

# THE FUNCTION OF MUSIC IN SOUND FILM

By MARIAN HANNAH WINTER

TO MANY the most interesting domain of functional music is the sound film, yet the literature on it includes only one major work—Kurt London's "Film Music" (1936), a general history that contains much useful information, but unfortunately omits vital material on French and German *avant-garde* film music as well as on film music of the Russians and Americans. Carlos Chávez provides a stimulating forecast of sound-film possibilities in "Toward a New Music" (1937). Two short chapters by V. I. Pudovkin in his "Film Technique" (1933) are brilliant theoretical treatises by one of the foremost figures in cinema. There is an extensive periodical literature, ranging from considered expositions of the composer's function in film production to brief cultist manifestos.

Early movies were essentially action in a simplified, super-heroic style. For these films an emotional index of familiar music was compiled by the lone pianist who was musical director and performer. As motion-picture output expanded, demands on the pianist became more complex; a logical development was the compilation of musical themes for love, grief, hate, pursuit, and other cinematic fundamentals, in a volume from which the pianist might assemble any accompaniment, supplying a few modulations for transition from one theme to another. Most notable of the collections was the *Kinotek* of Giuseppe Becce: A standard work of the kind in the United States was Erno Rapée's "Motion Picture Moods".

During the early years of motion pictures in America few original film scores were composed: D. W. Griffith's productions, for which William Carl Breil combined original and compiled music into special scores, were exceptions. Performed by an orchestra that travelled with the movies during first runs, these were later rented in piano reductions to small town and neighborhood theatres. As movies attained further importance this practice became almost universal. Craftsmen such as Riesenfeld, Axt, Men-

doza and Rapee, usually conductors of movie palace orchestras, arranged, compiled and occasionally composed special music. At best, as in Axt and Mendoza's score for "The Big Parade" (1925), they gave felicitous "background" music, "expressing" emotions by certain musical clichés. Surprisingly little effective use was made of the jazz idiom.

Both the older and younger schools of "serious" American composers were indifferent to movies during the twenties; Frederick Converse's score for "Puritan Passions" (1923), Deems Taylor's for "Janice Meredith" (1924) and Mortimer Wilson's for "The Thief of Bagdad" (1924) and other Fairbanks films, were rare phenomena.

Young American composers attracted to the medium went abroad to work with *avant-garde* directors, who were evolving valuable cinematic techniques and creating opportunities for composers to become an integral part of film production. A functional concept of film music emerged, opposed to scores that stemmed from the early piano pastiches.

France had early taken the lead. When Films d'Art, organized in 1907, wished to demonstrate the artistic merits of cinema, it not only induced members of the Comédie Française to act *L'Assassinat du duc de Guise* (1908), but commissioned Camille Saint-Saëns to compose an appropriate orchestral score. "Programmatic" and "descriptive", the score is particularly interesting for its verbal indications of film action, corresponding to a cue-sheet.

As American films gained ascendancy in the popular commercial field, the arranger prospered. It was not until the twenties that a consistent collaboration between distinguished European composers and film directors achieved results that indicated the future uses of film music.

Arthur Honegger was the first noted modern attracted to the movies. *La Roue* (1922), for which his first film score was composed, had been directed by Abel Gance over a two-year period during which Honegger was a collaborator. This score included some popular songs, although it was in no sense "compiled".

To synchronize music and film efficiently Honegger employed the Cinépupitre of Pierre Delacommune. This apparatus recorded the rhythm of successions of sounds. A later improvement was made by C. R. Blum, the Rhythmonome, which was to "register the living rhythm of music, speech or other succession of sounds

'phonorhythmically' by electrical recording on a tape running at determinable speed. In this way the time-values of such sounds are translated into corresponding space-values. Every rhythm in sound is thereby rendered apparent to sight. This 'rhythmogram' is thus the optical representation of otherwise rhythmical sound-processes, as the phonogram is their acoustical reproduction." (C. R. Blum, tr. by Kurt London in "Film Music").

Honegger's activity during the silent-film era included scores for Abel Gance's gigantic *Napoléon* (1925-1926), in which the screen was divided into three parts showing simultaneously three different scenes of action, and Claude Autant-Lara's *Fait-Divers* (1924).

In 1924 the Ballet Suédois produced *Relâche*, a ballet with cinema *entr'acte*, actually entitled *Entr'acte*, directed by René Clair, scenario by the painter Francis Picabia and music by Erik Satie. The Satie legend has obscured the fact that he was one of the first to understand the effectiveness of film music that was not accompaniment, but a commentary—retaining its own line—on the action. Satie recognized that through montage (editing) the rhythm of the film was established. In *Entr'acte*, melody becomes an accessory to the rhythmic and harmonic elements, which form a series of units often directly attached to each other without modulations, or by brief melodic interludes. Only one of these units reappears, coming periodically with dynamic emphasis.

The middle section of this film, tinged with *surréaliste* humor, depicts a fantastic funeral cortège, with the hearse drawn by a camel, and a motley entourage of mourners consuming the *couronnes de funeraillles*, which are made of bread, as they follow. This procession, shot in slow motion and accentuated by a mock lugubrious horn theme, gradually accelerates to a precipitous pursuit after the hearse, which has broken loose and careened away on its own momentum (the speed and humorous nature of which are indicated rhythmically by wooden claquettes).

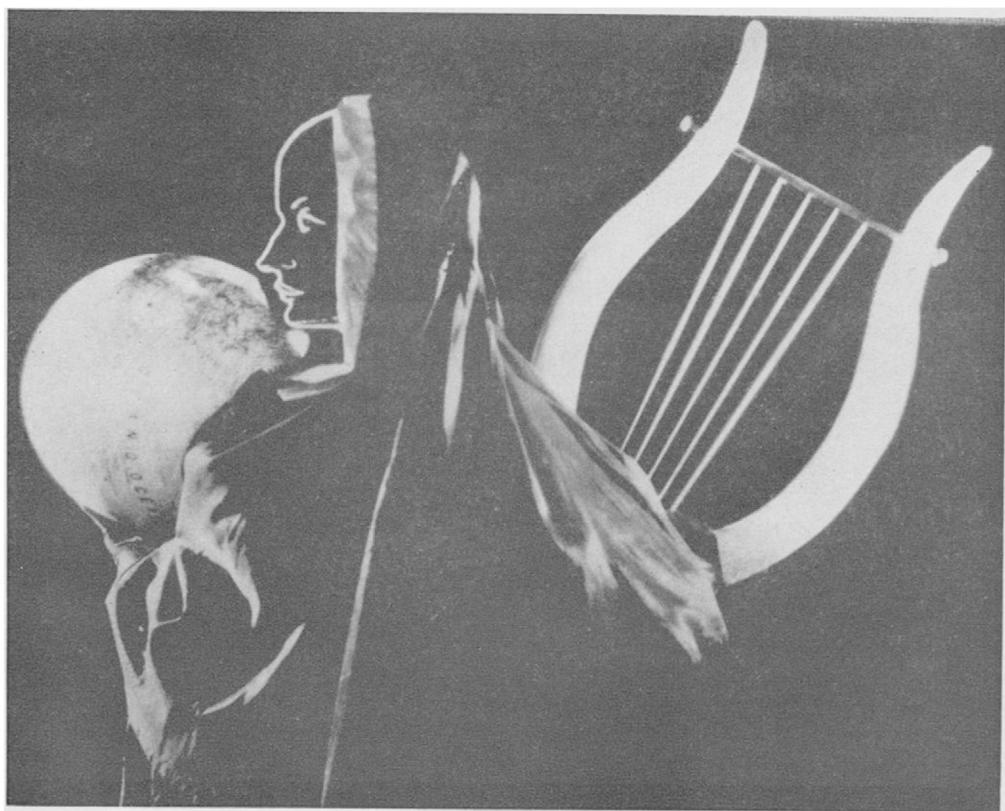
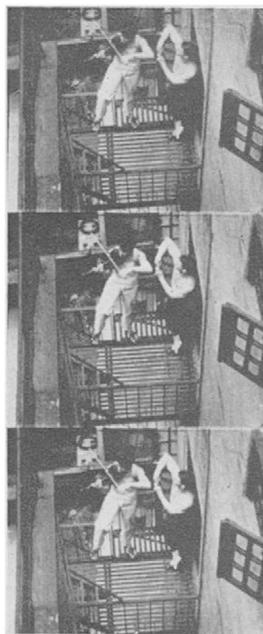
At no point does the music impinge on the primary and legitimate logic (or illogic) of the film image. In principle, as P.-D. Templier has noted, it is almost an extension of the *musique d'ameublement*.<sup>1</sup> Like most good film music it should be heard with its picture.

<sup>1</sup> Concerning Satie's introduction of *musique d'ameublement*, see Constant Lambert's "Music Ho!", p. 132.

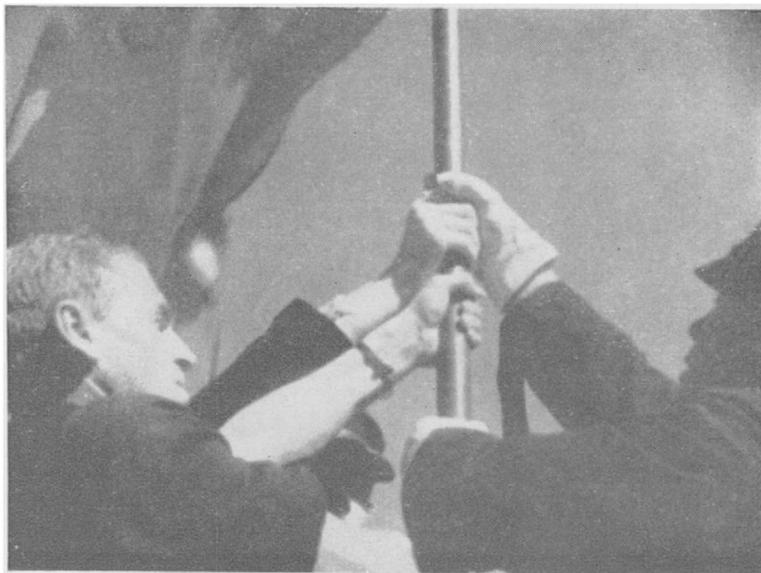


*To the left:*  
The Bearded Lady in  
the Film *Entr'acte* for  
Satie's Ballet *Relâche*  
(France, 1924)

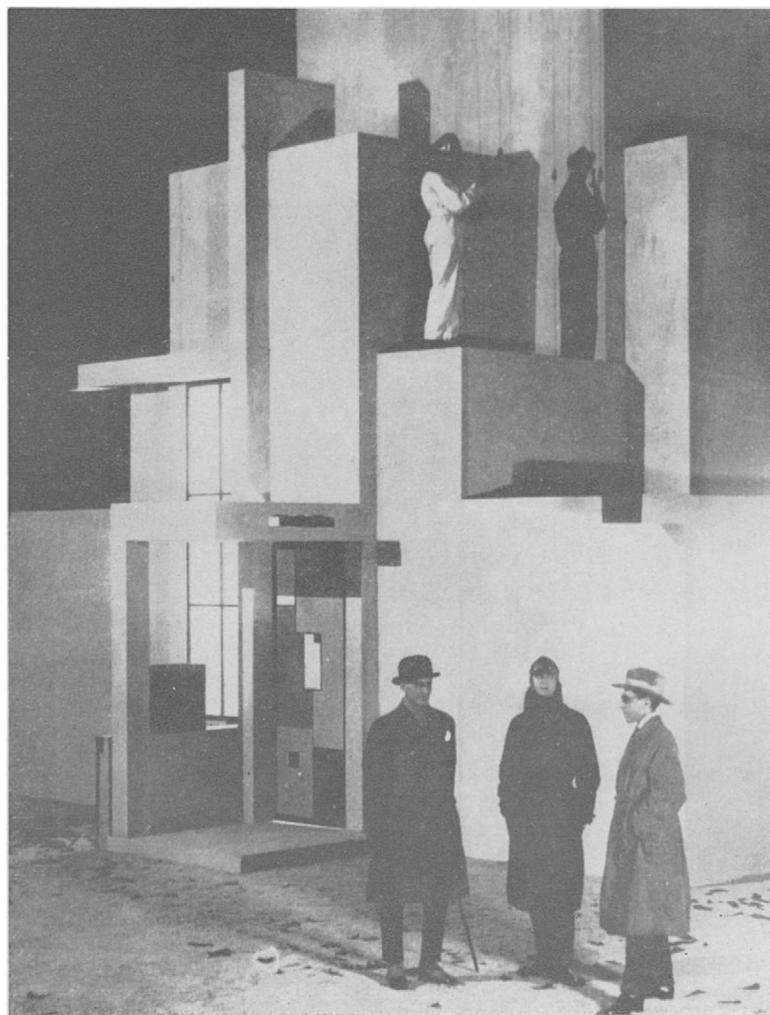
*To the right:*  
Film Sequence from  
'Venus and Adonis',  
Score by Paul Bowles  
(U. S. A., 1935)



"Still" from Jean Cocteau's *surréaliste* film *Le Sang d'un Poète*,  
Score by Georges Auric (France, 1932)



Close-up of the Battle between Workers and Police in V. I. Pudovkin's  
"The Deserter", Score by Y. A. Shaporin (Soviet Union, 1933)



Scene from Marcel L'Herbier's notable Silent Film *L'Inhumaine*

In 1924 Fernand Léger, famous cubist painter, finished his film *Ballet Mécanique*. The score, entrusted to a young American, George Antheil, achieved almost more notoriety than the picture. *Ballet Mécanique* was one of the first "absolute" films. It "employs a minimum of drawn or painted geometrical forms (in contrast to previous film cartoons of purely abstract designs) and a preponderant amount of photographic images." Even human figures were incorporated into patterns, the individual merely approximating "an object in motion in a rhythmical composition." (Iris Barry. Museum of Modern Art Film Notes.)

Antheil's score, recorded for the mechanical piano Pleyela, was an outstanding example in the use of an instrument enthusiastically regarded by Continental composers, technicians, and film distributors. Attempts to solve the problem of inadequate musical accompaniments, assembled from week to week by a house pianist, had been undertaken at an early date. In 1912 *Ciné-Journal* presented reports on the patents of Louis Janssens in his Synchronisation-Musico-Cinématographique. This kind of synchronization involved reproduction by mechanical piano and a rather elaborate schedule for realization. The composer or expert arranger (more likely the latter) was to evolve a score after completion of the film, but before its release, to meet the approval of producer, distributor, and director.

These "musical settings", which might have had some slight importance as original film music, were to be stamped on rolls and rented with the movie. Theatre owners were expected to invest in the necessary apparatus. The elaborate set-up involved in production and distribution doomed Janssens' plan at this early period of film history. Continental composers were nevertheless enthusiastic about the extension of experiments in mechanical music, particularly of experiments with the mechanical piano.

In the magazine, *L'Esprit Nouveau* (1921, No. 11), Albert Jeanneret, brother of the modern architect Le Corbusier, confrère of Jacques-Dalcroze and a composer who pioneered with new instruments, advocated the composition of original film music for the Pleyela. Of the two scores thus recorded, Antheil's was more successful, perhaps because the film itself stressed mechanical elements. Jean Grémillon made *Tour au Large* (1926) for Synchronisé, one of the French groups experimenting with synchronizing music and motion picture; he planned the scenario, directed the

photography, and composed the score for an abstract film of foam, waves, and open sea.

André Cœuroy, reviewing *Tour au Large* in *Cahiers d'Art* (1927, No. 3), directed attention to vulnerable phases of this experiment. After noting that Grémillon's musicianship was apparent in the first meters of the film, in which it was demonstrated by the musical nature of the visual action, he analyzed the nature of the music itself. The composition was a suite of *marines*, sometimes noisy as the swell of waves, sometimes impressionist and "atmospheric". "Yet, with all his gifts, because of all his gifts, Grémillon has only realized a theoretical ideal that cannot cope with reality. Far from experiencing an equilibrium, the auditor-spectator is the prey of a terrific battle between two art forms, neither of which wishes to cede to the other. The virtuosity of the screen jostle the heavy appeal of the music." The precision of film images gave no margin to Grémillon's score, and Cœuroy justly concluded that when two such arts were combined one must give way to the other; in this instance music must cede. He also recalls that Satie had achieved a necessary sense of proportion.

The crusade for mechanical instruments was maintained, with some impressive names enlisted, particularly in Germany. Film music was naturally a province for missionaries of *Gebrauchsmusik*, particularly when recorded on disks or stamped for mechanical organ or piano.

For the Baden-Baden festival of modern music in 1927, Paul Hindemith composed his first film score—"Krazy Kat at the Circus", an animated cartoon—, recorded by mechanical organ. Hanns Eisler's score for Walter Ruttmann's "absolute" film, *Opus 3*, was also heard at this festival. Hindemith's score for Hans Richter's *Vormittagsspuk* was performed on piano alone at the 1928 festival. This film was an extraordinary production by a man who made outstanding experiments in that type of cinema which was a facet of German *Expressionismus*.

During the silent era, when commercial producers would not employ or even co-operate with modern composers, preferring the perennial pastiches, these composers were compelled to collaborate with their friends among the artists and *avant-garde* film directors. Thus a preponderant number of notable scores were written for experimental or abstract films.

Space permits only brief mention of noteworthy silent-film

music. Among the French scores one finds Roger Desormière's for Chomette's *À quoi rêvent les jeunes films* [sic] (1924); Henri Rabaud's for *Le Miracle des Loups* (1924) and *Le Joueur d'Échecs* (1926); Milhaud's for *Actualités* ("score for any newsreel") and for Marcel L'Herbier's *L'Inhumaine* (1925); and Yves de la Casinière's charming score for Alberto Cavalcanti's famous "city-symphony" of Paris—*Rien que les Heures* (1926).

In Germany the most noted composer of film music was the late Edmund Meisel, whose fame rests almost exclusively on his work for motion pictures. His most renowned score was for Eisenstein's masterpiece "Potemkin" (1925); anecdotal apocrypha have accumulated about its effectiveness since its first performances. In several cities the movie passed the censors only with a stipulation that it be shown without Meisel's stirring and "provocative" score.

The scores for Razumni's "Unnecessary People" and Fanck's "The Holy Mountain" in 1926, and two Soviet films—Eisenstein's "October" (1927) and Trauberg's "China Express" (1929), the latter his first sound film—were among Meisel's major works.

In his use of percussion instruments Meisel anticipated many effects of sound film; the use of noise—*Geräuschmusik*—was his special interest, and after sound film was an actuality he made a series of six records for Polydor which incorporated various noises into "effect music"—*Street Noises, The Start and Arrival of a Train, A Train Running till the Emergency Brake is Pulled, Noises of a Railway Station, Machine Noises, A Bombardment and Music of the Heavenly Hosts*.

At this point practical sound films became an accomplished fact. "Talking pictures" had been in process of realization for many years. Warner Brothers' success with Al Jolson's "The Jazz Singer" (1927) was the conclusive demonstration that closed the silent picture era by 1929 and hurtled producers into a frenzy of sound-stage construction.

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America, maintaining commercial supremacy, turned out a host of monstrous "all-singing all-talking" films. Quality was sacrificed to quantity: theme songs became unbearable, but production quotas were met. European studios, with less capital, had a difficult time with physical construction for sound film, but

shortly proved their supremacy in directors and composers who knew what sound films could achieve.

Sound was reproduced either by recording on super-sized disks synchronized with the picture camera or else through photographing by sound camera; the drawbacks of the first method were mostly those of the average gramophone record. Sound on film, now universally employed, meant photographically recording sound on a film strip by means of a picture camera and sound camera synchronously coupled. For a complete technical presentation of sound-on-film recording, "Motion Picture Sound Engineering", a book published under the auspices of the Research Council of the Academy of Motion-Picture Arts and Sciences, New York, 1938, is helpful; for simplified diagrams see Carlos Chávez's "Toward a New Music", New York, 1937.

However, the basic techniques of assembling sound track are so inextricably a part of sound-film esthetics that a brief note of explanation may be useful here.

Spoken dialogue, noises, and music—used singly or in combination—are the components of a film sound-track. Dialogue is almost invariably recorded with its film sequence; then the dialogue track is mixed with the sound effects or music or both. This process is known as "post-synchronisation". W. F. Elliott has suggested the term "post-asynchronisation" for the process when it is employed non-realistically.

Post-synchronisation is extremely important in dance sequences, which are filmed from different angles, with trick-shots, close-ups, and every possible device to insure visual variety.

In order to provide an unbroken musical score "play-back" is employed. This means that, for example, the entire sequence is "shot" from the long shot position, with full orchestral score, singing, etc. and recording in synchronism. Subsequently, the track is "played-back" on the studio floor via reproducer and loudspeakers, and the action repeated in synchronisation with this "played-back" sound, while cameras photograph the required items. In certain cases the music, etc. is made *before* the picture is shot, the picture subsequently synchronized by "playing-back". This is known as pre-scoring and is used principally in cartoon work, although instances of its use in "musicals" are becoming more frequent. (W. F. Elliott, "Recording for Sound Films", London, 1937.)

The process of putting together these sound tracks for post-scoring and pre-scoring is re-recording. "The mechanics consist

simply of placing the desired sounds—dialogue, music, or other effects—at the proper place in two or more tracks, reproducing the tracks simultaneously, and controlling the loudness of each so that the desired effect is heard from the horns.” (Kenneth Lambert in “Motion Picture Sound Engineering”, New York, 1938.)

From a technical viewpoint alone it is apparent that the composer cannot isolate his work from the complete sound pattern of a film; ability to use non-musical sound is essential.

The various theories and studies of “noise-music” (the beloved *Geräuschmusik* of the Germans and *Bruitismus* of the Italian futurists) were linked particularly with film, during both silent and sound periods. Although many of these experiments had only academic interest, increased awareness of the uses of sound was effected.

In the twenties Moholy-Nagy, architect, photographer, and one of the directors of the Weimar Bauhaus, published designs for a stage and screen theatre that would include mechanical music apparatus and equipment for noise-music, rather vaguely listed as “Percussion-, Noise-, and Wind-Instruments, mostly without resonance-boxes, only with amplifiers.”

In a Bauhaus monograph (1923) Piet Mondrian, the Dutch artist, belonging to the abstract *stijl* group, proclaimed the triumph of *Bruitismus*, the noise-music of Louis Russolo, Italian futurist. Later Russolo composed a score for Eugène Deslaw’s *Vers les Robots* (1930?) on a variety of electric organ which he christened the Rumharmonium.

Studies of film rhythm and audio-reception were carried forward until, in 1928, with sound film a reality, Guido Bagier exclaimed (in *Der Kommende Film*):

Film is Rhythm—	outwardly perceived harmonic movement!
Music is Rhythm—	inwardly perceived articulated movement!

and a veritable avalanche of manifestos ensued!

The co-functioning of both musical and film rhythms (which Grémillon had attempted unsuccessfully) was recognized as essential. While the average commercial producers were frantically searching for theme-songs and recording every footfall or rain-drop within range, a few directors knew what sound film implied.

The most extreme experiment with sound film was Walter Ruttmann's "Week-End" (1930), which consisted of a film sound-track and *no images* on the screen. This was a *tour de force* in "absolute sound" by a man who had invariably disdained any accompaniment for his abstract "absolute films".

Mixing noise, speech, and music, the sound track followed the progress of a week-end from the end of work on Saturday, through the holiday spirit of Sunday, to Monday's renewal of routine. The film (non-visual) opens with syncopated machine noises, followed by a spoken interlude formally designed to evoke work-day atmosphere:

A business man's voice on the phone: *Opéra forty-two-eighty. . . .*

One hears a child's voice reciting: *Four times four are. . . .*

The second *four* is linked to the monotone of an elevator operator: *Fourth floor, foodstuffs, footwear.*

(Tr. from *Revue du Cinéma*, January, 1931)

Ruttmann recorded and edited daily noises, bird-songs as well as machinery and klaxons, telephone-bells and church-bells, children's songs and accordion music. His composition encompassed rhythm, harmony, and counterpoint.

This new "music", created by specifically sound-film media, as a *Hörspiel* or audio-acoustic play, was enthusiastically reviewed. It bears somewhat the same relation to commercial sound-film development as Sir Malcolm Campbell's races on salt tracks—at terrific speeds that burn the tires off special machines—bear to the automobile industry. Not practical goals for everyday use, but essential in testing certain elements for such use.

Several electrical instruments, such as the "Ondes Martenot" (for ether-wave music) added new tone colors to the orchestra; Shostakovich used it for both music and noise-apparatus in "Counterplan" (1932). Honegger has employed it in several films. In 1931, he stated that henceforward noises were an element of film music, and that films, like music, were a matter of rhythm.

Honegger composed for "Pygmalion" (1938) one of the most successful noise-music sequences to date. This is the sound track for the scene in which the speech expert is demonstrating his apparatus. Percussive devices, claquettes, tuning-forks, the whirl of machinery, and tones of the "Ondes Martenot" are orchestrated with such rhythmic brilliance that a non-melodic musical com-

position, perfectly proportioned to the screen image, impels the closest attention of the auditor-spectator.

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Certain devices or techniques occasionally make sound-film history—one remembers the chorus of disembodied voices in the job-hunt sequence of “Three Cornered Moon” and the use of railway sounds with the song “Beyond the Blue Horizon” in Lubitsch’s “Monte Carlo”. In René Clair’s *Le Million*, sound and picture were effectively combined in a backstage sequence in which a coat is tossed from one person to another, and gradually the sound track emits only the roar of a football crowd. In Painlevé’s *Hippocampes*, scored by Milhaud, a stud of sea-horses moves in straight formation across the screen, looking amazingly equine. The music gradually becomes a brisk parody of all the hackneyed sound tracks that are inevitable for newsreels of the Grand National or Derby. Audiences almost anticipate the next film wit-ticism—shots of madly cheering race fans superimposed on the tank of seahorses.

In *Mädchen in Uniform* a *diminuendo* of voices calling “Manuela!” as the child mounts the stairs to commit suicide gives a sense of height and severance from the earth. The final scene of “Ruggles of Red Gap” had the entire company singing “For he’s a jolly good fellow”. As the camera moved about, singling out the various principals in close-up, the voice of each character was brought forward in turn, momentarily dominating the chorus. Then too there was a delightful sequence in Guitry’s *Roman d’un Tricheur*, when Guitry practices sleight-of-hand preparatory to embarking on a career of card-cheating, and one hears repeated over and over the five-finger piano exercises of one’s childhood.

A small number of film directors and composers have so elucidated their theories on sound film that useful conclusions have been developed.

V. I. Pudovkin belongs to the group of Soviet directors who produced silent-film masterpieces during the twenties. Instead of recoiling from sound, which was the initial reaction of many cinema enthusiasts (particularly in the *avant-garde*), the Soviet directors Eisenstein, Pudovkin, and Alexandrov promptly issued a short manifesto, in 1928, lauding sound-film possibilities. By 1933

the revised edition of Pudovkin's "Film Technique" (English translation by Ivor Montague) included two historic chapters: "Asynchronism as a Principle of Sound Film" and "Rhythmic Problems in My First Sound Film".

He discusses first the abuses of "naturalistic sound" which ruined film continuity of movies during that period when the novelty of seeing and *hearing* a door slam *per se* fascinated an audience.

The rôle that sound is to play in film is much more significant than a slavish imitation of naturalism on these lines; the first function of sound is to augment the potential expressiveness of the film's content. . . .

Cutting<sup>2</sup> was the development that first transformed the cinema from a mechanical process to a creative one. The slogan *Cut* remains equally imperative now that sound film has arrived. I believe that sound film will approach nearer to true musical rhythm than silent film ever did, and this rhythm must derive not merely from the movement of the artist and objects on the screen, but also—and this is the consideration most important for us today—from exact cutting of the sound pieces into a clear counterpoint with the film.

In "Deserter" (1933), working with the composer Shaporin, Pudovkin demonstrated his principles. Into the unperturbed boulevard of a big city a workers' demonstration firmly advances, bearing aloft their flag; the police gather to break it up. They charge, and a fierce struggle ensues "in which all the physical strength is on the side of the police"; the workers are maintained by spirit, but are finally arrested and their flag is trampled underfoot. Their cause seems lost, the street regains its accustomed calm, when suddenly the "workers' flag is hoisted anew and the crowd is reformed at the end of the street."

The course of the image twists and curves, as the emotion within the action rises and falls. Now if we used music as an *accompaniment* to this image we should open with a quiet melody, appropriate to the soberly guided traffic; at the appearance of the demonstrators the music would alter to a march; another change would come at the police preparations, menacing the workers—here the music would assume a threatening character; and when the clash came between workers and police—a tragic moment for the demonstrators—the music would follow this visual mood,

<sup>2</sup> "Cutting" has two meanings. "The *cut*. The instantaneous transference from any shot to its successor." Raymond Spottiswoode, "A Grammar of the Film", London, 1935. ". . . 'Switches off' from the main action, or 'cuts' as they may be called, were originally interruptions of narrative for the purpose of depicting actions of the past related in some way to action of the present." Eric Elliott, "Anatomy of Motion Picture Art", Territet, Switzerland, 1928.

descending even further into themes of despair. Only at the resurrection of the flag could the music turn hopeful. A development of this type would give only the superficial aspect of the scene, the undertones of meaning would be ignored; accordingly I suggested to the composer the creation of a music, the dominating emotional theme of which should *throughout* be courage and the certainty of ultimate victory. From the beginning to the end the music must develop in a gradual growth of power. This direct, unbroken theme I connected with the complex curves of the image. The image succession gives us in its progress first the emotion of hope, its replacement by danger, then the rousing of the workers' spirit of resistance, at first successful, at last defeated, then finally the gathering and reassembly of their inherent power and the hoisting of their flag. The images' progress curves like a sick man's temperature chart; while the music in direct contrast is firm and steady. When the scene opens peacefully the music is militant; when the demonstration appears, the music carries the spectators right into its ranks. With its batoning by the police, the audience feels the rousing of the workers; wrapped in their emotions the audience is itself emotionally receptive to the kicks and blows of the police. As the workers lose ground to the police, the insistent victory of the music grows; yet again, when the workers are defeated and disbanded, the music becomes yet more powerful, still in its spirit of victorious exaltation; and, when the workers hoist the flag at the end, the music at last reaches its climax, and only now, at its conclusion, does its spirit coincide with that of the image. What role does the music play here? Just as the image is an objective perception of events, so the music expresses the subjective appreciation of this objectivity. The sound reminds the audience that with every defeat the fighting spirit only receives new impetus to the struggle for final victory in the future.

No further justification than this powerful scene was needed for Pudovkin's dictum, "Music must in sound film *never be the accompaniment*. It must retain its own line." Although Pudovkin is perhaps dogmatic in his theory, it is undeniable that it has been responsible for the trend of several of the most rewarding sound-film directors. Alberto Cavalcanti (in "Film", October, 1939) and Maurice Jaubert ("World Film News", July, 1936), director and composer respectively, have written brilliantly and convincingly about asynchronism, but the most stimulating exposition is that of Pudovkin.

Russia encouraged the composition of original film music; orchestral performance during the silent-film era was a problem that her composers met as hopefully as circumstances permitted. Shostakovich, for example, deliberately simplified, for Kozintzev and Trauberg's "New Babylon" (1929), his silent-film score originally intended for a twenty-five piece orchestra. As theatres

throughout the Soviet Union could not all provide this complete complement of performers, a piano part was sent out also, to be used only if some instruments of the ensemble were not available.

The performance problem solved by sound film, Shostakovich continued his collaboration with Kozintzev and Trauberg's "Alone" (1931) and "The Youth of Maxim" (1934) and in Ermler's "Counterplan" (1932).

Sergei Prokofiev wrote charming music (also performed as the concert suite "Lieutenant Kizhe") for Feinzimer's slight piece "The Czar Wants to Sleep" (1934). His most notable collaborations have been with Eisenstein, particularly for the "epic" "Alexander Nevsky" (1937). The Soviet preoccupation with "machine music" (Meitus's "Dnieprostroy Dam" and Mossolov's "Iron Foundry" are best known here) had opportunities in semi-documentary films such as "The Oil Symphony" (1932), an account of drilling oil-wells at Baku, with score by S. Paniev.

The brothers Vassiliev's famous *Chapaev* (1934) was scored by Gavril Popov. The music of outside composers such as Eisler and Meisel also contributed to Soviet films. In addition, the magnificent folk-songs of Russia have been skillfully used in Soviet cinema.

A director-composer relationship such as that maintained by Pudovkin and Shaporin is most often the point of departure for sound-film innovations. Maurice Jaubert said of his score for the late Jean Vigo's *Zéro de Conduite* (1933):

I had to write music to a procession of small boys by night, the occasion being a dormitory rebellion. The sequence in itself was highly fantastic and shot in slow motion. In order to follow out the atmosphere of unreality, I recorded my music and then reversed the sound track. The effect of running it backwards was to retain the broad outline of the melody, but as each single note was heard backwards an atmosphere of strangeness was achieved.

Independently Hanns Eisler composed for Dudow's film on German unemployment, *Küble-Wampe* (1932), music that almost paralleled Shaporin's march sequence for Pudovkin's "Deserter". Eisler pointed out that "dwellings of poor people were shown. These very quiet pictures were counterpointed with extremely energetic and stimulating music, which not only suggested pity with the poor, but at the same time provoked protest against such a state of affairs." In both cases the similar social view-



The Scene, from "Pygmalion", for which Arthur Honegger composed Noise Music (Great Britain, 1938)



Scene from Louis Jouvet's "Dr. Knock" or *Le Triomphe de la Médecine*, Score by Jean Wiener (France, 1935)



Scene from Paul Strand's *Pescados* (also known as *Redes* or "The Wave"), film sponsored by the Mexican Government, Score by Silvestre Revueltas (Mexico, 1935)



Scene from G. W. Pabst's Film of the Kurt Weill-Bert Brecht *Dreigroschenoper* (Germany, 1931)

point of the composers turned their music from obvious defeatist wailing.

The "musical" (operetta or operatic) film has proved most difficult to carry through successfully. Apart from actual motivation for extended song there is the problem of preventing the movie from becoming static and non-cinematic.

Three directors—Wilhelm Thiele, René Clair, and G. W. Pabst—were able to surmount this difficulty. Pabst's *Dreigroschenoper* (1931), far in advance of anything achieved before or since, has had no perceptible influence in America. Given a limited showing here, it gained tremendous enthusiasm from a small group of specialists.

The initial production of the *Dreigroschenoper*, a version by Bert Brecht and Kurt Weill of Gay's "Beggars' Opera", was for the stage. It is important to recall that during the twenties the German theatre was enormously influenced by films both in direction and stagecraft. Experiments were made with interpolation of film in plays, and productions were actually planned to attain the fluidity of motion pictures. *Expressionismus* in the theatre used film technique as well as circus and vaudeville-cabaret. Weill's music was sung by *actors*, not trained singers, and composed in a jazz idiom capable of such treatment. Rarely have composer and librettist been as mutually fortunate as Weill and Brecht. Pabst had as his film basis one of the masterpieces of 20th-century opera, written and composed *in a form that was not antagonistic to the camera*. The deficiencies of early sound-reproducing apparatus could not greatly militate against music whose idiom often had much of the stridency of beer-garden pianolas.

With these elements Pabst directed a cynically brilliant operetta, counterpointing songs and images. Incidentally, Pabst also directed the masterly *Kameradschaft* (1931), with *no* music—only sound effects.

Wilhelm Thiele first achieved the successful film operetta using conventional musical material, but so co-ordinated it with a plot adaptable to the camera, that a welcome effect of spontaneity and careless gaiety was attained. In *Drei von der Tankstelle* (1930), with pleasant music by Werner Heymann, the musical comedy *milieu* with its stage limitations was disregarded, and the camera endowed a stage form with new freedom.

Of all Continental directors, René Clair had the widest in-

fluence on American picture-makers; his were the first French films to invade the American market successfully. At first extremely wary of sound, Clair was in Berlin at the time Thiele was proving how deftly it could be used, and to what degree spontaneity in film operetta could be achieved.

Clair's first sound film became a classic. *Sous les Toits de Paris* (1930) revolves about a street song by Raoul Moretti, which somehow synthesizes all street songs; it is a theme song used as a source of action and characterization. Dialogue was reduced to a minimum, with almost less importance than music and sound effects. Clair gradually developed a superlative ability for satire by music as well as image. His musical collaborators included Maurice Jaubert for *Quatorze juillet* (1932) and Georges Auric for *A nous la liberté* (1932).

It was the lessons learned from Thiele and Clair that freed American musical films of much that was cumbersome, and pointed the way for the spontaneity of Astaire-Rogers films.

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After 1933, for racial or political reasons, most of the notable group of film workers in Germany was scattered, with the exception of Walter Gronostay, who composed the score for *Reifende Jugend*, *Der Tunnel*, and *Glückspilze*, all in 1933. Paul Dessau, who had scored some dozen films from 1930 to 1933, including E. A. Dupont's *Salto Mortale* (1931) and Fanck's Alpine pictures, came to America; Karol Rathaus, who worked with the director Ozep on *Karamazov* (1931) and *Amok* (1934), and also scored *Die Koffer des Herrn O.F.* (1931) and other films, went to England to score *The Dictator* (1935), then came to the United States. Anton Profes, who had composed such items as *Bockbierfest* (1931) went to Switzerland and wrote an interesting score for *Die ewige Maske* (1937). Max Brand (whose opera *Maschinist Hopkins* belonged to the *Wozzeck-Jonny Spielt Auf-Mahagonny* decade) did two films in pre-Anschluss Austria in 1934—Angel's *Der Zerbrochene Krug* and "a musical anecdote in one reel", *Nächtliche Ruhestörung*, "direction, scenario and music by Max Brand". He is now in the United States.

Occupied with political music, workers' choruses, etc., the Czech E. F. Burian and Hanns Eisler, a Hollander working in

Germany, were two of the most interesting contributors to the Baden-Baden festivals and German musical activities. Regrettably little information of Burian has been available since his score for the notable Czech picture *Pred Maturitou* (1932).

Eisler's work with film and microphone music has been recognized by his recent appointment as director of film-music research for the Rockefeller Foundation. A better choice could scarcely have been made. His experience with motion pictures dates from 1927, and includes thirteen varied productions—experimental abstract, anti-war and social, commercial story, documentary, and advertising. Eisler has consistently experimented with techniques of sound recording to achieve the most effective results from new engineering advances. When sound recording apparatus was unable successfully to record the performance of large orchestras, Eisler evolved a "microgenic" orchestra—small, with no string sections (violin tone was at that time badly distorted by the microphone). As soon as he believed strings could be used effectively he used them—in Ivens's "The 400,000,000", for example. Eisler's film scores include Victor Trivas's "No-Man's-Land" (1931) and *Dans la Rue* (1933), Ivens's "New Earth" (1932) and Feyder's *Le Grand Jeu* (1934).

British film music would be an almost negligible factor were it not for the British documentary film. Government subsidized, John Grierson and Alberto Cavalcanti have directed vigorous, exciting, and beautiful fact pictures. Here the composer's grasp of all the component sound-track elements can create effects far beyond those imposed by a story film. Walter Leigh's music for Basil Wright's "Song of Ceylon" is probably the most noted documentary film score. The British director Alfred Hitchcock, who rarely depends on music, has a genius for using sound which many composers might envy.

French studios continued to maintain their enviable record. Although the cost of sound equipment caused almost universal discontinuance of *avant-garde* films elsewhere, several were still produced in France. With the *surréaliste* movement entrenched in the art world, it was inevitable that the film medium, ideally suited to translate dream images, should be enlisted. Cocteau's *Le Sang d'un Poète* (1932), a study in the logic of the subconscious, was endowed with one of Auric's finest scores. A difficult problem was presented; because physical reproduction on the screen gave a

certain reality and logic to images that normally would have clarity only in dreams, it would have been inadequate merely to use exotic music or string together distant tonalities. By certain sustained melodic passages, Auric provided a tangible element. Auric also scored *La Mort du Sphinx* (1937), *Alibi* (1938) and *Entrée des Artistes* (1939).

Honegger's important work since 1928 includes Bernard's *Les Misérables* (1934), Chenal's *Crime et Châtiment* (1935), *L'Idée* (1934), an animated film from woodcuts by Frans Masereel, Litvak's *Mayerling* (1937), the Howard-Asquith "Pygmalion" (1939), and Pagnol's "Harvest" (1939). Milhaud collaborated with Jean Renoir on *Madame Bovary* (1934), on Painlevé's *Voix d'Enfants* (1935), Bernard's *Tartarin de Tarascon* (1934), and L'Herbier's *Rasputine* (1939).

After the Big Three of the Six, mention must be made of the brilliant young composer who not only was prolific but maintained an extraordinary distinction in his film music—Maurice Jaubert, whose death in the Battle of France has recently been confirmed. He was any director's most potent ally; from a list too extensive to cite, one need mention only Carné's *Bizarre-Bizarre* (1937), *Hôtel du Nord* (1938), *Le Jour se lève* (1939), and *Quai des Brumes* (1939), to emphasize his understanding of film rhythm.

In passing, we note the scores of Jacques Ibert, Alexandre Tansman, Roland-Manuel and Henri Sauguet, as well as Jean Wiener's little masterpiece—the score for Jouvet's "Dr. Knock" (1935). Leaving France for Italy, we record, still in passing, a score by Malipiero for a film directed by the German Ruttman—*Acciaio* (1933).

The *avant-garde* film in America requires only brief consideration because of its scarcity. Copland and Sessions, in their concert series of 1931, presented not only Milhaud's first sound-film score—Cavalcanti's *La P'tite Lilie* (1929)—, but also three silent abstract shorts by Ralph Steiner—"Surf and Seaweed" with music by Marc Blitzstein, "H<sub>2</sub>O" and "Mechanical Principles" with scores by Colin McPhee. Watson and Webber's "Lot in Sodom" (1933) with a score by Louis Siegel enjoyed a certain success. An exceptional American *avant-garde* film was Harry Dunham's "Venus and Adonis" (1935), the successful result of a group experiment in attempting to complete a movie within twenty-four hours. The sound for this movie was post-synchronized. Paul

Bowles composed for it a delightful score which in itself was a commentary to the non-dialogue picture. Felicitous scoring for sequences such as a mock birth of Venus, borne along by the spray of a street-cleaning truck instead of an ocean wave, achieved balance between the reality and dream-reality of the images.

Bowles's ballet and theatre music has gained increasing recognition. It is regrettable that his film music, which indicates the freshest and most promising American talent in this field, has had such limited circulation (a sharecropper documentary and several experimental films by Burckhardt comprise his cinema work).

Not experimental, but a new departure in American film making were the government-sponsored documentaries, "The Plow that Broke the Plains" (1936) and "The River" (1937) with scores by Virgil Thomson, based on American folk material.

During the past five years Hollywood has made tentative gestures to film music, although a persistent weakness for lush, all-pervasive "symphonic" effects by Newman, Steiner, and Stothart, generally assigns most of the "epics" to these three. Only in Disney's cartoon films has consistent intelligence with sound been manifest; the cartoon film deserves a book to itself.

Otherwise, these are our gleanings. George Antheil went to Hollywood and scored "The Plainsman" (1936) and "Angels over Broadway" (1940). Werner Janssen composed a curiously interesting score for "The General Died at Dawn" (1936) and an excellent one for Kline's "Lights out in Europe" (1940). An influx of Central European directors and composers brought Kurt Weill to score Fritz Lang's "You and Me" (1938); Ernst Toch scored "Peter Ibbetson" (1935), Erich Korngold "Anthony Adverse" (1936) and "Juarez" (1939). (Note that, in this group, it is Mr. Korngold who gets the "epics"!)

Early in 1939 a documentary film on housing, "The City", was shown at the World's Fair. It had a score by Copland and the services of a commentator. The score was good, and, although there was an occasional lack of unity, it seemed at the time due to the structure and editing of the film. Whatever its defects, it was an interesting production, and Copland's departure for Hollywood an encouraging sign.

The film critics were heretical enough to challenge his recent score for "Of Mice and Men". Mr. Copland's article in the *Times* (March 10, 1940) unfortunately does not alter the merits of their

disapproval. It was not a matter of too much or too obtrusive music in "Of Mice and Men", but of unperceptive *film music*.

This seems to stem from Copland's apparent conviction that films have no sustained and constant rhythm of their own, and need an evangelical saviour in the guise of composer. Oddly, Copland mentions Honegger with approval in his article, for no composer of our time has understood more thoroughly than Honegger the function of film music and the importance of *non-musical* sounds to his scores, to say nothing of the occasionally striking use of silence. Honegger scrupulously respects film continuity and rhythm, which Copland seems to regard as factors to be supplied by the composer. In "Our Town" (1940), however, the score is decidedly more of an asset; probably further work in the medium will temper Copland's lack of restraint and pretentiousness.

The current difficulty in Hollywood seems to be an exaggerated respect for the "symphonic" approach—a concept that continues to account for some of the most exasperating and persistent atrocities in film music (the scores for the otherwise admirable "Wuthering Heights" and "The Long Voyage Home" are recent effusions). "Music to underscore the emotions", "music illustration to express the emotions"—these and other fluffy phrases have been used to describe what is essentially a cheat, musically and cinematically. Champions of this hoax should be made to see and hear Paul Strand's Mexican film "The Wave" (1935), with its score by the late Silvestre Revueltas. Perhaps that masterpiece might make them understand. The possibilities of sound film are beyond anything that has yet been accomplished. Its exacting technical requirements, and the humility required of composers whose music becomes merely a component of a *sound track*, are compensated for by the excitement of creating in a new art-form.

NOTE: The illustrations from *Le Sang d'un Poète*, "The Deserter", and *L'Inhumaine* have been provided by courtesy of the Museum of Modern Art Film Library, and those from *Pescados* and "Dr. Knock" by courtesy of Garrison Film Distributors and The French Motion Corporation respectively.