13 The Story of Percy Peashaker: Debates about Sound Effects in the Early Cinema
Stephen Bottomore

It has become a nostrum of modern silent film aficionados that "silent films were never silent." While this is not strictly true,[1] it is certainly the case that the majority of film shows in the silent (and probably even in the early) period had some kind of sound accompaniment. The theory and practice of accompanying early films both with music and with the voice of a lecturer (*bonimenteur, erklärer,* etc.) have been quite well aired in recent scholarship. But the sound element that has been least covered in such discussions has been the use of sound effects, despite the fact that this was apparently quite a common practice.[2]

From the early years of the century, screenings of films, certainly in Europe and America, were often accompanied by effects, produced by individual "traps," and later using special sound effects machines, such as the Ciné Multiphone Rousselot and the Allefex, which incorporated a wide array of possible noises. Many commentators and audiences appreciated the addition of these sound effects to film shows, but a growing antagonism also developed to the practice: some people simply criticized the inappropriateness of some of the effects and the lack of skill of the operators, while others suggested that sound effects had no place at all in accompanying films. In the opinion of one sober writer of the time the question of whether or not to use effects "is undoubtedly a vexed one."[3] It seems likely that the widespread use of effects lasted less than half a dozen years, and the high-water mark may well have passed by the coming of the Great War. Live sound effects were certainly used throughout the twenties and beyond, but it seems not to the same extent as earlier. And perhaps one reason for this was the heated criticism that had been directed at effects in the early period.

When the earliest films were presented in the 1890s, they often took place either in silence or with only music or a lecturer to accompany them, but a number of the more enterprising showmen soon provided effects accompaniment. In the period after about 1906, as a wave of story films came onto the market, the number of film venues increased rapidly in Europe and America, and the use of sound effects was increasingly recommended to improve these shows. In 1907 the British *Kinematograph Weekly* was calling for the use of well-rehearsed effects for film shows, and suggesting that some firm could do good business if it put appropriate noisemaking devices—"living picture properties," as it called them—on the market.[4] A similar line was taken by the American trade press in the early years of the nickelodeon boom. Sound effects were seen as an additional attraction at film shows, and *Views and Film Index* suggested that patrons would really miss effects in some films, for

example in a film that showed objects being smashed. *Views* added that well thought out effects might even help to clarify a film's plot.[5]

By 1909 the *Bioscope* was talking of the unnaturalness of seeing events such as explosions, typhoons, and battles without their accompanying sounds, and of the need to break this "silence of death" in films.[6] The journal proclaimed that such effects gave

> a swing and "go" to the general effect which cannot be surpassed by any other means. It should be as indispensable to the pictures as the wig is to the actor; and the reward comes with the delighted comments of the audience, and the increased cash takings.[7]

But within a few years a heated debate developed about the use of sound effects. William Selig, on a trip to London in the summer of 1909, told his interviewer that effects "are overdone, and the tendency is to spoil the pictures."[8] Over the next few years the trade press of Britain and America was full of comments critical of sound effects. The complaints were on several different grounds. For a start, there were objections that effects were out of sync with the picture. Thus the *Kine Weekly* in 1910 complained of a "misuse of effects," noting:

> The sound of musketry firing, before the emission of the smoke is also ludicrous, and the toot-toot of the horn of a motor car after the vehicle has been brought to a standstill is far removed from reality.[9]

Then there was the question of whether the *created* sound effect was a true representation of the sound that one would expect from the *real* scene. The *Moving Picture World,* in a 1909 editorial entitled "Sound Effects: Good, Bad and Indifferent," suggested that inaccuracy was the major problem with effects for films:

> The imitations should be fairly accurate or they shouldn't be attempted. Inaccuracy is worse than nothing. It creates wrong impressions and often it wrongly interprets the pictures. They must correspond or else they should be let alone.[10]

Sometimes the inaccuracy was merely annoying: for example, a heavy chain was used to supply sounds to accompany images of a troop of cavalry in *The Charge of the Light Brigade*.[11] But sometimes the effect could be quite ludicrously inappropriate: one critic complained of the "continuous use of a motor horn" in a screening of *The Last Days of Pompeii*.[12]

The sound of horses' hooves (often produced using coconut shells) was the cause of several complaints. The objection was that the "quick, sharp ring" that was made for the hooves was the same whether the horse shown on screen was seen running over soft earth, over hard earth, or on a road. In the real situation,

13.1. "Our Village Cinema," *Punch*, 19 February 1913.

critics pointed out, the sounds would be quite different depending on the nature of surface the horse was running over.[13]

Similarly, both cars and trains were often given exactly the same sound effect of a motor running. Yet, as a *Moving Picture World* editorial stated: "everybody knows they are different and the imitation should be different to correspond or else be omitted."[14] The sound used for cars was itself often very inaccurate. One writer suggested that the "throb" effect generated in many cinemas during car scenes was "little short of a libel on the modern automobile," being more like the sound of cars of ten or a dozen years before.[15] Another objection to effects was that they were too loud. From its premiere in Melbourne in December 1906, *The Story of the Kelly Gang* was accompanied by extensive sound effects, but this was not to everyone's taste, one journalist complaining:

> [T]here is a deal too much racket in connection with the show—sometimes you can't see the picture for the noise of horses, trains, gunshots and wild cries, but all the same it is the sort of bellowdrama that the lower disorders crave.[16]

During the summer of 1908, at a screening in New York of Edison's *Crossing the Plains in '49,* the effects apparently antagonized the entire audience, and led to vocal protests:

> [T]he din and racket intended to represent rifle shots was strongly objected to by the audience, and cries of "cut it out," "stop the noise," and "keep still" were shouted from different parts of the house.[17]

Sometimes this excessive volume was due to the effects man's sounds failing to reflect the scale of the images on screen. So *Kine Weekly* noted in 1909:

> The view appears somewhat in the distance, yet we often hear the sounds apparently in our midst. The "sound effect man" cannot well judge of this, and should receive his instructions as to volume of tone from someone situated in the middle of the hall during the time that the set of films are first run through.[18]

But whether or not lack of rehearsal was the cause, the excessive sound levels continued. In 1911 a spectator in Oregon objected to a screening of *The Three Musketeers* due to the outrageous level of the effects: "During the battle I thought I was in a cafeteria, being treated to a free lunch. That's the kind of effects we get to represent the dignity of the sword."[19] Not only was this kind of thing annoying to the audience, it might also adversely affect the pianist:

"What good musician would play with a horrible banging to distract his attention," asked *The Cinema* in 1913.[20]

In the same year one writer in the *Kine Weekly* was so annoyed at this kind of accompaniment to films that he described the sounds as "perverted effects" and "cacaphonic embroidery." He suggested that this had reached its nadir in slapstick comedies, where sometimes the sound man

> turns all the loudest handles within reach and an appalling crash follows which suggests the simultaneous collapse of Westminster Abbey and the Houses of Parliament. Later, perhaps, we have a heavier smash in the film—the odds are that our friend, having reached the maximum of din, turns again to his "thwack" handle. So the evening wears merrily away—resounding thuds and smacks where no blows are passed, enthusiastic effects of a motor engine when the car is seen to have broken down, "cavalry" effects when a tired horse ambles gently over grass, and so on, while those with a sense of humor in the audience grin ever broader and broader and the others seriously discuss the advisability of cotton wool.[21]

This writer was also indicating another problem with the practice of effects. It was not only that effects were inaccurate and excessively loud, it was also a more general problem: that effects were being used in an unthinking and crude manner, being added willy-nilly to anything in the image. Critic Louis Reeves Harrison also noted this wild and unthinking use of effects: the tendency to make a noise for anything, no matter how unimportant it was within the scene, while failing to take a cue from the *mood* of the scene. He coined the contemptuous name "Percy Peashaker" for drummers who worked in this way:

> When there is water in the picture it goes to Percy's cerebrum. If there is a lake shown on the screen, no matter if it is a mile away, calm or stormy, he shakes his box of peas so that we may know that it is principally made of water. Realism becomes intense when a vessel appears and Percy blows a whistle "Oo-Oo" to enforce the fact that it is a steamer and not a full-rigged ship. "Bow-wow" indicates that we are looking at a dog and not a door-mat.[22]

The point was that the effects men were taking a far too literal approach to their job of reflecting in sound what was on screen. H. F. Hoffman had made a similar point the previous year, attacking the "irritating men" making loud and irrelevant sounds for films. For example, in a love scene that happened to have a horse in the background, every hoof beat was caught "with a keenness that soon attracts the attention of the audience to the horses' feet and away from the actors." Hoffman visited one theater with an especially diligent sound man where a film was shown that included a scene of the painful parting of two lovers:

> All at once a bird began to sing with great violence. I looked at the piano player in wonderment and found him looking the same at me. "What's that for," he asked. "You've got me," I replied, "I'll go and see." I found my friend with his cheeks and his eyes bulging out, blowing for his very life. "What's the trouble?" says I. "The bird! The bird!" says he, without removing the whistle. "Where?" says I. "There!" says he, pointing triumphantly with a stick to a diminutive canary in a tiny wooden cage on a top shelf at the far corner of the room. "Good boy!" I cried, giving him a wallop on the back that made him almost swallow his blooming whistle.[23]

Clearly the immediate culprits for this aesthetic quagmire were the operators of the effects devices. These were frequently unskilled youths—"effects boys"—who could be employed for very low wages. "Many proprietors imagine," noted the *Kine Weekly* in 1912, that effects can be worked "by any irresponsible or unimaginative youngster." But the result, it argued, was frequently "overdone or misapplied" effects.[24] The *Kine* the previous year suggested:

> It is often the case that a youth with no imagination, and with very limited brain power, combined with a spirit of mischief, "lets himself go," when presiding over the sound machine, the consequence

being that dramatic pictures are made farcical by incongruous noises, and humorous pictures are accompanied by a "babel of sounds" that gets on the nerves.[25]

In the smaller cinemas in Paris, effects were also treated in this cavalier fashion, and often left to unskilled employees, especially youths.[26] British showman Waller Jeffs employed one man and half-a-dozen boys to "sound" his film shows, but noted that "sometimes the lads, with a heaven-sent opportunity to be noisy without the usual consequences of being naughty … greatly exceeded their duties."[27] And yet one could not blame the boys alone. Sometimes the manager himself demanded a regime of constant effects. Former effects boy H. H. Fullilove recalled that his boss hated any silence during the screening of films, and effects or music were demanded throughout the show. So for example, "Bird whistles were expected in country scenes whether birds were to be seen or not" and the effects were generally "very noisy."[28]

The taste of such managers sometimes went counter to the instinct of the

13.2. An overenthusiastic "noise expert," using an Allefex machine. *Johannesburg Sunday Times,* 25 December 1910.

operators of the effects. One theater in America was showing a film with a scene of a man dying of TB, in which his wife kisses the dying man. At this point the manager asked the drummer to imitate the sound of the kiss. The drummer wrote to a trade paper to complain: "Of course the people laughed—they always laughed when a kiss is imitated—and I think it spoiled the picture, because the scene was a sad one."[29] Sounds for kissing scenes became quite an issue. Apparently some effects men would "imitate" the kissing sound by "whacking the top of a barrel with a board,"[30] while in some theaters the rowdier element would imitate the effect themselves with a chorus of lip-smacks.[31]

Young Fullilove was allowed to do much the same: "I would also kiss the back of my hand to represent screen kisses, and in extreme cases pull a cork from an empty bottle!" Indeed he often made effects specifically to get laughs, and he liked

to give my own interpretation of appropriate sounds. An example of this was in a comedy where if a character knocked on a door, I would ring a bell and vice versa, which seemed to have been much appreciated by the audience.[32]

It was said by the Yerkes company in America in 1910 that effects were especially effective in comedies, and could make audiences laugh "to the splitting point."[33]

This intentionally comic use of sound was made rather easy to do with some of the comic effects on sale or incorporated in effect machines. One of these was a baby cry, apparently

used by some drummers when they saw a baby in a scene, provoking a big laugh from the audience.[34] Another effect "trap," recommended by one writer, was even more hilarious: costing a mere ten cents, the "Nose-Blo" was

> a ridiculously true-to-life imitation of a man blowing his nose…. There are many places where you can use it in the picture, and it is a pleasing change from the siren whistle and rattle and it will cause a gale of merriment to flow over the audience when used.[35]

Many believed that this kind of effects working was getting out of hand, and some thought that effects should be dispensed with altogether. "Why," asked the *Photo-Play* of Sydney in 1912, "are the beauties of modern films spoilt by the hideous clamor that is usually put up from behind the scenes?" The journal added that these effects were sometimes so annoying that it made one want to shout "Shut up, while I look at the pictures":

> I think as matters are at present in this line, if votes were taken by the audiences to abolish the effects' man, and his appliances, the proposition would be carried unanimously.[36]

In September 1911, a writer in the *Moving Picture World* also suggested that theaters organize votes to determine whether patrons wanted effects in addition to music or not: the writer himself was very anti-effects. Interestingly, though, the article was published back-to-back with one by a drummer that (unsurprisingly) was very much in favor of effects.[37] There were clearly strong views on both sides in the American film industry.

But some writers took a more neutral approach to the subject, being neither entirely pro nor entirely con, suggesting that one should have effects, but more *subtle* effects. In Britain, Frederick Talbot believed effects were a good idea for the cinema, as in the theater, "provided they are judiciously managed."[38] In France a similar line was being taken. G.-M. Coissac said sound effects could be very successful, "but they must be done with much circumspection."[39] One French effects man (*bruiteur*), Barat, told his new assistant that this should be artistic work: the eyes of the audience were being filled with images from the screen, and the sound men had similarly to please their ears![40] In America the critic Stephen Bush as usual had interesting things to say. As early as 1908, he recommended: "Attempt no effects that have not been thoroughly rehearsed," and added: "All effects that work well and are skillfully prepared will delight, all others will disgust."[41] Three years later Bush reiterated that effects could help a film, but only if rehearsed and performed carefully. He also addressed the effects-with-everything issue, stating that: "Each picture must be studied by itself and only such effects introduced as have a psychological bearing on the situation as depicted on the screen."[42]

This idea of a *psychological bearing* was an important one. The problem, as we've seen, was that sound men were taking their job too literally, and simply supplying sounds for anything that they saw on screen. But if one used the Bush approach, this might mean varying this practice in two ways: firstly, making sounds for some things that were not necessarily visible in the picture, and secondly, not making sounds for some things that *were* in the image.

A nice example of the former came in 1911. The *Film Index*'s music critic described the process of working out the effects on a short Pathé subject, *Butter Making in Normandy:*

> It is a short subject but, a very pretty picture and when the cows were shown on the screen I told the effect man to use a cow bell. He waited for a cow to appear with a cow bell hanging on it. But there was no cow bell shown in the picture. After the first show was over I asked him why he did not use a cowbell in the scene and he told me there was none in the picture, and I told him to use the effect [in] the next show regardless of the fact that there was none shown in the picture. The next show he used the bells and that night the manager remarked about the number of comments he had received on that

short picture, that might otherwise have gone unnoticed. I have found that in many pictures you can draw a little on your imagination in working effects and get very good results.[43]

The corollary of this approach of imaginatively *adding* effects was whether to *reduce* the number of sounds. In other words, should one supply sounds for *everything* in the image or just some *particular* sounds? When in 1911 a reader wrote in asking how to make the sound of a car engine, *Kine Weekly*'s expert suggested using two cycle pumps, but added:

> [R]eally, the public is by this time quite educated to doing without the engine sounds in moving picture motor chases. Only don't forget to honk a motor horn occasionally.[44]

In other words, the advice was to selectively *indicate* the car through a horn, not to *imitate* it with an engine sound. On the other hand, the *Bioscope*'s Paris correspondent criticized a show for taking exactly this approach: in a film of a fire brigade in action the sound of engine horns was added in one show, but no sound was supplied for the horses' hooves or the bells on the horses. The writer thought that *all* of these sounds should have been added.[45]

One of the most interesting contributions to this "some or all" discussion of effects came from the *Bioscope*'s music columnist in 1913. He suggested:

> Effect-working to cinematograph pictures must necessarily be a very incomplete art, because the sounds which it is possible to imitate can, at the best, be only about a quarter of those actually suggested by the film. And it is very essential, therefore, to select for imitation only those sounds which would be unusually prominent and important in actuality.[46]

He made the point that in many domestic dramas there was actually little going on in the image that would generate any sound (and the human voice was outside
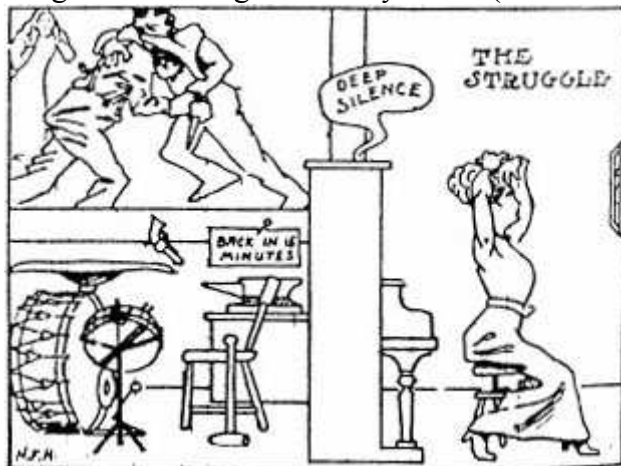
13.3. A rare moment of silence from an effects set-up and the pianist too. From "Jackass Music," *Moving Picture World,* 21 January 1911.

the realm of effects, he thought), so to provide the few effects that suggested themselves in such films was surely inappropriate, for

> to maintain silence throughout the main portion of a long film and then to cut in suddenly for about two seconds with the absolutely unimportant sound of a motor-car or a horse galloping, is simply to draw attention to the limited nature of your effects.

The most suitable films in which effects should be used, he thought, were those in which the effects could be continued through much of the film: such as railway journeys, travel films, industrial and topical films. As for dramas, only a few, such as those with battle scenes, called for effects.[47]

Emmett Campbell Hall in the *Moving Picture World* moved the discussion on to suggest that if one omits *some* sounds, one might eliminate them all: "[W]e are treated to a merry honk-honk when an automobile comes down a crowded city street, while cars, trucks and horses flit noiselessly by like visions in a fevered brain." Similarly a huge battle scene was accompanied by "a futile little popping," and a powerful express train by a mere "toot-toot." This was, he thundered, "sound-effect vandalism":

> To make this *occasional-sound* [my italics] business approach intelligent [*sic*], it would be necessary to presuppose a condition of hearing somewhat corresponding to color blindness, only infinitely greater in effect; the ability to hear sounds only of a peculiar and determined nature."

And to do the job properly, "the sound artist would have to have as many hands as a centipede has legs, and about a carload of effects to 'sound' an average picture."[48] Hall's radical suggestion, therefore, was that effects should be abolished entirely. But if sound effects were banished, what sound accompaniment to films would take their place? Some theorists suggested that the piano alone was sufficient accompaniment for films. In an article entitled "Coconuts or Ivories?" Bert Vipond argued that

> the use of even the most perfectly constructed mechanical effects is unnecessary and artistically wrong, because there is something which can produce every conceivable effect, *including* the human voice, in a way that is not mechanical. This instrument is, of course, the piano.

With an intelligent performer, the piano could replace mechanical effects with what he called "musical effects" (he mentions one pianist who even managed to play "a clever musical representation of a sneeze").[49] Emmett Hall also suggested that music was sufficient accompaniment to films, as it "does not attract the conscious attention."

Another theorist, Clarence Sinn, in late 1910 expanded on this idea of music as effect, and provided a useful dichotomy of two types of music: "The instruments in a picture show orchestra are used for twofold purposes, viz., to provide music and furnish sound effects." The musical side was "descriptive, and is merely accessory to the picture," while the sound effect side was "part of the picture." That is to say, the former was effectively "mood music," while in the latter case, the musicians were imitating something within the scene. Included in this "effects" role of music was that of accompanying scenes in which characters played instruments. Sinn suggested that: "The difference between the 'accessory' and the 'sound effect' can be made apparent enough if the musician uses judgment."[50]

It is clear that this idea of "effect music" was quite important, and soon became a standard technique for musicians, especially in smaller theaters where the effects boys were already being given the sack. In one of the earliest published guide books for cinema musicians from 1913, the author, Eugene Aherne, devoted an entire section to this technique of "effect playing," that is, of imitating certain sounds using the piano's keys alone. He emphasized that such effects, especially comic ones, should not be overdone.[51]

> Many pianists of today who accompany silent films are effectively applying the same aesthetic: for example, when an on-screen character is playing a musical instrument, the theater pianist will try to imitate the style or even the tune. And when there is a crash in a comedy they might give an additional thump on the keys. It is worth adding that there was nothing new in this concept of music as effect, for it was even used in magic lantern shows in the nineteenth century: in *Jane Conquest,* for instance, "a cry of mortal fear" in the plot was to be indicated by "Music—a Weird Chord."[52]

13.4. Another overenthusiastic effects boy. *Kinematograph and Lantern Weekly,* 20 November 1913.

It seems that with the passage of time, from the 1910s onward, effects were used less promiscuously in cinemas of all sizes. But they did not go away entirely. In later years sound effects were apparently most often used in certain genres that seemed to evoke loud noises, especially in military films: "a battle scene is so empty without these effects," said one writer in 1913.[53] Apparently during the First World War sound effects were often used when showing military films: in a screening of *The Battle of Jutland* in Harwich, thunder flashes were detonated, filling the cinema with smoke (and clearing the first three rows, it was said!).[54]

Effects were also sometimes used through the later teens and twenties, especially in larger theaters. In a theater with an orchestra, this might be the responsibility of a drummer (as in the teens), sometimes using the individual effect traps of former years.[55] Some cinema organs incorporated effects devices, which might be operated by the feet, to enable the organist to continue playing the music with his hands.[56] In non-Western countries there are anecdotes of live sound effects being introduced in screenings in later years: as late as 1942, in China, where footsteps and machine gun sounds were imitated for outdoor screenings.[57]

But the most interesting period for debate over effects was undoubtedly the early teens. And this debate should be seen within the context of a wider discussion about sound and film. During the early cinema period the use of all forms of sound accompaniment—lecturers, effects, dialogue, various forms of music, and experiments with sync sound—suggests that there was a feeling that the pictures alone lacked something, a feeling that was to be fully satisfied only with the "coming of sound" to the cinema in the late 1920s. The theoretical debate over sound effects—and especially about how, when, or whether to use them—not only was extremely interesting, but may well have laid the foundation for an aesthetic governing sound effects practice in later periods of cinema. When commercial sync sound arrived in the late twenties there was already a tradition of both theory and practice to build on in working out how to make sound, and sound effects, mesh with the pictures. Perhaps this is one reason why the practice of incorporating effects along with other sound elements was so swiftly mastered in the 1930s. But that is another story.

Notes

1. See Rick Altman's important essay, "The Silence of the Silents," *Musical Quarterly* 80, no. 4 (Winter 1996), 648–718.

2. An earlier section of this essay, which covers many other aspects of effects (including their use in pre-cinema and in the first film shows, and the various effects traps and machines, especially the Allefex), appears as "An International Survey of Sound Effects in Early Cinema," *Film History* 11, no. 4 (1999), 485–498.

3. Colin N. Bennett, *The Handbook of Kinematography,* 2nd ed. (London: Kinematograph and Lantern Weekly, 1913), 280.

4. *Kinematograph and Lantern Weekly,* 5 September 1907, 258; 12 September 1907, 274–275.

5. *Views and Film Index,* 13 October 1906, 3.

6. *Bioscope,* 7 October 1909, 5.

7. "Effect Machines," *Bioscope,* 8 November 1909, 4. Effects were also praised as improving the films in *Kinematograph and Lantern Weekly,* 17 June 1909, 285.

8. *Kinematograph and Lantern Weekly,* 19 August 1909, 709.

9. *Kinematograph and Lantern Weekly,* 18 August 1910, 925.

10. *Moving Picture World,* 2 October 1909, 441—reprinted in *Bioscope,* 14 October 1909, 29.

11. *Kinematograph and Lantern Weekly,* 7 November 1912, 200.

12. *Kinematograph and Lantern Weekly,* 13 November 1913, 3.

13. *Moving Picture World,* 2 October 1909. On hoof sounds see also *Picture Theatre News,* 9 August 1911, 7.

14. *Moving Picture World,* 2 October 1909.

15. *Picture Theatre News,* 14 February 1912, 7.

16. *Sydney Bulletin,* 24 January 1907—quoted in Daniel Catrice, *Cinemas in Melbourne, 1896–1942* (master's thesis, Monash University, Monash, Australia, 1991), 16–17.

17. "Anti-Noise Movement," *New York Dramatic Mirror,* 1 August 1908, 7.

18. *Kinematograph and Lantern Weekly,* 27 May 1909, 145.

19. *Moving Picture World,* 21 October 1911, 189.

20. *The Cinema,* 27 August 1913, 69.

21. *Kinematograph and Lantern Weekly,* 20 March 1913, 2044–2045. See also P. Lindsay in "Picture Effects: Manipulating the 'Sound Makers'," *Views and Film Index,* 18 January 1908, 11.

22. "Jackass Music," *Moving Picture World,* 21 January 1911, 124. At this time there was also rare praise for particular drummers: a correspondent to *Moving Picture World* praised a Bill Judd, who could play various instruments and sing, as well as make effects devices, including one to imitate the sound of a pump. *Moving Picture World,* 18 February 1911, 353.

23. "Drums and Traps," *Moving Picture World,* 23 July 1910, 184–185.

24. *Kinematograph and Lantern Weekly,* 14 November 1912, 331.

25. *Kinematograph and Lantern Weekly,* 4 May 1911, 1792.

26. See Jean-Jacques Meusy, *Paris Palaces, ou le Temps des Cinémas, 1894–1918* (Paris: AFRHC/CNRS Editions, 1995), 388–389.

27. John H. Bird, *Cinema Parade: Fifty Years of Film Shows* (Birmingham: Cornish Brothers, 1946), 30.

28. H. H. Fullilove, *Animated Pictures: The World before Your Eyes,* 3. Manuscript in BFI Special Collections.

29. *Moving Picture World,* 18 February 1911, 353.

30. *Film Index,* 21 November 1908, 11–12. The article notes that the same device was apparently used to generate many other sounds too.

31. One of the more annoying activities of the young men of Gopher Prairie (Sinclair Lewis's fictional Midwestern town) was their "smacking moist lips over every lovescene at the Rosebud Movie Palace." See Sinclair Lewis, *Main Street* (New York: Bantam Books, 1996 [1920]), 117.

32. Fullilove, 3–4.

33. "Yerkes Noise Makers on Tour," *Film Index,* 19 March 1910, 10.

34. "Our Music Page," *Moving Picture News,* 24 February 1912, 15. Such comic use of effects overturned a convention that sound effects in films are generally realistic (whereas when indicated in comic strips they are often exaggerated). See "Glop, pas glop…," *Cinémaction* (Summer 1990), 48–51.

35. "Our Music Page," *Moving Picture News,* 24 February 1912, 15.

36. *Photo-Play,* 10 August 1912, 249—in a report from Brisbane. The following year the *Eclair Bulletin* in America made the same point, suggesting that managers whisper to their trap drummer, "Cut out all effects." *Eclair Bulletin* 36 (February 1913), 2.

37. Emmett Campbell Hall, "Those Sound Effects," and (pro) Clyde Martin, "Working the Sound Effects," *Moving Picture World,* 23 September 1911, 873–874.

38. Frederick A. Talbot, *Moving Pictures, How They Are Made and Worked* (London: William Heinemann, 1912), 139–140.

39. G. Michel Coissac, *Manuel Pratique du conférencier-projectionniste* (Paris: 1908), 202. Another French critic suggested that effects should be kept to a minimum "because the cinema is after all an art." *Ciné-Journal,* reported in *La Rivista Fono-Cinematografica,* 7 October 1911, 5. For effects practice in Italy, see *Immagine* 32 (1995), 20–25.

40. This was c.1907. See Meusy, 144.

41. "Hints to Exhibitors," *Moving Picture World,* 24 October 1908, 317. On care with effects and the need for rehearsal, see *Kinematograph and Lantern Weekly,* 20 February 1908, 253.

42. "When 'Effects' Are Unnecessary Noises," *Moving Picture World,* 9 September 1911, 690.

43. Clyde Martin, "Playing the Pictures," *Film Index,* 14 January 1911, 11. Martin notes that the sound effects man already had an attitude of working effects on "the principle features only."

44. *Kinematograph and Lantern Weekly,* 1 June 1911, 203.

45. *Bioscope,* 21 December 1911, 849.

46. *Bioscope,* 20 March 1913, 853. He also said that the chief requirement of an effects worker was "discretion … because effects rendered promiscuously and with no discrimination are very much worse than useless."

47. Another writer also advised that effects were best for "travels and industrials" or military scenes, but should not accompany "domestic plays." *The Cinema,* 12 March 1913, 40.

48. "With Accompanying Noises," *Moving Picture World,* 10 June 1911, 1296.

49. *Kinematograph and Lantern Weekly,* 2 March 1911, 1213.

50. Clarence Sinn in late 1910 in *Moving Picture World,* quoted in Altman. (Sinn also included the imitation of tom-toms to accompany Indian pictures as "effect" music.) *Moving Picture World*'s article was reprinted without attribution in "The Picture Musicians' Page," *The Cinema,* 12 March 1913, 37.

51. Eugene A. Aherne, *What and How to Play for Pictures* (Twin Falls: News Print, 1913), 53–55.

52. *Jane Conquest: An Illustrated Poem* (London: Warren, Hall and Lovitt, n.d.). The text is in the fabulous collection of David Francis, who brought this issue to my attention.

53. *The Cinema,* 9 April 1913, 37. Even military panoramas in the nineteenth century were presented with gunfire effects: see Herman Hecht, *Pre-Cinema History* (London: Bowker Saur, 1993), item 534B. Providing effects for military films could be done relatively simply, using a big drum to provide bangs coincident with explosions. See the letter from "Jim" in *Cambridge Daily News,* 2 September 1938, 6. (Courtesy Nick Hiley.)

54. Ad by Hawkes in *The Cinema,* 12 November 1914, 27; Chris Strachan, *The Harwich Electric Palace* (author, 1979), n.p. See also "Sunderland and Wearside Highlights," *Bioscope,* 1 October 1913, 43.

55. Albert A. Hopkins, "Noises for the Movies," *Scientific American,* January 1922, 30–31.

56. See the splendid illustration in *Illustrated London News,* 10 August 1929, 239. For a fine illustration of an American effects installation, see "Les Bruits du Cinéma," *La Nature* 47 (22 November 1919), 335–336. The North West Film Archive, Manchester, holds a transcript of an interview with Albert Jones, who made sound effects in British cinemas in the 1920s.

57. Jay Leyda, *Dianying* (Boston: MIT Press, 1972), 116. For Syria in the 1920s and 1930s, see Georges Sadoul, *Cinema in the Arab Countries* (Beirut: Interarab Centre of Cinema and Television, 1966), 100–101.