
Rick Altman

What it Means to Write the History of *Cinema*

For once, let us begin at the beginning.¹ Of all the basic assumptions on which cinema history is built, none is more deeply ingrained than the apparently tautological notion that cinema history is the history of *cinema*. But what is cinema? Rarely are such naïve questions asked, because the answer seems so obvious. By and large, we know just what cinema is, and what it is not, so much so that it has not seemed necessary to theorize cinema's identity. Yet the media industry has shown much less assurance than critics about the nature of its products, often openly revealing hesitations about their identity.

If cinema could be defined solely from the standpoint of the image, then it might make sense to base a definition entirely on the image apparatus. Seen in this manner, cinema has for a century followed a more or less straight-line trajectory. An entirely different figure appears — zigzagging and indirect — when we take sound into account, for cinema's sound-identity has undergone constant redefinition, through regular redistribution of the dividing lines among media. With the apparent retrospective illumination provided by an era of relatively stable cinema identity (from the thirties to the fifties), we easily conclude that cinema has always been clearly identified and that the media have always been neatly differentiated. When we take a *prospective* look at the early cinema industry and its products, however, we find an entirely different situation. The media that we now take to be so well differentiated from cinema are one after the other conflated with cinema, to the point where it becomes impossible to identify cinema as an independent phenomenon, separate from other media. While this process affects the image as well, it is especially evident in the domain of sound.

With 20/20 hindsight, we are typically convinced that we understand what constitutes a medium or a technology. In fact, however, representational technologies are constantly in the process of being redefined. Today's widescreen

¹) This essay also appears, in a slightly different form, as the introduction to the historical section of *Sound Theory / Sound Practice*. Ed. by Rick Altman. New York, London: Routledge 1992.

and multiple-channel technologies are not the same as those introduced in the fifties, which in turn differ from the widescreen and multiple-channel approaches pioneered in the late twenties and early thirties. Yesterday, the term "film" meant one thing; today it means another. If we want to understand how cinema works, we must guard against projecting today's definition into the past. Instead, we need to learn from the past an object lesson about cinema's tenuous and volatile identity. Derived from multiple image and sound technologies, film has an admirable ability to blend in with whichever of these technologies serves a particular aesthetic or economic purpose.

We will understand these chameleonesque talents better through a survey of some of the media that have played a part in cinema's self-definition, with an emphasis on the early years of film history, where the interpenetration of cinema and other media was at its height. At the conclusion of this overview, I will suggest how an understanding of cinema's problematic and fluctuating sound-identity might lead to a new model of cinema history.

1906: Cinema as photography. In spite of the familiar cliché whereby "the silents were never silent," most of the early nickelodeons treated the newfangled film medium as nothing more than moving photographs, sufficient unto themselves and requiring no musical accompaniment. An automatic piano or phonograph was almost always present, but typically used on the street to attract trade, in the manner of a carnival barker. A pianist was often on the scene as well, but he (or, more likely, she) was there to accompany the featured illustrated song. The theater operator, according to a contemporary set of instructions for running a nickelodeon program, "is required to call the accompanist as the [film] performance nears the close, that the intermission music may start promptly at the close of the pictures".² Everything is accompanied, in these early days, *except* the film. For at this point in its history, film is just that, a spool of Eastman or Pathé film capable of registering moving photographs. Though in this early period sound and image are simultaneously present in the theater, they have not yet come together to produce the familiar audio/visual phenomenon we now call cinema.

1907: Cinema as illustrated music. It didn't take very long for filmmakers to figure out that film was just as good as song slides at illustrating familiar songs. Here we first encounter the notion that film is not just photography, but a combination of image and sound. More and more films are shot in view of a specific accompaniment. This is the heyday of the Passion Play, with its multiple openings for church music. The operetta is soon recorded on film, with a film version of Lehar's *The Merry Widow* opening in New York nearly concurrently with the stage version (Kalem, 1907). Old favorites like *Only a Bird in a Gilded Cage* (Edison, 1909) or *The Spanish Cavalier* (Edison, 1912) offered additional opportunities for musicians, as did Fourth of July releases like *The Star-Spangled*

²) L. Gardette, "Conducting the Nickelodeon Program". *The Nickelodeon*. (March 1909), 79-80.

Banner (Edison, 1911) and *The Battle Hymn of the Republic* (Vitagraph, 1911). In terms of content as well as programming, films like these were produced to take the place of the song slides with which cinema had long shared the bill, thus revealing that, in spite of its growing tendency toward narrative fiction, cinema was at this point still not entirely differentiated from the song slide tradition.

1908: Cinema as vaudeville. For many years, the exhibition practices of vaudeville and film were closely intermingled. By adopting moving pictures as one of its acts, big-time vaudeville had turned into so-called small-time vaudeville; conversely, nickelodeon owners at pains to differentiate their programs from the other nickelodeons on the same block had begun to introduce live acts on the cinema bill. Still, in 1908, there was one way to distinguish clearly between the vaudeville and film worlds: whereas vaudeville thrived on name acts, contractually guaranteed billing, and star-system salary scales, film never even so much as alluded to the names of its actors, writers, or technical personnel.

Enter Cameraphone, 1908. Now, it had long been the dream of filmmakers to add sound to the film-viewing experience. Edison had paired the phonograph with the Kinetoscope; Gaumont had attempted to sync disks to film; many others had labored to link moving images and recorded sound. When the Cameraphone Company offered its new sound-on-disk system to "Owners and Managers of Vaudeville Theatres," it revealed no interest at all in this distinguished lineage of attempts to produce sound film. For Cameraphone had no stake in realizing some inventor's pipe dream. Instead, it sought to sell a recognizable product to the well-known impresarios of the vaudeville world.

What difference does it make that Cameraphone saw its product not as sound film but as a new form of vaudeville turn? If Cameraphone had been selling films, they would have been designated as comedy, drama, adventure, chase, or perhaps musical novelty. No mention would have been made of the actors or technicians. Because of the widely divergent vaudeville tradition, however, Cameraphone covered the pages of national publications with the names of its headliners: Eva Tanguay, James Harrigan, Alice Lloyd, Blanche Ring, Vesta Victoria, and many others. Soon, in response to strong popular demand, Cameraphone began to diversify its offerings, producing dramatic subjects as well as straight vaudeville turns. Now, in late 1908 and early 1909, the importance of Cameraphone's early self-definition as canned vaudeville has its most important effect: fully integrated into the film exhibition world, Cameraphone carries its vaudeville-based star-orientation with it. Strange to say, the Hollywood star system is not the product of turn-of-the-decade machinations by Biograph and Vitagraph, but a perfectly predictable import from vaudeville, vehicled by the neither-fish-nor-fowl Cameraphone, the film that thought it was vaudeville.

Tradition has it that early sound film systems were no more than inventors' oddities. Rarely has film scholarship been so wide of the mark. "We have no

hesitation" says the editor of *Moving Picture World* on March 6, 1909, "in prophesying that before long hardly a moving picture theatre in the country will be without the talking or singing phonograph as a part of its entertainment" (261). A week later, another editorial drives the point home: "The combination of the phonograph or graphophone with the picture machine has now advanced to such a state of perfection and is being promoted by so many well financed concerns, that it is destined to occupy an important part in the moving picture field" (*Moving Picture World*, March 13, 1909: 293). A year later, this assurance had not dwindled (though notice the subtle change in the language, confirming the now independent existence of sound film as a separate concept): "In our opinion the singing and talking moving picture is bound sooner or later to become a permanent feature of the moving picture theater" (*Moving Picture World*, May 7, 1910: 727-728). In 1909, Frank L. Dyer, Vice-President of Edison Manufacturing and President of the Motion Picture Patents Corporation, confidently predicts that talking pictures will soon reach the complexity and success of the legitimate theater (*New York Dramatic Mirror*, May 1, 1909: 36).

With a hundred theatres equipped with Cameraphone apparatus by the end of 1908, and many more serviced by the dozens of competing sound film systems, it seems that sound film could hardly be far off. Such are the complexities of film history, however, that it will take nearly two decades to install a durable sound film system. The star system, however, is installed to stay within months after Cameraphone's decision to record vaudeville on film.

1911: Cinema as opera. For the first of many times, the film industry in 1911 recognized its ability to record the stage action of famous operas, with local orchestras taking on the challenge of playing the accompanying score, now provided along with the film by the producing company. Pathé launched the mode with its version of *Il Trovatore*, with the Verdi music arranged by Charles P. Muller for a small orchestra or even for a lone pianist. When Edison produced *Aïda* later in the year, Pathé countered with a spectacular version of *Faust* (earlier produced in a shortened version by Edison). As long as film was just photography, popular music, or vaudeville, it could hardly attract the carriage trade. Through repeated early teens attempts to record opera, classical novels, and successful plays, film successfully redefined itself as a very proper medium indeed. Viewed retrospectively, cinema's identity at this point in its history seems foreordained by its technology; considered prospectively, cinema is still actively seeking to establish its own identity in a profitable manner, based on social and commercial affinities rather than solely technological ties.

1916: Cinema as cartoon. It is a clear sign of film's chameleonesque tendencies that it could simultaneously play host to grand opera and to lowly cartoons. Other industries are defined by their products: some make breakfast cereals, others make toothpaste. Now, on the surface of things, it might appear that the film industry is appropriately defined by its products: not biodegradable plastic bags, but films. In fact, however, we make more sense of the film industry by

understanding it as a complex of related production strategies. Just as minimal wartime retooling made it possible for a can factory to make grenades or for a camera manufacturer to fabricate bombsights, so Hollywood easily slides from silent snapshots to merry melodies and from chase films to newsreels. Because its production system can reproduce epics just as easily as interviews, the film industry finds it not only possible, but economically desirable, to pass rapidly from opera to cartoons and back.

In mid-1911, Horsley began distributing the Nestor Film Company productions of "Mutt and Jeff Talking Pictures." Based on the familiar comic-strip characters, these films offered an unexpected solution to the dialogue problem: they simply included written-in speech balloons like those found in the contemporary funny papers. Never what we would call headlines, these films nevertheless fared passingly well over the years. In fact, they did so well that, in 1916, a certain Charles F. Pidgin attempted to patent a method for producing filmed cartoons without resorting to animation or drawings. Pidgin's "invention" provided for each character to inflate, at the appropriate moment, a balloon carrying the words to be spoken. As Pidgin's patent application puts it:

the words constituting the speech of the actors or characters are placed on balloons of oblong shape adapted to be inflated to a relatively large size and normally occupying a comparatively small space with the words entirely visible. [...] The blowing or inflation of the devices by the various characters of a photo-play will add to the realism of the picture by the words appearing to come from the mouth of the players. The balloons may be made of rubber or any other suitable material and the words or other characters, constituting the speech may be applied to or placed on the balloons in any desired manner, and a suitable valve will preferably be provided for maintaining the balloons or other inflatable device in an inflated or expanded condition.³

Unfortunately, Pidgin provides no instructions about how to manipulate multiple balloons in the actor's mouth during long conversation scenes. I am pleased to report that Pidgin's invention was approved, receiving U. S. Patent number 1,240,774 on September 18, 1917. Let it not be said that the U. S. Government ever harbored any prejudices against Pidgin English.

1922: Cinema as radio. Few will dispute the notion that radio is one thing, television a second, and film yet another. This assumption of course overlooks the extent to which television was referred to as radio throughout the twenties. It pays too little attention to the attempts of RKO Radio Pictures to capitalize on its connection with the parent Radio Corporation of America company. For years, every RKO Radio Pictures ad played up radio iconography, as if the film were somehow received over the "ether," as early radio buffs put it. In fact the RKO logo still perpetuates this connection.

Today we look back on the radio towers in RKO's ads and smile at their naïve rhetoric. But in 1922, it was anything but rhetoric. How would *you* syn-

3) Thanks to my colleague, Lauren Rabinovitz, for bringing this intriguing example to my attention.

chronize a human voice or a phonograph record to an otherwise silent film? In 1922, you might have done it in the manner invented by Harry J. Powers, Jr., for Chicago's Rothacker Film Company. Inspired by the actors-behind-the-screen approach widely used in the late aughts and early teens, but concerned to develop a greater economy of scale, Powers looked to the synchronization opportunities offered by radio broadcasting in order to produce sound films. Today, we can confidently affirm that radio and cinema are different media, but in 1922 the borders of the media remained an open question. Radio was not born ineluctably separate from cinema; instead, they grew apart historically.

But in 1922 they had not yet definitively separated, as demonstrated by *American Cinematographer's* contemporary description of the Rothacker process:

A motion picture is produced in the studio as usual, the scenario writer having supplied speaking lines and sound effects as though the production were to be given behind the footlights. A number of theaters are equipped with radiophone receiving instruments and projection machine synchronizing apparatus. The movie company, possibly composed of the same persons who made the original film in the studio, is assembled at the radiophone broadcasting station.

Out at the theaters the overture has overtured and the audiences settle back for the evening's feature movie-speakie. Buz-z-z goes the signal at the broadcasting station and in all the theater projection booths. The master projection machine begins throwing the photoplay upon the screen at the broadcasting station and simultaneously, to a fraction of a second, the silversheets at the various theaters are illuminated with the shadow drama.

And at the broadcasting station the movie actors are re-enacting the drama, speaking out their lines, word for word, just as though the many different audiences were seated down in front instead of in many different theaters many miles apart. The actors watch the film being screened by the master projector very closely lest they supply the speakies too swiftly or too slowly for the movies.⁴

Today, we would call this approach to synchronization a *simulcast*. The very existence of the word appears to sanction the practice, while Rothacker's 1922 experiment somehow strikes us as pitifully misguided. We laugh when the Chicago Tribune film critic, describing the sound system for the opening of *Don Juan* four years later, explains that the sound comes from "a miniature broadcasting station perched up in the projecting room".⁵ The problem isn't restricted to Chicago, though. It resides instead in our own tendency to draw barriers

4) "Radio Talking Pictures". *American Cinematographer*. April 1, 1922: 24. Note that the Rothacker experiment is far from an isolated instance. A German medical lecture broadcast by radio and synchronized with a projector is reported by the London Times for February 25, 1927, as well as by *Motion Pictures Today*. March 26, 1927: 6; and *Transactions of the Society of Motion Picture Engineers*. 11, no. 29 (July 1927): 24. Two years later, *Variety* reported (5/29/29: 28) that Pathé's sound newsreel crew resorted to a radio hookup with New York to record the Kentucky Derby during a Churchill Downs downpour (in sync with location cameras!).

5) Ruth Russell, "Voice is Given to Shadows of Silver Screen". *Chicago Tribune*, September 16, 1926.

around the media, to assume that cinema's identity is once and for all determined and no longer subject to history.

Just what did Vitaphone mean when it compiled its first program of film shorts? A look at the history of radio in 1925-26 makes it quite clear how Vitaphone defined "film" at this point. On January 1, 1925, an all-star cast of Victor recording stars, led by tenor John McCormack, gave a live concert over a chain of AT&T-controlled radio stations spearheaded by WEAf (affectionately known as the tollbooth of the air, because AT&T insisted on identifying radio broadcasting as "radiotelephony," in order to circumvent an agreement whereby RCA could monopolize radio while AT&T would have a free hand with telephone). With AT&T contributing the air time, the Victor artists were not paid, thus arousing the ire of the ever-vigilant Equity union. For the first half of 1925, and then again in the beginning of 1926, this arrangement was perpetuated on a weekly basis. While Equity pressure had caused McCormack to withdraw, top talent nevertheless continued to contribute. The quality of the performers, the protestations of the union, and the resultant publicity combined to concentrate public attention on these weekly concerts.

It is thus no surprise that Warners should model their first variety film program on Victor's successful radio program, right down to their signing of John McCormack. Though McCormack eventually did not appear in the opening Vitaphone program, Warners' advance announcement of the new process leaves no doubt about their intention of recreating Victor's radio show: "At a phenomenally small cost," explained Albert Warner, "the unquestionably planned and perfected radio music program will begin a new era for moving picture patrons throughout the country" (New York Times, April 26, 1926). In 1908, Camera-phone recorded vaudeville in order to sell film. In 1926, the system has changed; now it is radio that film must emulate. But not just radio.

1926: Cinema as phonography. Histories of cinema typically treat Hollywood's conversion to sound as the culmination of a long march toward today's technology. Edison dreamed of linking the phonograph and the moving picture. DeForest invented the Audion tube and the sound-on-film recording process. Scientists at Bell Laboratories perfected the sound-on-disk process. Warner Bros. took a chance on the new system and produced *Don Juan* and *The Jazz Singer*. Case and Sponable made the sound-on-film system commercially viable. Fox used their new system for its Movietone newsreels. All the other companies followed suit. In a word, this is the standard story.

It didn't happen quite that way. While during the post-war period DeForest seems to have been driven by a desire to perfect a sound-on-film system, Bell Laboratories had more important fish to fry. With new sound apparatus in every domain (microphones, amplifiers, recording methods, loudspeakers, and much more), Bell made a frontal assault on two important and lucrative fields: public address and phonography. The appearance of the orthophonic victrola in 1925 brought these efforts to a successful conclusion. For the first time bringing to-

gether the benefits of electrical recording, matched impedance, and the folded speaker horn, the orthophonic victrola was rightly hailed as a revolution in the phonograph field. In fact, Bell licensees Victor and Brunswick were so convinced of the revolutionary nature of the new system that they made a point of selling off their entire stock of existing phonographs before marketing the new victrola. Then, in 1926, they began an all-out media blitz in favor of the new phonograph.

When Bell, Western Electric, and Warners got into the sound film business, their actions were almost entirely unrelated to DeForest's sound-on-film experiments. On the contrary, *Don Juan*, the Vitaphone shorts, and *The Jazz Singer* were an outgrowth of the record industry. By and large unaware of the specific background of the Warner Bros. experiment, the critics of the period were nevertheless not fooled by the new medium. With the Vitaphone process, said a New York Times reviewer, "the eye as well as the ear is engaged in the business." That's right: "the eye as well as the ear." For this reviewer, the recorded sound is clearly primary, with the image added on to provide illustration. A Chicago critic was more specific: Vitaphone sounded like "a telephone plus a phonograph plus a radio".⁶

A year later, the headlines were all garnered by *The Jazz Singer*, but the reviews remained the same. "*The Jazz Singer*, primarily, is scarcely a motion picture," says John S. Spargo of the *Exhibitors' Herald*. "It should more properly be labeled an enlarged Vitaphone record of Al Jolson in half a dozen songs".⁷ Bert Ennis was even more straightforward: "when it comes right down to it, what is a talking picture but a phonograph record with plenty of amplification behind it?".⁸ MTV, move over. Music videos were hardly the first to conceive of cinema as illustrated phonography.

1929: Cinema as telephony. As developer and monopolistic exploiter of America's telephone network, AT&T had everything to gain from identifying the Vitaphone system with its familiar telephone technology. Against all logic, a 1929 ad campaign sought to capitalize on Vitaphone's popularity in order to solidify Western Electric's overall reputation. "It pays to go to theatres equipped by the makers of your telephone," the ad proclaims. On the left a series of drawings of microphones establishes continuity between the familiar telephone mouthpiece and the condenser microphone used in Western Electric's film sound system. On the right a similar set of drawings ties the familiar telephone receiver to Western Electric's loud speaker horn. Every version of the ad seeks to transfer satisfaction with AT&T's telephone network to the Vitaphone system,

⁶) Ashton Stevens in the *Herald-Examiner*, quoted in William R. Weaver, "Chicago Tests Vitaphone, Approves Eastern Verdict". *Exhibitors' Herald*. 27.2 (September 25, 1926): 29.

⁷) John S. Spargo, "Jolson's Songs Help *The Jazz Singer* at New York Premiere". *Exhibitors' Herald*. October 15, 1927.

⁸) Bert Ennis, "Sophie Goes Talkie: The Last of the Red-Hot Mamas Falls for the Film". *Moving Picture Classic*. 29.3 (May 1929): 43.

and from there to the rest of the Western Electric realm. "This same organization which brought the telephone to its present excellence," the ad affirms, "will likewise constantly seek to improve Sound Picture apparatus still further" (*Photoplay*, Sept. 1929: 13).

In fact, Western Electric's attempts to position Vitaphone as illustrated telephone are not entirely without logic. Throughout the twenties, Bell Labs labored hard to discover the exact properties of sound that make speech comprehensible. Originally conceived as an aid to AT&T's telephone operations, this research eventually proved instrumental in Western Electric's attempts to master theater acoustics. Stressing intelligibility over realism, Western Electric's sound system brought to film sound precisely the same narrow frequency response and dynamic range that made the telephone a communications triumph — and an aesthetic washout.

The list could go on. The important point is that film is not a unified object, nor cinema a homogeneous medium. Viewed retrospectively, cinema may appear to have a stable technologically defined identity, but considered prospectively, cinema takes on a series of disparate identities, its sound-based affinities with other media often challenging its apparent image-based unity.

Typically founded on a particular understanding of their object of study, approaches to history cannot withstand a radical redefinition of that object. It is thus no surprise that the reconsideration of cinema identity offered here should have far-ranging consequences for the writing of cinema history in general. These will be best understood through comparison to the current dominant mode of cinema history writing. As I see it, this mode of historical explanation is built on three simple principles:

1) The principle of *identity*. Each representational technology is identical to itself. For example, a camera obscura is always a camera obscura; that is, in order to be termed a camera obscura an apparatus must minimally perform certain functions deemed constitutive of the stable notion known as "camera obscura." In the same way, cinema is always fundamentally identical to itself. While historical changes are possible, they in no way undermine the transhistorical definition of cinema's identity.

2) The principle of *functional equivalence*. By performing a similar function, one technology or technique may effectively substitute for another. This principle, as extensively employed by David Bordwell in *The Classical Hollywood Cinema*, emphasizes the ability of one system successfully to carry out functions defined and initially performed by another.⁹

3) The principle of *succession*. Characterized by metaphors of parentage, birth, and inheritance, the historical accounts constructed by practitioners of

⁹) David Bordwell, Janet Staiger, and Kristin Thompson, *The Classical Hollywood Cinema. Film Style and Mode of Production to 1960*. New York: Columbia, University Press 1985, especially pp. 5, 248, 303-304.

the identity and functional equivalence principles are commonly built around a notion of bequest, with each representational technology simply bequeathing its structure and function to a fundamentally similar mode of representation.

However logical these principles may appear, however traditional they may have become in the fields of philosophy, literary criticism, and political science, they fail to provide an appropriate basis for recounting the history of representational technologies. The complexities of historical interaction are better served by the following principles:

1) The principle of *identity redefinition*. According to a constantly varying scale of material, social, and technical needs, apparently identical systems regularly take on new functions and thus new historical roles.¹⁰ In addition, as we have seen in the case of early cinema, the retrospectively defined identity of a particular system often appears fragmented when considered prospectively. With the ascendancy of sound cinema over vaudeville, for example, Camera-phone lost its chance to be defined as a type of vaudeville; instead it has been seen as a (failed) attempt to create sound cinema. But in 1908, no such conclusion could be drawn. Nor, I am suggesting, should it be drawn today. Only by recognizing the tendency of representational technologies to take on multiple identities, constantly redefined, can we understand the complexities of the historical object. For representational technologies are just as subject to the vagaries of reception as are literary and filmic texts; that is, they may be interpreted or defined in more than one way, according to diverse "use formations."¹¹

2) The principle of *functional near-equivalence*. Bordwell rightly recognizes the desire of artistic and technical personnel to provide more efficient or more versatile equivalents of existing techniques and technologies. While providing improvement in one area, however, such efforts invariably cause disturbances in another, precisely because of their non-equivalence in that other area. The combination of a longing for true functional equivalents and the impossibility of creating them is one of the prime movers of history. The problems that enter through the back door of non-equivalence are just as important as the fully equivalent front-door improvements. For example, the adoption of Wollaston's meniscus lens was important for reducing the exposure time of early photographs, yet while increasing available light, the new lens simultaneously introduced chromatic aberrations causing a disparity between the focus of visible yellow light on the ground glass and recordable blue light on the plate.¹² All

10) Jean-Louis Comolli has made a similar point apropos of technical categories such as the "close-up". [J.-L. Comolli, "Technique et idéologie: caméra, perspective, profondeur de champ". *Cahier du cinéma*, 231 (1971), 47 ff.].

11) This term is based on the notion of "reading formations," as defined by Tony Bennett, "Texts, Readers, Reading Formations". *Bulletin of the Midwest MLA*. 16.1, (Spring 1983), 3-17.

12) For contemporary testimony on this problem see S. D. Humphrey / M. Finley, *A System of Photography, Containing an Explicit Detail of the Whole Process of Daguerrotype*. Canandaigua, N.Y.: Ontario Messenger 1849, 6-7; and Antoine Claudet, "Researches on the Theory of the Principal Phaenomena of Photography in the Daguerrotype Process". *London, Edinburgh,*

changes in representational practice conform to this model: equivalence and improvement in one area are accompanied by a zone of non-equivalence in another.

If cinema had a single identity, with a single defining principle, then it might be possible to envisage a linear history involving successive functional equivalents (or progressive developments of, say, the attempt to create a viable sound film system), but cinema's successive conflation with other media has created multiple sets of conflicting desiderata, thus precluding true equivalents. Each attempt at producing an equivalent system stems from a desire to maximize one particular set of values; judged from the standpoint of a conflicting value structure, however, the new system always reveals a lack or excess not present in the old system.

3) The principle of *jurisdictional struggle*. According to the principle of identity redefinition, new representational technologies are subject to multiple definition, with the models provided by competing reality codes. Whereas the principle of succession assumes a stable situation, in which the shape of the future is assured by the political structure of the present, the approach that I am proposing here assumes a constant skirmishing over questions of investiture. Not just "who will be the next sovereign?" but "what body may decide who shall rule?" Not "what decision will be made?" but "according to what principle will the decision be made?" Not the language of hereditary monarchy but that of revolutionary freedom.

Practically speaking, the tendency of representational technologies (especially during their formative years) toward multiple definition has regularly led to quite literal jurisdictional skirmishes. The rise of the nickelodeon, for example, was heavily marked by repeated battles, on the local or state level, over the legal definition that would be attached to moving-picture shows. In the watershed year of 1908-09, for example, films were classified as a circus in Delaware and as an exhibition in Arkansas (until April, 1909, when they were reclassified as theater). *Views and Films Index* says they are "neither a book nor a drama, but [...] a photograph" (3/21/08: 6), while in the *Ben Hur* trial they are characterized by the U.S. Court of Appeals as "stage representations".

It is hardly surprising that Essanay's 1910 contest to name the new medium should conclude with an overt compromise: the *photoplay*. Why not the vaude-song, the pictobook, or the dramatone? Because of copyright decisions, the need for easily reproducible subject matter, evolving standards of narrative as an entertainment vehicle, and many other reasons too complex to evoke here. Whatever the answer given, the problem is clearly defined in terms of a territorial struggle in which existing systems battle for supremacy over a new me-

and Dublin Philosophical Magazine and Journal of Science. (November, 1849), 10-11; both in *The Daguerrotype Process: Three Treatises, 1840-49*. Ed. by Robert A. Sobieszek. New York: Arno 1973. On the general history of lens development, see Rudolf Kingslake's authoritative *A History of the Photographic Lens*. Boston: Academic Press 1989.

dium. The important novelty in the approach I am suggesting here is contained not in this or that particular explanatory sentence, but in an overall argument structure that turns on jurisdictional concerns, on an ongoing struggle to define the representational technology and its products in a particular manner.

Traditional accounts of Hollywood's conversion to sound, for example, foreground the history of attempts to perfect sound cinema, the finances of Warner Bros., or the heroic innovations of the first sound directors. An account more attuned to the problem of jurisdictional struggle would stress instead the multiple identities of film sound in the mid twenties (as radio, record, public address, theater, telephone, etc.), the near-equivalences characteristic of each attempt to translate silent practice into sound, and the constant battles over who should have jurisdiction over jobs and decisions. Who should play the disks in the theater? The projectionist, a musician, an electrician, or a stage-hand? Who should apply the sound insulation to studio sets? Should the needs of sound men or the desires of cinematographers have priority during a take? Somehow it seems appropriate that *Photoplay*, the very magazine that took Essanay's 1910 contest name, should, like the trade paper *Exhibitors' Herald-World*, run its own contest to name the talkies. While *Photoplay* adopted the obvious "phonoplay", *Exhibitors' Herald-World* opted for "audien", a term so unfamiliar today as to suggest that, in 1929, Hollywood was simply not yet fully ready to define its project. The jurisdictional phase of the conversion to sound had not yet come to a close.

Legal jurisdiction, union jurisdiction, aesthetic jurisdiction — these and many more are implied by the notion of jurisdictional struggle, with the complex social investments that each of these implies.

If all we were trying to explain were the image, the identity/functional equivalence/succession model might prove acceptable. As soon as we grant a hearing to the cinema sound track, however, an entirely different decision must be rendered. Film sound's multiplicity of related technologies and connotations, the impossibility of satisfying all interested parties with any proposed functional equivalence, and the constant need to adjudicate among differing sound sources, values, and industries lead directly to a new understanding of the way in which history must be configured, as long as sound is to be part of the figure.¹³

¹³) This approach to history writing will receive fuller definition and appropriate exemplification in another publication: Rick Altman, *Writing Sound History*. Volume one of *Hollywood Sound Systems* (forthcoming).
