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SOUND REWRITES SILENTS

In one of the introductions he wrote for his book *Sound Theory—Sound Practice*, Rick Altman said:

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 century followed a more or less straight-line trajectory. An entirely different figure appears – zigzagging and indirect – when we take sound into account.

Altman published these lines in 1992, but since then not much work has appeared in response to his challenge, except his own essay, "The Silence of the Silents," published in *Musical Quarterly*, which caused such a furor at last April's DOMITOR conference. This does not mean that no work is being done: quite a lot of primary research is underway. What is lacking is a critical and historical re-assessment of the results of this primary research. It is my argument that once the so-called early synchronized sound 'experiments' are taken into full consideration, the history of silent cinema will have to be completely rewritten. This paper traces the influence of early sound practice on contemporary silent film practice and begins to show how early cinema history will have to be reconsidered in light of new research on early sound films. The focus is on the Gaumont *chronophone*, especially the *phonoscènes* produced in France between 1902 and 1906 and those produced in the U.S. between 1908 and 1913.

The classical periodization of film history is one of this first historical givens that needs to be altered. I use Thompson and Bordwell's here, but any one would do, as they all go something like this:

1180s-1904 Invention and early years (also known as Cinema of Attractions)
International Expansion (also known as the transition to narrative cinema)
1913-1919 Early "classic period"
Late Silent era
1926-1945 The Development of Sound

If we add sound to this picture, this is what an early periodization might look like:

1894: Edison invents the kinetoscope and begins work on the kinetophone

1896: Messter synchronizes music to his "Biorama"

1900: Three separate talking film exhibits are shown at the Paris Exposition: the Phono-

Cinema-Theatre, the Theatrescope, and the Phonorama. 1901: Gaumont takes out his first chronophone patent, which owes a debt of inspiration to Edison's kinetoscope coupling and the work of M. Baron. 1902: First Gaumont chronophone demonstration 1903: Messter presented his "Biophon" -- a cinematograph-phonograph coupling that the Gaumont Company considered to be a plagiarization of the Gaumont system – on August 29, 1903, in the Apollo Theatre in Berlin. 1905: Construction of Gaumont Chronophone studio. 1906: Frely, working for Gaumont, invents the first microphone connected to an electromagnetic signal for recording the human voice. This device is not patented in order to preserve the Gaumont company's competitive edge. 1908: Gaumont considers the problems of post-synchronization and amplification to be solved. Construction of a chronophone studio in the U.S. is begun. 1907-1908 are also peak year's for Messter's Tonbilder in Germany. 1910: chronophone films seen by thousands of spectators 1912: Gaumont gives up on English language chronophone production 1913: after one last concerted sales effort, Gaumont pulls out of the U.S. altogether. At about the same time, Messter pulls out of Tonbilder production.

Although this periodization focuses on the *chronophone*, and to a certain extent, on Messter's *biophon*, the pattern was largely similar for post-synchronized sound systems in the U.S., the U.K, Germany and France. By 1914, their day was virtually over.

Like others before me, for some time I was content to tell the story of the chronophone and allow the fact that it didn't have long-term commercial success to blind me to what was really important about the history of post-synchronized sound systems. For starters, there were so many of them: in the U.S. the Cameraphone, the Cort-Kitsee Device, the Synchronophone, and the chronophone. In England there was the Cinematophone, the Vivaphone, and most successful of all the Animatophone, developed in 1910 from Thomassin's Simplex Kinematograph Synchroniser. Mismanagement forced the Animatophone company out of business in 1911. In Germany, Alfred Dusker produced a Cinephon, Karl Geeyr built the Ton-biograph for the company Deutsche Mutoskop und Biograph GmbH, Guido Seeber developed the Seeberophon and later used Messter's synchronophon as a technical model for the German Bioscop The proliferation of devices is matched by placid expectation in the editorials: for example, from around 1906 to the mid-teens, The Moving Picture World discussed widespread synchronized sound film production and distribution as if it were just over the horizon, an inevitable and natural occurrence. In the public's mind it also appeared to be just a matter of time. Everyone seemed to be waiting for the right system to be developed by the right inventor and then commercialized by the right company. Writers for the trade press recognized that implementing the changes necessary for synchronized sound exhibition would require a large capital base. As Alan Williams has noted, "until the Vitaphone, in fact, the history of sound filmmaking is the history of repeated failure, not of technology, but of marketing.

All we remember now is this "failure of marketing." What we need to think about instead is at least twenty years (from the mid-1890s to the mid-teens, and other

post-synchronized sound systems continued well into the 20s, after Gaumont and Messter gave up) of uninterrupted, commercially successful, internationally distributed, post-synchronized sound practice. Early sound films force us to reconsider our accepted story of how the star system came into being, how the transition from histrionic to verisimilar acting styles was effected, and how cinematic language moved from principally using master scenes, deep staging, and tableaux arrangements of actors to the classical Hollywood editing style. When the history of early sound films has been completely written we will also find that our narratives of how studio management developed and our accounts of nationalist cinemas will be substantially altered.

Let's start with the development of the star system. There is Tino Balio's summary of the classical account of how the star system began:

The star system evolved during the heyday of the Trust, although not all members embraced it. MPPC producers certainly understood the commercial value of stars. The industry competed with other forms of entertainment to attract the disposable income of the public, and it was plain to all that the star system operated successfully in vaudeville, legitimate theater, and burlesque. As early as 1909, the Edison Company publicized its acquisition of important theatrical talent from Broadway producers David Belasco, Charles Frohman, and Otis Skinner. Rental catalogues of the company contained lengthy descriptions of their careers. In 1910, Kalem and Vitagraph introduced lobby card displays containing pictures of their stock companies. By then, trade papers regularly featured stories about the "real lives" of movie players, among them Mary Pickford, Ben Turpin, Pearl White, and Florence Turner

And here is Altman's response, which takes the Cameraphone practice into account:

What difference does it make that the Cameraphone saw its product not as sound film but as a new form of vaudeville turn? If Cameraphone has 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 Camerapohone'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 of 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.

What was true for the Cameraphone was also true for the *phonoscènes*, as the films made for the chronophone were called. Alice Guy, who directed over one hundred *phonoscènes*, described the kinds of acts she put on film:

I was charged with the cinematographic part of the repertoire and thus filmed the Mante sisters, very fashionable popular dancers at that time; Rose Caron of the Opera, with her singing class. With Mme. Mathieu-Luce and Marguerite Care of the Opera Comique, Note of the Opera, Mlle. Bourgeois The Café-Concert itself was made to contribute, with Mayol, Dranem, Polin, Fragson and many others.

I have often been forced to admire the courage of the artists and their professional loyalty...Mme. Mathieu-Luce was singing the air from *Mignon* "Connais-tu le pays." She went straight to the end, smiling, but then the camera stopped, she fainted. She had placed her bare foot on a burning ember fallen from an arc lamp, and had endured the burn rather than interrupt the filming.

Not all celebrity artists were as "professionally loyal" as Mathieu-Luce. Guy also engaged the opera singer Caruso, who agreed to make several *phonoscènes* of some of his best- known arias. The date was set and Guy commissioned the well-known and very expensive set decorator Jambon to make ten backdrops. However, at the last minute Caruso changed his mind, saying that "with his name, he could not reasonably be expected to demean himself to this degree."

In the Gaumont catalogue, sound films were grouped by performer and the performer's name was clearly indicated as a selling point. Some artists, like "Charlus", and a couple of other unnamed singers, appear in two or three films. Better known singers such as Polin, Dranem, and Mayol have as many as twelve or thirteen *phonoscènes* listed in a row Interestingly enough, the same practice was used in spectacle films that had no mechanized sound track but which clearly called for a musical or sound effect accompaniment, especially dance films: Gaumont catalogues for such spectacle-without-sound films give the performer's name – when the performer is already well known – as early as 1899. In fact, it was adherence to the star system that made Messter's *Biophon* go under.

The fact that well known vaudeville performers were cast in the *phonoscènes* may have contributed to the evolution in acting styles that becomes noticeable in this period of these films heyday, that is, from 1902 to 1908.

Generally, the actors in the *phonoscènes* maintain theatrical tradition and look out into the distance, not acknowledging the presence of the camera while they are performing, not making eye-contact with the cinematic spectator, although in *Ce que c'est qu'un drapeau* M. Dana is clearly nervous, and glancing toward someone behind the camera who is giving him directions before his number starts. He sings without moving his body and without making any gestures with his hands, but his face registers some of the emotions indicated by the song: he looks up at the "flag" proudly, he smiles during triumphant musical passages. But when he is not actively singing he drops out of character

- his face becomes still and impassive while he waits for the instrumental transition to end and for his turn to sing to come again.

Mayol, in *Questions Indiscrètes*, walks on stage from screen left after the music begins. When he is framed in a medium shot he stops and bows; all of this time he is "out of character," he is a generic performer in a tuxedo. Then he starts to sing, and he is transformed. The song is a flirtatious conversation between a man and a woman. The generic costume allows Mayol to "be" each of the characters in turn; although he doesn't move around on the stage, he has a lot of body movements to indicate which character he is playing at a given moment. His gestures are a combination of theatrical pantomime (to go with the dialogue) and caricatured behavioural gestures, like putting his hands on his hips, elbows out, and swaying saucily from side to side when he is playing the coquettish girl. Once he begins to sing he remains in character for the entirety of the song, until he has sung all of the lyrics. Although the music is still playing, he then drops out of character and reverts to his persona of performer, gives us a goodbye smile, and backs off the stage in a half bow, so that he has made his exit by the time the instrumental music has finished playing.

The combination of pantomime gestures and caricatural gestures are the most striking element of this performance. In the extant *phonoscènes* of Dranem there is an even richer combination of personas in each performance. Dranem was a very energetic performer, moving around on the entire stage, combining whole body language with pantomime and caricature. Although in he wore the same "bum" or "clown" costume in each of his films, he had a different prop (a bucket, a poncho, a vegetable) in each one. He enters the stage already in character. One persona is that of the "narrator" who sings a few lines of the song that explains the situation. He then plays one or more characters; in one song he depicts simulates two people walking, by depicting each character with a different set of caricatured gestures. When the characters speak he accompanies their speeches with pantomime gestures that elaborate on the words. When there is an instrumental he reverts to the "narrator" persona, with a smile or frown that passes judgement on the behaviour of the "characters." When the song ends he exits the frame, either in his "narrator" persona or as one of the characters, and then re-enters the frame after the music is over, now out of character, and bows.

Chronophone production had moved to real locations, as the next extant film attests, *Anna qu'est-ce que tu attends* (known in England as *Let's All Go Down to the Strand*). The film starts with the singer, Fragson, already in character and with the business of the film (packing for a picnic) underway. The scene is shot at a location, front of his country cottage, and then for the second tableaux, at a sylvan riverside setting. He gathers his children and sings "Anna, what's keeping you?" to his wife, who is so detail conscious that it is almost impossible for her to leave. In the second tableau he continues his song as the children and wife continue with farcical (and silent) business.

This performance is more like that of the later Hollywood musical numbers. Fragson is in character as impatient husband, but also as narrator for the benefit of a spectator (though he doesn't make eye contact with the camera, except for one moment that appears to be in error). Unlike the films with Mayol and Polin, the fourth wall remains intact. Whether the fourth wall is maintained or not is one indication as to whether a film's performance style can be categorized as histrionic or verisimilar. As we see in the film by Dana, for a long time many films combined both styles. However, it would appear from

these sound films that Alice Guy, as director, at least, became conscious of the difference in 1905-1906 and developed a preference for verisimilar acting, although she couldn't always get the performance she wanted out of her actors. At her Solax studio she even had a large banner that said "Be Natural" hanging on the back of the studio wall.

And, recalling Altman's notion of a zigzagging history, we can now start to look at cross-influences between post-synchronized sound films and the silent films that were shot at the same time, sometimes by the same directors.

The change in performance styles may have contributed to a change in staging; specifically, it may have led directors to be aware of the value of the close-up. For example, *phonoscènes* staging practices may have led Guy to make what is possibly the first dramatic use of a close-up in her 1906 silent film *Madame a des envies*.

Celebrity performers in the *phonoscènes* were hired by the day, for one day or in rare cases, a few days. They arrived with their material, their music, their costumes and their "acts" set and mastered; what Messter and Guy did, for the most part, was to restage the cabaret or opera number on film, without substantially altering it.

The Gaumont catalogue features a production still from each *phonoscène*. Nevertheless, both extant films and catalogue as a whole indicate that when a series of *phonoscènes* were made of one artist, at least one of them would be framed in a medium shot (waist up) or bust shot (chest up).. In Mayol's case neither his backdrop nor his costume change, suggesting that the collection of songs was recorded in the fastest possible time. Polin wears the same costume, but sometimes the backdrop changes. In *phonoscène* number 139 *Chez les lutteurs*, he is shot in a medium shot (from the waist up). Dranem has three *phonoscènes* shot from a tighter angle: number 163, *Etre légume*, (from the knees up), number 158, *Le trou de mon quai*, (from the hip up), and number 164, *Le cucurbitacée* (bust shot). All the catalogue stills of Mayol show him in long shot, but the extant print of *Questions Indiscrètes* shows that he walks into a medium shot. In at least one film, the actor is vignetted by the camera shutter to produce a medium-close-up effect. It seems that the need to frame certain *phonoscènes* in a closer shot led Guy to consider the use of close-ups in her silent films, especially in *Madame a des envies* (Gaumont 1906).

Envies may represent the first time narrative had been structured around close-ups in films. These close-ups are an extension of "comic gag" films, single shot films where an actor is shown in medium or close shot, and the fun of the film consists of the grimaces of the actor. These were comic version of the melodramatic convict films, the cinematic equivalent to mug shots, in which convicts would grimace in order to make themselves less recognizable. The Pathé films starring Dranem, *Ma Tante* made in 1900 and *Man Eating Pomogranates* made in 1903, are both examples of this kind of comic film. Guy herself made at least one film of this type, *Horribles Grimaces* in 1898.

So far we've looked at the influence of post-synchronized sound films, spectacle films, on silent narrative films. But the influence also worked the other way.

The earliest chronophone films may have adhered to a cinema of attractions aesthetic, but gradually, as we see with *Anna qu'est-ce que tu attends*, they went out on location and cut from location to location to show passage of time. The effect of narrative films is felt even more in *phonoscènes* that feature dialogue instead of songs. Unfortunately, none of these still exist, but a script in the Bibliothèque Nationale shows us that the ability of the camera to change things was being used by 1908 in promotional

films for the *chronophone* itself. The script is a silly poem in rhyme apparently meant to be presented by a single character; after a great many extravagant claims have been made for the device, the script indicates that the character undergoes "a complete change of voice and physiognomy," indicating that the camera was stopped and one actor was substituted for another. The script then wraps up with a wistful goodbye and an apology for any failings of the system

There is another script, from a film made later, in the Bibliothèque Nationale, entitled *Le Voyage Sentimental* (Gaumont 1909), that shows a husband and wife on the phone with each other, the husband in telephone booth, the wife in an elegant bedroom setting. This suggests that either split staging or a split screen was used. The idea of asynchronocity evident in the *phonoscènes* had an effect on silent films, such as in *Canned Harmony* (Solax, 1913) where the man pretends to play a violin but really the phonograph plays for him.

Early sound films not only influenced how silent films were made, but also changed the system that produced them.

Guy's film output, especially the silent films she directed for Gaumont from 1896 to 1907, the *phonoscènes* she directed from 1902 to 1906, and the first silent films she produced and directed for her own film company, Solax, using the Gaumont *phonoscène* studio facilities in Flushing, New York, poses a unique and particular challenge to the film historian. The period from 1896 to 1912 represent a little more than half of her film career, but it spans several key film periods. Tom Gunning, Janet Staiger and Charles Musser have all attempted to break down these periods into particular phases determined by the mode of distribution and the changing role of the filmmaker. Since Guy's career is the only one that spans all of the periods described, it is of interest to apply their theories to her modes of production and see if they fit.

Guy described the process she went through for making the films and the kinds of acts she put on film:

It was not the talking picture as you know it. The voice of the artist (singer, speaker), (sic) the music for the dance were recorded in the studio. The actors then rehearsed their roles until they had obtained a perfect synchronization with the phonographic recording. Then the cinematographic record was taken. The two instruments (photo and phono) were united by an electric contrivance which assured their synchronization.

In the documentary film clip that we have of Alice Guy directing a *phonoscène*, we see this process at work: Guy starts up the phonograph (with a double horn) and watches the dance troupe (for a scene from *Mignon*) go through its steps. Next to her, a still photographer is taking pictures and the motion picture cameraman is waiting for the rehearsals to be complete so he can film the performance.

According to Guy, she never had anything to do with the sound part of the *phonoscène* recordings: she received the already-recorded wax cylinders and rehearsed the actors until they could perform a movement that matched the recording. She shot the first ones on the concrete terrace behind the labs at Belleville, where she had shot the first version of *La Fée aux choux*. She didn't have to work on the concrete terrace for long. Soon after, Gaumont built his glass-house film studio in Belleville; he also built two studios for the filming of *phonoscènes*.

Musser, in his article on changing mode of film production, argues that Staiger's model, with five successive systems of production, needs to be reconsidered. Musser focuses principally on the middle three stages of Staiger's five-stage model: the director system, dominant from 1907 to 1909; the director-unit system, which developed as manufacturers increased output after 1909; and the "central producer" system, which became dominant around 1914. Musser's research of American filmmakers (specifically Porter at the Edison Co.) indicates that:

.... American production gradually underwent only one fundamental transformation during this period. Occurring primarily in the area of fiction filmmaking, it involved a shift from a mode of production dominated by collaboration to the central producer system outlined by Staiger. This shift proceeded awkwardly and unevenly.... Although the collaborative system of production has continued to operate in many filmmaking systems to this day, a sharp break is evident within the emerging Hollywood industry between 1907 and 1909. This transformation thus parallels the shift in representation and narrative form that I have discussed elsewhere.

Musser's model of a transition from cameraman-unit system, to collaborative director-cameraman system, to central producer system seems more applicable to Gaumont's modes of production. The cameraman system as Staiger described it applies to the "newscameramen" who shot *actualités* and occasionally shot *scènes comiques* that might have been improvised on the spot. When Guy started working, she began by making fiction films, in a studio environment (even if her studio was an outdoor terrace) with a cameraman, Anatole Thiberville, with whom she collaborated for almost a decade. It is hard to say how "collaborative," in Musser's sense of the term, this relationship was. Guy wrote the scenarios, hired set designers, shopped for or made costumes, and found the actors for her earliest films. By 1905-1906, Guy's last years as head of film production at Gaumont, the transition to "director-unit system" as Staiger defines it had taken place.

My hypothesis is that the *phonoscènes* had a more hierarchical organization than the silent film production Guy carried out before and during her synchronized sound film production. This was due to the complex and delicate nature of the equipment and the multiplicity of tasks to be carried out. This supports Musser's thesis (based on work by Alfred Chandler Jr. and Janet Staiger) that the film industry ". . . moved from the traditional craft model of the cameraman system to the complex multiunit production of the central producer system, involving greater division of labor and hierarchy," except that Musser does not see this as having occurred in the U.S. until after 1908, and I see it well in place at Gaumont by 1905 at the latest. What's interesting about Gaumont is that Guy, while making silent films, was given almost free creative rein and worked on a more or less collaborative basis, while simultaneously directing *phonoscènes* in a rigid labor divided, hierarchical environment.

But since the *chronophone* apparatus and the *phonoscènes* to be projected in it were sold together as a package, in terms of distribution Gaumont's sound production falls more into Gunning's "self contained producers" category, even though chronologically it came later. This is an example of how difficult it is to apply existing theories of studio management to early sound films. A rewrite of early film history to include early sound films will also lead us to a reconsideration of distribution patterns. As an example, we can consider the story of the Gaumont chronophone in Germany and in the U.S.

At first Gaumont attempted to market the chronophone outright in Germany, although his *phonoscènes* were in French (a handful of *phonoscènes* in German were filmed in Berlin). To promote the *chronophone* in Berlin meant competing with Oskar Messter, the German equivalent of Gaumont himself in Germany.

Both Messter and Gaumont had patents on their inventions. Messter's sound productions sold well as long as he maintained his technical advantage over other filmmakers in Germany. He owned his own chain of theaters in Berlin and in other West German cities. By 1913 he had sold 500 Biophon projectors to other exhibitors. Martin Loiperdinger credits the sound film with a very important role in establishing stable theaters in Germany, a trend that started in 1905 as sound films were shown as part of a program of vaudeville acts.

Because it was difficult to market French *phonoscènes* in Germany and German ones in France, Messter and Gaumont came to a gentlemen's agreement: Gaumont did not ship his *phonoscènes* to Germany, and Messter stayed out of France. The machines were sold by both manufacturers and also offered together under one combined brand called the Gaumont Messter Chronophon-Biophon.

Such a civilized arrangement worked for Gaumont with Messter in Germany, but he had much less luck in the United States.

Gaumont's entry into the United States was his chronophone. He had demonstrated his system at the London Hippodrome in 1907, where it caught the attention of members of the Motion Pictures Patent Company, who licensed it for distribution in the United States. Gaumont's initial venture in the United States was to send one of his managers, Herbert Blaché, to Cleveland to try to establish a chronophone franchise with backing from some American investors. Since Guy and Blaché had just married, Guy retired from her position of eleven years at Gaumont and accompanied her husband to the United States in February or March of 1907. Blaché was not actually getting a salary. The couple lived off her dowry and his savings, and when these ran out after nine months. At about the same time the investors went bankrupt, so Blaché and Guy went to Flushing, New York, and Blaché asked Gaumont for work at the newly constructed Flushing studio. Gaumont had spent at least \$20,000 converting it into a studio for chronophone film production. In October, the chronophone was exhibited to the public. .

Although the Motion Pictures Patents Company had originally expressed interest in the *chronophone*, Edison's chief counsel, Frank L. Dyer, was opposed to it, as is reflected in a letter Edison sent to Dyer on February 24, 1909:

I had the pleasure yesterday of seeing a very good performance by

means of the Chronophone, although one or two false starts were made before it could be made to work. Afterwards Messrs. Gaumont and Blaché talked for a long time going over all of the old reasons why they should be licensed so far as the Chronophone was concerned. Blaché practically admitted that whether or not Gaumont will abide by his contracts with Kleine depends on the vote of the Manufacturers on the Chronophone tomorrow. Mr. Kleine is to be here, and Gaumont gave me to understand, would bring the matter up.

So far as I could see, there is little to fear in the way of competition from this Chronophone, and possibly some advantage in the fact that the Licensed Manufacturers have such a device to offer to exhibitors. I was under the impression that you really did not care whether or not the Chronophone is licensed, but Mr. Berst informed me over the 'phone today that you were unalterably opposed to it. Will you please let me know by wire tomorrow how you wish to have your opinion expressed and your vote cast in the matter?

In tandem with his Chronophone license, Gaumont entered into a contract with George Kleine to distribute Gaumont silent films in the United States. Gaumont also entered into a separate agreement with the Edison Manufacturing Company to strike prints from Edison negatives for sale abroad, and the Edison company provided Gaumont with the same service in the United States. Correspondence between the two companies indicates that Gaumont continued to lobby for direct membership in the Motion Picture Patents Company without success.

By November the company announced in *The New York Dramatic Mirror* that they had over 139 chronophone subjects in English, mostly popular songs by various vaudeville singers with titles like "Cuddle Up a Little Closer," and "I'm Afraid to Come Home in the Dark."

Guy gave birth to her first child, Simone, in 1908, and to her son Reginald in 1912. She mentions assisting her husband with marketing the chronophone in Cleveland, but there is no mention of her directing *phonoscènes* at the Gaumont Flushing Studio.

Lois Weber, an actress and gospel singer, was hired to sing American Gaumont chronophones (in 1907 or 1908). Guy variously credited her husband and herself with giving Weber her start. From performing, Weber and her husband, Phillip Smalley, went on to scripting and directing a *phonoscène* in English, which became the beginning of Weber's long film career. Although it is most likely that Guy herself had nothing to do with hiring Weber, it stands to reason that the precedent Guy had set with her husband and the Gaumont company probably made it easier for these men to give Weber her chance.

Though the Motion Picture Patents Company as a group had licensed the Gaumont Chronophone, opposition to it at the Edison company continued to grow. As early as May of 1908 one of his exhibitors in Los Angeles sent Edison a telegram saying "Can't you prevent Gaumont pictures running here under talking picture?" and an answer handwritten on the margin says "probably yes."

In addition to Edison's opposition, the *Chronophone* had its own problems. The system was expensive to install, lacked the necessary amplification and rarely remained

synchronized for long periods of time. By 1912, Gaumont's tenuous distribution arrangements with the Motion Picture Patents Company had fallen completely apart. Gaumont never succeeded in joining the MPPC, and in early 1912 he and George Kleine had a falling out and Gaumont joined the ranks of the independents, who did not receive him graciously. In a later correspondance with Herbert Blachè, Gaumont refers repeatedly to the money he invested in the Flushing Studio and then lost because the MPPC blocked him from exploiting the *Chronophone*. In any case, he felt that further investment in the United States would be throwing good money after bad.

Gaumont might have abandoned *Chronophone* production in the United States, but he continued to refine the system in France. On February 17, 1911 Gaumont presented nine *phonoscènes* in Paris. These films made a very favorable impression on Gaumont's fellow inventors and scientists, who made up the membership of the *Société de la photographie*. (The lecture by Mr. D'Arsonval was also presented to the *Académie des Sciences* on December 27, 1910.)

Bouyed by this success, Gaumont returned to New York with a "new and improved" Chronophone in 1913. The program, a combination of chronochromes (the Gaumont color process, a predecessor to Technicolor) and *phonoscènes*, was shown at the 39th Street Theatre in June of 1913 and advertised as "First time in America." But the exhibitors had long memories, and now the field was populated with talking picture systems, including the Cameraphone and Edison's new and improved Kinetophone.

According to Harald, by 1914 the "sound-image" boom was over. Harald is careful to say the boom ended for "technical and artistic reasons" and not because of the outbreak of World War I. By 1914, 1500 negatives, from 60 to 85 metres in length and 500 *biophones* had been sold in Germany; Gaumont recorded 1000 films for the Gaumont-Messter system, totalling 60,000 meters. According to Harald, as many sound-films were produced in England as in France. His estimate of sound-films produced world-wide is 3500-4500, totalling 250,000 or 300,000 meters.

Gaumont was slow to lose his faith in his *chronophone* system. He promoted it tirelessly for over twenty years, from the first presentation in 1902 to June 15, 1922, when he gave a public demonstration of the improvements in the Gaumont Theater. The press responded to this latter demonstration enthusiastically. However, in 1925 the Gaumont company formed a partnership with the Danish Electrical Fono Films company that represented Peterson and Poulsen to exploit a double band system called "Gaumont, Peterson & Poulsen." Their research resulted in the projection of the first synchronized feature film in France, Marcel Vandal's *L'Eau du Nil* ("The Waters of the Nile") on October 13, 1928. However, the double band system was not commercially feasible and was abandoned in favor of optical sound, in which Gaumont invested heavily from 1929 on. Léon Gaumont himself retired in August of 1929. It seems fitting that he should have retired when the silent era was clearly over and the synchronized sound system he had championed for twenty years was finally retired from the ring.