 was advertising
shows with "descriptive musical accompaniment" (Abel and Altman 2001, 125).

The success of these and other itinerant motion-picture enterprises led to a major boom in the establishment of nickelodeons in the USA, which began to appear in c.1905 and numbered some 10,000 by 1910; after their humble beginnings, these establishments catered for increasingly discerning audiences who would pay more for luxuries such as comfortable seats and music. A parallel development in France, also beginning in 1905–6, saw Charles Pathé and Léon Gaumont establish *salles de cinéma* in numerous provincial towns. It was in venues such as these that the initial showbooth-style 'cinema of attractions' became gradually supplanted by more substantial films with a strong narrative orientation, and with these came more ambitious musical accompaniment. Comments published in the trade press seem to indicate that a perceived need for incidental music was growing stronger by c.1907 and that, by c.1911, music accompanying the picture was regarded as more useful than the independent musical numbers that had been performed previously; musical provision also became increasingly standardized as a result of the systematic attempts of production companies to promote a consistent manner of film accompaniment in preference to the widely contrasting types of aural stimulation on offer at various establishments, which had formerly been regarded by the latter as competitive selling-points (Altman 1996, 677–9, 690). The production companies did this partly through the medium of live demonstrations, either given by touring representatives or by invitation to exhibitors to attend presentations at major urban venues, especially in the period 1911–14 (Altman 2004, 272–3).

**Categories of film music**

At an early stage it was recognized that there were two fundamentally different types of film music. On the one hand, the music might be what modern film scholars describe as diegetic: in other words, it formed part of the film's narrative world (diegesis) and its purported source was often, though not exclusively, visible on the screen. On the other hand, the music might be nondiegetic, serving as appropriate background listening. Diegetic music-making in the visual image could easily be matched by a synchronized instrumental or vocal accompaniment — whether supplied live or on a gramophone recording — and this procedure became especially popular in c.1907–8 (Altman 1996, 682), being referred to specifically as 'cue music'. As greater attention was paid to the provision of nondiegetic music, such accompaniments drew increasingly on features of the well-established
symbiosis between music and drama that had in the nineteenth century shaped the development of major theatrical genres such as opera, ballet and (above all) melodrama (Shapiro 1984). According to one early twentieth-century commentator, the basis of the musical component in melodrama (‘which accompanies the dialogue and reflects the feeling and emotion of the spoken lines’) is simplicity of construction and subservience to the words: ‘It usually accompanies the most sentimental passages in the play . . . , following the hero and heroine most obstinately. But the villain too will have his little bit of tremolo to help him along his evil path’ (O’Neill 1911, 88). Recapitulation is used ‘to remind the audience of a previous situation’, later a standard film-music technique; but on the whole ‘both music and drama of this class have no great artistic value. The music is simply called in to bolster up the weakness of the drama. It is used to stimulate (by what I may call unfair means) the imagination of the audience, and to help the actor’ (O’Neill 1911, 88).

Since many influential silent-film directors had been schooled in melodrama, the transferral of its characteristics to the silver screen was inevitable. Stagings of melodrama had utilized live organ or orchestral incidental music to enhance the audience’s emotional response and to suggest character types or geographical locations, the choice of appropriate music being indicated in the scripts and aided by the existence of anthologies of specially selected musical extracts. These were all features of early film music, which directly inherited melodramatic clichés such as the use of string tremolo and delicate pizzicato for tension and furtiveness respectively, and loud stinger chords to emphasize physical action or rousing lines (Gorbman 1987, 33–5; Marks 1997, 28). These simple devices, combined with background music lulling the spectator into an uncritical state, remained useful in inferior melodramatic film drama because, as Yves Baudrion put it, ‘if the music is taken away, there is a risk of losing the necessary minimum emotional warmth which must exist for us to believe (however temporarily) in the sentiments we are supposed to be feeling, attracting, through a sort of magic, the complicity of the audience’ (quoted in Mitry 1998, 253).

The importance of music as a mood-enhancer in early cinema was reflected in the common practice of having live or recorded music played on film sets during shooting to inspire the actors, a procedure later occasionally used in the making of sound films by directors such as John Ford, Alfred Hitchcock (who, while shooting The Birds, used a drummer on set to terrify the actors in the absence of the film’s sophisticated avian sound effects), Stanley Kubrick, Sergio Leone, David Lynch, Ken Russell and Peter Weir. Cecil B. DeMille, for example, used the slow movement of Dvořák’s New World Symphony to establish the mood for his portrayal of
the Exodus in *The Ten Commandments* (1923). Geraldine Farrar, a silent-film star who combined careers as an opera singer and screen actress, recalled that after her first experiment with using an on-set pianist to inspire her performance, ‘I always had a musician at my elbow whose soulful throbs did more to start my tears than all the glycerine drops or onions more frequently employed by less responsive orbs’ (quoted in Karlin 1994, 162). The image of music as a substitute for glycerine was echoed by later observers of film-making practices, and contemporaneous commentators found some pathos-inducing music laughably self-indulgent, for example Alphons Czibulka’s *Winternächten* (1891), its theme identical with the contemporaneous hit tune *Hearts and Flowers* by Theo Tobani. The most stereotyped and clichéd idioms used to accompany silent films survived into the sound era almost exclusively in a context of parody, figuring prominently in comedy and cartoon scores; but the tributes were often affectionate.
Improvised accompaniments to screenings of silent films might typically be provided by a pianist or harmonium player, sometimes resourceful enough simultaneously to play piano with one hand and harmonium with the other (Huntley [1947], 25). In its idealized but rarely attained form, a good keyboard accompaniment mediated between the image and the spectator, just as an effective pre-composed score would come to do in the sound cinema: as Bernard Herrmann later observed, film music may be considered as 'the communicating link between the screen and the audience, reaching out and enveloping all into one single experience' (Herrmann 1945, 17). One major advantage of improvised accompaniments was their ability, when skilfully executed, to lend a sense of continuity to the narrative; film music in the later silent era was sometimes continuous from start to finish, though pre-arranged compilation scores (see below) tended to be highly sectionalized; strategically placed gaps in the aural continuum were also sometimes necessary merely for practical reasons. The ability of all kinds of music to create continuity and enhance a sense of momentum became increasingly evident in the second decade of the century. Kurt London believed that the raison d'être for film's musical accompaniment was 'the rhythm of the film as an art of movement' (London 1936, 35). Kracauer described music as 'a meaningful continuity in time' and declared that music in film causes us to perceive 'structural patterns where there were none before. Confused shifts of positions reveal themselves to be comprehensible gestures; scattered visual data coalesce and follow a definite course. Music makes the silent images partake of its continuity' (Kracauer 1960, 135). Mitry concluded that the 'real time' component of music 'provides the visual impressions with the missing time content by giving them the powers of perceptible rhythm' (Mitry 1998, 265) and felt that musical continuity was necessary to compensate for what he felt was an inherent inadequacy of film editing:

"it is all too apparent that the editing of a series of fixed shots establishes a feeling of continuity but is unable, unlike moving shots, to create the sensation of the continuous, since this sensation is reconstructed intellectually and not perceived as such – which means that reality appears as though it were an idea or memory; or, to put it another way, it appears restructured."

(Mitry 1998, 162)

The habitual use of intertitles to convey information or dialogue essential to the narrative was a major impediment to the continuity of silent films, though the ease with which they could be replaced by intertitles in different languages for export was one factor contributing to the rapid international dissemination of new releases.

Another of music's many functions was to play mild intellectual games with the film's spectators, who might be amused by appropriate references
to certain popular songs they were already familiar with through participation in illustrated-song shows. This practice proliferated in the first decade of the century when the popular-song industry enjoyed its own boom, but as early as 1910 at least one commentator had noted that it was an entirely pointless procedure if members of the audience failed to recognize, or did not know, the song being quoted (Abel and Altman 2001, 238). These topical allusions were sometimes unaccountably light-hearted even during serious scenes: for example, at a British screening of The Queen of Sheba (dir. William Fox, 1921) the ensemble cheerfully trotted out ‘Thanks for the Buggy Ride’ during the spectacular chariot race (Karlin 1994, 156). One technical manual went so far as to lambast such musical puns as ‘not only worthless, but offensive’ (Beynon 1921, 2). Such literal-mindedness in thematic allusion persists in mainstream narrative cinema, which frequently draws on appropriate song tunes which the audience might be expected to recognize. Tin Pan Alley songs and jazz standards are today usually heard as diegetic performances, since these seem marginally less contrived than thematic allusions in the non-diegetic score; the tunes are often rendered by instruments alone in an attempt to make the allusion subtler by suppressing the relevant lyrics. Woody Allen’s Manhattan (1979) and Hannah and Her Sisters (1981) provide good examples of the use of appropriately entitled instrumental standards in their non-diegetic music tracks, though these are spotted with structural as well as punning intent (Marshall and Stilwell 2000, 14). A far less subtle example occurs in An American in Paris (1951; see Chapter 4) when Gene Kelly dances with his love in a jazz café to the diegetic accompaniment of Gershwin’s ‘(It’s Very Clear) Our Love is Here to Stay’ – and feels the need to point out the title to her in case it wasn’t quite clear enough.

The popular classics were plundered for suitable extracts for use with silent films, while the style of freshly composed cues drew heavily on the idioms of romantic opera and operetta. The most influential by far was that of Wagner, whose name is invoked time and again in contemporaneous commentary on music in the silent cinema. A journal proclaimed in 1911 that all musical directors were disciples of Wagner (Flinn 1992, 15), and the influence was manifested both in specific compositional techniques such as the use of leitmotifs as both narrative and structural device – considered to be a cutting-edge technique in early film music and persisting to the present day, in spite of the attempts of later commentators to discredit it – and in an aspiration towards uneuclidische Melodie in the interests of musico-dramatic continuity. The Wagnerian ideal of the Gesamtkunstwerk became applied to the cinematic medium as a whole, and the connection emphasized the vital role played by music in shaping the impact of the drama (Paulin 2000).
Camille Saint-Saëns and *film d’art*

Original scores were rare in the early years of silent film. A singular example came into being when French cinema, which achieved international market dominance in 1906–10 largely through the phenomenal success of Charles Pathé’s production company and the work of Léon Gaumont, attempted to reach a high artistic plateau with the launching of the intensely theatrical style of *film d’art*. Unlike other film companies, the Société Film d’Art employed renowned stage directors, screenplay writers, actors from the Comédie Française and established composers in its striving for a quality product. The best-known music by Camille Saint-Saëns, such as ‘The Swan’ from *The Carnival of the Animals*, was already familiar in French cinemas (R. S. Brown 1994, 53), so it was logical enough that he be invited to compose a score for Henri Lavédan’s eighteen-minute *L’assassinat du Duc de Guise* (dir. André Calmettes and Charles Le Barge), which launched *film d’art* on 17 November 1908 in a programme at the Salle Charras featuring two other films with original music by Fernand Le Borne and Gaston Berardi.

The ever-practical Saint-Saëns made his film-scoring task easier by reworking extracts from an unpublished work, his symphony *Urbs Rama* (B. Rees 1999, 382) – and, according to a review of *L’assassinat* published two weeks after its première screening, composed his film score ‘in front of the screen as the film was being projected’ (quoted in Abel and Altman 2001, 54). In contrast to the bittiness of much film music in this period, Saint-Saëns’ music for *L’assassinat*, performed by classical instrumentalists drawn from the orchestras of the Concerts Colonne and Concerts Lamoureux, showed how structural coherence could articulate the drama across relatively broad time-spans, and it proved to be prophetic of the later mainstream film composer’s art. Prophetic too was Saint-Saëns’ decision to recycle his film music for concert use (as Op. 128, for the original ensemble scoring of wind, piano, harmonium and strings), a procedure later adopted by many composers who wished to rescue their film music from its ephemeral source; his publisher, Durand, also issued a version for solo piano intended for use in projection venues which could not afford the full ensemble.

Contemporary reviewers of *L’assassinat* declared that the promoters of such productions ‘cannot imagine them without the help of a powerful music which from the point of view of the audience will replace the human voice in the minute details of its expressivity . . . [T]here is the great display, the whole kit and caboodle of invisible yet present music, the mystery appropriate for cinematographic evocations’ (quoted in Abel and Altman 2001, 50–1). The film received critical acclaim in France, though some observers lamented its utter subservience to old-fashioned theatricality, and others later exhibited it with designedly ridiculous music (Sadoul
The 'silent' cinema

It exerted a powerful influence on global film production, which quickly turned to canonic works of literature — and even opera — as fodder for more ambitious silent-film treatments. In the UK, an early original score was written by operetta composer Edward German for the Ealing film *Henry VIII* in 1911 (Huntley 2002); in the USA, original scores did not begin to be produced in earnest until later in the decade.

**Cue sheets and anthologies**

Production companies had meanwhile begun to take a keen interest in the nature of the music that might accompany exhibitions of their products. In 1907, for example, Gaumont began publishing a weekly pamphlet entitled *Guide Musicales* for distribution to exhibitors in France. In 1909, Edison Pictures in the USA started publishing cue sheets in the pages of its *Edison Kinetogam* to encourage the selection of appropriate musical numbers from both classical and popular sources to accompany screenings of its films, and a range of similar suggestions began to appear in the trade press.

A major motivation behind this initiative was the apparent ineptitude of many movie-theatre pianists, amongst whom the standard of proficiency was wildly variable. Few intelligent movie-goers seemed to agree with Jean Cocteau’s opinion that ‘one can only love this pianist who created *sound cinema*’ (quoted in Lacombe and Porcile 1995, 27). London recounted a typical example of what was undoubtedly widespread audience dissatisfaction with shoddy accompaniments:

> a man in a cinema audience . . . had been sitting in long-suffering silence while a very bad pianist accompanied the film. When the heroine was about to seek an end of her troubles by plunging to a watery grave, he called out to her image on the screen, in a voice full of disgust: ‘Take the pianist with you, while you’re about it!’

(London 1936, 41)

In France, mediocre pianists were so commonplace that they had their own name (*tapeurs*).

Cue sheets were supplemented by, and sometimes made specific reference to, more substantial published anthologies of motion-picture music that were organized by mood or dramatic type. In France, no fewer than 30 such anthologies were available by 1910, and some original pieces were specially commissioned for this purpose (Lacombe and Porcile 1995, 30–1) — a procedure that adumbrated the modern practice of setting up music libraries from which pre-existing cues can be sourced relatively cheaply. One of the first anthologies to appear in America was Gregg A. Frelinger’s *Motion Picture Piano Music*, issued in 1909. Another
American pioneer of these publications was Max Winkler, who persuaded his employer, the New York publisher Carl Fischer, to back the issuing of cue sheets. Winkler claimed this occurred in 1912 but Altman has demonstrated this date to be erroneous, the relevant initiative having probably dated from as late as 1916 by which time many other rivals were involved in similar enterprises (Altman 2004, 346-7). In Winkler’s own much-quoted words, ‘extracts from great symphonies and operas were hacked down to emerge as “Sinister Mysterioso” by Beethoven, or “Weird Moderato” by Tchaikovsky’ (Max Winkler 1951, 10). A popular favourite was Rossini’s William Tell overture, which proved ideal for chases or what were termed ‘hurry’ scenes, while Beethoven’s Cariolanus overture was deemed ‘suitable for tree-felling or lumber-rolling’ (Irving 1943, 225).

In 1913 John S. Zamecnik, a former pupil of Dvořák’s, published a collection of 23 original keyboard cues as the first volume of a series entitled The Sam Fox Moving Picture Music, his approach to the task showing a typical predilection for short repeated segments. Other American publishers who provided scores and parts for movie music were G. Schirmer and Morse Freeman. In 1916, Walter C. Simon conceived a novel ‘Phototune’ format in which eleven different eight- or sixteen-bar keyboard compositions were superimposed in a single-page chart, the principal barlines extending unbroken from the top to the foot of the page to show the alignment, and related keys used ‘to enable the musician to instantly jump from place to place on the sheet as may be desired’ (facsimile in Altman 2004, 264). Giuseppe Becce’s Kinothek (its title a contraction of ‘Kinobibliothek’), published in instalments in Berlin in 1919 and in the USA by Belwin, was a seminal anthology, and Becce later collaborated with Hans Erdmann and Ludwig Brav to produce the encyclopaedic Allgemeines Handbuch der Filmimusk in 1927. In 1924 Ernő Rápee, a Hungarian with wide experience of musical direction in cinemas both in Europe and the USA, issued in New York his Motion Picture Moods for Pianists and Organists, and followed this a year later with an Encyclopaedia of Music for Pictures. Rápee recognized a general paradox of film music, to which attention is still often drawn today:

If you come out of the theatre almost unaware of the musical accompaniment to the picture you have just witnessed, the work of the musical director has been successful. Without music the present day audience would feel utterly lost. With it they should obtain an added satisfaction from the show, and still remain unconscious of the very thing which has produced that satisfaction. (quoted in Lack 1997, 34)

Several of the themes and techniques popularized by cue sheets and anthologies such as Rápee’s, many of which were directly inherited from melodrama, became clichés that remain firmly in the popular imagination:
for example, diminished-seventh chords for villains, ‘weepie’ love themes on solo violin and the bridal march from Wagner's *Lohengrin* for wedding scenes. The last was brutally dismissed by Adorno and Eisler: 'The person who around 1910 first conceived the repulsive idea of using the Bridal March from *Lohengrin* as an accompaniment is no more of a historical figure than any other second-hand dealer' (Adorno and Eisler 1994 [1947], 49). Diminished-seventh harmony was routinely used for scenes of evil and villainy, as shown by a typical cue entitled 'Treacherous Knave (Villain Theme, Ruffians, Smugglers, Conspiracy)' composed by Zamecnik for *The Sam Fox Moving Picture Music* in 1927 (facsimile in Kalinak 1992, 62). The importance of this simple chord, already long outdated in concert music, as a melodramatic device was outlined by a pianist in Anthony Burgess's novel *The Pianoplay* (1986) recalling the basic instructions he had received from his mentor as he embarked on the art of silent-film accompaniment:

> Here's a chord you can't do without, he said, if you're a picture palace pianoplayer. You use it for fights, burst dams, thunderstorms, the voice of the Lord God, a wife telling her old man to bugger off out of the house and not come back never no more. And he showed me... Always the same like dangerous sound, he said, as if something terrible's going to happen or is happening (soft for going to happen, loud for happening)... and you can arpeggio them to make them like very mysterious.

(quoted in Kershaw 1995, 125)

'Soft for going to happen, loud for happening' was to remain an absolutely fundamental approach to dynamics in much later film music.

So-called 'special music', expressly designed to accompany specific films, became more common after c.1910. The idea originated in the use of musical extracts to accompany highly compressed silent films of popular operas, which may be one reason why the subsequent development of film music was so indebted to operatic prototypes. In 1911, for example, the commercially successful Italian film *Dante's Inferno* appropriated music from Boito's *Mefistofele* (Marks 1997, 73–4). In the same year, the Kalem Company in the USA commissioned the first sustained series of special piano scores, featuring the work of Walter C. Simon, an experienced theatre musician who also published a *Progress Course of Music* for budding cinema pianists. Simon's highly sectionalized scores, which included one for the three-reel *Arrah-Na-Pogue* (dir. Sidney Olcott, 1911), juxtaposed arrangements and original compositions, consolidating existing performance practices. Many of the items were structured on the principle that short segments could be repeated *ad lib.* until a visual cue (e.g. an intertitle card) prompted a shift to a new musical idea. Kalem's venture was followed in 1913 by a similar series of piano scores issued by Vitagraph. From c.1916 onwards there was a
proliferation of 'photoplay' library music arranged for flexible instrumentation (ranging from large orchestras down to a violin-and-piano duo or solo piano as a bare minimum), taking the form of both classical extracts and original cues based on compositional principles similar to those in the early keyboard anthologies. Prominent composers and arrangers of such library music were Ernst Luz (Photoplay Music Co.), Zamecnik (Sam Fox Photoplay Edition), J. C. Breil (Schirmer) and Otto Langey (Chappell).

Although such music was offered at competitive prices, and some of it was evidently geared towards players of limited abilities (the difficulty of sight-reading more elaborate 'special' scores in advanced keys having been one factor which inhibited the widespread adoption of accompaniments based on complex classical repertoire), interest in the idea was not as widespread as might have been predicted, since many projection venues continued to arrange their own music to cut costs. Similarly, as film music developed during the sound era so studios came to realize that commissioning original music was often cheaper than having to pay to use copyright material or meet reproduction fees on existing recordings.

Venues and ensembles

The often modestly appointed nickelodeons were very different from the luxurious picture palaces that became prominent in the second decade of the twentieth century. The first venue of this kind, the Omnia-Pathé, opened in Paris in December 1906; nearly five years later, the former hippodrome at Place Clichy was transformed into the 3,400-seat Gaumont-Palace, featuring a Cavallé-Coll organ and, at the venue's inauguration on 11 October 1911, an orchestra of 60 conducted by Henri Fosse. A description of a Gaumont-Palace programme from January 1913 reveals that an orchestral overture was followed by the screening of short actualités (including a colorized documentary about butterflies) and a comedy film, followed by an orchestral entr'acte, after which came more documentaries and a two-part film about Napoleon (Lacombe and Porcile 1995, 22, 27). The first of the gargantuan American picture palaces was the Strand on Broadway, New York, which opened in 1914 and could also seat in excess of 3,000 spectators; its music was provided by a 30-piece orchestra and enormous Wurlitzer organ.

In keeping with the grandeur of the viewing facilities, serious narrative films had grown considerably longer in duration and more sumptuous in their production values. Most early movies were only one reel in length, a single reel holding up to 1,000 feet of film stock and running for approximately fifteen minutes at the projection speed of sixteen frames per second often used in silent films (though shooting and projection speeds
could vary considerably: see Brownlow 1980). As multi-reel ‘feature’ films became popular, so narrative continuity became even more important and the more lavish production values seemingly cried out for correspondingly elaborate musical accompaniment. It was not uncommon to exploit the performance space by using antiphonal effects, such as the locating of trumpets at the rear of the hall to provide an echo device in a Belfast tour of The Four Horsemen of the Apocalypse (dir. Rex Ingram, 1921), screenings of which also featured special sound effects to suggest the hooves of the galloping horses (Huntley [1947], 27–8). Prestigious screenings were sometimes mounted in revered theatrical venues. For example, Eugene Goossens conducted the London Symphony Orchestra in the Royal Opera House for the screening of a silent version of The Three Musketeers (dir. Fred Niblo), starring Douglas Fairbanks and shown in the USA with a score by Louis Gottschalk. For the London show, part of a season of silent epics mounted at the opera house by United Artists in 1921–2, Goossens based his compilation score heavily on the work of August Enna, an obscure composer whose music ‘fitted anything, and also conveyed a spurious impression of great emotional depth, making it very suitable for my purpose’ (quoted in Kershaw 1995, 128; see also Morrison 2004, 176). In 1926, a silent film of Richard Strauss’s opera Der Rosenkavalier was shown in the Dresden Opera House, not in a popular projection venue – as Adorno and Eisler, who were disturbed by the cultural implications of the venture, might well have preferred it to have been (see Chapter 4). In 1925, the Paris Opéra hosted the première of Pierre Marodon’s film Salammbô, featuring music by Florent Schmitt, and two years later the same venue screened Abel Gance’s Napoléon (see below), with a lavish accompaniment featuring live actors and full chorus. In New York, the finest film-related musical performances were those masterminded by respected music director Hugo Riesenfeld at picture palaces that rivalled opera houses in their opulence; his classical credentials as a former leader of the Vienna Opera and the Metropolitan Opera orchestras were impeccable.

Instrumental ensembles resident in movie theatres of varying sizes ranged from duos (e.g. violin and piano, or piano and drums), through small groups of five or six players up to (by the 1920s) large orchestras with 40 players or more – the formation of the latter in major cities in both the USA and Europe sometimes resulting in a dwindling of the ranks of leading symphony orchestras. A lone pianist might be employed to accompany films during the week, with an ensemble brought in for better-attended weekend shows or to launch a high-profile new picture. Some featured soloists, especially violinists and ‘funners’ who specialized in witty musical commentaries, commanded considerable popular followings in their own right (Berg 1976, 244–5). The small ensembles were often versatile. Cinema organist Gaylord Carter recalled:
The first thing you had to have, if you had any kind of a combo, was the drummer. So you could get the punches and rifle shots and cataclysmic things like an earthquake. You'd need a trumpet for bugle calls. And it would be nice to have a clarinet... You had to have usually one violin and a second violin. You wouldn't have a viola, but you'd have a cello and maybe a bass.

(interviewed in McCarty 1989, 49–50)

Violas were considered to be a dispensable luxury (London 1936, 46), and they are still often omitted in the string arrangements of modern film scores, which may feature just one rather than the two violin lines customary in classical orchestras. Percussion was absolutely vital in providing onomatopoeic effects. According to a contemporaneous report, a resourceful percussionist at the Bijou Dream theatre in New York in 1909 made the screen characters appear to ‘talk, almost; they groan, they laugh, kiss, whisper under his magic touch’ (Marks 1997, 67). Comic drumming effects in particular were a direct holdover from vaudeville. Alberto Cavalcanti noticed that percussive effects could produce a far greater impact than realistic sounds:

An airplane was flying towards us [on screen]. The music director ‘cut’ the orchestra, and a strange, frightsome sound began, and got louder and louder. It was nothing like an airplane, but very frightening. When I got home I was still wondering how this noise was done. Then I got it. It was a noise I had known all my life – an open cymbal beaten with two soft-headed drumsticks. How familiar! Yet it had lost its identity, and retained only its dramatic quality, used in conjunction with the picture. Pictures are clear and specific, noises are vague. The picture had changed a cymbal noise into an air-noise. That is why noise is so useful. It speaks directly to the emotions.

(Weis and Belton 1985, 109)

As Altman has shown (1996, 698–9), production of musical sound effects was by no means restricted to the drummer, and the piano proved to be equally versatile in capable hands: such diegetic effects appear to have dominated accompanying music in c.1908–12.

Resident music directors were variously referred to as music illustrators, fitters or synchronizers – the last term then used differently from its modern application, in that synchronization was more a matter of finding music of exactly the right length for a particular scene rather than attempting to tie its details to specific on-screen events (Kalinak 1992, 58). Music directors were responsible for arranging and conducting appropriate repertoire drawn either from the classical extracts or short original pieces published in anthologies, from cue sheets, or preparing freshly selected passages; such pre-existing material might be linked by specially composed or improvised transitions. The fact that music was often accorded a high degree of
importance is shown by the working practice of Riesenfeld, who habitually edited segments of film himself or had the projector run at variable speeds so that the images would fit better with the musical extracts he had selected (Buhrman 1920).

Photoplayers and cinema organs

Silent-film pianists had frequently struggled with inferior instruments and limited technique, one journal's editorial making a plea that nickelodeon pianos should either be tuned or burnt – and preferably replaced by instrumental groups (Moving Picture World, 3 July 1909). The piano and humble harmonium were supplanted in grander venues by mechanical keyboard instruments (photoplayers) which exploited up-to-date pneumatic and electric technology to include integrated sound-effect mechanisms, and then by specialized and highly versatile cinema organs, of which noted manufacturers included Compton, Marr and Colton, Robert Morton, Estey, Barton and Moller. The most imposing organs were made by Kimball and Wurlitzer, both regarded as status symbols for any venue prosperous enough to be able to afford them. Wurlitzer became involved in the motion-picture industry in 1909 when they found an application for their mechanical instruments as vehicles for nickelodeon ballyhoo, but from 1910 onwards they devoted attention to the cinema organ and by 1916 organ sales had begun to overtake the dwindling demand for photoplayers (Altman 2004, 335). At the grand end of the spectrum was the Kimball organ at the Roxy Theatre, New York, originally planned to have been played by no fewer than five organists seated at five independent consoles – an ambitious scheme later reduced to three performers, who nevertheless still had at their disposal a total of eleven manuals and three pedal boards operating in excess of 300 stops.

Most theatre organs had at least two manuals, and the console could often be raised and lowered on a special elevator for added visual impact; translucent panels were designed to reveal patterns of coloured lights within the instrument's casing, and this enhanced the sense of virtuosic showmanship. Capacity for mechanical sound effects was considerable and could include the sounds of surf, hail, aeroplanes, birds, various whistles (e.g. police, train and steamboat), horses' hooves, fire gong, klaxon horn, electric bell and a crockery-smashing effect comprising 'a cleverly devised electro-pneumatic crane which literally drops metal plates onto a metal surface below' (Whitworth 1954, 308). Cavalcanti scathingly observed that the provision of such novelties 'will give you some idea of the absurdity of referring to “the great days of the silent cinema”'
(Weis and Belton 1985, 101). Genuine untuned percussion instruments (traps) were operated by thumb and toe pistons, with tuned percussion (various metallophones, chimes and xylophones) played via the keyboards. Ranks of pipes might be disposed antiphonally on opposing sides of the projection screen, and the enormous Christie instrument at London’s Marble Arch Odeon even included full-length 32’ reeds.

In many venues both organist and orchestra would be involved in performances, with the organist playing a reduction of the orchestral music for matinees and participating with the orchestra in the evening shows; it was common practice for the organist gradually to start playing after the orchestra had been in action for 30–45 minutes, allowing the instrumentalists to drop out one by one and take a break before reassembling for a grand finale (McCarty 1989, 24). The organist might also be called upon to provide improvised transitional passages between orchestral items. Organists were primarily required to imitate orchestral effects, and those who sounded as if they were playing in church were unpopular. Among the most respected American organists during the 1920s were Gaylord Carter, Milton Charles, Jesse Crawford, Lloyd Del Castillo, Ann Leaf, John Muri, Henry B. Murtagh, Albert Malotte and Alexander Schreiner, and their art was taken sufficiently seriously for the Eastman School of Music in Rochester to be founded specifically to provide instruction in it (McCarty 1989, 45), with similar training provided by special schools in other American cities. Reginald Foort made history by giving a radio broadcast from the organ of the New Gallery Cinema in London’s Regent Street in 1926 and, along with artists such as Quentin Maclean and Firmen Swinnen, helped establish the cinema organ as a concert instrument in its own right.

The many composers and musicians who benefited from apprenticeships as silent-film accompanists on piano and/or organ included composers such as Jacques Ibert in France; Dmitri Kabalevsky, Dmitri Shostakovich and Dimitri Tiomkin in the Soviet Union; and, in America, jazz musicians Count Basie and Fats Waller. The cinema organ survived well into the sound era, but playing standards continued to vary wildly. As late as the early 1950s, one commentator lamented (in terms equally applicable to commercial film music in general) that

the music demanded from the cinema organist by managements is only too often cheap and tawdry. Frequently it is associated with songs of a sickly sentimentality that has fostered an abuse of the tremulant and a panic of registration... Managers have a habit of insisting that this is the kind of thing the public demands, forgetting or choosing to overlook that picture-going audiences do not know what they want, but accept what they are given and imagine it must be good if it is played to so large a public.

(Whitworth 1954, 269)
Music for silent epics

Among the most ambitious films distributed on the eve of the First World War were the Italian historical epics that took the movie-going world by storm in 1913–14. *Quo vadis?* (dir. Enrico Guazzoni, 1913) occupied nine reels and for its New York screenings in 1914 was furnished with a score compiled from music by composers such as Gounod, Puccini and Wagner by exhibitor Samuel L. Rothafel. Though musically uneducated, ‘Roxy’ Rothafel was a sensitive businessman who felt that clichéd and over-familiar music should be avoided, as should novelty trap drumming and gratuitous sound effects; his quest for musical quality seems to have been successful, since one reviewer remarked that the admission price for *Quo vadis?* was justified by the music alone (Marks 1997, 97). The Punic War epic *Cabiria* (dir. Giovanni Pastrone, 1914) was even more lavish, occupying twelve reels and shot to a massive budget with thousands of extras. It was furnished in Italy with a score compiled by Manlio Mazza from popular classics linked by modulatory passages. For American showings of the film, Mazza’s score was adapted by Joseph Carl Breil, a composer of incidental music for stage plays who had compiled scores for various *films d’art* in 1911–13, among them the famous Sarah Bernhardt vehicle *Queen Elizabeth* (dir. Louis Mercanton, 1912), for which Breil claimed his score was entirely original apart from its (anachronistic) use of the British national anthem to accompany the defeat of the Spanish Armada (Marks 1997, 102). Breil’s adapted score for *Cabiria* – which, like his music for *Queen Elizabeth*, featured leitmotivic construction – was an extravagant affair scored for large orchestra and unseen chorus. It undoubtedly served as a useful preparation for his subsequent and influential collaboration with the ground-breaking director D. W. Griffith, whose refinement of narrative editing techniques and encouragement of a naturalistic style of acting established him as the most important film-maker of the era.

Griffith’s Civil War epic *The Birth of a Nation* (1915), costing in excess of $100,000 and the longest film so far made in the USA, met with phenomenal success and considerable controversy arising from its racist content – which led to its being banned in numerous states and censored in others. The film was first screened (under the title *The Clansman*) in Los Angeles in February 1915 with a score compiled by Carlin Elinor, who believed that ‘there was no need for original music since so many good tunes had already been written’ (Darby and Du Bois 1990, 3). The theatre’s publicity proudly proclaimed: ‘The arrangement and selection of the music for “The Clansman” was accomplished after a diligent search of the music libraries of Los Angeles, San Francisco and New York. To select and cue the scenes it was necessary to run the twelve reels comprising the story eighty-four times;
and also to render a perfect score six complete full orchestral rehearsals were necessary' (facsimile in Marks 1997, 134). Composers whose work was featured in Elion's compilation included Beethoven, Bizet, Flotow, Mozart, Offenbach, Rossini, Schubert, Suppé, Verdi and Wagner. A sextet of vocal soloists joined the orchestra for certain items.

Breil's hybrid score for this three-hour epic, partly original and partly compiled, contained well over 200 individual musical cues and was first used when the film was screened in New York in March 1915. The score appears to have been prepared under the close supervision of Griffith himself, and included metronome markings as an aid to synchronization (Karlin 1994, 161). The director evidently regarded the New York opening as more important than the West Coast première, as suggested by reporter Grace Kingsley in the Los Angeles Times (8 February 1915), who noted that Breil and Griffith were collaborating on the score for the upcoming New York screenings and commented that the music was to be

no less than the adapting of grand-opera methods to motion pictures! Each character playing has a distinct type of music, a distinct theme as in opera. A more difficult matter in pictures than in opera, however, inasmuch as any one character seldom holds the screen long at a time. In cases where there are many characters, the music is adapted to the dominant note or character in the scene.

From now on special music is to be written in this manner for all the big Griffith productions.

Breil's original cues included a theme for 'The Bringing of the African to America' which took its lead from Dvořák in its use of syncopation and hints of pentatonicism, several numbers in popular dance forms (with a clear penchant for waltz rhythm), an attempt to represent the diegetic music sung by the character of Elsie Stoneman as she strums her banjo, and an amorous love theme. Civil War songs appeared alongside extracts from the classics, the most memorable of which was the use of Wagner's 'Ride of the Valkyries' to accompany the equestrian riders of the Ku Klux Klan. According to actress Lilian Gish, director and composer argued intensely over the 'Valkyrie' material; Griffith wanted some of the notes to be altered but Breil refused to 'tamper' with Wagner, whereupon the director remarked that the music was not 'primarily music' but rather 'music for motion pictures'; he clinched his argument by noting that 'Even Giulio Gatti-Casazza, General Director of the Metropolitan Opera, agreed that the change was fine' (Gish and Pinchot 1969, 152). Jane Gaines and Neil Lerner have demonstrated how Breil's syncopated 'African' theme (which acquired the label 'Motif of Barbarism' when published in a piano album in 1916) was used throughout
the film to promote the image of black men as primitives (Abel and Altman 2001, 252–68). A simple repeated falling semitone in the bass was used to punctuate and create tension in the scene in which Gus preys on Flora, this technique looking ahead to modern economical scoring methods.

Breil’s love theme from The Birth of Nation met with success of its own when it was entitled ‘The Perfect Song’ and furnished with lyrics for publication; other selections from the score were issued in arrangements for piano and for ensemble. These were amongst the earliest commercial spin-offs in the history of film music, and later silent-film scores began to include a ‘big theme’ in an attempt to cash in on the marketability of such material. By 1927, the abuse of ‘theme scores’ had become so acute that one commentator lamented the film composer’s tendency towards ‘theme-ing an audience to death’ (quoted in Altman 2004, 376). In an early example of using film tie-ins to sell independent popular songs, the faces of Charlie Chaplin and other movie stars began to be featured on the covers of sheet music, no matter how tenuous the connection between music and film (Barrios 1995, 106). Major hit songs from film scores began with the theme song to Mickey (dir. F. Richard Jones and James Young, 1918; music by Neil Moret), and towards the end of the silent era million-copy sales were achieved by Rapée’s songs ‘Charmaine’ and ‘Diane’, from What Price Glory? (dir. Raoul Walsh, 1926) and Seventh Heaven (dir. Frank Borzage, 1927) respectively: the trend continued with hit songs from the Jolson vehicle The Singing Fool during the transition to pre-recorded soundtracks (see Chapter 2).

Breil’s and Griffith’s collaboration on Intolerance (1916) failed to equal either the artistic or commercial success of The Birth of a Nation in spite of a grossly excessive budget of nearly $2 million. Other joint projects included The White Rose (1923) and America (1924); Breil also contributed original music to films by other directors, including The Birth of a Race (dir. John W. Noble, 1918). In 1930, after the introduction of the sound film, a compressed version of The Birth of a Nation was released with a synchronized orchestral score adapted from Breil’s by Louis Gottschalk, who had been responsible for the music for several of Griffith’s later silent films (including The Fall of Babylon, 1919). The familiarity of Breil’s score for The Birth of a Nation on both sides of the Atlantic led to an increased interest in the composition of original film music, no doubt prompted by the realization that the more sophisticated narrative structuring pioneered by Griffith seemed to demand more sophisticated accompaniment. Breil had shown how the character of individual Wagnerian leitmotifs could be transformed to serve dramatic developments: as he himself put it in 1921, ‘the motif must in its further presentations be varied to suit the new situations. And the greatest
development of the theme must not appear in the early part of the score, but towards the end where is the climax of the whole action’ (quoted in Marks 1997, 156).

An entirely original score was composed for *The Fall of a Nation* (dir. Thomas Dixon, 1916) by Victor Herbert who, like some later commentators, objected to the use of pre-existing classical music on account of the potential distraction it offered to an audience already familiar with the material. (However, as Mitry pointed out (1998, 31), visual images of familiar objects can just as easily conjure up distracting personal reactions in a viewer.) According to a review in *Musical America*, ‘Mr. Herbert’s stimulating score clearly indicates the marked advance that music is making in the domain of the photoplay and should prove encouraging to composers who have not yet tried their hand at this type of work’ (quoted in Karlin 1994, 161). *The Fall of a Nation* proved to be Herbert’s sole venture into film scoring, but others were more prolific: among the notable composers of original scores in the USA were William Axt, Gottschalk, Henry Hadley, Leo Kempinski, Ernst Luz, David Mendoza, Joseph Nurriberger (who supplied an overture to Elinor’s score for Griffith’s *The Clansman*), William F. Peters, Rapee, Riesenfeld, Victor Schertzinger (including a score for Thomas Ince’s *Civilization*, 1916), Louis Silvers, Mortimer Wilson and Zamecnik. Several of these had started their careers in film as cue-sheet compilers, and some collaborated with others in joint arrangements. A well-known pairing was Axt and Mendoza, who provided music for *Ben-Hur* (dir. Fred Niblo, 1925) and many other Metro-Goldwyn-Mayer productions; such team efforts continued as a familiar working pattern in Hollywood music departments during the early sound era. It remained common for individual films to be screened with different scores in different locations: *The Four Horsemen of the Apocalypse*, for example, was scored independently by Axt, Gottschalk, Luz and Riesenfeld (McCarty 2000, 119). High-profile original scores composed on the eve of the advent of sound films were Wilson’s *The Thief of Bagdad* (dir. Raoul Walsh, 1924), and Riesenfeld’s *The Covered Wagon* (dir. James Cruze, 1923), *Beau Geste* (dir. Herbert Brenon, 1926) and *Sunrise* (dir. F. W. Murnau, 1927) – the last reissued with synchronized recorded music in the same year as the phenomenal success of *The Jazz Singer* marked the demise of the silent film.

Although original scores were generally favourably received, Wilson’s landmark contribution to *The Thief of Bagdad* was harshly criticized in one review for its harmonic boldness that incorporated ‘bizarre extensions, augmentations, depleted sixteenths, vigorous minor forte passages and other incongruous music idioms under the guise of oriental music’, the complainant picking up on the press agent’s infelicitous hyperbole to ask: ‘When the music of the world is at the disposal of an arranger and the libraries are
rich in beautiful numbers, written by renowned composers, suitable for accompanying such a delightfully fantastic picture, why worry any one man to write a new "note for every gesture"?" (quoted in Anderson 1987, 288–9).

Charlie Chaplin and music for comedies

One successful director and star of silent films who took music especially seriously was Chaplin, who began his acting career as a protégé of the silent-comedy director Mack Sennett in 1913. In the following year Chaplin starred in Sennett’s feature-length Tillie’s Punctured Romance (1914), which includes a scene inside a typical nickelodeon of the day, complete with pianist located to one side of the projection screen. Chaplin directed all his own films from 1915 onwards and the popularity of his baggy-trousered tramp character earned him a million-dollar contract with First National in 1917. Chaplin liked to control all parameters of his films and as such can be regarded as an early auteur director. A self-taught amateur musician, he ‘composed’ the music for many of his films, believing (like many of the more didactically inclined film commentators of the time) that filmed entertainment could expose to good music audiences who might not otherwise be minded to listen to it. In reality, Chaplin depended heavily on the skills of various orchestrators and arrangers in order to realize his sometimes primitive musical raw material. On the evidence of the music by Eric James and Eric Rogers accompanying the 1971 re-release of Chaplin’s directorial feature debut, The Kid (1921), a characteristic mixture of physical comedy and melodrama, the main ingredients were a sentimental lyricism, mock-sinister music for villains, circus slapstick for comic capers, a light operetta style enlivened by occasional ragtime syncopations, folksy jauntiness, stentorian pomposity and banal Edwardian waltzes. Use might also be made of familiar song melodies appropriate to the plot: examples are to be found in Arthur Kay’s score to The Circus (1928), prepared under Chaplin’s supervision at the time and reconstructed by Gillian Anderson in 1993. Wilfrid Mellers, commenting on Chaplin’s recourse to banality as a source of pathos, described his music as a paradoxical ‘apotheosis of the trivial’ (Irving et al. 1954, 104).

After the advent of sound, Chaplin resisted dialogue but showed himself keen to use synchronized music and sound effects in his films; he claimed the credit for the music of all seven of his sound features for United Artists, including City Lights (1931), The Great Dictator (1940) and Limelight (1952), which won the Academy Award for Best Score when re-released in 1972. He confessed that a major advantage bestowed on his work by the sound film was the fact that he could now exert absolute control over the constitution
of the soundtrack and not be at the mercy of the exigencies of differing projection venues, as was the case in the silent era. Among the composers who assisted him were Arthur Johnston (City Lights), Meredith Willson (The Great Dictator), Raymond Rasch and Larry Russell (Limelight). Carl Davis later paid tribute to the consistency of Chaplin’s ideas: ‘how is it that the Chaplin style maintains itself through widely differentiating and widely changing arrangers? There is a line that goes through, no matter who is working with him. He’s saying, “I like it like this,” he’s humming the tunes, he’s making the decisions about the harmonies and orchestrations. There are important lessons in melody and economy to be learned from Chaplin’s music’ (quoted in E. James 2000, xv).

In Modern Times (1936), silent segments featuring typical Chaplin clowning were juxtaposed with sometimes satirical sound elements; the
elaborate score was conducted by Alfred Newman and arranged by Edward Powell and newcomer David Rak... Rakin recalled the collaboration:

Charlie would come in with these musical ideas and we would work on them together, because he didn’t read or write music. It’s a total mistake for people to assume that he did nothing. He had ideas. He would say, ‘No, I think we should go up here, or we should go down there’... But he had fired me after a week and a half because he was not used to having anybody oppose him. And I was just saying, ‘Listen, Charlie, I think we can do better than this.’ Eventually, he hired me back on my own terms.

(interviewed in R. S. Brown 1994, 285)

Rakin recalled the friction coming to a head when he dared to suggest Chaplin’s old-time music-hall idiom was vulgar; after his reinstatement on the project he spent hours with Chaplin developing musical sketches while running the film repeatedly in the projection room (Rakin 1985, 162). During the subsequent recordings sessions, Newman snapped his baton and refused to work with Chaplin when the latter accused his exceptionally fine orchestra of complacency: the sessions had to be completed by orchestrator Eddie Powell, Rakin having sided with Newman in the dispute (Rakin 1985, 170).

Newman’s and Rakin’s Chaplin-based score in places included examples of a technique popularly known as ‘mickey-mousing’: illustrative musical effects synchronized with specific events in a film’s physical action. The term was derived from Walt Disney’s famous cartoon character (who first appeared on screen in 1928), but the procedure had also been common in music for live action: animation had borrowed some of its musical techniques from the circus, vaudeville and silent live-action comedies such as those starring Buster Keaton and Harold Lloyd. Gaylord Carter provided organ music for many of Lloyd’s films in the later 1920s, and recalled how the comedian instructed him to make effects with musical devices, such as stinger chords, rather than resorting to realistic sound effects, and well understood the power of music to bolster weaker moments in his films: on one occasion Lloyd told the organist, ‘when they’re laughing, play soft. It’s when they’re not laughing that I need you’ (McCarty 1989, 53–7). After its initial popularity in serious sound films of the Hollywood Golden Era, mickey-mousing became discredited for its essential redundancy and frequent crudity, and even as early as 1911 some commentators had expressed the opinion that comedies were best played without musical accompaniment to maximize their effectiveness (Altman 1996, 681).
Chaplin himself disliked mickey-mousing and strove to avoid it altogether when adding synchronized music to his silent films after his relocation to Europe in 1952. Between 1958 and 1976 he worked in Switzerland on new but old-fashioned scores to his classic comedies with his ‘music associate’, Eric James, who was legally bound not to claim authorship of any of the films’ music – even when on their final project he had to suggest virtually all the material to the ailing Chaplin (E. James 2000, 66, 111–12). Like Raksin’s, James’s account of their collaboration reveals that Chaplin could not read music, nor play the piano with any more than three fingers, and would messily thump out tunes on the keyboard or sing them, using a tape recorder to preserve his ideas if his music associate were not present at the time, so that they could be polished, harmonized and subsequently scored: the process often took an inordinate length of time, with great attention paid to detail and much irascibility on Chaplin’s part. An unusual form of shorthand, which demonstrated how unoriginal his thematic style could be, was to jot down verbal aides-mémoire indicating, for example, ‘first two notes of Grieg’s “Morning”’, next four notes, those in the opening bars of Liszt’s “Liebestraume”’ and so on (E. James 2000, 71). His obsessive desire to control all aspects of the soundtrack extended to personal interventions at recording sessions, on matters concerning both recording levels and aspects of scoring – James learning that if he cued principal melodies into various alternative instruments’ performing parts in advance it would save considerable time when Chaplin changed his mind.

Early film music in Europe and the Soviet Union

The early market dominance of French and Italian film productions was checked by the First World War, which effectively allowed Hollywood to take the lead, though for a time film-making continued to flourish in those Scandinavian countries that took no part in the conflict. During the early war years, a major Hollywood studio could easily release several feature films per week, going on to make massive profits through distribution practices such as enforced block-booking and the monopolization of theatre ownership. At the end of the First World War, 90 per cent of all films shown in Europe were of American origin (D. Cook 2004, 41). As European cinema regained its strength during post-war reconstruction, it was not uncommon for established composers of concert music to compose film scores for major silent productions, this situation contrasting sharply with that prevailing in the USA. As Bernard Herrmann once remarked of later Hollywood practice, ‘America is the only country in the world with so-called “film
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composers'—every other country has composers who sometimes do films' (quoted in Thomas 1997, 189).

In France, several prestigious scores accompanied bold films made by young avant-garde directors associated with the film theorist Louis Delluc. One of the most memorable of these so-called 'impressionist' films was Marcel L’Herbier’s *L’inhumaine* (1924), featuring a score by Darius Milhaud and described by David Cook as 'an essay in visual abstraction thinly disguised as science-fiction; it ends with an apocalyptic montage sequence designed to synthesize movement, music, sound, and color [tinting]' (Cook 1994, 305). Swiss composer Arthur Honegger was asked to provide scores for Abel Gance’s *La Roue* (1922), which Cocteau deemed to be as important to the development of cinema as Picasso had been to the development of painting, and *Napoléon* (1927), a film which Gance himself described as 'music of light which, gradually, will transform the great cinemas into cathedrals' (Ballard 1990, xxi). According to Henri Colpi, Gance drew his cinematic inspiration from musical structures: he used musical notation to help him edit part of *La Roue*, this notation then being passed on to Honegger so that he could match the filmic rhythm with appropriate music (R. S. Brown 1994, 20); but Honegger testified to Mitry that he in fact ‘ran out of time and did not compose a single note for *La Roue*. He merely assembled an arrangement with special sound effects’ (Mitry 1998, 384). Famously, the breathless editing in the film’s depiction of the rapid motion of a train inspired Honegger’s mechanistic symphonic poem *Pacific 231* (1924), a score which later formed the basis for filmic interpretations by Mikhail Tzankov (1933) and by Mitry himself (1949). Before his collaboration with Honegger, Gance had already conducted notable experiments with the music for his films, using it as a potent structural tool: for example, in *La Dixième symphonie* (1917; music by Michel-Maurice Lévy), the continuity of the score compensated for, and complemented, the designedly bitty nature of the film’s treatment of the process of assembling a symphony worthy to succeed Beethoven’s Ninth (Lack 1997, 36–7).

Gance had been strongly influenced by Griffith’s *Intolerance*, both in specific shooting and editing techniques and in a tendency towards megalomania. *Napoléon* originally ran to 28 reels in length, itself merely the first part of a planned six-film cycle, and was designed to have images shown on three screens simultaneously using the Polyvision process; Gance claimed that he developed this triple-screen presentation in order to realize his ambition that the ‘visual harmony’ and complexity of cinematic images should become directly analogous to a musical symphony (Lacombe and Porcile 1995, 34). Similar parallels were drawn by other French film-makers and theorists such as Emile Vuillermoz (‘composition in the cinema is without a doubt subject to the confined laws of musical composition. A film is
written and orchestrated like a symphony'), Léon Moussinac ("cinematic rhythm... has an obvious counterpart in musical rhythm... the images being to the eye what the musical sounds are to the ear"). Germaine Dulac ("only music is capable of stimulating the same sort of impression as the cinema... the visual idea... is inspired by musical technique far more than any other technique or ideal") and Léopold Suravage ("The basis of my dynamic art is colored visual form (serving a similar function to that of sound in music)"; quotations from Mitry 1998, 111-13). Suravage declared the structural functions of musical and cinematic rhythm to be similar, though such parallels were felt to be specious by Mitry and many others (Mitry 1998, 118). Nevertheless, an overriding concern to achieve audio-visual 'rhythm' was an explicit preoccupation in Gance's screenplay for Napoléon and its visual realization. While shooting, Gance had music played on set by a trio of violin, cello and organ, claiming (somewhat more prosaically) that it was necessary 'not only to give the mood, but to keep everyone quiet. You can capture their attention more easily by the use of music. In the scene where the young Napoleon lies on the cannon... he had to cry in that scene. He couldn't until the musicians played Beethoven's Moonlight Sonata' (quoted in Anderson 1988, xliii). During editing, some elaborate montage sequences were cut to fit music that had already been composed. The screenplay called for the Marseillaise and Dies Irae to take starring roles: in a deleted scene, the organist playing the latter 'looks up with strange, terrible eyes... stops playing momentarily, and says in solemn, terrifying tones: "I am burying the Monarchy!'" (Ballard 1990, 40). Later versions of the film with synchronized sound featured a form of stereophonic reproduction for Honegger's score (D. Cook 2004, 308) and alternative music by Henry Verdun, a former silent-film pianist who hailed from the music halls and did not possess an academic background (Lacombe and Porcelle 1995, 48).

Erik Satie composed an idiosyncratic score for Entr'acte (dir. René Clair, 1924), a short avant-garde film, designed to be screened between the two acts of Francis Picabia's Dadaist ballet Relâche, which (like many provocative artistic events in Paris at the time) came close to provoking riots amongst its first audiences. Satie not only composed the music: he also appeared in the film (as Milhaud was later to do in La P'tite Lilette), clutching his umbrella and appearing to jump off the terrace of the Théâtre des Champs-Elysées. Surrealist and witty, the essentially non-narrative Entr'acte was matched by fragmentary music which, while referring ironically to contemporaneous popular styles in places and wryly distorting Chopin's Funeral March to accompany shots of a camel-drawn cortège, remained as detached and dispassionate as its composer's concert works (Marks 1997, 167-85). As Stravinsky later commented of Satie's importance to twentieth-century music in general, he opposed to 'the vagueness of a decrepit impressionism a precise and firm
language stripped of all pictorial embellishments’ (Stravinsky 1936, 93). Satie’s music, which was revived in a synchronized re-release of *Entr’acte* in 1967, was considerably ahead of its time in its use of obsessive repetition (easier to synchronize than fully blown themes, as later film composers were to discover) and fragmentary, unrelated ideas in a kaleidoscopic aural montage ideally suited to the creative dissolves, superimpositions and trick photography of Clair’s cinematography. At times Satie chose to draw out the black humour in the images: for example, popular dance-hall clichés are heard when we see, in slow motion, the mourners cavorting behind the cortège. When they begin to run after the out-of-control hearse, however, the music turns surprisingly sombre and eventually builds up an extraordinary momentum for the frenetic and dizzying rollercoaster ride with which the film concludes. Some sense of autonomous structure is created by Satie’s use of a spiky and insistent ritornello figure for the full ensemble, serving as an obvious musical punctuation mark whenever it recurs.


Cinema in Germany before the First World War featured substantial compilation and hybrid scores, such as those by Joseph Weiss for *Der Student von Prag* (dir. Stellan Rye, 1913), its Faustian scenario treated in a refreshingly non-theatrical manner, and by Becce for *Richard Wagner* (dir. Carl Froelich and William Wauer, 1913). Expressionism and Angst took their hold on post-war German cinema after the impact of *Das Cabinet des Dr Caligari* (dir. Robert Wiene, 1919), which was screened in New York in 1921 with an unorthodox selection of modern music by Debussy, Mussorgsky, Richard Strauss, Prokofiev, Ornstein, Schoenberg and Stravinsky (Altman 2004, 315), all arranged by Rothapfel and Rapée. Traditional compilation scores continued to be prepared in Germany by Becce, Erdmann and Friedrich Holländer for the films of F. W. Murnau (including *Nosferatu*, 1922) and other seminal directors. Gottfried Huppertz prepared the score for Fritz Lang’s *Siegfried* (1923), which retold the Wagnerian myth without the accompaniment of Wagner’s music. Lang detested Wagner, and resented the addition of Wagnerian cues to the film when it was shown outside Germany (D. Cook 2004, 98): in the USA, for example, *Siegfried* was
screened in 1925 with a compilation score by Riesenfeld. Huppertz provided lush music for Lang's futuristic Metropolis (1927), couched in an expansive idiom clearly influenced by Strauss and Zemlinsky but in places hinting at the harmonic adventurousness of early Schoenberg. Rooted in leitmotivic procedures, including use of pre-existing themes such as the Dies irae and the Marseillaise (which is subjected to distortion when the underground workers turn rebellious), Huppertz's music includes mechanistic writing for machinery, dark-hued textures for the subterranean setting, an opulent Viennese waltz for flirtation in the gardens, pulsating and struggling music for the building of the Tower of Babel, delicate love music, and atmospheric impressionism for special effects such as the creation of the robot.

The Viennese composer Edmund Meisel achieved international fame with his music for German screenings of Soviet director Sergei Eisenstein's controversial The Battleship Potemkin (1925). One of at least three independent scores composed for the film at the time, Meisel's music remains the best known on account of the scandal it created: its hard-hitting idiom was deemed sufficiently disturbing as to warrant suppression of the score in some countries, including Germany. Eisenstein believed that Potemkin's spectators should be 'lashed into a fury' by the music, and Meisel achieved this by composing aggressively percussive and militaristic cues that use repetitive material to powerful cumulative effect. As Alan Kriegsmann commented of the combined impact of Eisenstein's vivid imagery and Meisel's score, 'For sheer visceral agitation, there is nothing in all film history to rival it' (quoted in Prendergast 1992, 14). In the words of an early American reviewer,

The score is as powerful, as vital, as galvanic and electrifying as the film. It is written in the extreme modern vein, cacophonies run riot, harmonies grate, crackle, jar; there are abrupt changes and shifts in the rhythm; tremendous chords crashing down, dizzy flights of runs, snatches of half-forgotten melodies, fragments, a short interpolation of jazz on a piano.

(New York Herald Tribune, 29 April 1928)

The writer noted, however, that the score was not bombastic throughout, and he was particularly moved by a melody Meisel introduced to represent the people of Odessa: 'It soars and endears itself to the heart. It is full of gratitude and the love of man for man. It's one of the warmest, tenderest passages that has found its way into the cinema-music repertoire.' Especially impressive was the manner in which the combination of Eisenstein's montage techniques and Meisel's obsessive music manipulated the spectator's temporal perceptions, as when a few seconds of real-time tension on the Quarterdeck are stretched out to form an utterly compelling extended climax in the final reel.

As evidenced by his later collaboration with Prokofiev (see Chapter 9), whose services he initially wished to acquire for Potemkin, Eisenstein
believed in the necessity to establish a genre of ‘sound-film’ in which the music and images were governed by an interdependent audio-visual structure far more sophisticated than the formulaic approach to scoring already prevalent in the popular film industry. But not all commentators were lavish with their praise for the music of *The Battleship Potemkin*. The English composer Constant Lambert declared that Meisel’s score was ‘a great improvement on the ordinary cinema music of the time, but it would be idle to pretend that it was a worthy counterpart of the film itself’ (Lambert 1934, 223). While recognizing that Meisel was only a ‘modest composer’ and that his score was ‘certainly not a masterpiece’, the ever-elitist Adorno and Eisler nevertheless praised him for avoiding a commercially viable idiom and noted that the music’s modernistic aggressiveness impacted powerfully on the film’s spectators (Adorno and Eisler 1994 [1947], 123–4).

Meisel also wrote music for Eisenstein’s *October* and Walter Ruttmann’s experimental documentary *Berlin: Symphony of a Great City* (both 1927; for the latter, see Chapter 7). Eisenstein drew attention to the audio-visual structural parallel by which Meisel’s cue for the toppling of the statue of Alexander III in *October* was played in retrograde when the statue subsequently ‘flew back together’ (Taylor 1998, 181). In his music for Ilya Trauberg’s *The Blue Express* (1929), Meisel used a jazz band, though the film was in some countries accompanied by Honegger’s *Pacific 231* (Lambert 1934, 209). Meisel was fascinated by the possibilities of sound montage, undertaking experimental work at Berlin’s German Film Research Institute and in 1927 issuing (on the Deutsche Grammophon label) recordings of onomatopoeic instrumental sound effects for filmic use; in 1930, shortly before his untimely death, he recorded his music for both *Battleship Potemkin* and *Blue Express* for the purposes of sound-on-disc synchronization when the films were re-released.

The development of cinema in the Soviet Union had been personally encouraged by Lenin, who (for its propaganda value) regarded it as the most important of all art forms: film production came under the control of the People’s Commissariat of Education in 1919, two years after all those who worked in film—including pianists—were organized into a trade union. As in other countries, Soviet silent films could be accompanied by anything from a lone pianist up to a full orchestra of 60 players, as was to be found in Kiev’s Shander cinema, where complete Tchaikovsky symphonies might be performed as part of the programme. Original but pastiche scores—one dating from as early as 1908—were composed by Alexander Arkhangelovsky, Dmitri Astradantsyev, Yuri Bakaleinikov, Igor Belza, Mikhail Ippolitov-Ivanov and Georgii Kazachenko (Robinson 1990, 46–9; Egorova 1997, 5–7). Musical cue sheets proliferated in the early 1920s, the Soviet film industry having accelerated production in the wake of the enormously successful importation of Griffith’s *Intolerance*.
Shostakovich, the most famous musician who worked in the Soviet silent cinema, initially gained valuable experience as a pianist at the Bright Reel, Splendid Palace and Piccadilly theatres in Leningrad, where he worked in the mid-1920s in order to support his family. Later he composed a flamboyant orchestral score for *The New Babylon*, directed by Grigori Kozintsev and Leonid Trauberg in 1929; as was the case with Saint-Saëns’ score for *L’assassinat du Duc de Guise*, the music was made available in a version for solo piano for use in small venues. According to Kozintsev, ‘we at once came to an agreement with the composer that the music was to be connected, not with the exterior action but with its purport, and develop in spite of the events, regardless of the mood of the scene’ (quoted in Egorova 1997, 8). For this reason, Shostakovich in places supplied what might on the surface have appeared to be anempathetic accompaniment: in an article bemoaning the impoverished state of much film music, the composer drew attention to a scene in an empty restaurant at the end of the second reel which is overlaid with music depicting the imminent onslaught of the Prussian cavalry, and to a moment in the seventh reel in which the music depicts the melancholy and anxiety of a soldier, not the merry-making by which he is surrounded (Shostakovich 1981, 23; Pytel 1999, 26). Synchronization between image and music is notable during a seminal scene in the sixth reel in which piano music by Tchaikovsky is supplied for a diegetic keyboard meditation; however, as Fiona Ford has noted in her unpublished study of the film’s musical sources, by building repeated material and pauses into the score at appropriate places Shostakovich afforded the conductor several ‘recovery opportunities’ so that image and music would not come to diverge too uncontrollably in live performance (Ford 2003, 39). Typical of its composer’s early style and replete with sardonic parodies of popular idioms, including several slick waltzes to characterize the bourgeoisie and circus-like gallops reminding the listener that Soviet film in the silent era remained deeply rooted in the cinema of attractions, Shostakovich’s score made effective use of famous melodies such as Offenbach’s can-can (from *Orpheus in the Underworld*) and the *Marseillaise*, these being appropriate to the film’s French setting; no fewer than three songs from the French Revolution are used to support the Soviet ideology underlying the film’s action. The *Marseillaise* had previously been used by Meisel (for a similar reason) in *Potemkin*.

In spite – or perhaps because – of its visual and musical interest, *The New Babylon* was not a success. Audiences found the film and its music incomprehensible, and some alleged that Shostakovich had been drunk when he composed the score. Like *Potemkin*, international paranoia resulted in the banning of the film in various countries. In the Soviet Union, Shostakovich’s overly challenging music was quickly ditched, and thus one of the most
The strong tradition of artistic independence from international styles that characterized the German and Soviet silent cinemas was the exception rather than the rule. Elsewhere the global market was dominated by films imported from the USA, and (to a lesser extent) influential European countries such as France, Germany, Italy and the UK; in less powerful countries, indigenous cinema and its associated film music inevitably struggled to come into existence during the silent era. A typical example was the situation in Greece. Film music in the silent era was here considered not for its aesthetic value, but principally as a means of luring audiences into cinemas; lavish orchestral accompaniments were reserved almost exclusively for American films featuring famous stars, with native Greek films usually having to make do with a pianist, sometimes with the addition of two to three instruments and perhaps a singer (Mylonás 2001, 22, 197). The high-profile nature of music for imported films was perpetuated by the fact that these films made the most money, thus readily permitting cinemas to finance the often costly orchestras required: one of the most popular ensembles serving this function in c.1914–15 was that directed by Iannis Krassás at the Kyvélis cinema in Athens. By the end of the silent era, Krassás was music director at the capital’s Pántheon cinema, where his contribution still mainly consisted of conducting popular classical pieces (such as overtures by Adam, Suppé and Rossini) as simple introductions and interludes to each film screened; there was no direct link between the subject-matter of the music and the subject-matter of the picture. Original Greek film music first emerged in 1917 when Theófrastos Sakellaridis wrote a score for the Italian film operetta The Nine Stars and, in the following year, Dionýsios Lavrázas composed original music for voices and a fourteen-piece ensemble to accompany the imported film Pierrot’s Ring. Sakellaridis went on to compose music for two more foreign films, Daughter of the Waves and Barbara, Daughter of the Desert – the latter featuring an original song entitled ‘Kamómata’ (‘Antics’), which became a popular attraction and was featured by Krassás at the Pántheon in 1928–9. The first original score for a Greek silent film was that by Manólis Skouloudis for Daphnis and Chloe (dir. Oréstes Láskos, 1931), partly based on ‘archaic motifs’; but by this time the sound cinema had already made its way to Greece (Mylonás 2001, 18–23).

Postlude: the silent-film revival

The flexibility of sound provision in the silent cinema made the medium unpredictable, with films never shown in precisely the same way on more
than one occasion. This spontaneity was immediately lost once synchronized soundtracks were permanently fixed onto film stock in the 1930s; but, although it may have seemed so to pessimists at the time, the loss was not irrevocable. Connoisseurs of silent cinema long lamented the sound era's inevitable neglect of film as an art enhanced by live sound, and various attempts were made to reinstate something of this abandoned dimension: the experimental film-maker Ken Jacobs, for example, mixed pre-recorded and live sound in screenings of his work (Weis and Belton 1985, 370), while Warhol, in The Chelsea Girls (1966), used two screens, one silent and the other with sound. Film-music scholars soon afterwards began to resurrect the glories of the silent era by embarking on a systematic preservation of historic scores, and this initiative was subsequently enhanced by the creative work of numerous composers - many of whom were born long after the demise of the silent cinema - commissioned to provide classic silent films with new music that at once tapped into the strengths of the old tradition and made the works seem more relevant to the modern age.

Landmark authentic scores for silent films were reconstructed, by scholars and performers such as Gillian Anderson and Dennis James, not merely to languish in historical archives but more importantly for resurrection in live performance in conjunction with screenings of the images for which they were originally prepared. Anderson's first such project was a recreation in 1979 of Victor Alix's and Léon Pouget's score to one of the last great classics of the silent era, The Passion of Joan of Arc (dir. Carl-Theodor Dreyer, 1928); her later reconstructions included Breil's score for Intolerance and Wilson's for The Thief of Bagdad. James resurrected the art of the cinema organist in a series of screenings at Indiana University, the Ohio Theatre and elsewhere from 1969 onwards, and in 1971 reconstructed the score to Griffith's Broken Blossoms (1919); he worked on many other reconstructions and live organ accompaniments, including music for Gance's Napoléon (McCarty 1989, 61–79). Many historic scores were systematically catalogued and preserved at national and university archives in the USA, with some institutions (notably New York's Museum of Modern Art) committed to mounting live performances of them to accompany showings of the relevant films. High-profile tours that married screenings and live orchestral accompaniment became relatively common, an important example being the exposure accorded to Shostakovich's music for The New Babylon: commercially recorded for the first time (in the form of a suite) by Soviet conductor Gennadi Rozhdestvensky in 1976, Shostakovich's complete score was relaunched with the film at that year's Paris Film Festival and was widely performed live to accompany screenings in both Europe and the USA in 1982–3. At around the same time, the performing parts for Meisel's Battleship Potemkin music were discovered, permitting this seminal score to be reconstructed (Kalinak 1983).
Silent films were revived earlier than this within the Soviet Union, sometimes with memorable results: a new score to *Potemkin* was composed by Nikolai Kryukov in 1950, and in 1967 a surprisingly effective score compiled (by others) from pre-existing orchestral works by Shostakovich accompanied a re-release of *October* on the occasion of the fiftieth anniversary of the Revolution, the composer's propulsive ostinato textures fitting well with images such as the rapid jump cuts conveying the stuttering of machine-gun fire and here proving just as agitational as Meisel's *Potemkin*. Similarly, a new score for *Potemkin* was fashioned from parts of Shostakovich's symphonies when the film was restored to mark its fiftieth anniversary in 1975.

New scores were widely commissioned in the 1980s to accompany re-releases of silent films in theatrical, televisal and video formats. Carl Davis scored *Napoléon* (1980) for Thames Television and the British Film Institute, including some of Honegger's original music, and received a standing ovation at the London première (Ballard 1990, xiii). Davis also scored *The Thief of Bagdad* (1984), *Intolerance* (1986) and the 1925 *Ben-Hur* (1987), his music for the latter taking inspiration from Bruckner to achieve reverence in biblical scenes. Other Davis projects included Griffith's *Broken Blossoms* (1919) and Eric von Stroheim's *Greed* (1923), and a British tour of his new music to *The Phantom of the Opera* (dir. Rupert Julian, 1925) with the Hallé Orchestra in 2002 continued his popular successes in the field. In 1986, Griffith's *Intolerance* celebrated its seventieth birthday and was furnished with a new score by Antoine Duhamel and Pierre Jansen at the Avignon Film Festival. In sharp contrast to traditional scoring techniques, Giorgio Moroder supplied an up-to-date (and therefore almost instantly dated) synthesized music track to a shortened and colour-tinted restoration of Lang's *Metropolis* in 1983; the inclusion of modern pop songs provided, according to Claudia Gorbman, 'a choruslike commentary on what is seen, sometimes with brilliant irony. Some listeners, their primary attention divided between the lyrics and the [newly subtitled] “dialogue,” find this difficult to assimilate' (Gorbman 1987, 20). *Metropolis* has inspired many modern musicians to endow it with new music, including the Alloy Orchestra, Club Foot Orchestra, Peter Osborne, Bernd Schultheis and Wetfish. Huppertz's original orchestral score was reconstructed by Berndt Heller for video release in 2002. Two years later the Pet Shop Boys' Neil Tennant wrote a new score for *Potemkin*.

Other composers, arrangers, keyboard players and ensembles who contributed to the silent-film revival included James Bernard, Neil Brand (of London's National Film Theatre), Carmine Coppola (who provided a conventional hybrid score for the American release of *Napoléon* in 1980), The Curt Collective, Alan Fearon, Edward Dudley Hughes, Robert Israel, Adrian
Johnston, Benedict Mason, Richard McLaughlin, David Newman, Michael Nyman, Paul Robinson, Geoff Smith (applying his hammered dulcimers to classics of German silent expressionism), Joby Talbot, Jo Van den Booren and Wolfgang Thiele (who reworked Erdmann’s music to Nosferatu). Veteran cinema organists such as Gaylord Carter came out of retirement to contribute their own reminiscences of the silent era: Carter had remained active as a silent-film accompanist in the 1960s and in 1986–7 recorded historically authentic accompaniments for the video release of Paramount silents. These included Lang’s The Golden Lake (1919) and The Diamond Ship (1920), and DeMille’s The Ten Commandments (1923), the original compilation score for which had helped to popularize Dvořák’s New World Symphony and Tchaikovsky’s Piano Concerto No. 1 (Huntley [1947], 27). At the other end of the stylistic spectrum, British saxophonist Jan Kopinski’s slowly evolving modal jazz found an unlikely application in his 2004 score to Alexander Dovzhenko’s Earth (1930), where it was nevertheless perfectly in tune with the leisurely pace and haunting visual beauty of the Russian director’s bold images.

Adrian Johnston’s music for Harold Lloyd’s Hot Water (1924; Thames TV, 1994) is a model example of a silent-film score conceived for a modern...
television audience. It uses a mere six instruments with resourcefulness and imagination in an idiom sufficiently sophisticated to satisfy contemporary tastes but deeply rooted in traditional scoring techniques, even down to the prominent use of the Dies irae in a ghostly sequence. Carter recalled how he used this melody in his organ accompaniment to the unmasking scene of The Phantom of the Opera: as seen above, the plainchant was used in Huppertz’s score for Metropolis and thereafter remained one of the most frequently quoted melodies in later film music. Prominent later appearances in films of widely differing styles and genres include Foreign Correspondent (dir. Alfred Hitchcock, 1940; music by Alfred Newman), in which it is sung diegetically by an unseen choir in London’s Westminster Cathedral before an attempt is made to push the film’s hero off the tower; in Erik Nordgren’s score to Ingmar Bergman’s The Seventh Seal (1957), where it is several times suggested merely by its first four notes, in addition to receiving a full-blown arrangement sung diegetically by a procession of monks in the context of the Black Death; in three of Bernard Herrmann’s scores: his music for the death of Hydra in Jason and the Argonauts (dir. Don Chaffey, 1963), in The Bride Wore Black (dir. François Truffaut, 1967), and delicately on a harp for a graveyard scene in Obsession (dir. Brian De Palma, 1975); in The Shining (dir. Stanley Kubrick, 1980; music by Walter Carlos), where an electronic version alluding to its arrangement by Berlioz creates a sense of foreboding in the main-title sequence; in Sleeping with the Enemy (dir. Joseph Ruben, 1990; music by Jerry Goldsmith), where its famous incarnation in Berlioz’s Symphonie fantastique appears diegetically on a hi-fi system as a symbol for the male protagonist’s depravity; and in the fantasy animated musical The Nightmare Before Christmas (dir. Tim Burton, 1993; music by Danny Elfman).

Such is the renewed popularity of silent-film screenings with live musical accompaniment that other media, such as television documentary, have in recent years been adapted for this purpose. Extracts from British composer George Fenton’s substantial orchestral score to the monumental BBC TV series about the oceans, The Blue Planet, have been performed live in several countries, commencing with a show in London’s Hyde Park in 2002 in which Fenton conducted a live accompaniment to a large-screen projection of the stunning wildlife photography from the series. The venture led to a release of a documentary film for theatrical exhibition, Deep Blue (dir. Andy Byatt and Alastair Fothergill, 2004).