

Framing the Mechanical Voice: Generic Conventions of Early Phonograph Recording

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Introduction

The invention of the phonograph enabled people to record and reproduce sound for the first time—any kind of sound, whether human speech, the voice of a cornet, or the barking of a dog. Out of this vast range of potential subjects, what did people actually consider suitable for recording, and how might they have conceptualized and interpreted the products of this new technology?

Despite much research into the public reception, technology, and marketing of the phonograph, little study has been devoted to the content and conventions of the earliest sound recordings, also known as *phonograms*. However, in an attempt to broaden the scope of phonographics¹ beyond commercial music, David Morton (2000) has introduced the concept of a “culture of recording,” broadly defined as a complex of practices surrounding sound recording technology and admitting such examples as dictaphones and answering machines. While this “culture” does involve music, it has also encompassed various distinctive uses of the spoken word and rules governing ways of speaking, data to which sociolinguistics has taught us to pay close attention (Hymes 1974).

Together with the telephone, the phonograph specifically inaugurated what Walter Ong has termed a “secondary orality” of sound media (1977:298, 1988 [1982]:136-8). Although Ong does address historical trends within chirographic and typographic cultures, his treatment of secondary orality itself is synchronic, drawing exclusively on whatever current technologies have captured his attention.² Here, I adopt a diachronic approach, tracing some textual

characteristics of secondary orality—or, more broadly, aurality—in its nascent stages. I approach the sound recording as a particular kind of communicative event with formal characteristics of its own, characteristics that suggest how people bring prior interpretive norms to bear on new forms and technologies of communication.

Scholars often note that Thomas Edison first envisioned the talking machine as a practical gadget for capturing the everyday speech of businessmen. Instead, it was destined to flourish as an entertainment device, used for the reproduction of pre-recorded music. This transition has been conceptualized as a “diversion of purpose” in which an invention earmarked for the business world was ultimately relocated to the domestic sphere (Gitelman 1999). More fundamental, however, was a shift in thinking that attributed to the phonogram not just referential content but also a potential esthetic value. In the case of speech, for example, not only were a person’s words recorded, as in writing, but also the way in which the words were spoken. Consequently, phonograms were able to serve as surrogates for many aural-mode performance genres, including ones that could be categorized as music and verbal art. But the translation of these genres into the new medium was not a simple or transparent affair.³

In the past, all sounds had been connected directly to the objects and circumstances that originated them, but the introduction of the telephone and phonograph changed that. R. Murray Schafer coined the term *schizophonia* to refer to “the split between an original sound and its electroacoustical transmission or reproduction” (1977:90). *Schizophonia*, a word consciously modeled after *schizophrenia*, implies a sort of aural disorientation; as Schafer explains, “I employ this ‘nervous’ word to dramatize the aberrational effect of this twentieth-century [sic] development” (1977:273). On the other hand, Evan Eisenberg has used the term *phonography*, which once referred to phonetic spelling or shorthand, to name “a new art, the art of recorded music” (1987:105), or alternatively to refer to the product of that art, pure phonography being a “pure studio product,” an aural composite with no natural point of origin (1987:110). The two terms describe roughly the same phenomenon—the artificial manipulation of sound—while passing very different value judgments on it: Schafer’s “aberration” is the basis for Eisenberg’s “art.” *Schizophonia*

insists that sound recordings should be inherently disorienting; an art of phonography, on the other hand, implies the existence of techniques for overcoming that disorientation to render radically decontextualized sounds intelligible.

At its most basic level, phonography would require guiding an audience in how it should interpret the experience of hearing. Erving Goffman (1974) has suggested that various conventionalized frames of reference govern how people interpret different situations, and that recognized cues can be used to signal when a particular frame should be applied or dropped. Because phonograph recordings were among the first experiments at translating live performances of any kind into mass-mediated ones, their producers had to pioneer new conventions for framing discourse, using sound to compensate for the lack of visual or contextual cues. Furthermore, the phonograph was able to manipulate and combine sounds in unprecedented ways that resulted in not just the adaptation of existing genres, but also the rapid emergence of new ones. Given the further obstacle of schizophrenia these new forms had to overcome, we might expect to find overt framing techniques even more indispensable in phonography than in other forms of expression not inherently subject to such disorientation.

Because not all esthetically valued recordings fit under the rubric of “music,” it is more accurate to conceptualize them broadly as “sound programs,” each consisting of an intentional and finite sequence of sounds produced and perceived in a fixed order. And the phonograph was not the first mechanical device used to produce “sound programs” as I am defining them here; earlier non-phonographic attempts to produce similar content—for example, self-playing music or mechanical speech—themselves reflected older narratives and cultural concepts, precedents that undoubtedly informed early orientations toward recorded sound. Accordingly, I begin with a “prehistory” of phonograph recordings.

Automatic Music

Of the various possible types of sound program, music had been the most successfully automated by pre-phonographic technology. It has been argued that the phonograph caused music to “become a thing,”

a commodity conducive to bourgeois acquisition in a way that printed musical scores, requiring skilled performance, had never offered (Eisenberg 1987:16-17). Long before the introduction of the phonograph, however, equally reified music had been provided to the wealthy by music boxes, barrel organs, and other devices referred to collectively as *automatophones*. In the last quarter of the nineteenth century, some of these automatophones even became standardized enough for machines and music to be sold separately, the basic precondition for a commercial music industry. For example, the Ariston Organette, a cheap self-playing reed organ first introduced in Germany in 1876, accepted interchangeable perforated cardboard discs. By 1890, when the commercial sound recording industry was in its infancy, the Ariston company was already able to boast:

Well over 200,000 of these instruments and millions of records are already distributed throughout the globe, and therein lies the fascination that every nation rediscovers its national melodies on the Ariston. The Ariston record catalog now includes nearly 4000 musical compositions. No nation of the world is disregarded—even Zulu-Kaffir music is obtainable! (Bowers 1972:741)

What were the formal features of these pre-phonographic musical “records”?⁴ In the case of the Symphonion music box introduced in 1886 that played interchangeable metal discs, each disc contained a program of one tune, arranged to fit the space of a single revolution. Some discs were “continuous,” programmed to repeat seamlessly like a modern-day tape loop, and these were marketed as “ideal for dancing.” Alternatively, as one music-box researcher observes, “If the tune was too short, embellishments or perhaps an extra chorus would be added at the end. If the tune theme was very short . . . it would be played twice. If a tune was too long it would be abbreviated where the music box arranger saw fit; at a point that often disagreed with the composer’s original intentions!” (Bowers 1972:101). Earlier automatophones, such as cylinder music boxes that could play sequences of a dozen or more songs, had also required musical selections to be adapted for length and instrumentation in ways too technically complex to describe here. This sort of adaptation has often

been associated with early sound recordings, particularly when it has involved condensing longer traditional musical forms into the shorter time available for a record or substituting instruments that recorded well for ones that recorded poorly. Rather than being a unique characteristic of the sound recording, such adaptation has been required for nearly any sort of automated music.⁵

The early automatophones did not, of course, fix and reproduce the sounds of musical performance as the phonograph did; they were strictly non-schizophonic, in that they really originated the sounds associated with them.⁶ Although the problem of automating music had already been “solved” in a different way, i.e., by self-playing instruments, the idea that musical sounds might be fixed in some manner was nevertheless anticipated before the phonograph. For instance, the adventures of Baron Munchausen include an episode in which music played on a postilion’s horn in unusually cold weather “freezes” inside the instrument and later thaws out, producing an enjoyable concert of several tunes (Raspe 1948 [1786]:23-4).

The Oracular Head

Mechanical speech was attempted less frequently and less successfully than mechanical music in the pre-phonographic era. However, the idea of artificial speech had been around for centuries, and there was a rich medieval and early modern tradition attributing particular characteristics to it. The creation of objects that could *talk* had long been presumed to be inseparable from the creation of objects that could *answer questions*, and that might therefore be used to divine secret or future knowledge. Out of the many legends incorporating the motif of the necromantic talking head, two examples should suffice to convey their general contours.

According to the chronicler William of Malmesbury, Gerbert of Aquitaine cast a metal head “by a certain inspection of the stars when the planets were about to begin their courses” which gave true yes-or-no answers to any questions asked of it (Thoms 1858:184). An Elizabethan prose romance states that Friar Roger Bacon aspired “to make a head of brasse, and if he could make this head to speake (and heare it when it speakes) then might hee be able to wall all England

about with brasse,”⁷ a project for which collusion with the Devil proved necessary (Thoms 1858:205).

Later there were attempts to rehabilitate the brazen head of Roger Bacon as a purely mechanical contrivance, rather than a supernatural one. By the mid-eighteenth century, Bacon was credited with “producing articulate sounds out of a *Brazen head*: and this not by any *Magical* power, but by one much superior, that of Philosophy and Nature, which can do such things, to use his own expressions, as the ignorant think *Miracles*” (Freind 1973 [1750]:238-9). A publication by Edison’s National Phonograph Company goes so far as to identify Bacon’s brazen head as the first fully authenticated talking automaton (*Phonograph* 1971 [1900]:12-13). There is no good evidence for this assertion. On the other hand, there are numerous early modern accounts of alleged talking heads that were in fact hoaxes. Chapter 62 of Miguel de Cervantes’ *Don Quixote* describes one such “enchanted head” (*cabeça encantada*) that returns enigmatic answers to questions asked of it by guests. It turns out that the host’s nephew is doing the talking from downstairs through a metal speaking tube (Cervantes 1975:546-556).

Regardless of their necromantic, technological, or illusionary bases, these stories show that artificial talking devices—invariably modeled after human heads—were expected not to deliver a programmed speech but to communicate occult information, usually in response to questions. Thus, the oracular talking head provided a conceptual model for artificial speech that existed in advance of technology to make it possible. Even if no artificial head ever really spoke of its own accord, an interpretive frame developed in accordance with popular beliefs about such speech, and this frame was invoked in at least the case of frauds after the model of the enchanted head in *Don Quixote*.

At the time of the phonograph’s invention, this “oracular” model was most commonly being invoked by the “trumpet séance” of spiritualism. The spirit trumpet was first associated with Jonathan Koons of Ohio, who used it in the 1850s to enable what are referred to in parapsychology as “direct voice” phenomena. Spirits of the dead were believed to speak and sing from the horn in a darkened room and to hold conversations with Koons’ visitors (Shepard 1991:911-12). According to one exposé of techniques used by later fraudulent mediums, an effect of this sort was often produced by attaching the

trumpet to a concealed rubber tube with a mouthpiece on the other end into which the medium could talk unobserved (Abbott 1916:289). This technique obviously resembles very closely the one described by Cervantes.

On rare occasions, the oracular model was even associated directly with the phonograph. One delegate to the first national phonograph convention reported that some potential customers had “felt quite disappointed upon discovering that the instrument would not answer their questions. ‘Why,’ they said, ‘we thought you could talk to it, and it would answer your questions’” (*Proceedings* 1974 [1891]:33). Newspapers had followed up the first reports of Edison’s invention by announcing such fantastic talking machines as the *orthophone*, which exposed lies spoken by the person holding it (*St. Louis Evening Post* 1878b), and the *prosemainograph*, which accurately predicted events up to thirty hours into the future (Emerson 1991:46). Such hoaxes show the extent to which traditional beliefs about disembodied speech suggested themselves as models for comprehending the new technology.⁸

Talking Machines

The first device known really to have produced articulate speech by mechanism was a talking machine (*Sprachmaschine*) designed in imitation of the human vocal organs by the Hungarian nobleman Wolfgang von Kempelen (1734-1804). Although he published a book describing the machine and its workings (Kempelen 1970 [1791]), he never perfected it to his satisfaction and exhibited it only informally, never to large audiences as he did with some of his other novelties. These included the “invisible woman,” a hanging globe with trumpets that emitted a female voice using the concealed speaking-tube principle, and a famous “automaton chess-player” in which a mechanized figure dressed as a Turk⁹ appeared to play chess against audience volunteers and usually won. Visually, the talking machine consisted of a curtained box attached to a bellows that provided air in the place of lungs. “The form of the speaking organ surprised me,” wrote one observer on seeing the machine for the first time; “I had certainly expected to see a humanoid figure”¹⁰ (*Teutsche Merkur* 1784:178). The machine’s boxlike appearance was supposedly only

temporary. Kempelen had plans, never realized, to equip it with the figure of a five or six-year-old child to match the childlike quality of its voice (Windisch 1783:50). In the meantime, he encouraged an anthropomorphic perception of the machine by his method of exhibition, if the program described by the aforementioned observer is representative:

Hereupon he put his right hand through the large hole into the box, depressed the bellows with his arm and elbow, and pronounced in the box with fully the voice of a three to four-year-old child, very clearly and perfectly well articulated: *Oh Maman, Maman, on m'a fait mal!* [*Oh mama, mama, I got hurt!*] At that he himself answered in the character of the mother, and so continued this little dialogue a short while between himself and his hand.¹¹ (*Teutsche Merkur* 1784:180)

This performance contextualized Kempelen's artificially produced utterances within a theatrically framed dialogue, but it also created the illusion of actual sentience on the part of the machine. "It already answers some questions fairly clearly, and intelligibly," reported another spectator: "If one does not understand something properly, or pretends not to understand, then it repeats what was said slowly; but if one requires this yet again, then it says it with an angry and irritated voice"¹² (Windisch 1783:47). This latter account provoked one skeptic into open derision: "So the machine can also *hear* and *understand* what one says! . . . So it also has emotions!"¹³ (*Allgemeine deutsche Bibliothek* 1784:278).

But Kempelen did reveal and explain the workings of his speaking machine, so the conversation between himself as "mother" and the machine as "daughter" was an open illusion, evidently heightened by alterations in technique to produce slower or "angry" speech for dramatic effect. The success with which these qualities of speech were mimicked was the point, not the referential content of the speech as had been the case with the oracular heads: the machine said only what Kempelen directed it to say. Although Kempelen never put his talking machine to any practical use, its principle was apparently adopted by the mechanic Johann Mälzel in the 1830s to make the chess-playing automaton pronounce the word *echec* or *check*, using "a cord in communication with bellows" to produce a "thin, small voice . . .

feebly enunciated” (*Illustrated London News* 1845; see also Poe 1984 [1836]:1261). This may even have been the talking machine’s original intended purpose, since Kempelen claims to have begun work on both projects about the same time (1970 [1791]:389-90), although during his lifetime he had made the Turk indicate a check by rapping on a box with its mechanized hand. If true, this would mean the machine was conceived to produce situated utterances from the beginning, rather than merely speech synthesis for its own sake.

An improved talking machine, based on similar principles but worked by a more convenient keyboard, was built by Joseph Faber of Vienna and exhibited publicly beginning in 1840, its “mouth” concealed behind the mask of a turbaned Turk in tacit tribute to Kempelen’s chess-player. Faber’s apparatus was commonly referred to as the “speaking automaton,” but it was not technically an automaton because, like Kempelen’s talking machine, it required a human operator and did not run automatically. Rather, it must have been grouped with the literal automata simply because, like the automaton chess-player or James de Vaucanson’s famous artificial duck that ate and digested food, it performed a mechanical simulation of an activity ordinarily thought to require a living being.

When Faber displayed his talking machine in London in 1846, the spectacle was framed as a serious scientific presentation: “as the exhibition is one illustrating mechanical science, and not the rareeshow of a mountebank, Mr. Faber has done wisely in avoiding the quackery generally displayed to attract admiration” (*London Times* 1846). Judging from accounts of these shows, Faber had improved the ability of the machine not only to pronounce vowels and consonants, but also to mimic vocal qualities and nonverbal articulations and to vary the musical pitch of its voice. “[I]t is equally capable of speaking French, English, Latin, Greek; and even whispering, laughing, and *singing*: all this depending upon the agility of the director in manipulating the keys,” reported the *Illustrated London News* (1846). The inventor invariably had his automaton laugh, shout “hurrah,” and sing “God Save the Queen” during his London exhibitions, and he also invited the audience to suggest challenging words for demonstration purposes. While the machine’s speech was fairly intelligible—especially if the audience was told in advance what it

was going to say—there was no mistaking it for a natural human voice. One observer wrote that the automaton

produced words which, slowly and deliberately in a hoarse sepulchral voice came from the mouth of the figure, as if from the depths of a tomb. It wanted little imagination to make the very few visitors believe that the figure contained an imprisoned human—or half human—being, bound to speak slowly when tormented from an unseen power outside. No one thought for a minute that they were being fooled. (Lindsay 1997b:61)

This account emphasized the numinous aspect of the mechanical monotone, but others gave a more playful interpretation to the unusual qualities of synthetic speech. One article connected the machine's imperfect pronunciation with its native German accent, which rendered the name of the Queen as a barely recognizable "Figdoria" (*Punch* 1846b). Another article attributed the secret of the automaton's success as "the most popular singer of the day" to its use of Stolberg's Voice Lozenges and fretted over the possibility that it might catch cold because of broken windows in the exhibition hall (*Punch* 1846a). Faber clearly sought to encourage such whimsical anthropomorphization with his programs of hurraing, singing, and laughing. At the same time, the machine's imperfect pronunciation and the strangeness of its monotonous timbre kept its artificiality transparent and impressive.

Faber's work was considered a scientific novelty, a masterpiece of human ingenuity, rather than an invention with any obvious practical application. Nevertheless, uses were suggested for it, if only in jest; these suggestions highlight the social meanings ascribed to speech styles. One article proposed that the talking machine should be combined with a type-setting apparatus so that it could run automatically instead of being worked manually by keyboard. Then it could read out pre-programmed texts, such as political speeches or sermons, which would "be uttered with all the best benefits of emphasis and oratory, without a Scotch accent like LORD BROUGHAM'S, or a high key like MR. SHIEL'S, or a conventicle twang like SIR ROBERT'S." The automaton's elocution was not perfect, admitted the writer, but surely no worse than that of the Duke of Wellington (*Punch* 1846b). Another article suggested that the automaton could be used to make

announcements in train stations, for example to call out: “Tick–ets. Gents–get–your–tick–ets r-r-r-ea–dy,” or to read out telegraph messages received from other stations. The “blandness” of the automaton’s voice would, it was argued, be a welcome change from the insolent tones of railway officials (*Punch* 1846c). The benefit of automatic speech, apart from the fact that it freed up human beings to do other things, supposedly lay in its lack of distracting personal idiosyncrasies such as accent and emotion. The machine would outdo politicians, preachers, monologists, and train station announcers by combining the content of their speech with more-than-human declamatory technique.

Mechanical speaking devices programmed with fixed texts had been suggested before the nineteenth century, but only rarely. One example was the clockwork “books” mentioned by Cyrano de Bergerac in his fictional account of a lunar civilization:

When someone wishes to read he winds up the machine with a large number of all sorts of keys; then he turns the pointer towards the chapter he wishes to hear, and immediately, as if from a man’s mouth or a musical instrument, this machine gives out all the distinct and different sounds which serve as the expression of speech between the noble Moon-dwellers. . . . In this way you have continually about you all great men, living and dead, and you hear them *viva voce* (1962 [1649]:136).

In this case, the mechanism ostensibly reproduced the distinctive qualities of the speech of great men (*viva voce*, with living voices) rather than stripping spoken discourse of all vocal idiosyncrasies as Faber’s automaton was expected to do. The two visions for artificial talking machines thus make different assumptions about what might be meaningful about the vocal qualities of any given speech. This concern with eradicating or emphasizing indexical speech would surface again in the production and reception of phonograph records.

Telephone Concerts

Alexander Graham Bell’s telephone was introduced to the public in 1876, the year before the invention of the phonograph, and early accounts of it reveal an interest in having it transmit sounds with

esthetic value. "Perhaps, in the future," suggested one editor in 1877, "operatic or concert companies and lecturers, instead of traveling over the country, will simply send out telephones enough to present each person of their audience in a distant city with an instrument apiece, and do their talking and singing once for all in the metropolis" (*Scientific American* 1877a:212). Public exhibitions of the telephone in the late 1870s were frequently arranged as "telephone concerts" in which participants at one end of a wire performed varied sound programs for an audience gathered at the other end. Bell's assistant Watson recalled serving on the far end of a line during the inventor's early telephone lectures, where he shouted a few sentences followed by a selection of songs including "Yankee Doodle," "Auld Lang Syne," and "Pull for the Shore."

This repertoire always brought down the house. After every song I would listen at my telephone for further directions from the lecturer, and always felt the artist's joy when I heard in it the long applause that followed each of my efforts. I was always encored to the limit of my repertoire and sometimes had to sing it through twice. (Watson 1934:28)

Despite Watson's mock artistic pretensions, the audience was presumably more struck by the novelty of hearing such familiar tunes in an unfamiliar context than by the virtuosity of his performance. However, telephone concerts soon came to be evaluated in more overtly esthetic terms. A more elaborate example organized in 1879 between two telephones a quarter mile apart in Columbus, Ohio, consisted of the following program:

[A] solo sung in the Western Union office was distinctly heard by the audience. After this, Mr. George Makepiece, of the State University, gave a cornet solo. Every note was distinct, yet as sweet and low as though heard from a distance, and coming over still waters on a quiet summer eve. When "Great Deliverer, Come," by the Wesley Chapel quartette, came through the instrument, not only were the tones of different parts distinct, but even the words could be understood in every part of the room. As an encore, "We're Going Home To-morrow," was given. This, also, was clear and sweet. A cornet duet by Messrs.

Makepeace and Hyatt, and, in response to an encore, “Old Virginia” was given with equal success. The musical programme was closed by the Doxology. (*Scientific American* 1879:343)

This program is fairly representative of the heyday of the telephone concert, although spoken recitations were sometimes included as well. By 1881, performances were being transmitted by telephone from the Grand Opera to the Palais de l’Industrie in Paris for the benefit of paying audiences listening in at eighty receivers—and in stereophonic sound, no less (*Scientific American* 1881:422).

Some listeners described the telephone concert in supernatural terms, claiming that “it seemed like holding mysterious communication with the spirit land” or that “there was something weird and uncanny about it. It was as if a telegram had come from some far-off planet” (Johnson 1877:21-22). Still, it is worth noting that the telephone was not routinely anthropomorphized. Although it emitted speech and song, the simultaneous agency of human beings at the other end of the wire was apparently too well recognized for anyone to describe the telephone itself as “speaking” or “singing.” Speech and music were *conveyed* by the telephone in real time, not *produced* by it independently; only the form of transmission was remarkable. Perhaps this is one reason why only conventional performances were transmitted during telephone concerts, rather than the very different sort of aural illusions I will describe below with respect to the phonograph.

Phonographic Visions

The phonograph was, in a manner of speaking, invented twice within the course of a few months in 1877: first by the French poet Charles Cros in France, and then by Thomas Edison in the United States. The principle involved was the same in both cases, but the two inventors had very different ideas when it came to *what* they anticipated recording. Cros conceived of a process of tracing sound waves, photoengraving the traces on metal plates, and using these etchings to reproduce the sounds. He deposited a sealed envelope describing this invention with the French Academy of Sciences on April 30, but he never built a working model. Cros’s friend Abbé Lenoir described the

idea in an article published in *Le Semaine du Clergé* on October 10. According to Lenoir, the machine would be used for preserving the speech of the deceased by means of “voice photographs” (*photographies de la voix*) and for duplicating the traces of vocal music from plates similar to those used for pictorial engravings: “these undulations themselves, being spread in the atmosphere, will be the songs, the sounds, the words of the piece of which one will have taken the phonography”¹⁴ (Cros 1927: 518-20). The analogy with photographs was only natural: one of Lenoir’s earlier articles had described Cros’ experiments with polychromatic photography. For Cros and Lenoir, sound recordings would—like photographs and poetry—have sentimental and esthetic value.

Thomas Edison had a very different sort of recording in mind when he stumbled upon the principle of his phonograph that July. Edison, whose attention had hitherto been focused on such devices as stock-tickers, saw the phonograph as a potential component in business communication: it would make it possible to record and repeat telephone messages. The fact that the machine happened to record qualities of speech would incidentally provide a useful safeguard against imposture, like a signature on a document. According to a later memoir by Edward Johnson, who was traveling the country in mid-1877 giving “telephone concerts,” the idea that the invention might be used to do something other than repeat telephone messages surfaced when he mentioned Edison’s experiments during one of his presentations, probably in August:

My audience seemed to have a much clearer appreciation of the value of the invention than we had ourselves. They gave me such a cheer as I have seldom heard. I did not comprehend the importance of the device at the time: but the next morning the Buffalo papers announced in glaring headlines, “A Great Discovery: A Talking Machine by Professor Edison. Mr. Edison’s Wonderful Instrument will Produce Articulate Speech with all the Perfections of the Human Voice.” I realized for the first time that Edison had, as a matter of fact, invented a talking machine. (Johnson 1890: 11872)

The phonograph was officially announced in print at the beginning of November. Johnson wrote a letter to the *Scientific American*, asserting that “[a] speech delivered into the mouthpiece of this apparatus may fifty years hence—long after the original speaker is dead—be reproduced audibly to an audience with sufficient fidelity to make the voice easily recognizable by those who were familiar with the original.” Johnson’s letter was prefaced in print by an editorial suggesting for the first time that certain recordings might be sufficiently desirable to generate a commercial market. Along with recordings of speeches by famous political orators, people could purchase vocal music: “an opera or an oratorio, sung by the greatest living vocalists, thus recorded, and capable of being repeated as we desire” (*Scientific American* 1877b). The *New York Times* followed up with the tongue-in-cheek metaphor of bottled speech: lectures by Mark Twain might be purchased and stored in one’s “oratorical cellar,” phonographic sermons could be bought by churches too poor to afford their own ministers, politicians could freely distribute speeches to their constituents by the pint, and a skillful elocutionist might record novels by Dickens or Thackeray for home listening (*New York Times* 1877). Once this speculation had come to Edison’s attention, he lost no time in jotting down his own notes about further uses for his discovery: phonographic speaking toys, clocks, advertisements, train station directions (Jenkins et al. 1994:629, 686).

This thought process culminated in an oft-cited article of May 1878 entitled “The Phonograph and its Future” and ghost-written for Edison by Edward Johnson (cf. Israel et al. 1998:224). Dictation was privileged by this official manifesto as the machine’s “main purpose,” but other recording categories were expected to serve esthetic needs. Books recorded by professional readers would be valuable “because of the greater enjoyment to be had from a book when read by an elocutionist than when read by the average reader.” The standard phonograph could be used to record songs sung by one’s friends, but a special phonographic “musical box” would reproduce the voices of such celebrities as Adelina Patti (Edison 1878:30-34). The whole constellation of nineteenth-century American musical and verbal genres was targeted as natural subject material for the phonograph.

Tricks with Tinfoil

But no phonographic music boxes or books materialized. The machine Edison made available for public display involved wrapping a sheet of tinfoil around a pre-grooved metal cylinder, on which sound was recorded by indenting the tinfoil into the groove. Once removed from the cylinder, these tinfoil recordings became unplayable, which immediately thwarted any plans to market them. For about a decade, only this tinfoil machine with its ephemeral recordings was available to demonstrate the principle of the phonograph.

Edison first exhibited his invention to the staff of the *Scientific American* in December 1877 by playing a recording he had made in advance and left in place on the cylinder: "The machine inquired as to our health, asked how we liked the phonograph, informed us that it was very well, and bid us a cordial good night" (*Scientific American* 1877c). In this case, the phonograph was presented as speaking on its own behalf, like an oracular talking head. This illusion—though of course not intended seriously—would have been diminished if the recording had been made in the listeners' presence. Exhibitors generally made recordings in the presence of their audiences and played them back on the spot, so phonographs speaking *in character as phonographs*, in the first person, were relatively rare.¹⁵ So were speeches addressed to the machine, e.g. "Halloa! Halloa! Mr. Phonograph, are you there?" (*Chicago Tribune* 1878). The latter were appropriate when recorded onstage, but not when played back; they seemed to make the machine go "into a conversation with itself" (*San Francisco Chronicle* 1878). Phonographic replay inverted the context of first and second-person pronouns, so experienced exhibitors avoided those forms of speech for demonstration purposes.

Instead, a different sort of program developed, one that was conventionalized enough to be the subject of occasional parody (e.g. Hockenberry 1886). In conjunction with popular science lectures, a set of memorized rhymes and familiar songs came to provide the stock sung and spoken repertoire, safely free from first and second-person references: "Mary had a little lamb,"¹⁶ "There was a little girl who had a little curl," "Old Uncle Ned," "Bingen on the Rhine," and "John Brown's Body" recur in press accounts. So far, this may seem much

like Watson's transmissions via telephone, but more than song and speech was involved. At the first public exhibition of a phonograph, which took place in New York City in early February, 1878:

It proved its capacity as a linguist by repeating sentences spoken to it in English, Dutch, German, French, Spanish, and the Hebrew. It imitated with marvellous fidelity the barking of dogs, crowing of cocks, etc. and then taking a severe cold, coughed and sneezed and wheezed, until the physicians in the audience instinctively began to write prescriptions. After the inventor had exhibited its reproduction of his remarks, his auditors wanted the machine to imitate theirs also, and for a long time the apparatus was made the recipient probably of all the different sounds that the human voice could produce or scientific ingenuity devise. (*Scientific American* 1878a)

A comparison of this program with the exhibitions of the telephone and Faber's talking machine, respectively, shows fewer similarities with the transmitted "concerts" of the former than with the anthropomorphized laughing, singing, and hurraing of the latter. Because the phonograph *produced* its sounds independently, or at least not simultaneously with their originals, exhibitors and audiences were interested in testing its mimetic limits in ways that apparently did not seem worthwhile in the case of the telephone.

The phonograph could do more than reproduce existing sounds; once it had fixed them on the tinfoil, however temporarily, it could also manipulate them. One account from New York describes a phonograph as *competing* onstage with the famous cornetist Jules Levy. The contest is reminiscent of John Henry's match against the steam drill, as though the perceived challenge were not to create a perfect recording—which would make the phonograph Levy's artistic equal—but to thwart the phonograph by producing an unrecordable sound. The machine "won a victory" over Levy when it proved capable of repeating anything he played and, when the playback speed was altered, of reaching both higher and lower notes than the cornet could (*Scientific American* 1878c). When the trick of altering playback speeds was applied to speech, it produced distortions familiar to us today but strange and impressive then. Much as listeners had struggled

to fit the unfamiliar monotone of Faber's talking machine into a known vocal category (e.g., "sepulchral"), slowing down a phonograph recording was said to produce "the voice of a decrepid [sic] old man with his mouth full of water," whereas speeding it up resulted in "the shrill voice of an angry old woman" (*New York Times* 1878). Recordings might also be played backwards; Edison tried reversing a recording of himself saying "Mad dog!" to get his phonograph to swear: "God damn!" (*Scientific American* 1878b).

Another trick was to record several times on the same sheet of tinfoil: each successive recording did not erase the previous ones, but instead resulted in an overlapping effect somewhat like multi-track recordings today. One time a skeptical minister was said to have visited Edison's laboratory, supposing the phonograph was a fraud based on ventriloquism. He was invited to record himself reciting Scripture on a sheet of tinfoil Edison had prepared beforehand, with the following result:

He that cometh from above is above all ("Who are you?"); he that is of the earth ("Oh, you can't preach!") is earthly and speaketh of the ("I think you're a fraud!") earth; he that cometh from heaven is above all. And what he has seen and heard ("Louder, old pudding head!") that he testifieth; and no man receiveth his testimony ("Oh, go and see Beecher!"). (*Scientific American* 1878b)

This arrangement was nicely ambiguous: was Edison disparaging the minister, or was the phonograph itself doing so? Another use for the overdubbing technique was to permit one person to sing both parts of a duet, otherwise an impossibility. Nor did the matter have to end there:

Singing first the air of "John Brown's body," etc., and afterward the bass over the same matrix while listening to the air as reproduced by the instrument, he [Edison] produces a matrix which will sing both treble and bass. Not satisfied with this, he whistles Yankee Doodle, and finally, over the same matrix, talks in a loud voice, so that when the whole is reproduced we have a first-class street corner bawl, which is like this: Two fellows singing John Brown, another whistling Yankee Doodle, and a perturbed citizen crying from an upper window, "O shut up! Go away! If you can't sing better than that the police will arrest you! Police! police!" (*Scientific American* 1878d)

These were “trick” recordings exploiting a technical quirk of the phonograph, but similar programs were also produced in a more straightforward manner. The following scene was recorded during an exhibition in St. Louis, Missouri:

“Fellow-citizens,” begins the operator in a high key as if addressing a crowd of 10,000 people from the Court-house steps, “we have met here this evening to discuss the political situation, and as the first speaker who will address you I have the honor of introducing Hon. Berry Mitchell, of Cahokia Creek, who will address you on the issues of the day. Before the gentleman begins I propose three cheers for Mr. Mitchell, which I know you will give. Now, again, hip, hip, hurrah. Now once more to close up on.”

Into the ear of the phonograph the gentleman pours all these excited utterances. He then changes his talk. Assuming another voice, supposably from some disgruntled member in the crowd, he calls out, as people always do at political meetings, “Put him out.” “Put him out.” “Let’s hang him.” “Pull down his vest.” “Down with the fraud.”

Then, resuming his character as chairman of the meeting, the gentleman goes on to say: “Let’s have no disturbances, gentlemen. In order to harmonize the feeling of all present, we will have a little music.” (*St. Louis Evening Post* 1878a)

This sound program was recorded in front of the exhibitor’s audience and then played back to convey the impression of an overheard multivocal political scene, relying for the illusion on the removal of visual cues—when played back, of course, the recording did not reveal that all the voices had been “done” by the same person.

The phonographic “political meeting” was designed primarily to demonstrate one sort of illusion the phonograph could perpetrate, not to take real advantage of the possibilities that illusion offered for conveying the impression of elaborate scenes with sound. Of course, this sort of illusion could just as easily have been produced through a telephone during a “telephone concert,” or even earlier through a speaking tube. In that case, however, the fact of the deception would not have been obvious: the telephone might really have been connected to the site of a political rally. Apparently it never occurred to anyone that this technique might be used to produce sound programs with

entertainment value in their own right, so they were simply not attempted by telephone. Nor did any of the many pundits who wrote in 1878 about the potential of the phonograph proposed anything like Edison's "first-class street corner bawl" or the phonographic "political meeting" as a model for future commercial recordings, although such aspects of the exhibitions were widely reported in the popular press. Rather, they considered only pre-existing speech and sound genres as serious candidates for recording: lectures, sermons, musical performances, letters, advertising shpiels, animal noises. By comparison, new sound programs that relied specifically on the phonographic medium were literally throw-away recordings: after one exhibition involving an overdubbing of "Mary had a little – oh shut up – lamb," Dr. J. W. S. Arnold "tore up the slips of tin foil that had been used, and distributed them among the audience. There was a wild scramble for these keepsakes" (*New York Times* 1878). This fact was to change only with the introduction of permanent phonograms a decade later.

Permanent Phonograms

In 1887-88, a new version of the phonograph was introduced that made permanent recordings on solid wax cylinders. At first, this "perfected phonograph" was marketed as a business accessory. The wax cylinder was standardized to have a capacity of 800-1000 words for dictation purposes (Edison 1888: 648): four inches in length and roughly two inches in diameter, recorded at one hundred turns per inch, with a maximum playing time of a little over three minutes. This length, chosen to accommodate the average business document, was thus necessarily imposed on all other sound programs that used the same medium. For several years, phonographs were not sold to the general public; instead, interested persons leased them for business use, visited arcades in which they could listen to coin-operated machines through ear-tubes, or attended public exhibitions in lecture halls. However, by the late 1890s there was a brisk traffic in cylinder phonographs sold for home use, and Emile Berliner's gramophone, which could not be used for dictation but only played pre-recorded shellac discs, emerged as a significant competitor in this arena. Whether

for arcades, exhibitions, or home entertainment, there was now a market for commercial sound recordings—but what were they like?

The American phonograph business in the early 1890s was portioned out among various regional franchises licensed by the nationwide North American Phonograph Company. Although the focus at that time was still the lease of machines for business dictation, each regional company was theoretically free to produce whatever pre-recorded cylinders it saw fit for the exhibition and coin-in-the-slot markets. Looking back on the first few years of wax cylinder recording, a trade journal called the *Phonogram* observed in 1892:¹⁷ “When exhibitors of the musical phonographs first undertook this species of entertainment, the average performance was not always a success. The reproduction was sometimes faint in tone, the subjects chosen were uninteresting or coarse, if consisting of recitations, and if musical, were often a burlesque on music.” By 1892, however, discriminating exhibitors wanted to obtain “not only perfect records, but a well chosen programme of amusements, both musical, recitative, and of a mixed character” (Wile 1971:10-11).

The “recitative” recordings were somewhat different from those originally expected. In 1878 the plan had been to have skilled elocutionists record entire books, but the three-minute capacity of the standard dictation cylinder was insufficient for making recordings on that scale. Under the circumstances, the next best thing was to record short dramatic recitations. Columbia first listed records of this sort, mostly selections from Shakespeare, in its catalog for July 1891 (Brooks 1978:13). As to the “musical” category, the North American Phonograph Company had begun producing commercial “musical phonograms” in 1889, starting with instrumental solos and duets accompanied by piano (Koenigsberg 1969:109-35). Other companies had developed their own specialties: the Columbia Phonograph Company of Washington, D. C., was initially known for its recordings of the United States Marine Band and the artistic whistler John Yorke AtLee. It might seem as though these musical phonograms should have been basically identical in conception to the selections marketed on discs for music boxes and organettes, except that they could include a theoretically infinite range of instruments, or even the singing human voice. Taken as sound programs, however, even the straightforward

musical phonogram displayed some formal characteristics unique to the commercial sound recording. In the next section, I will analyze the significance of one particularly obvious convention. Then I will describe the third category mentioned in the *Phonogram* article—recordings of “mixed character.”

Announcements

A distinctive feature of early commercial phonograms is the spoken announcement recorded immediately before the body of the performance: for example, “The Preacher and the Bear, sung by Arthur Collins, Edison Record.” Jim Walsh explains that announcements were “originally used to prevent unscrupulous persons from duplicating and re-selling standard brands of records” and were eventually eliminated “because customers complained, with little justification, that they took up too much space which might be devoted to music” (1946:19-20). In an overview of the history of the Columbia Phonograph Company, Tim Brooks adds that “these ‘little advertisements’ had helped establish the Columbia name in the days when cylinders were mostly heard on coin-slot phonographs in public places” (1999:102). However, announcements often do not identify the recording company, but only the title and performer—or sometimes only the title. An alternative explanation is that, until 1904, most cylinder records did not have inscribed titles and had to be identified by separate paper “title slips” curled up and stored inside them, or else by the labeled pegs on which they were stored in cases. If the record were separated from its title slip or put back on the wrong peg, the only way to identify it was to play its introduction—so goes the argument.

However, spoken announcements also appeared on early disc records that had their titles and performer information etched directly on the surface or printed on an affixed paper label. Announcements were also retained on many post-1903 cylinders that had similar information engraved legibly on their rims or outer surfaces. In these cases a spoken announcement was redundant for purposes of identification. Perhaps the pattern might simply have become so deeply ingrained that it survived its *raison-d’être* for several years. By 1908,

however, announcements were being painstakingly removed from the beginnings of Columbia master discs as outmoded,¹⁸ so we should not attribute too much to sheer conservatism in recording industry practice. Furthermore, in phonograph arcades—the original venue for commercial cylinders in the early 1890s—the titles of selections had been prominently displayed by each machine. Thus, the announcement was redundant for the purpose of identifying records to listeners even at the time that it was first being adopted as a convention. In at least one case, the spoken announcement was *itself* listed in an accompanying written notation of a cylinder's contents,¹⁹ further suggesting that the purpose of this element was not mere identification.

About a generation after announcements had been discontinued, they were still remembered as a feature distinctive of early records, and casual references to them sometimes contain inaccuracies that help to reveal popular interpretations of their function. In 1937, one newspaper mentioned “the closing words of each disc: ‘This is an Edison record’” (Walsh 1946:20). This account foregrounds the use of the announcement to identify the company name and thus to discourage record piracy, but it misplaces the announcement at the end rather than the beginning of the recording. The error hints that on one level it did not matter whether this element came at the beginning or the end, but only that it should exist to demarcate the boundary of the recording—that is, that the announcement served as a recognized framing device for phonograms, just as raising or lowering a curtain serves as one for stage performances. The formal structure of the earliest commercial announcements even suggests successive boundaries and layers: when announcers included company names, they placed that extraneous information about the medium at the very beginning—on the outside, as it were—with the title and artist identified afterwards, in closest proximity to the performance itself.²⁰

Another interesting factual error: during the mid-1940s, the *Suffolk County Watchman* recalled that, in the early days of sound recording, “[a]n announcer would recite the name of the piece, gave the name of the composer, lyric writer and songster and then warn the listener that the music would follow immediately” (Walsh 1947:22). No actual announcements are explicitly formulated as warnings, so this is a valuable clue to the way in which announcements were interpreted

by contemporary audiences. Hearing decontextualized sounds of any sort through a phonograph may have been more startling to early listeners than we realize. Schizophonic disorientation may have been more pronounced when the technology was new and unfamiliar, and the pervasive model of the “oracular head” had long vested disembodied speech with occult significance: “it sounds more like the devil every time,” one listener had said of repeated listenings to the tinfoil phonograph (*Washington Evening Star* 1878). A spoken announcement or “warning” may have carried listeners past their initial shock, bracing them so that by the time they reached the body of the performance the experience could be comfortable and entertaining rather than numinous or confusing.

It is also worth considering that the first commercial cylinders were produced for coin-in-the-slot arcades at a time when people who paid to hear a phonograph presumably wanted the novelty of hearing what it could do. Any music-box could produce a tune, but only the phonograph could *speak*—and the convention of beginning each recording with a spoken announcement ensured that, even in the case of purely instrumental selections, paying listeners would never be cheated out of the experience of the “talking machine.” Keeping this in mind, it is less perplexing for us to find 1890s recording engineer Charles Marshall claiming that a record “is half made by a perfect announcement. Nothing is more gratifying to a listener to a phonograph than a clear and distinct announcement at the beginning of the record” (Gelatt 1965:47). The applause and cheers found at the end of some early instrumental recordings²¹ may have served a similar purpose: replicating the noise of onlookers was something else no music box could do.

Descriptive Recordings

Although the phonograph recording was necessarily restricted to the aural channel, there was some thought of providing it with a visual complement of one sort or another. The *Scientific American* had already proposed combining sound recording with moving pictures to create “the illusion of real presence” in the earliest days of the tinfoil phonograph (1877c). In 1889, the utopian novelist Edward Bellamy described a future in which there would be commercial recordings of

plays, such as *Othello* by the Booth-Barrett Company, to be built into phonograph cases resembling miniature stages with changing pictures: “Of course the figures, being pictures, did not move, but their presentation in so many successive attitudes presented the effect of movement, and made it quite possible to imagine that the voices in my ears were really theirs” (1898 [1889]:358). More generally, there was a feeling that singing and talking machines should be designed to resemble the human form in order to contextualize their utterances in a visually familiar way. Along with the recorded plays, Bellamy described phonographs built into various speaking mannequins, including ministers and politicians, and at Coney Island there was apparently an actual display, destroyed by fire in 1907, in which several phonograph-equipped wax figures carried out a pre-recorded blackface minstrel show (Walsh 1958:32). Such attempts at supplementing the recorded voice suggest uncertainty as to whether sound by itself was capable of communicating certain things—whether the voices in Bellamy’s hypothetical recording of *Othello* could be mentally attributed to actors without the opportunity of seeing them on the stage, for example. Edison insisted in an early interview about the cylinder phonograph that sound recordings by themselves would provide enough information for such uses, based on his experimental results: “A phonograph reproduction of a play at the theatre will be so perfect that each actor can be followed distinctly, and the effect of several persons at once is reproduced to the life. A mimic quarrel of several persons given out on my test phonographs makes one almost believe that the dispute is going on in the next room” (*Commercial News* 1887). As it turned out, pioneer recording artists did manage this sort of communication without having recourse to the sort of visual aids Bellamy thought would be necessary, but the programs required more adaptation than Edison in his optimism was willing to admit.

The recording artist Dan Kelly (b. 1842) was first hired by the Ohio Phonograph Company of Cincinnati to recite Shakespeare and sing songs without accompaniment. He soon turned to something new:

It . . . occurred to him that an imitation of a courtroom scene he had witnessed as a boy might be suitable for the phonograph. He called it *Pat Brady’s Plea in His Own Defense*. This cylinder

far outsold the Shakespearean recitations and the songs, and soon Kelly's rich brogue was to be heard in dozens of Pat Brady scenes, such as *Pat Brady Before the Election*, in which Pat dispensed some extravagant promises to the electorate, or *Pat Brady and the World's Fair at Chicago*, in which he exposed his views on what countries should send representatives and who should stay away. (Gelatt 1965:54)

By 1892 the Ohio Phonograph Company had already sold five thousand of these "celebrated" records, which were in use throughout the United States and Canada, and which explicitly played upon links between speech and social groups. "The great charm to these Pat Brady records," proclaimed the *Phonogram*, "is their naturalness of tone. The Irishmen that talk are real Irishmen, with the rich brogue and their Celtic way of saying things, and not an imitation of the genuine article. There have been many imitators of Mr. Kelly in his Pat Brady records, but none of them have been successful" (Wile 1971:11). Among the minor "imitators" was Joseph Gannon, whose technique was described as follows:

He stands before a Phonograph or Graphophone horn and sings or talks in a series of voices all abstractly different in dialect, in idiom and inflection of vocal register. For instance, he will sing or imitate the voices of two Irishmen in controversy, a Teuton struggling with a Chinaman, or an Englishman at word-war with a Yankee. Besides this, while he is impersonating his character he is also imitating their brogue, their euphonism of voice, their style of melody. He tells you a story in one line, denies it in the next, satirizes it in the third and glorifies it in the fourth. (*Phonogram* 1899)

These programs had been anticipated by the "political meeting" illusion created on the tinfoil phonograph in St. Louis in 1878, but there was still no analogue on the stage to this type of elaborate solo performance at the time of its introduction via phonograph. However, in the 1900s and 1910s the Chautauqua solo platform act shifted away from the straightforward literary reading and towards what has been termed the *monopolylogue*, in which one performer simultaneously played all the characters of a drama (Gentile 1989:85-86). Whether

there was any causal connection between these parallel developments is hard to judge.

The interpretive frame invoked by these recordings was one of “open eavesdropping,” in which sounds were phonographically arranged to simulate the soundscape associated with particular sequences of events. Such programs were not restricted to the human voice. Consider this recollection by Fred Gaisberg, an early associate of Emile Berliner:

One day when things were slack Berliner and I improvised a record called “Auction Sale of a Piano.” He did the auctioneering and called out to me: “Professor, show dem vat a peautiful tone dis instrument has.” When no bids were forthcoming, with anguish in his voice he would complain, “Why, ladies and gentlemen, on *dis* piano Wagner composed *Die Götterdämmerung*. Still no bids? I see you know nothing about music. Johnny, hand me down dat perambulator!”²² (Gaisberg 1942:18)

Gaisberg downplays the technical virtuosity of the record: “things were slack,” so he and his boss had nothing better to do than experiment with a humorous combination of auctioneer speech and piano-playing effects. However, by 1892 the artist Russell Hunting (1864-1943) had acquired a valuable reputation for recording “highly dramatic representations, in which all phases of actual life are manifested, with the addition of imitations of railway whistles, bells, galloping of horses, and other sounds, brought to a wonderful degree of perfection” (Wile 1971:11). In 1903 the *Talking Machine News* observed:

Edison himself declared that the Casey steamboat record²³ was the best he had ever heard. There were no less than ten different characters in this record and eight mechanical effects, all of them produced by Mr. Hunting. First the bell on the forward deck clangs loudly, then the little bell on the look-out-house puts in its turn. “Get in that gangplank there; hurrah now; pull her in, boys; pull her out!” shouts the mate in a voice which drowns even the snorts of the engine at work. Thump, thump go the bales of cotton and boxes of merchandise on deck. “Look heah, honey, doan you forgit to send me a letter so I gets it at St.

Louis," shouts a Negro deck hand to his dusky sweetheart, waving him a last adieu from the land. Puff, puff, puff goes the engine, and sh-sh-sh sings the escape valve. The heavy chain rattles against the capstan, and as the sound dies away a dozen of the deck hands strike up to the melody: "Farewell, my love, farewell."

And Mr. Hunting would tell you, as he told me—for he makes no secret about it—that all that went to make that record was his own voice, a bell, a couple of bottles, and a piece of sandpaper. Only that and nothing more: or has he left one thing out, and that—a consummate knowledge of the art of record-making? I think so. (Walsh 1944:27-28)

The resulting category could no longer be classified as a monologue or dialogue, since it combined spoken and non-spoken elements. The most common term for the new phonographic genre was the *descriptive*. This term appears to have been borrowed from music, in which it designates a composition seeking to portray a scene or story through such devices as the imitation of hunting horns or birdsong; for phonographic purposes, identifying something as a "descriptive" implied the presence of sound effects of one sort or another. But there was no consistent emic term for this new category of recording. The Columbia Phonograph Company's first efforts in this direction in mid-1891, for example, were advertised as "auction records covering very many varieties of sales and interspersed in a humorous way with bids of mock purchasers" (Brooks 1978:12-13).²⁴ The same company's catalogs of 1896-97 used the heading "special talking records and novelties," with the modifier "descriptive, tough series" attached to such items as "The Dog Fight" and "The Medicine Fakir." Another Columbia catalog of 1898 included several categories under "talking records," including "laughing stories," "talks," and "scenes from life." Later on, if a recording had a particular ethnic slant, it was often classified on the label as an "Irish specialty," "Darky specialty," etc.

The most consistent taxonomies used by early recording companies were block systems of catalog numbering, i.e., ranges of numbers rather than names, and these usually lumped descriptives together with miscellaneous spoken-word recordings, such as political

oratory and nursery rhymes.²⁵ Although the generic designations were often inconsistent and ambiguous, they were just consistent enough to show—together with published reports about artists such as Hunting and Gannon—that the new form was recognized by contemporaries as something distinctive. Thus, *descriptive* is not merely an analytical category I am imposing on material with certain shared characteristics, but an emic or “ethnic” genre, a cultural mode of communication constituted within the culture of early recording itself (cf. Ben-Amos 1976 [1969]).

For the recording engineers the challenge of the descriptive was to make the scene intelligible without visual cues: “the first thing to realize,” explained Russell Hunting, “is that you must talk as though you were speaking to a blind man, who depends entirely upon sound, unaided by sight” (Walsh 1944:28). A methodical study of the various sound effect techniques used in descriptive recordings would reveal that many of them carried over into radio, movie and television soundtracks, and even the sound effects of computer games. One example is the equation of loud sounds with nearby events and quiet sounds with far-away events which permits an aural representation of space and movement: in radio, “the impression of distance from the center of the stage is attained by a combination of volume control and angle and distance of speaker to microphone” (Goffman 1974:146). The descriptive piece “Spirit of ’76,” issued as a Berliner gramophone disc in the 1890s, produced the illusion of a passing parade by increasing and then decreasing the volume of a fife and drum corps, presumably by changing its position vis-à-vis the acoustic recording horn. Moreover, a comparison of the 1894 and 1897 recordings of this same piece shows an increasing confidence in the power of the sound effects and a decreasing number of verbal cues, i.e., intelligible shouts by “parade spectators” that help orient the listener to what is supposed to be happening.²⁶

Some sound effects used at the turn of the century invariably strike the modern listener as unconvincing: kettle-drums used to simulate cannon-fire during the “Battle of Santiago” (Victor disc 1330), the same whistling noise used to convey the impression of whipping a slave in “Uncle Tom’s Cabin” (Edison cylinder 8656) and swatting flies in “Mosquito Parade” (Edison cylinder 7503), and an

undifferentiated loud crash used to communicate a person being thrown out a window in “Engaging an Opera Company” (Edison cylinder 8437) and a person falling out of bed in “Night Trip to Buffalo” (Columbia disc 458). However, in none of the above cases is the intent of the sound effect in any way ambiguous. The context clearly dictates how each effect should be interpreted, or should have done so for the listener at the turn of the century even if *we* lack the experience necessary to interpret some sounds, such as characteristic steamboat noises: “sh-sh-sh sings the escape valve. The heavy chain rattles against the capstan” The kettle-drums in “The Battle of Santiago” do not sound much like the naval cannons used during the Spanish-American War, but when prefaced by the command, “Fire the starboard thirteen-inch gun at the enemy’s flagship!”, the striking of a drum can readily be interpreted as the firing of a cannon.

The Minstrel Record

The live minstrel show of the nineteenth century followed a conventionalized format well-known to audiences of the time. On the stage, the curtain was raised for the “first part” with the blackface troupe members standing in front of their chairs arranged in a semicircle; the *interlocutor*, who stood at the center and was often not in blackface, called out: “Gentlemen, be seated!” Once they had been seated, he continued: “We will now commence the performance with the overture” (Paskman 1976:23-24). The “musical star” of this segment was generally a tenor who sang a sentimental ballad following the overture. The *end-men*, so called because they sat at either end of the semicircle, then engaged in witty interchanges with the interlocutor, the dignified “straight man.” The curtain dropped on this part after a song and dance number by the entire troupe. The second part or *olio* was performed in front of the curtain and, although less structured than the rest of the show, came to be dominated by a monologue called the *stump speech*, either a humorous exposition on some topic or a serious address filled with malapropisms. The curtain was then raised on a one-act play, the *afterpiece* which closed the show (Toll 1974:52-56).

Because the minstrel show was the popular entertainment *par excellence* during the infancy of the commercial recording industry, it was only natural that there be an attempt to translate the genre into

a marketable sound program. Although a series of “minstrel first part” records had been produced for North American in 1891,²⁷ the earliest description of minstrel records I have found is drawn from an 1894 catalogue for the United States Phonograph Company of Newark, New Jersey:

These gentlemen [Len Spencer, Billy Williams, Dan W. Quinn, and George W. Johnson] have together produced a most decided novelty in their new minstrel records. . . . Each record contains a complete minstrel first part, embracing overture with bones and tambourine accompaniment, several jokes and witty sayings, interspersed with laughter and applause by the audience, and finishing either with some comic negro song or story by Spencer, or a pathetic song by Quinn or Williams. (Walsh 1955:28-29)

The three minutes available on a cylinder of the 1890s was clearly insufficient for an entire minstrel show at normal length, and the first step in adapting the show to the new medium was to drop the olio and afterpiece, retaining only the structure of the “first part.” This is not to say that olios and afterpieces were excluded from the phonographic repertoire. From the olio, one piece occasionally recorded was a “Stump Speech on Love,”²⁸ which is elsewhere confirmed as a legitimate minstrel stump speech title (Wittke 1968:170). Lambert cylinder 590, “A Meeting of the Lime Kiln Club,” seems to have been based on an 1886 afterpiece by Al G. Field’s minstrels, “The Lime Kiln Club,” which its originator had considered impressive mainly because of its elaborate stage setting—that is, ironically, because of precisely those details that could not be translated into sound (Field 1912:501). Many comic dialogues and descriptives might be traceable to minstrel stage performances; even the phonographic celebrity Cal Stewart modified his “Uncle Josh” descriptives for the vaudeville circuit, for which they were augmented with unphonographable stage directions.²⁹

However, the first part had the most recognizable minstrel structure, and it provided the framework for the minstrel record genre. Of course, three minutes was too short even for a full-length first part. Sometimes this problem was skirted by issuing a series of records, such as “An Evening With the Minstrels,” parts one through eight of which were first recorded by Victor in December 1902. It was

enthusiastically promoted: “An absolute Novelty in Minstrel records—a complete performance of old-fashioned minstrelsy. . . . This series consists of eight Monarch [i.e., ten-inch] Records and lasts from twenty-five to thirty minutes, with not one dull moment. . . . Although primarily intended for use in a series, each record is complete in itself, as the description indicates” (Fagan and Moran 1983:340). Each record contained one component of the minstrel first part, beginning with the opening chorus and ending with the grand finale. Each disc was also a self-contained unit, as demonstrated by the fact that disc eight (Victor 1830) is identical in content and structure to Columbia disc 1551, “Levee Scene,” not issued as part of a series.

Despite such exceptions to the contrary, the rule was to condense an entire minstrel first part into a single three-minute cylinder or side. The following example is a transcription of Victor Monarch 3036, as recorded in April, 1902:

Hooley.³⁰ Minstrel First Part, by the Georgia Minstrels.
Gentlemen, be seated!

[*Fanfare*]

Dudley. Introductory overture!

[*Instrumental overture, twelve seconds. Whistles and applause*]

Hooley. Grand opening chorus by entire company: “Carry Me Back to Old Virginny.”

[*Fanfare. Chorus with orchestra: Carry Me Back to Old Virginny, twenty-seven seconds. Whistles and applause*]

Dudley. Say, Mr. Johnson, did you see that gal I was with last night?

Hooley. Yes, I saw her, Sam—had a big yellow hat on.

Dudley. Yes, I gave her that hat.

Hooley. And she wore some lovely flowers.

Dudley. Yes, I gave her the flowers.

Hooley. And she had a fine pair of diamond earrings.

Dudley. I gave her the earrings too.

Hooley. Why, you must think a lot of that girl. She was a pretty girl, too—had a lovely pair of black eyes.

Dudley. Yes, I gave her them too!

[*Laughter, whistles and applause*]

Hooley. Mr. Dudley will sing “My Old Kentucky Home.”

[*Vocal with orchestra, My Old Kentucky Home, one minute and ten seconds. The whole company joins in at the chorus. Instrumental refrain with overlapping whistles and applause at the end.*]

The announcement, “Minstrel First Part, by the Georgia Minstrels,” is functionally equivalent to the announcements on other early records. The next element, “Gentlemen, be seated!”, is recognizable as the formulaic opening of the minstrel show onstage and can be interpreted as yet another opening bracket framing the performance that follows as minstrelsy, much as the other announcements scattered throughout the recording frame parts of the recording as components of the minstrel first part: the “Introductory overture!”, “Grand opening chorus by entire company!”, “Mr. Dudley will sing ‘My Old Kentucky Home.’” These announcements urge the listener to accept a twelve-second orchestral snippet as an overture and a twenty-seven-second piece as an opening chorus. Without these cues, the abbreviated performance forms of the minstrel record would appear ludicrous, but when they are fitted into the recognizable structure of a “minstrel first part,” the listener can identify and accept them more easily. If the smallest unit of sound recording (such as a twelve-second orchestral snippet) can be conceived of as an utterance, then the minstrel record is what Bakhtin calls a “complex utterance,” on a theoretical par with the novel. The internal announcements of the minstrel record frame each segment as though it were a *whole* record of its own, devoted to a musical selection or a comic dialogue. Such primary genres “are altered and assume a special character when they enter into complex ones,” Bakhtin observes. “They lose their immediate relation to actual reality and to the real utterances of others” (1994:82). Although the purpose of each segment is still to entertain the phonographic listener as it would if it were a separate full-length recording of speech or music, it also comprises the recorded minstrel show in conjunction with other segments so that the composite whole can entertain the phonographic listener on yet another level.

Moreover, beginning with “Gentlemen, be seated!”, the whole recording operates like a descriptive, the listener operating within the theatrical “open eavesdropping” frame which incidentally corresponds

to the proper audience mode for a live minstrel show. The internal announcements serve the further purpose of enhancing the verisimilitude of the piece as a descriptive, since such announcements were themselves part of at least some live minstrel shows. Indeed, the “minstrel first part” can be interpreted as being simultaneously a complex utterance (the minstrel record) comprised of simple utterances (musical snippets, dialogues), or as a simple utterance (a seamless descriptive sketch) communicating a complex utterance whole (the live minstrel show).

The evolution of this genre after 1902 is also informative. The introductory overture and opening chorus were conflated to free up more time for the repartee between interlocutor and end man. The name “minstrel first part” was dropped in favor of the pithier “minstrel record,” implying that recording engineers no longer felt it necessary to apologize for presenting a truncated minstrel program; perhaps they felt that the minstrel record could stand as a genre in its own right after a decade of production. Even when announcements had been dropped from most other records, as I pointed out above, minstrel records continued to be framed as minstrelsy through the phrase “Gentlemen, be seated!” well into the 1910s. Still, there seems to have been some embarrassment over the use of these words at the very beginnings of minstrel recordings, since this resembled the backwards, outmoded, *passé* record announcement. So, by the end of the nineteen-oughts, the “Gentlemen, be seated!” formula had been shifted to come *after* the introductory overture. Despite the fact that this ran contrary to the structure of the minstrel show, the changing esthetics of the sound recording must have demanded it: only the closing chorus was still announced, e.g. “Mr. Billy Murray will sing ‘San Antonio.’”

The minstrel record is one example of a recorded sound genre for which we cannot account only with reference to music or live popular culture: it demands an understanding of genre and generic change in sound recording itself. Another example might be the phonographic *medley* as exemplified by such recordings as the “Mocking Bird Medley” performed by the Spencer Trio.³¹ This record is not a medley in the musical sense of sequential songs “connected by a few measures of introduction or modulation” (Randel 1978:399). Instead, two

separate musical pieces are bridged by applause and a cry of “Bravo, encore!” At a time when standard practice was to record one song per record, combining two songs in this way must have suggested an analogy with the musical combination of the medley, even though an identical live performance onstage would have been interpreted not as a medley but as a song followed by an encore.

Conclusion

Automated sound programs did not originate with the phonograph. Music boxes and organettes had permitted the prior marketing of musical “records,” which to some extent explains the initial lack of emphasis on the phonographic reproduction of music. The mechanization of speaking was a more bewildering accomplishment: although the inventions of Kempelen and Faber had made this a reality before the phonograph (to a limited extent), disembodied speech had long been invested with supernatural or even diabolical significance, its numinous connotations still quite current in the nineteenth century. As Erika Brady observes, “the virgin encounter with the phonograph thrust an individual into a real-life folktale adventure: a meeting with a magic speaking object” (1999:34). This not only created apprehension about the unfamiliar technology, but also invoked associations with such phenomena as mechanical voices, enchanted heads, and spirit trumpets, including expectations about the forms the discourse would take and ways in which it should be interpreted. While early phonograph recordings had to contend with the cognitive disorientation of schizophrenia, they also had to overcome the competing oracular model for the interpretation of voices unconnected to living bodies.

In order to translate various performance genres into phonographically recorded forms, artists and engineers first had to adapt or invent techniques for framing and defining sound. Conventionalized spoken cues were used to guide listeners in their experience of commercial phonograms, contextualizing entire performances or parts of more elaborate programs such as the “minstrel first part.” Words such as *descriptive* or *medley* were borrowed from musical terminology as metaphors to identify analogous kinds of sound recording. The generic organization of early phonograph recordings

was a creative and emergent process, not a straightforward borrowing of established musical and narrative categories.

Although the recording examples given in this study have not been the focus of much previous investigation, my conclusions are also relevant for the exploration of more frequently trodden ground. For example, there has been some research into explicit framing techniques—including spoken announcements—found on later “hillbilly” recordings, with attention to their significance in establishing relations between live and mediated performances (e.g. Minton 1990). I have suggested here that such framing techniques were already linked to notions of backwardness and technological naïveté by the 1910s, which provides an alternative explanation for their intentional use in defining later “folk” recordings in opposition to “modern” culture. On the other hand, overemphasizing phonographic forms can be just as misleading as ignoring them. For months some of the most prominent phonographic historians puzzled over the discovery of an 1891 cylinder recording entitled “Five Minutes With the Minstrels”: the instrumental band selection was not five minutes long, nor was it a “minstrel” record. It turned out that “Five Minutes With the Minstrels” was simply the title of an obscure musical composition.³²

We tend to take recorded sound for granted today, being exposed to it almost constantly through artificial soundscapes and mass media. Like many other technologies, sound recording has acquired a “natural quality” through its familiarity (cf. Bausinger 1990 [1961]:18-25). That is all the more reason to draw attention to it and to problematize the forms it took, not long ago, among people who were more conscious of its artifice. Diachronic analyses of the texts of secondary orality, such as the one I have presented here, should not only supplement the technocentric history of the phonograph, but can also provide new insight about the interaction of technology with the production and transmission of social meaning. Thus, the information gained through such an approach is useful to the ethnography of communication more generally.

Acknowledgments

I first worked through several of the ideas expressed in this paper as part of a seminar on “genre” conducted by Dr. Richard Bauman at Indiana University in the

spring semester of 1999. I am grateful for his comments and encouragement, which directly or indirectly suggested many of the lines of investigation I have pursued here.

Notes

1 By “phonographics,” I mean the study of sound media in their sociocultural contexts, perhaps a recorded-sound equivalent to “film studies.”

2 This despite his brief outline of a “sequence” of electronic communication culminating in the computer, which is *not* the same as a chronology of secondary orality (Ong 1967:87-88). More recent scholarship (e.g. Fowler 1994) routinely identifies the term “secondary orality” with electronically mediated alphabetic communication—mainly hypertext and internet chat programs—rather than with the mediation of actual *spoken* language that the term was originally coined to describe. But this semantic broadening is problematic, given that Ong has argued so consistently for the importance of the distinction between aural and visual sensory emphases in the evolution of human thought (1967, 1977, 1988 [1982]).

3 While I will focus here on commercial recordings, much could be said in a similar vein about “home” recordings and ethnographic recordings—although the latter were long considered primarily an aid for transcription and, as such, were functionally closer to recordings of business dictation.

4 Note in particular the use of the term *record* here, which at this early date is unlikely to have been borrowed metaphorically from phonographic usage. Ariston discs were obviously not “recorded,” which gives us cause to rethink the etymological significance of the word *record* itself: perhaps it never implied the undoctored inscription of a particular live event as has been suggested (Eisenberg 1987:109). Other terms often associated with the phonograph have earlier histories too: special “albums,” modeled after photograph albums and patented in 1892, were designed to hold sets of twelve Symphonion discs (Ord-Hume 1973:178). This same arrangement was later adopted for storing sets of disc gramophone records, and eventually the term “album” came to be applied to any compilation of multiple recorded selections—even if these appeared on a single long-playing disc. In this way, even the “record album” as a unit can trace its ancestry back to the disc music-box.

5 Other stock observations about musical recordings can also be applied to mechanical musical instruments. Automatophones had already begun to raise the technical ideal of performance standards beyond the ability of human musicians in the time of Beethoven and Haydn (Brauers 1984:27), a development usually attributed to spliced tape recordings of a much later date. John Philip Sousa’s oft-cited diatribe on the “menace of mechanical music,” which he predicted would devastate amateur musicianship in America, accordingly lambasted the player piano as vehemently as the “canned music” of the phonograph (Sousa 1906).

6 Another difference between the two cases is that recording musicians learned to play *for* the phonograph, so there was a tendency for techniques originally adopted for recording purposes to carry over into live performances—for example, the intensive use of vibrato on the violin or the introduction of the clarinet into klezmer ensembles (Katz 1999). This reciprocal influence was much less likely in the case of automatophones that did not directly involve live performances.

7 What is specifically meant by the phrase “walling England with brass” is not explained by any of the early Friar Bacon fiction in which it appears, but one early commentator, Sir Thomas Browne, glossed it as “the tradition of making a brazen wall about England, that is, the most powerful defence or strongest fortification which gold could have effected” (Thoms 1858:186).

8 A more frequently cited piece associating the phonograph with magical antecedents is an article by William Croffut, published in the New York *Daily Graphic* on April Fool’s Day, 1878. It claimed Edison had invented a machine that could convert earth and water into any kind of food. An object with basically the same property, “a table or sack that supplies itself with food,” features prominently in tale type AT 563 (“The Table, the Ass, and the Stick”) and is identified as folktale motif D1472.1.7 or D1472.1.22 depending on whether it takes table or sack form. The technological realization of one magical object (a talking “thing”) had suggested another one (an automatic provider of meals) to the editor’s imagination. Many readers allegedly believed the report, despite the fact that its final paragraph revealed the hoax, and wrote to Edison seeking to buy “food-machines” (Israel et al. 1998:223-4). Croffut was also responsible for coining a telling epithet for Edison, “The Wizard of Menlo Park,” and his *Daily Graphic* once portrayed the inventor clothed in the robes of a sorcerer (Lindsay 1997a:192).

9 While Kempelen’s choice of a Turkish figure may have been intended to exoticize his automaton in the Orientalist tradition (cf. Said 1978), the Ottoman Empire still shared a common border with his homeland of Hungary in 1769—indeed, the two states were at war from 1736-39 and 1788-91—so the “Turk,” while certainly a stereotyped Other, was not all that distant or abstract. As an alternative explanation, David Lindsay suggests that the Turkish guise may have been adopted as a tribute to the Eastern origins of automata, which at the time were thought to have developed in ancient Egypt (1997a:369, n.87).

10 *“Die Form des Sprach-Organs überraschte mich. Ich erwartete gewiß ein menschenähnliches Figur zu sehen.”*

11 *“Hierauf steckte er die rechte Hand durch das große Loch ins Kästgen, drückte mit dem Arme und Ellenbogen den Blasebalg nieder und sprach völlig mit der Stimme eines drey bis vier jährigen Kindes, sehr deutlich und vollkommen gut artikuliert in dem Kästgen aus: Oh Maman, Maman, on m’a fait mal! Antwortete darauf selbst im Charakter der Mutter, und führte so diesen kleinen Dialog zwischen sich und seiner Hand ein Weilchen fort.”*

12 *“Schon beantwortet sie einige Fragen ziemlich deutlich, und vernehmlich.... Wann man etwas nicht recht versteht, oder verstehen will, so wiederholt sie das Gesagte langsam; wann man dieses aber noch einmal fordert, so sagt sie es mit einer bösen, und aufgebrachten Stimme.”*

13 *“Also kann die Maschine auch hören und verstehn, was man sagt! . . . Also hat sie auch Leidenschaften!”*

14 *“[C]es ondulations elles-mêmes, se répandant dans l’atmosphère, seront les chants, les sons, les paroles du morceau dont on aura pris la phonographie.”*

15 This changed whenever the target audience was absent during recording. First-person texts were conventionalized in the 1880s during the development of

the Bell-Tainter graphophone, e.g. "I am a graphophone and my mother was a phonograph," "I am the graphophone, the invention of Mr. Chichester Bell and Mr. Charles Sumner Tainter &c." (Tate 1938:139). Later on, similar formulas were used on special advertising records: "I am the Edison Phonograph," "I am the Columbia Double-Disc Record," etc.

16 It is generally believed that the first text Edison recited into a phonograph was "Mary had a little lamb." His choice of this rhyme has been playfully criticized by some who would have preferred something more profound, such as the "WHAT HATH GOD WROUGHT" telegraphed from Washington to Baltimore by Samuel Morse in 1844 (Gelatt 1965:34, Morton 2000:2). It becomes more comprehensible when we learn that "Mary had a little lamb" was simply the standard phrase Edison and his colleagues had been using to test telephone diaphragms (Wile 1982:21, n.5), and was therefore functionally equivalent to "testing, testing, one two three."

17 Ray Wile incorrectly gives the date as December, 1891; Brooks 1978:15 has the correct date of December, 1892.

18 This is the usual explanation. One alternative reason for the removal of spoken introductions, however, is that Columbia also pressed discs from these masters for a number of client labels, such as the Sears, Roebuck & Co. "Oxford" and "Silvertone" labels, and may not have wanted the records identified as Columbia products.

19 The one example known to me is a cylinder notation first transcribed by Mike Loughlin for the 78-L@topica.com discussion list on July 1, 2001, which can be corrected on the basis of other documentation to read: "[Henry] Hagen voice announcing / Geo. Schweinfest / at the Phono Works / Piccolo Solo / St. Clare [?] Dance."

20 In 1891, a Columbia record would have been announced: "The Columbia Phonograph Company of Washington DC presents 'The Washington Post March,' as played by the U. S. Marine Band" (Shambarger 1995:149). North American cylinders began with the phrase "Edison Record," or after the introduction of the numbering system in 1892, with something like "Edison Record Number 600, 'Safe in the Harbor,' as sung by Mr. Joseph Natus" (Koenigsberg 1969:xix).

21 Gitelman (1999) notes that "not a few of the earliest records had ended with recorded applause." An example of *cheering* is provided by the March 1889 white wax cylinder recording of "Fifth Regiment March" by Issler's Orchestra, National Park Service catalog number 564.

22 There were various takes of Berliner disc 644, "Piano Sale," recorded by George Graham between 1896 and 1899, probably with Fred Gaisberg on piano. A version spoken by Berliner himself may have predated these, but none is listed in Charosh 1995.

23 This probably refers to Edison cylinder 3813, Russell Hunting's "Casey Departing By Steamboat," released about 1896-97 as Edison cylinder 3813, Columbia cylinder 9648, etc. Russell Hunting left the United States for England in 1898 and made records there for Edison Bell, whose earliest catalogue (ca. 1898) lists the title "[Casey] Leaving Dover for Paris (*Steamboat effects*)." Later lists mention Edison Bell 4099, later 5809, "Casey Crossing the English Channel (*Steamboat Effects*)." These were probably Anglicized versions of the Mississippi steamboat descriptive. In the United States, vocal quartets began making similar recordings after Hunting's

departure with the titles "Steamboat Leaving the Wharf at New Orleans," "Steamboat Medley," and "Down on the Mississippi (Levee and Steamboat Scenes)."

24 These did contain special effects, such as the squawking of a parrot in W. O. Beckenbaugh's "Auction Sale of a Dime Store Museum" (Columbia cylinder 10009, Berliner disc 685), but the emphasis was—at least initially—on the spoken element: the November 1896 Columbia catalog boasted that "These novel records are exceedingly popular for exhibition work, especially in displaying the marvelous qualities of the Talking Machine in reproducing rapid speech." The early Columbia catalogues referenced here are reprinted in facsimile in Gracyk 2000.

25 For example, the Columbia 11000s block (Lorenz 1981) or the Berliner 600s block (Charosh 1995). Sometimes performers also received their own blocks: e.g., the Columbia 9600s were dedicated to Russell Hunting's "Casey" series.

26 The two versions are Berliner 705, recorded October 30, 1894, track five on *Emile Berliner's Gramophone*; and Berliner 705Y, recorded December 1897, in the possession of the author. The former contains numerous verbal cues; the latter retains only the phrase: "Here comes General Washington! Three cheers for General Washington!"

27 Koenigsberg 1969:151 depicts a pre-printed "Minstrel First Part" title slip marked "No. 1" (indicating a series) and the title "High Old Time." This matches the sixth item listed on page 208 of the North American ledger transcribed by Koenigsberg (1969:133), recorded by the Manhasset Quartet on September 27, 1891.

28 Recorded examples of this title are Berliner 623, 623Z, and 623Y, recorded by George Graham and dating back to at least 1895; and Columbia disc 34, which was performed by Harry Spencer.

29 For example, his "Train Time at Punkin Center" descriptive was prefaced in print: "SCENE.—Typical town railway station with customary small town loafers waiting for the train to come in. They are looking at a board where train time is marked" (Stewart 1924:109).

30 Fagan and Moran 1983:171 identify the announcer as William Hooley, and "Sam" is S. H. Dudley (pseudonym for Samuel Holland Rous). My identification of speakers is based in part on vocal qualities and should be regarded as tentative.

31 Found as Victor 1946, Columbia cylinder 7705, and Columbia disc 653 (later A392). Another example of this use of the term *medley* is "Echoes of 1900 Medley Lancers," played by the Metropolitan Orchestra, Victor 280, recorded October 10, 1900. The "lancers" recording itself was introduced in the early 1890s and consists of instrumental parlor orchestra music framed as a live dance with one or more spoken interludes. Such recordings generally predate the turn of the century and are unfortunately rare today, but the few examples I have heard suggest that they are structurally at least as complex as the minstrel record.

32 The recording, and a summary of the "paradox" surrounding it, can be found online at <http://www.tinfoil.com/cm-9806.htm> (posted June, 1998; accessed July 5, 2001). The composition is a medley overture by Frank C. Collins (see Rehrig 1991:155).

References Cited

- Abbott, David P. 1916. *Behind the Scenes with the Mediums*. Chicago: Open Court Publishing Company.
- Allgemeine deutsche Bibliothek*. 1784. Carl Gottlieb von Windischs Briefe über den Schachspieler des H. von Kempelen, nebst drey Kupferstichen. Book review. (58:1) 275-80.
- Bakhtin, Mikhail M. 1994. *The Bakhtin Reader: Selected Writings of Bakhtin, Medvedev and Voloshinov*, ed. Pam Morris. London and New York: E. Arnold.
- Bausinger, Hermann. 1990 [1961]. *Folk Culture in a World of Technology*, trans. Elke Dettmer. Bloomington and Indianapolis: Indiana University Press.
- Bellamy, Edward. 1898 [1889]. With the Eyes Shut. In *The Blindman's World and Other Stories*. Boston and New York: Houghton, Mifflin, and Company, 335-65.
- Ben-Amos, Dan. 1976 [1969]. Analytical Categories and Ethnic Genres. In *Folklore Genres*. Austin and London: University of Texas Press. 215-42.
- Bowers, Q. David. 1972. *Encyclopedia of Automatic Musical Instruments*. Vestal, New York: Vestal Press.
- Brady, Erika. 1999. *A Spiral Way: How the Phonograph Changed Ethnography*. Jackson: University Press of Mississippi.
- Brauers, Jan. 1984. *Von der Äolsharfe zum Digitalspieler. 2000 Jahre mechanische Musik, 100 Jahre Schallplatte*. Munich: Klinckschardt & Biermann.
- Brooks, Tim. 1978. Columbia Records in the 1890's: Founding the Record Industry. *ARSC Journal* 10(1):4-36.
- _____. 1999. *Columbia Master Book Discography, Volume One*. Westport, Connecticut and London: Greenwood Press.
- Cervantes Saavedra, Miguel de. 1975. *Vida y Hechos del Ingenioso Cavallero Don Quixote de la Mancha*. Volume 4. Reprint. Barcelona: Círculo del Bibliófilo.
- Charosh, Paul. 1995. *Berliner Gramophone Records: American Issues, 1892-1900*. Westport, Connecticut and London: Greenwood Press.
- Chicago Tribune*. 1878. The Phonograph. May 23.
- Commercial News* (Charleston, South Carolina). 1887. Edison's Greatest Wonder. October 24.
- Cros, Guy-Charles. 1927. Charles Cros, Inventeur du Phonographe. *Mercure de France* (May 1): 513-23.

- Cyrano de Bergerac, Savinien. 1962 [1649]. *Voyages to the Moon and the Sun*, trans. Richard Aldington. New York: Orion Press.
- Daily Graphic* (New York). 1878. A Food Creator. Edison Invents a Machine That Will Feed the Human Race! Manufacturing Biscuit, Meat, Vegetables and Wine Out of Air, Water and Common Earth. April 1.
- Edison, Thomas. 1878. The Phonograph and its Future. *North American Review* 126 (May-June): 527-536.
- _____. 1888. The Perfected Phonograph. *North American Review* 379 (June):641-50.
- Eisenberg, Evan. 1987. *The Recording Angel: Explorations in Phonography*. New York: McGraw Hill.
- Emerson, John A. 1991. The Arrival of Edison's Tinfoil Phonograph in San Francisco and the Grand Musical Festival of May, 1878. *Inter-American Music Review* 11(2):41-51.
- Emile Berliner's Gramophone: The Earliest Discs 1888-1901*. 1988. Compact disc: Symposium 1058. Notes by Peter Adamson.
- Fagan, Ted and William R. Moran. 1984. *The Encyclopedic Discography of Victor Recordings: Pre-Matrix Series*. Westport, Connecticut and London: Greenwood Press.
- Field, Al G. 1912. *Watch Yourself Go By*. Columbus, Ohio: Al G. Field.
- Freind, J. 1973 [1750]. *The History of Physick; From the Time of Galen, to the beginning of the Sixteenth Century*, Part 2. Reprint. New York: AMS Press.
- Fowler, Robert M. 1994. How the Secondary Orality of the Electronic Age Can Awaken Us to the Primary Orality of Antiquity, or What Hypertext Can Teach Us About the Bible. *Interpersonal Computing and Technology: An Electronic Journal for the 21st Century* 2, 3 (July):12-46.
- Gaisberg, F. W. 1942. *The Music Goes Round*. New York: Macmillan.
- Gelatt, Roland. 1965. *The Fabulous Phonograph: From Edison to Stereo*. New York: Appleton-Century.
- Gentile, John S. 1989. *Cast of One: One-Person Shows from the Chautauqua Platform to the Broadway Stage*. Urbana and Chicago: University of Illinois Press.
- Gitelman, Lisa. 1999. How Users Define New Media: A History of the Amusement Phonograph. Paper presented at the Media in Transition Conference, MIT, October 8. Online text at <http://media-in-transition.mit.edu/articles/gitelman.html>. Accessed June 7, 2001.

- Goffman, Erving. 1974. *Frame Analysis: An Essay on the Organization of Experience*. New York, Evanston, San Francisco, London: Harper Colophon Books.
- Gracyk, Tim. 2000. *Companion to Popular American Recording Pioneers, 1895-1925*. Granite Bay, California: Tim Gracyk.
- Hockenberry, Frank. 1886. *Prof. Black's Phunnygraph, or, Talking Machine. A Colored Burlesque on the Phonograph*. Chicago: T. S. Denison.
- Hymes, Dell. 1974. *Foundations in Sociolinguistics: An Ethnographic Approach*. Philadelphia: University of Philadelphia Press.
- Israel, Paul B. et al., ed. 1998. *The Papers of Thomas A. Edison*. Volume 4. Baltimore and London: Johns Hopkins University Press.
- Illustrated London News*. 1845. The Automaton Chess-Player Redivivus. December 20.
- _____. 1846. The Euphonia, or Speaking Automaton. July 25.
- Jenkins, Reese V., et al., ed. 1994. *The Papers of Thomas A. Edison*, Volume 3. Baltimore and London: Johns Hopkins University Press.
- Johnson, Edward H. 1877. *Telephone Hand Book*. New York: Russell Brothers.
- _____. 1890. Edison's Phonograph, Its History and Development. *Scientific American Supplement* March 29:11872-3.
- Katz, Mark. 1999. *The Phonograph Effect: The Influence of Recording on Listener, Performer, Composer, 1900-1940*. Ph.D. dissertation, University of Michigan.
- Kempelen, Wolfgang von. 1970 [1791] *Mechanismus der menschlichen Sprache nebst Beschreibung einer sprechenden Maschine*. Stuttgart-Bad Cannstatt: Friedrich Frommann Verlag.
- Koenigsberg, Allen. 1969. *Edison Cylinder Records, 1889-1912*. New York: Stellar Productions.
- Lindsay, David. 1997a. *Madness in the Making: The Triumphant Rise and Untimely Fall of America's Show Inventors*. New York, Tokyo, and London: Kodansha International.
- _____. 1997b. Talking Head. *Invention & Technology* (Summer): 57-63.
- London Times*. 1846. The Speaking Automaton. August 12: 3.
- Lorenz, Kenneth M. 1981. *Two Minute Brown Wax and XP Cylinder Records of the Columbia Phonograph Company: Numerical Catalogue, August 1896-ca. March 1909*. Wilmington, Delaware: Kastlemusick.

- Minton, John Stephen. 1990. *Phonograph Blues: Folksong and Media in the Southern United States Before the Second World War*. Ph.D. dissertation, University of Texas at Austin.
- Morton, David. 2000. *Off the Record: The Technology and Culture of Sound Recording in America*. New Brunswick, New Jersey, and London: Rutgers University Press.
- New York Times*. 1877. The Phonograph. November 7.
- _____. 1878. The Phonograph Exhibited. March 24.
- Ong, Walter J. 1967. *The Presence of the Word: Some Prolegomena for Cultural and Religious History*. New Haven and London: Yale University Press.
- _____. 1977. *Interfaces of the Word: Studies in the Evolution of Consciousness and Culture*. Ithaca and London: Cornell University Press.
- _____. 1988 [1982]. *Orality and Literacy: The Technologizing of the Word*. London and New York: Routledge.
- Ord-Hume, W. J. G. 1973. *Clockwork Music: An Illustrated History of Mechanical Musical Instruments from the Musical Box to the Pianola from Automaton Lady Virginal Players to Orchestrion*. New York: Crown Publishers, Inc.
- Paskman, Dailey. 1976. "Gentlemen, Be Seated!": *A Parade of the American Minstrels*. New York: Clarkson N. Potter.
- The Phonogram*. 1899. Mr. Joseph Gannon. 3(1):9.
- The Phonograph and How to Use It* 1971 [1900] Reprint. New York: Allen Koenigsberg.
- Poe, Edgar Allen. 1984 [1836]. Maelzel's Chess-Player. In *Essays and Reviews*. New York: Library of America, 1253-76.
- The Proceedings of the 1890 Convention of Local Phonograph Companies*. 1980 [1890]. Reprint. Nashville, Tennessee: County Music Foundation Press.
- Punch*. 1846a. A Voice from Egyptian Hall. 11 (July-December): 64
- _____. 1846b. The Speaking Machine. 11 (July-December): 83
- _____. 1846c. The Speaking Automaton on Railways. 11 (July-December): 143
- Randal, Don Michael. 1976. *Harvard Concise Dictionary of Music*. Cambridge, Massachusetts and London: Belknap Press.
- Raspe, R. E. 1948 [1786]. Marvelous Travels and Campaigns in Russia. In *Singular Travels, Campaigns and Adventures of Baron Munchausen*, by R. E. Raspe et al. London: Cresset Press. 7-24.

- Rehrig, William H. 1991. *The Heritage Encyclopedia of Band Music: Composers and their Music*, Volume I. Westerville, Ohio: Integrity Press.
- St. Louis Evening Post*. 1878a. The Funny Phonograph. Some New Facts About the Remarkable Machine. May 30.
- _____. 1878b. The Orthophone. An Invention That Eclipses All of Edison's. June 1.
- Said, Edward W. 1978. *Orientalism*. New York: Pantheon Books.
- San Francisco Chronicle*. 1878. Edison's Phonograph. A Loud-Mouthed Delegate Comes to the May Festival. May 28.
- Schafer, R. Murray. 1977. *The Tuning of the World*. New York: Alfred A. Knopf.
- Scientific American*. 1876. The Human Voice Transmitted by Telegraph. September 9.
- _____. 1877a. The New Bell Telephone. October 6.
- _____. 1877b. A Wonderful Invention—Speech Capable of Indefinite Repetition from Automatic Records. November 17.
- _____. 1877c. The Talking Phonograph. December 22.
- _____. 1878a. The Talking Phonograph on Exhibition. February 9.
- _____. 1878b. The Speaking Phonograph. March 16.
- _____. 1878c. The Phonograph Wins a Victory. June 22.
- _____. 1878d. An Hour With Edison. July 13.
- _____. 1879. A Telephone Concert. May 31.
- _____. 1881. The Telephone at the Paris Opera. December 31.
- Shambarger, Peter. 1994. Cylinder Records: An Overview. *ARSC Journal* 26(2):133-61.
- Shepard, Leslie, ed. 1991. *Encyclopedia of Occultism and Parapsychology*. Volume 2. Detroit: Gale Research, Inc.
- Sousa, John Philip. 1906. The Menace of Mechanical Music. *Appleton's* (8): 278-84.
- Stewart, Cal. 1924. *Uncle Josh Stories, Including Readings, Humorous Poems, and Sketches*. Boston: Walter H. Baker.
- Tate, Alfred O. 1938. *Edison's Open Door: The Life Story of Thomas A. Edison, a Great Individualist*. New York: E. P. Dutton.

- Teutsche Merkur, Der.* 1784. Ueber Herrn von Kempelens Schachspieler und Sprachmaschine. 2. Brief, Leipzig, den 14. Oktober. 178-182.
- Thoms, William J., editor. 1858. *English Prose Romances, with Bibliographical and Historical Introductions*. Volume 1. London: Natali and Bond.
- Toll, Robert C. 1974. *Blacking Up: The Minstrel Show in Nineteenth-Century America*. New York: Oxford University Press.
- Walsh, Jim. 1944. Russell Hunting, Sr. *Hobbies* (November):27-28.
- _____. 1946. Edward Warren Meeker. I. *Hobbies* (February):19-20.
- _____. 1947. Ada Jones VIII. *Hobbies* (January):22.
- _____. 1955. Jottings from Old Record Catalogs and Phonograph Publications. *Hobbies* (April):28-29, 45, 56.
- _____. 1958. Leonard Garfield Spencer As His Daughter Ethel Lovingly Recalls Him, Part II. *Hobbies* (August):30-33.
- Washington Evening Star.* 1878. National Academy of Sciences. An Interesting Session Yesterday—Edison, the Modern Magician, Unfolds the Mysteries of the Phonograph. April 19.
- Watson, Thomas A. 1937. *The Birth and Babyhood of the Telephone*. American Telephone and Telegraph Company.
- Wile, Raymond. 1971. Raymond R. Wile's Adventures in Edisonia. *ARSC Journal* 3(2/3):7-23.
- _____. 1982. The Edison Invention of the Phonograph. *ARSC Journal* 14(2):19-32.
- Windisch, Karl Gottlieb von. 1783. *Karl Gottlieb von Windisch's Briefe über den Schachspieler des Hrn. von Kempelen, nebst drey Kupferstichen die diese berühmte Maschine vorstellen*. Basel: Chr. von Mechel.
- Wittke, Carl. 1968. *Tambo and Bones: A History of the American Minstrel Stage*. Westport, Connecticut: Greenwood Press.