Early film accompaniment offers maddeningly incomplete evidence. Sound was held in such low esteem that it is never even mentioned in most reviews. Even more problematic, cinema's early years were a period of exceptions. Everything was a novelty, and thus received special treatment. Remaining evidence often relates to inaugural presentations of new projection systems, gala releases of new films, or special introductions of new devices. As a whole, the sound components of this era have thus been entirely passed over by historians, with the sole exception of the festive debuts of the Vitascope, Cinématographe, Biograph, and other new projection systems. Previous commentators have treated these inaugural events either as wholly representative or as totally unique and separate from all others. Cinema's earliest years challenge us to discover within a wide variety of apparently unrelated practices a pattern that will permit us to understand how film sound was conceived at the turn of the century.
The Kinetophone

Introduced in 1877, Edison's phonograph was successfully exploited by showmen until 1879, but its novelty soon wore off. Not until Alexander Graham Bell, Chichester A. Bell, and Charles Sumner Tainter perfected the rival graphophone did Edison return to the problem of sound recording. "In the year 1887," he claimed in 1894, "the idea occurred to me that it was possible to devise an instrument which should do for the eye what the phonograph does for the ear, and that by a combination of the two all motion and sound could be recorded and reproduced simultaneously." While the first half of this famous statement is regularly quoted in connection with the invention of moving pictures, it is the latter half that offers insight into the expected role of sound in the new medium. From 1888 to 1895, the Edison team, headed by W. K. Laurie Dickson, labored to create a system whereby "motion and sound could be recorded and reproduced simultaneously," culminating in the introduction of the Kinetoscope and Kinetophone.

As usual, public pronouncements regarding the new system provided more information about the inventor's aspirations than about his actual progress. A century before the process was perfected in the political domain, Edison had mastered the technique of the industrial "leak," repeatedly luring reporters into making unjustified claims regarding the nature and progress of his research. In early 1890, a local newspaper reported thusly:

The idea Mr. Edison had in mind was to take a public speaker and photograph him successfully eight or twelve times a second throughout his entire speech, the subject matter being at the same time recorded by the telephone. By an ingeniously constructed mechanism the reproduction of the audible speech by the phonograph and the personal appearance, gesticulations and facial changes as thrown on a screen by the stereopticon are so exactly timed as to be synchronous. The photographic pictures following one another at the rate of eight to twenty a second produce a constantly moving picture, exactly simulating the appearance of the speaker, while the speech as reproduced by the phonograph will apparently come from the lips of the orator. The experiments were perfectly successful and are now concluded, the next stage being the development of the commercial side of the invention and the creation for a demand for new products.

The confusion apparent in this reporter's account perfectly reflects the state of affairs in the Edison Laboratory. Attempting to combine attributes of the telephone, phonograph, and stereopticon, Dickson's team had as of this date not yet produced any audio-visual combination, but it had clearly set as its goal synchronized recording and presentation of image and sound.

A year later, Edison's wife invited members of the Federation of Women's Clubs to view the peephole prototype of the Kinetoscope. On that occasion, the New York Sun reported Edison's plans for the new machine:

My intention is to have such a happy combination of electricity and photography that a man can sit in his own parlor and see reproduced on a screen the forms of the players in an opera produced on a distant stage, and, as he sees their movements, he will hear the sound of their voices as they talk or sing or laugh. . . . Before long it will be possible to apply this system to prize fights and boxing exhibitions. The whole scene with the comments of the spectators, the talk of the seconds, the noise of the blows, and so on will be faithfully transferred.

Two more years elapsed before the new apparatus would be publicly displayed. According to the Brooklyn Standard Union, "The kinetograph, Edison's wonderful new invention, by means of which a moving, living scene is brought before the eye, while the ear hears the accompanying sounds, was publicly exhibited for the first time anywhere at the annual meeting of the Department of Physics of the Brooklyn Institute, which took place last evening." Yet the newspaper specifies, "The instrument which was exhibited, however, only presented the moving picture without the noises accompanying." Images with sound nevertheless remained the overt goal. When a year later Dickson and his sister publicly recounted
ongoing work at Edison Laboratory, the desirability of providing sound synchronized to the image remained paramount:

Nothing more vivid or more natural could be imagined than these breathing, audible forms with their tricks of familiar gesture and speech. The inconceivable swiftness of the photography successions, and the exquisite synchronism of the phonographic attachment, have removed the last trace of automatic action, and the illusion is complete. The organ-grinder’s monkey jumps upon his shoulder to the accompaniment of a strain from “Norma.” The rich strains of a tenor or soprano are heard, set in their appropriate dramatic action; the blacksmith is seen swinging his ponderous hammer, exactly as in life, and the clang of the anvil keeps pace with his symmetrical movements; along with the rhythmic measures of the dancer go her soft-sounding footfalls. 

While the subjects mentioned clearly correspond to films produced by the Edison Laboratory in 1893–94 (Organ Grinder, Blacksmithing Scene, Carmen), no surviving evidence suggests that the corresponding sound was ever recorded. In fact, the illustrations of simultaneous recording in the Dicksons’ article are so fanciful as to suggest that synchronized sound was never achieved during this period. Yet the aspiration to produce synchronized sound never wavered.

The desire for synchronized reproduction of the sounds produced by image activity may be traced to the early history of phonography. Early phonographs were exploited as recording devices, capable of playing back a recognizable copy of sounds produced on stage. The first traveling phonograph showed typically involved visible production of some sound (speech, music, barking dogs), followed by phonographic repetition of that sound. The quality or interest of any particular sound was less important than its match to the original. This is hardly surprising, since Edison happened onto the principle of phonography while attempting to perfect a device for transmitting telegraphic messages. Film sound thus begins under the sign of transcription.

However important synchronized sound may have appeared to the Edison team during the early 1890s, this goal was eventually set aside in favor of commercializing the Kinetoscope. First exploited in A. O. Tate’s storefront parlor at 1155 Broadway on 14 April 1894, the peephole device used an infinitely repeatable loop of film measuring less than fifty feet and lasting no more than twenty seconds. Like the contemporary flip-card Mutoscope device, which the American Mutoscope Co. began to market just a few months later, the Kinetoscope was exhibited without sound. Even silent, however, the reproduction offered by the Kinetoscope was regularly praised and deemed wholly natural. A local newspaper opined that, “The scene which is displayed in Mr. Joyce’s kinetoscope is that of three blacksmiths working at an anvil. It is perfectly natural and life-like in every respect.” Scientific American echoes this judgment: “In the picture exhibited in the kinetograph, every movement appeared perfectly smooth and natural…. The machine in this case was not accompanied by the phonograph, but nevertheless the exhibition was one of great interest.” The public’s willingness to accept a silent image as “natural” may be attributed in part to the circumstances under which the peephole device was exploited.
Spring Motor Coin-in-the-Slot GRAPhophone TALKING-MACHINE
For $20.00 Former prices, $50.00 to $75.00.

THE AUTOMATIC MONEY-MAKER.
Furnished for either Pennies or 5 Cent Pieces.

The Coin-in-the-Slot Machine

Opportunities wait for no man.

Grand Graphophone TALKING MACHINE ENTERTAINMENT

THE CASE.

5.2 Talking-machines were big business in the 1890s—both concert and coin-in-the-slot versions—as evidenced by this Sears and Roebuck catalog page.

Boston to San Francisco, by far the majority of Kinetoscopes were exploited in nickel-in-the-slot phonograph parlors—on one side a bank of machines that offered sound without an image, on the other side a new row of instruments offering an image without sound. Ironically, the Kinetoscope's soundlessness would thus be authorized by the very phonograph whose transcription tendencies provided a model for Kinetophone sound.

For a full year, the Kinetoscope ruled the entertainment roost. Of the 973 Kinetoscopes eventually sold, most were delivered by the spring of 1895, when some sixty films were available. Finally, in April 1895, as demand for the Kinetoscope waned, Edison began to make deliveries of his long-announced Kinetophone.9 Basically a modified Kinetoscope, with a phonograph in the spot where the battery had previously been located, the Kinetophone featured ear-
to produce precise synchronization, the new machine did, however, offer a more generalized synchronization, thanks to savvy production choices. Instead of offering speeches or opera arias, the Kinetophone was regularly outfitted with films featuring dancers or marching bands. Of the fifty-five titles listed in Edison's mid-1895 catalog, one third are march or dance films—and we know from newspaper references that these are the films most often installed in Kinetophones.¹⁰

Dancers and marching bands do indeed offer unique synchronization opportunities. Instead of people making sounds (like the lecturers or opera singers mentioned in Edison's earlier pronouncements), dance and band films portray people keeping time to sounds. Whereas people making sounds require exact instantaneous synchronization, dancers and marching bands easily tolerate loose synchronization. "One of the new machines is now in oper-

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¹⁰
### LISTA DELLE FILMS ACCORDE COI CILINDRI MUSICATI DA ADOPERARSI NEL KINETOFONO

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<td>Primavera Ali</td>
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<td>Orchestra</td>
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5.4 List of Edison music cylinders suitable for accompaniment of Kinetophone films

Point to establish synchronization (always located at the very beginning of the film/cylinder), the Kinetophone would depend heavily on semi-synchronization with dance or band movement.

A page from an 1895 Italian publication, suggesting appropriate musical cylinders for use with specific Kinetophone films, constitutes the earliest existing list of recommended musical accompaniment for silent films. Of the seventeen films mentioned, all available from the Continental Phonograph Kinetoscope Co. of Milan, fifteen are dance or march films; the only exceptions—a juggler and a contortionist—may well have performed to music. The proposed accompaniment cylinders all contain music that is chosen for its rhythmic match to the image: a belly dance number for Princess Ali's Egyptian Dance, an African wedding march for the Fiji Islander Paddle Dance, marches by Gilmore's Band for Band Drill and Finale of 1st Act, Hoyt's Milk White Flag, waltzes for Carmencita and Annabelle Butterfly Dance. Interestingly, the only prescribed classical number, selections from Cavalleria Rusticana, is paired both with the juggler and the contortionist, the only performers who don't either dance or march. Recognizing the potential of light classical music to provide a desirable background only loosely matched to the image, this recommendation comes twenty years ahead of its time.

Before cinema became cinema—with projected images—the Kinetophone had thus already established important aspirations and standards for film sound. Tied by its technology to the phonograph, the Kinetophone would also be fundamentally dependent on phonographic values and practices. At this point in its history, the phonograph was still primarily a recording instrument. Touted by Edison as an office dictating device, the phonograph was best known for its ability to provide automatic transcription. This is precisely the relationship that presides over Edison Kinetophone-related discourse. Just as showmen would show a singer singing and then play the freshly made recording of the singer singing, the new machine was to offer the image of a sound-
maker accompanied by transcription of the sound being produced in the image. Unable to attain the phonography-inspired goal of point-by-point synchronization, the state of the art in the mid-1890s was limited to semi-synchronization, with heavy emphasis on marching and dancing. Though the history of silent film sound had at this point not really begun, in a fundamental manner the Kinetoscope/Kinetophone pairing established a relationship that would endure for many years. While some films seemed appropriate for use with the Kinetophone, others were deemed better served by the Kinetoscope’s silent presentation. Complemented by sound transformation kits for the Kinetoscope, the Kinetophone enjoyed modest success for about a year. Neither apparatus would survive the 1896 introduction of projected moving pictures.

Nickel-in-the-slot technology remained strong for many years, long enough to see the introduction of a machine that claimed to satisfy Edison’s aspirations for synchronization. Developed by E. A. Reeves of New Haven, the Stereophone is described as a combination of the phonograph and cosmorama or automatic stereoscope.

It sings songs and illustrates them, or shows interesting views and describes them. One series, for instance, is called “Going to the Circus.” Looking at the first scene you see the circus procession approaching and hear the band play, gradually becoming louder as if growing nearer. The next scene is a near view of the elephants, and you hear their cries and the band in the distance. Then other procession views are shown in regular succession, with accompanying street noises, the tramp of horses’ feet, etc. Then a view of the circus grounds is shown and you hear the huckster’s cries and other well-known circus sounds. Then a view inside the first tent, and you see the animal dens, with near views of the lion and hippopotamus, and a good imitation of the growl of the lion is heard. Then inside the big tent you see the old familiar scenes and hear the old familiar cries, “Peanuts five a bag,” predominating; then “Tickets for the grand concert” is heard, finally ending with a chorus supposed to be sung by the concert troupe, and all in about three minutes and for five cents. Everything real as life except the odor of the sawdust and the animal’s, and doubtless this might be added.¹⁴

Going to the Circus is enough to make a contemporary composer of descriptive music envious! Though it made little commercial impact, the Stereophone testifies to the importance of synchronized realistic sound as a continuing goal for turn-of-the-century entrepreneurs.

Projected Images

In 1895 several teams were laboring to produce a machine that would project moving images. By the end of the year, the Lathams had demonstrated their Eidoloscope, the Lumière brothers had shown their Cinémagraphe, and Jenkins and Armat had exhibited their Phantoscope, eventually licensed to Raff and Gammon and renamed the Vitascope. Cleverly contracting with Edison to manufacture the Vitascope and provide films, Raff and Gammon thus secured the best possible publicity—association with the “Wizard of Menlo Park.” The 23 April 1896 Vitascope premiere at Koster and Bial’s Music Hall in New York City (on the current location of Macy’s department store) thus attracted an enormous amount of media attention. More than just a new vaudeville act, the Vitascope was presented as the phenomenon of the age, the brainchild of the world’s greatest inventor. As such, it was given the kind of wrapping that no other vaudeville newcomer ever enjoyed. The Times noted that the projectors were draped with blue velvet brocade.¹⁵ The Daily News pointed out that the pictures were projected on a drop curtain with “a huge picture frame painted in the center.”¹⁶ An engraving from the New York Herald represents the spectators as a sea of top hats. While reports on musical accompaniment for this inaugural show are notoriously fragmentary, we do know that the resident ensemble, Dr. Leo Sommer’s Blue Hungarian Band, introduced and accompanied at least the initial film: “The band struck up a lively air and from overhead could be heard a whirring noise that lasted for a few moments; then there flashed up on the screen the
life-size figures of two dancing girls who tripped and pirouetted and whirled an umbrella before them." It is difficult to tell from this text whether the band's primary purpose here is to accompany the opening film, Umbrella Dance, or to provide the kind of fanfare traditionally provided for a star's stage entrance.

Charles Musser eloquently begs the question by suggesting that, "The Musc Hall band accompanied the images with appropriate music." Just what kind of music (if any) would be appropriate here? The Kinetophone debuted in phonograph parlors, thus leading exhibitors to base their Kinetophone sound
FROM PEEP SHOW TO PROJECTION

practice on a phonographic model. But once moving pictures were projected, what might we expect as their reality code? According to what standards might one possibly decide what constitutes “appropriate music”? A single page of the Phonoscope will help to demonstrate the complexity of the problem. Indeed, the very relevance of a periodical named “The Phonoscope” requires some explanation. The first reports on a new technology are commonly made in publications dedicated to domains now understood as fundamentally different from that technology. Repeatedly, early cinema events were reported next to reviews of phonograph records (in the Phonoscope), stage productions (in the Dramatic Mirror), or lantern slides (in Views and Films Index and Moving Picture World and View Photographer). This necessary association with other media contributed markedly to cinema’s identity crisis. In November 1896, after six solid months of motion picture system premieres, Phonoscope correspondents reported in a telling fashion on six “Picture Projecting Devices.” Here, in brief, is how each system was presented (with added italics for terminology borrowed from other media):

- The Vitoscope has been called an improved Kinetoscope.... The pictures reproduced have been previously photographed on Kinetoscope films, and are in size about as large as one's fingernail. The films, as prepared for scenic reproduction, are each fifty feet in length, and contain several hundred pictures that go to make up a panorama.

- The Cinematographe consists of a box 8 in. × 10 in. × 4, containing a series of reels upon which the band, about 18 yards long, of photographic films is rapidly wound behind a set of five magnifying lenses. Each photograph is not larger than a postage stamp....

- The Biograph made its debut at Olympia, under splendid auspices, a special interest being given to its performance by the semi-political character of the views and scenes represented.

- The same wonderful inventive gift that prompted Edison to give to the world the Telephone, has made itself manifest in “The Eidoloscope.” This instrument is to the eye what the Telephone is to the ear.... As the camera can easily take 2,000 impressions per minute, the photographs, displayed before the vision with such rapidity, form an ever moving living picture.

- At the Imperial Theatre, the Phantoscope has proved itself a drawing card. The pictures are all French views....

- The Theatrograph is to all intents and purposes a powerful stereopticon provided with a series of wheels, over which is passed a spool of films or pictures, taken of the same scene at infinitely short intervals.

One senses the writers’ discomfort in describing the new phenomenon. Lacking standard language to designate these different “picture projecting” devices (the monthly column’s very title frames the term with quotation marks), the journal’s representatives must resort to neologisms (quotograph) or familiar terminology borrowed from other media (improved Kinetoscope, panorama, photographic films, scenes, performance, Telephone, living picture, views, stereopticon, pictures). To each one of these borrowed identities implicitly corresponds a different style of accompaniment. It is thus hardly surprising that the early history of projected motion pictures should present such a variety of sound strategies.

On 29 June 1896, the Lumière Cinématographe received its U.S. debut at Keeth’s Union Square Theatre in New York City. Reporting that "Lew Shaw fluently introduced three new views," the Clipper went on to opine that "he was hardly necessary as the views speak for themselves, eloquently." Had the moving pictures not been identified with magic lantern "views," no need would have been felt for a lecturer. Reviewing the very same program, the Dramatic Mirror concentrated instead on an entirely different sound practice, affirming that, "The effects used behind the scenes while the pictures are being shown add greatly to the effect." If the Cinématographe had not been exhibited on a stage, and
EARLY FILM SOUND

thus assimilated to a theatrical production, it is
doubtful that sound effects would have been made
available. When in August the Cinématographe
reached Keith's Bijou in Philadelphia, sound effects
continued to be used, along with music matched to
on-screen activity:

No play of the past season has contained a situ-
ation more thrilling than the reproduction of a
parade of the Ninety-sixth Regiment French Cava-
lry. The soldiers march to the stirring tune of the
"Marseillaise" and the scene stirred the audience
to a pitch of enthusiasm that has rarely been
equalled by any form of entertainment. The play-
ing of the "Marseillaise" aided little in the suc-
cess of the picture. In the sham battle scene the
noise and battle din created also added to the won-
derful realism of the scene. A political argument
and a street scene (children dancing to the strains
of a hand-organ) were also excellent specimens of
the work of the cinematographe.23

Repeatedly, early moving pictures and their accom-
paniment were praised for realism. In New York, The
Charge of the Seventh French Cuirassiers at Keith's
Union Square Theatre was admired for its "flash of
sabers, noise of guns, and all the other realistic the-
atrical effects."24

In September 1896 the Cinématographe opened
at Keith's Opera House in Providence (R.I.). The
event was deemed important enough to justify a
Sunday private exhibition for the press and the lead-
ing dignitaries of the city, with refreshments pro-
vided by Manager Fynes. Of the twelve films pre-

tened (called "views" by the Providence Journal's
reporter), three were singled out for special attention
by virtue of their sound accompaniment, starting
with a picture of a wall in the process of demolition
(Lumière's Tearing Down a Wall):

First, the workmen were seen rigging the mecha-
nism which is to dismantle the structure. After a
cry of "look out," given by the supers in back of the
stage, the wall is seen to totter and finally fall.
Every detail is perfect, even to the cloud of dust
which arises after the wall has fallen. The crash is
heard as the bricks come tumbling down one after
another, and the workmen are seen to jump out of
the way just before the fabric totters.25

One review of The Charge of the Seventh French
Cuirassiers mentions "the gallop of the horses, the
cloud of dust raised by their hoofs, the jingling of
the troopers' accoutrements, their cuirasses and
guaitleted hands,"26 while another provides still
more auditory detail: "The bugle call advance is
heard, the clanking of sabres rings out through the
theatre and the ceaseless patting of horses' hoofs,
all add to one of the most exciting scenes ever dis-
played."27 This film so delighted spectators during
the following evening's public showing that it had to
be repeated. Finally, a nature documentary was
turned into a novelty film by clever accompaniment:

The Aquarium, a picture of sea life, presented fish
and eels that wriggled as though they were in their
natural element. Two frogs were included in the
submarine company, and when Lovenberg's Or-
chestra, which had been rendering some musical
gems, started up a jig to which the frogs kept time,
the applause was unbounded.28

Using available resources, Keith's Opera House

treated Lumière's films just as they would have han-
dled any other act. Because some of the films could
make good use of theatrical sound effects and per-
sonnel, they were assimilated to melodrama, while in
good vaudeville tradition another was turned into a
comedy by the high jirks of the standing orchestra.

When the Biograph finally began its career during
the fall of 1896, its films were subjected to a similar
variety of sound treatments. During a showing of
McKinley at Home to 200 Republican Club mem-
bers at New York's Olympia Music Hall, a tenor from the
Santa Maria opera company sang "I Want You
McKinley; Yes, I Do."29 The juxtaposition of a film
documentary and a campaign song may seem ludic-
rous today, but it was perfectly in keeping with the
period practice of using songs to complement living
pictures (staged human tableaux of familiar visual
compositions) or magic lantern views. When the Bio-

graph was exhibited in Cincinnati, the Cincinnati
Enquirer was especially impressed by The Empire
State Express: "a fast New York Central train tearing
down a half mile of track till it rushes across the

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stage like a palpitating monster, as big as reality, every item perfectly reproduced, and the orchestra so aiding the sight with the sound that when it is gone we sit spellbound, exalted in happy wonder that man's scientific and mechanical education are left us to give one sign of hope to the dragged sensuality of our music halls." Of course, had the film not been shown in a music hall, there would in all likelihood have been no orchestra to "aid the sight with the sound."

Keith's Bijou in Philadelphia deployed backstage and orchestra effects in support of the sound-producing components of the Biograph image:

Not content with showing the living picture, Manager Keith furnishes with every view the noises which accompany the scene. Thus is anticipated what will come soon—a device that will be a phonograph as well as a reproducer of scenes. At the Bijou the roar of the waves, splashing of water, the playing of bands of music, a locomotive whistle, bell, stream, etc., are accompaniments that have played no small share in the 48 weeks success of the biograph.

While awaiting a single device that would record both sound and image, many traveling showmen resorted to live or recorded sound effects. After perceiving on the impending cataclysm to be brought on through projection of *The Black Diamond Express* by his confederate Albert E. Smith, lecturer J. Stuart Blackton would turn into a sound effects man, simulating the noise of a train by beating on dishpans, pie plates, metal sheeting, and large hollow pipes. Traveling exhibitor Lyman Howe went Blackton one better by actually phonographically recording the sound of an oncoming train. Audiences appreciated the ringing of bells, the roar of the wheels, the rush of the steam, and the whistle of the *The Black Diamond Express.*

When a new medium lacks a strong identity, exhibition venues supply their own. Because each location, audience, and topic was already associated with a specific tradition, films regularly found themselves subjected to what we might call "resident" practices. A film shown in a theater with its own orchestra and sound effects personnel was easily assimilated to a play and received the auditory treatment typically given to plays. Send the same film on the road with a couple of itinerant showmen having only their own four hands to provide both projection and sound, and it turns into something else entirely. Show it in a music hall and the resident band may well accompany it. In some cases, however, the nature of the films themselves invokes a specific auditory tradition that is powerful enough to override questions of venue and audience. When Klaw and Erlanger's *Hörizt Passion Play* played the Philadelphia Academy of Music during Thanksgiving week 1897, it was presented by lecturer Ernest Lacy and accompanied by "unseen organ music." Local religious music also complemented Professor Lacy's Baltimore lecture: "Not a little of the effectiveness of the performance yesterday was due to the accompanying music. During the presentation of some of the views an organ accompaniment was played by John R. Clemnow. The biblical tableaux were accentuated by solos rendered by Miss Blanche Yewell, who has a rich contralto voice, and Mr. N. Du Shane Cloward, who has a magnificent baritone." In 1898, at New York's Academy of Music, "music by organ and choristers" accompanied "THE GREAT SCENES OF THE PASSION PLAY" presented by lecturer Rev. Thomas Dixon, Jr. Whether in Baltimore's Music Hall, a local church (as in small towns throughout America), or in New York's prestigious Eden Musée, the religious character of the various Passion Play versions elicited accompaniment by sacred music.

Was the music played primarily between tableaux, as it had been for Stoddard's Passion Play lectures, or did musical performances actually accompany film projection? A publicity letter from the American Mutoscope & Biograph Co., dated 22 November 1900, argues strongly in favor of the former. "We desire to call your attention to the Biograph as an entertainer for your Church this Winter," the letter begins. A modest proposal follows:

We will furnish you with a Biograph and either 36 or 48 views, whichever you may prefer, including
our religious views, arranged on reels of 12 pictures each. The charge for the Biograph for one evening is $50. The only other charge will be for music to be given during the time that the reels are being changed. The Biograph views and music will give an entertainment lasting about two hours.38

Reproducing a pattern familiar to all turn-of-the-century Americans, whether they frequented the theater or the Lyceum circuit, the letter proposes an evening of alternation between moving pictures and music. Offering an important additional attraction to a music-hungry population, Biograph imagines music only “during the time that the reels are being changed.”

Just as 1890s accompaniment was influenced by available resources, exhibition venues, and film topics, so audience response varied widely. Projected in a theater and accompanied like a play, early films were greeted like melodrama. During the 1896 presidential campaign audiences often hissed one of the candidates, treating him like a stage villain,39 while cheering the other.40 Spectator participation followed the period practice of active, vocal involvement. The turn-of-the-century press often had more to say about audience noise than about musical accompaniment:

- Pandemonium broke loose for five minutes [New York Mail and Express, 13 Oct. 1896]
- The cheering was incessant…. [New York Tribune, 13 Oct. 1896]
- Niagara Falls made a realistic pouring picture, but their noise in the original could not be much louder than the cheers that greeted the picture of them. [New York Times, 13 Oct. 1896]
- The other night two ladies in one of the boxes on the left-hand side of the horseshoe, which is just where the [Empire State Express] flyer vanishes from view, screamed and nearly fainted as it came apparently rushing down upon them. [New York Mail and Express, 17 Oct. 1896]
- He was received with tremendous cheering, and there were loud calls for a speech. [New York Herald, 1 Nov. 1896].41

At the Philadelphia opening of the Höritz Passion Play something entirely different took place. At first, spectators applauded each tableau, as if in recognition of the theatrical character of the projected images. But soon, “it seemed gradually to dawn upon them that they were witnessing something sacred, they caught the spirit of the actors, and the silence which followed was significant of their feelings.”42 Like the accompaniment provided by the exhibitors, the accompaniment provided by the audience varied widely during film’s early years.

Discontinuities

Even in its fragmentary and limited state, the available record regarding early film sound reveals an extraordinary range of practices. Evidence remains of music, sound effects, and lectures, produced by live orchestras, stagehands, phonographic recordings, or the human voice. From the few remaining bits of information about specific musical numbers, we know that film accompaniment during this period used every available tradition: dance music, marches, light classical selections, and popular songs. One question remains. During this period did films always have some sort of sound accompaniment?

Early reports from abroad certainly suggest otherwise. After seeing the February 1896 opening Cinématographe show in London, O. Winter offered this report:

The picture varies, but the effect is always the same—the terrifying effect of life, but of life with a difference.

It is life stripped of colour and of sound. Though you are conscious of the sunshine, the picture is subdued to a uniform and baffling grey. Though the waves break upon an imagined shore, they break in a silence which doubles your shrinking from their reality. The boys laugh with eyes and mouth—that you can see at a glance. But they laugh in a stillness which no ripple disturbs.43

Just a few months later, Maxim Gorky reacted quite similarly to a Lumière program at the Nizhni Novgorod fair. The screen teems with life, he says,
but “It is a world without sound.” Everything takes place “in strange silence where no rumble of the wheels is heard, no sound of footsteps or of speech. Nothing. Not a single note of the intricate symphony that always accompanies the movements of people.” People laugh until their sides split, “but not a sound is heard.” 44 Even in France, where we know that the Cinématographe was first introduced to piano accompaniment, it would appear that subsequent showings took place in musical silence. 45 From around the world come many later reports of silent film projection. 46

It seems likely that in the United States as well many early films were shown in silence. Exhibition reviews fail to mention accompaniment, but we can draw no conclusions from this fact: vaudeville reviews don’t mention accompaniment either, and we know that music was present in every vaudeville theater. The one available piece of hard evidence on the silent exhibition of films pertains, ironically, to the noise of exhibition. The Vitascope projector was especially noisy, as we discover each time the relative silence of the Cinématographe is praised. As the century drew to a close, projector noise increasingly became an issue, to the point where the Optigraph made it one of its primary selling points. In an often repeated statement, absence of noise was presented as one of the projector’s “Points of Superiority”:

No. 5. The absence of noise is a feature of great value in the Optigraph Motion Picture Machine. With other machines 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. The Optigraph works with a motion that is so smooth, easy and perfect, that there is almost no noise. 47

Like many early statements regarding film sound, Optigraph’s point has a double edge. On the one hand it suggests that by common agreement the level of projector noise required musical accompaniment. We may thus conclude that musical accompaniment was common. At the same time, however, it indicates that film music was considered dispensable: if all projectors were as quiet as the Optigraph, music would no longer be needed. We may thus conclude that musical accompaniment was not always deemed necessary. In the face of such contradictions, the evidence regarding silence in early American film exhibition must be considered incomplete.

Distinctions were regularly made among film topics according to their suitability for musical accompaniment. The very first Vitascope catalog issued by Raff and Gammon in March 1896 includes a page recommending the use of music with selected films. “All subjects made up of dancing, marching, or other acts and scenes where musical selections in time with the movement are in place, can be made more interesting and remarkable by the addition of music.” 48 Matching Kinetophone’s preference for dance or march films coupled with dance or march music, this recommendation justifies musical accompaniment on diegetic grounds. Understanding music-makers as simply another group of sound effects personnel, this approach configures musicians as an implicit part of the film world. Complementing the film’s realism, the orchestra or pianist simply supplies that which is implied but not provided by the image. Music is here understood not as a rhetorical device designed to guide spectator reaction to the film, but as a reality effect directly contributing to the film’s reproductive qualities. Early silent film practice is thus precisely the reverse of what has since the thirties been called “Mickey Mousing.” When music imitates the movements of sound film actors, it is perceived as clearly outside (and after) the image, whereas early film sound instead emulates sound effects, seeking to appear internal to the image, as if it had been produced contemporaneously with the image.

Opportunities for traveling showmen to add moving pictures to their shows were regularly touted by phonograph manufacturers, as in this 1899 F. M. Prescott catalog entry:

With the advent of the Graphophone Grand, which reproduces as loud and natural as the human voice or an orchestra or band, a combined
** EARLY FILM SOUND **

Musical Accompaniments

Music can be very appropriately and effectively rendered simultaneously with the exhibition of many Vitavoscope subjects. All subjects made up of dancing, marching, or other acts and scenes where musical selections in time with the movement are in place, can be made more interesting and remarkable by the addition of music.

THE EDISON . . . PHONOGRAPH

Can thus be utilized to render band and orchestra selections. A piano; a group of mandolins or guitars; a combination of violins and wind instruments, or even an orchestra or band where the exhibition is given in a theatre or large hall will, in either case, add materially to the novelty and attractiveness of the Vitavoscope.

5.6 Instructions on the use of musical accompaniment from an early Edison catalog

Cineograph and graphophone is now possible, so that the audience may hear as well as see the performance.

By the use of the following outfit, as illustrated above, in connection with the Cineograph, musical records, harmonized to the films of dancers or of marching, can be reproduced so that the audience may see the dancing or the marching and hear the music to the steps at the same time. The Graphophone is placed on the stage and the audience can hear the music plainly. The Graphophone is operated independently upon the stage by the lecturer, the Cineograph being operated in the rear of the hall or room by an assistant, both operators working in conjunction.99

It is instructive to compare this exhortation to use the phonograph to accompany dancing and march-

ing films with the same catalog’s description of the projection of a railroad film:

The drop curtain has fallen for the intermission, when suddenly the house is darkened and the following announcement slide is thrown on the screen by the stereopticon attachment: The Black Diamond Express…

A number of workmen are engaged in repairing the roadbed. There appears in the distance, just emerging from the wood, a cloud of white smoke which, within a few seconds, shapes itself into the outlines of an approaching train, and then the famous “Black Diamond” Express thunders toward and by the window at tremendous speed…

In a twinkling the whole scene disappears, the theatre is again lighted up, and before the audience hangs only the painted drop-curtain.50

Adapted from a Sears and Roebuck catalog description first included in the Spring 1898 catalog advertisement for the Optigraph, and repeated in the Fall 1898 and Spring 1899 catalogs, this evocation of a late-nineteenth-century film exhibition makes no mention of music, even though Prescott touts the usefulness of the Graphophone Grand to provide musical accompaniment for selected films.

The Prescott catalog provides a preliminary explanation for this difference. According to the catalog, the Graphophone Grand is to be operated by “the lecturer.” During the final quarter of the nineteenth century, spectators had become accustomed to the two-man lecturing team. While the projectionist remained with the projector, the lecturer occupied the stage, providing anything from an erudite lecture to intermittent comments. Whenever the topic or the sumptuousness of the occasion required music, the numbers would be placed just as in the theater: before, between, and after the lecturer’s presentations. When the lecturer-projectionist system was adapted to the new moving picture medium, the lecturer commonly introduced the film as he would introduce a phonograph record. When projection began, the lecturer would abandon the lecturing role in order to play a phonograph record, provide sound effects, or prepare the next film. Contemporary texts suggest that music was most commonly used for
The Vitascalpe being Exhibited in a Theatre or Public Hall.
(The machine can be just as successfully exhibited in vacant store-rooms, etc.)

DEPARTMENT OF
PUBLIC ENTERTAINMENT OUTFITS AND SUPPLIES.

Our experience in the past has proved that public exhibition work is extremely profitable and, with comparatively small investment, affords to the exhibitor an opportunity for realizing very large profits, and in addition opens up to him a line of business that is pleasant as well as invaluable in the development and building up of a successful business man.

THIS DEPARTMENT is maintained for the benefit of those who contemplate entering the exhibition field, or those already in it, and for the purpose of keeping the exhibitors up to date and consequently making the exhibitor more valuable and more disposed to meet the public's demand, as well as furnishing the exhibitor to accumulate a fortune.

PUBLIC EXHIBITION WORK has never been in better shape for exhibition as now. Our public are eagerly waiting for such as the newest kind of intensely interesting entertainment, and the exhibition public is ready to act. There are already indications of a demand for the line of business, and this is a healthy sign, which it is impossible to resist.

IN THESE PAGES we shall describe exhibits for public exhibition work such as have never been brought together before, at lower prices than were ever offered before, and of a novelty which it is impossible to surpass.

THE WONDERFUL GRAPHPHONE TALKING MACHINE is the most important invention of the present century. It is a combination of beautiful and musical movements, and is the most absorbing trait of the day. We aim to explain the principles of the great invention daily, and to illustrate it with colored pictures.

THE STEREOPHOTON PANORAMIC EXHIBITION is another invention of the present century, which is a combination of beautiful and musical movements, and is the most absorbing trait of the day. We aim to explain the principles of the great invention daily, and to illustrate it with colored pictures.

THE UNRIVALLED EDISON KINETOSCOPE is another invention of the present century, which is a combination of beautiful and musical movements, and is the most absorbing trait of the day. We aim to explain the principles of the great invention daily, and to illustrate it with colored pictures.

NO PREVIOUS EXPERIENCE NECESSARY, no ability as a public speaker required. Some of our most successful exhibitors had never spoken in public before.

57 Two contemporary presentations of moving picture projection: Vitascalpe, showing a dance on-screen and an orchestra in the pit, and Kinetoscope, showing a train on-screen and no music.
films that depict music-making, dancing, or marching, while sound effects were most common with representations of noisy mechanical devices like fire trucks and steam engines. Rarely would music and sound effects be combined for a single film, and then only in the largest theaters.

One remaining form of documentation deserves to be evoked at this point. Early film publicity often included a stylized graphic representation of film projection and the film audience. Used on posters, in catalogs, in advertisement copy, and on corporate stationery, these images typically represent the projection process with a triangular beam of light, always showing a film image on the screen. Though there is a great deal of repetition in these on-screen images, many different scenes are nevertheless portrayed: several different dancers, locomotives and war ships, marching bands, Edison’s *The May Irwin Kiss*, Lumière’s *The Gardener and the Bad Boy*, and the Lathams’ *Bullfight* (or possibly one of Edison’s 1898 *Bull Fight* films). 51 Interestingly, some of these scenes feature an orchestra, while others reveal neither musicians nor any other obvious sound accompaniment. A clear logic dictates the inclusion or absence of music sources. Systematically, orchestral accompaniment is shown with on-screen images representing dancers and marchers, while musicians are absent for locomotives, warships, and narrative films. In other words, the films for which previously quoted texts lead us to expect musical accompaniment are shown with an orchestra, whereas no music is shown for those films that seem to require sound effects, or for which no consistent sound model has been evoked. The exception that proves the rule is *Bullfight*, shown with orchestral accompaniment in a 1902 Kleine catalog. 52 While certainly neither a dance nor a march film, *Bullfight* had shortly after being shot in 1896 been incorporated into the fourth act of a *Carmen* stage production. 53 Its identification with the opera clearly justifies the unexpected orchestral accompaniment in Kleine’s catalog.

This fascinating distribution of music among films represented in cinema publicity corresponds quite precisely to many previously quoted examples, both prescriptive and descriptive. Together, these drawings and texts suggest that at the turn of the century cinema’s first standard for sound production was already in place, just as the phonograph was primarily considered as an instrument capable of producing a record of reality, so early cinema was understood as a device for the reproduction of reality. Sound’s major role during this period lay in reinforcing that reality. Whenever sound is implied by the image, this early standard specifies, the exhibitor may usefully supply (i.e., simulate) that sound. This sound-effects-oriented aesthetic obtains whether the sound is directly implied (people or objects shown making sounds), or suggested only indirectly (people or animals moving in time to some unheard sound). In the former case the exhibitor provides what we usually call “sound effects” (crashing bricks, train whistles, saber clashes), whereas the latter situation typically requires what we term “music” (the waltz or march to which on-screen characters seem to be moving); but it is important to recognize that this terminology corresponds not to differences in motivation for the sound, but only to a distinction between sound providers. Whether the film is complemented by “sound effects” or “music,” the sound is meant to be understood as a product of the image; the sound-makers are thus implicitly within the space implied by the image. At this early date, sound accompaniment is thus configured not as a rhetorical addition to the image but as a form of ventriloquism. Musicians and sound effects personnel alike “throw their voices,” as it were, into the image. The whole point of this early sound standard is to make the sound seem to be coming from the image, thus reinforcing the latter’s transcriptive powers.

We may usefully call this early accompaniment approach the “cued-sound aesthetic,” because it is entirely based on the presence of sound cues (whether for music or effects) within the image. Note that this aesthetic is operative even when no accompaniment is provided. As we have seen, early witnesses to silent projections regularly express their
experience as a lack, and what they claim to need is not just sound in general but the specific sounds implied by the image. In other words, this is not a case of the often mentioned eeriness of silence (which is indeed sometimes evoked, though less often than critical texts imply), but a clearly expressed need for specific sounds. Whether or not individual exhibitors actually provided the sounds implied by the image is of course heavily dependent on their resources. Keith’s Providence Opera House could easily furnish sound effects for Tearing Down a Wall, or music for The Aquarium, but a solo itinerant showman would be hard put to provide similar accompaniment. Nor would the quality of effects or music be the same in these very different cases. In both situations, however, exhibitors would be reaching toward the identical goal of increasing the film’s reality quotient.

Enhancing a film’s reproductive qualities is not the only reason for early exhibitors to provide sound, however. All too often, we forget that early films were rarely presented in the context of programs devoted exclusively to films. Films almost always complemented other entertainments, including live theatrical performances, lantern slides, phonograph records, and...music. Played before, between, and after the acts of a play, the tableaux of a Passion Play, or reels of film, music was clearly understood as a major attraction in this period when Americans were enjoying a love affair with all sorts of music, live or canned. Whether political, religious, scientific, artistic, or simply amusing, no event during this period could afford to do without music. The key to understanding early film sound lies in the period’s continued tendency to separate film accompaniment, heavily dependent on the cued-sound realistic aesthetic, from entertainment music in the orchestral overture or marching band tradition. By the teens, these two approaches would merge, but at the turn of the century cued sound and entertainment music existed side-by-side and separately.

As the new century began, cinema sound was thus doubly discontinuous. Contemporary standards required accompaniment for selected films only. In many theaters, dance and marching band films could count on some form of musical accompaniment, but films lacking clear justification for music would usually do without. Similarly, sound effects might well be introduced, but they would accompany only image events clearly productive of sound. Finally, in many theaters music would serve as an alternative to the films, providing an independent point of interest precisely at the moment when the film reel was being changed. One way or another, the sound component of early film venues would usually be characterized by its discontinuity.