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## **The Routledge Companion to Sound Studies**

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### **Remastering the recording angel**

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# REMASTERING THE RECORDING ANGEL

*Jacob Smith*

When Evan Eisenberg's book, *The Recording Angel*, was published in 1986, it struck reviewers as the first study of its kind. One critic called it "the first full-length book on the implications and effects of recording on music" (Parels 1987: H24). Another wrote that, given the "enormous impact" of recording technology on "the musical life of our era," it was surprising that so little had been written about it (Fantel 1986: H23). These reactions to Eisenberg's book are surprising given that they occurred more than a century after Thomas Edison invented the phonograph in 1877. As a point of comparison, a book published in 1986 on the implications of Edison's later invention – the motion picture – would not have struck anyone as the first of its kind; in fact, it would have joined a sizable literature on the history and theory of film. It seems that Eisenberg had discovered an intellectual terrain that had long been hidden in plain sight.

I have a special affection for *The Recording Angel* because it was an important resource for me as I studied the history and theory of recorded sound as a graduate student in the early 2000s. At that time, the book still seemed to exist in a class of its own. The study of recorded sound has expanded considerably in the last fifteen years, due in part to the emergence of the field of sound studies. Themes in Eisenberg's book provide a useful point of reference for an overview of the academic study of recorded sound in the era of an incipient sound studies.

## **The angel's quill and the machine's ear**

Eisenberg's title, *The Recording Angel*, refers to a logo for the record company EMI that depicted "a winged cherub sprawled on a record and using a quill to engrave it" (Eisenberg 1988: 63). As with the RCA-Victor logo "His Master's Voice," the recording angel is a rich image to think with, and was discussed in the German media theorist Friedrich Kittler's analysis of the gramophone around the same time that *The Recording Angel* was published. Eisenberg and Kittler's attention to that image is indicative of a scholarly tendency to understand sound recording devices as reading and writing machines.

The poet Rainer Maria Rilke addressed the status of phonographic grooves as a form of inscription in his essay "Primal Sound" (1919), which compares the grooves on wax cylinders to those on the inside of the human skull (see Kittler 1999: 39–41; Gunning 2003). Phonographic inscription also fascinated Theodor Adorno, whose essay "The Form of the Phonograph Record" (1934) approaches the phonograph disc in terms of "the contours of its thingness"

(Adorno 2002: 278). Adorno wrote that the record was a new form of musical writing, a “scriptal spiral” that “survives in time” (Adorno 2002: 280). In a key early work of contemporary sound studies, Lisa Gitelman made a systematic study of the phonograph as part of a genealogy of inscription, dictation, and phonetic shorthand (Gitelman 1999). Patrick Feaster has advanced that project, and points out that the term “phonography” has “almost always been defined contrastively, relative to some other practice of inscription that is perceived as less aurally expressive” (Feaster 2015: 139). Mara Mills expands this area of inquiry into disability studies, revealing the close connection between the development of sound technologies and devices for the deaf and blind communities (Mills 2011; Mills 2015).

The “thingness” of the phonograph has also been discussed in terms of the simulation of the human body. Here, the iconic image is not the recording angel’s quill but Alexander Graham Bell’s “ear phonautograph,” images of which have appeared in several influential sound studies texts. James Lastra reproduces that image in the context of an argument about the simulation of the vocal apparatus and ear in the design of early talking machines (Lastra 2000: 34–5). For Jonathan Sterne, Bell’s device is illustrative of the ear as “a mechanism for transducing vibrations”; a “tympanic mechanism” (Sterne 2003: 34). These examples show that scholarship in sound studies has been in dialogue with the social history of technology, film “apparatus theory,” and media archaeology, fostering an interest in the cultural history of technological devices.

Eisenberg was interested in technological devices to the extent that they allowed him to discuss recorded music. The close association between recorded sound and music is one explanation for the paucity of scholarship on the more general category of phonography, as compared to medium-specific work on film. To the extent that phonography was considered the domain of music, and as long as musicologists were relatively uninterested in the forms of popular music most associated with sound technology (jazz, rock, disco, hip hop, etc.) the medium would remain underexplored. The focus on music also hindered the investigation of the many other uses to which recorded sound has been put. One review of *The Recording Angel* compared the invention of the phonograph to the invention of musical notation: “In both instances, the aim was the preservation and conveyance of music” (Fantel 1986: H23). In fact, the preservation of music was not the driving force behind the invention of the phonograph, as indicated by the fact that music ranked a poor fifth on Edison’s initial list of applications for “the gathering up and retaining of sounds hitherto fugitive.” Ahead of music, Edison promised letter-writing, dictation, books, and “Educational Purposes,” and only then mentioned music, which was quickly followed by “Family Record; Phonographic books; Musical-Boxes; Toys; Clocks; [and] Advertising” (Edison 1878: 527).

Scholarship in sound studies has expanded the investigation of recorded sound to encompass the variety of phonographic writing indicated by Edison’s list, including spoken word recordings, film sound design, radio transcription, dictation, telephone answering machines, field recording, and home recording (see for example Morton 2000; Smith 2011a; Russo 2010; Bijsterveld 2008). Edison helped to inaugurate a long and diverse history of recorded sound industries, and scholars such as Gitelman, Emily Thompson, and David Suisman have outlined the complex evolution of phonograph companies from being purveyors of a technological wonder to a business instrument to an entertainment device (Gitelman 1999; Thompson 1995; Suisman 2009). Numerous scholars have described the ways in which sound has been commodified: note Adorno’s concerns about “regressive listening” and musical standardization; Jacques Attali’s anxieties about an era of repetitive mass production; Eisenberg’s account of “music’s backwards metamorphosis, from butterfly to chrysalis” to become a commodity; and Jeremy Wade Morris’s recent analysis of the “digital music commodity” (Adorno 2002; Attali 1996; Eisenberg 1988: 24; Morris 2015). The industries built upon recorded sound have continued to proliferate in the

digital era, including sound art, podcasting, audiobooks, ringtones, audio branding, and sound design for digital games. One thing is certain: in the era of sound studies, the recording angel's quill is busier than ever.

### Icons of phonography

One of Eisenberg's central concerns was the interaction of musical performance and recording technology. In one section of the book, he refers to Louis Armstrong and Enrico Caruso as "icons of phonography." For Eisenberg, an icon of a new art was someone with a personality so powerful that they seem to be present when they aren't, someone "so in command" of their art that they turn a medium's "disadvantages into advantages" (Eisenberg 1988: 146). While historians such as Feaster and Tim Gracyk have demonstrated that Armstrong and Caruso were not the first phonographic celebrities, Eisenberg's investigation of how those "icons" developed modes of performance in tandem with particular assemblages of recording technology has been taken up by subsequent scholars (Feaster and Smith 2009; Gracyk 2013).

Sterne describes how "easily recognizable forms of human speech" such as rhymes and popular quotations were used as testing material for the early phonograph, mobilizing "conventionalized language" to help the machine in "doing its job of reproducing" (Sterne 2003: 247). Feaster develops this theme through the concept of "phonogenic" sonic subjects: "voicings of communicative behavior" intended for "sonic mediation across time and space" (Feaster 2015: 145). Similarly, in his discussion of "phonograph effects" – the "manifestations of sound recording's influence" on musical culture – Mark Katz includes the time limitations enforced by recording formats and the ways in which particular technologies have been more or less "receptive" to certain instruments or performance styles (Katz 2010: 31–41).

As the example of Armstrong and Caruso indicates, vocal performance is a particularly resonant case study for considering phonogenic styles and phonograph effects. During the "acoustic era" of sound recording, sound was funneled through a horn to a flexible diaphragm that transferred vibrations to a stylus that engraved grooves onto a wax disc. No electronic amplification was involved in this process, and so performances had to be quite loud in order to produce a viable recording (Katz 2010: 37–9). Dynamics of the acoustic era favored vocal performers who had developed techniques to address audiences in large spaces, such as opera singers, political orators, variety stage performers, auctioneers, and street performers (Siefert 1995: 430–1). Electric recording with sensitive new microphones allowed for new protocols, such as the male radio "crooners" described by scholars like Alison McCracken (McCracken 2015; Smith 2008). Neepa Majumdar and Amanda Weidman explore the interplay of vocal performance and sound technology with regards to female playback singers and recording artists in the Indian film industry (Majumdar 2001; Weidman 2006; Weidman 2015). Kay Dickinson examines the interplay of gender, voice, and technology with records to recordings of female singers treated with vocoders and digital autotune applications (Dickinson 2001).

McCracken, Majumdar, Weidman, and Dickinson reveal the ways in which cultural notions of gender shaped the interplay of voice and technology, and Lindon Barrett and Alexander Weheliye are among scholars who write about how ideologies of race have become refracted through the recorded voice. An important distinction for both authors is that between a "singing voice" associated with the enactment of blackness and embodiment, and a "signing voice" associated with whiteness and disembodiment (Weheliye 2005; Barrett 2009). Alice Maurice's investigation of the promotion of African American voices in early sound films reveals a dual strategy to emphasize both the "hyperpresence of black bodies in order to deflect attention away from the apparatus" as well as offering those same bodies "to show off the prowess of the

apparatus” (Maurice 2002: 33, 45). Scholarship such as this suggests that who or what counts as an “icon” of media performance at any historical moment is dependent upon a set of social assumptions about skill, technique, identity, embodiment, and authenticity.

Just as important as the interaction of performance styles and recording technologies was the new kind of spaces where these interactions took place: recording studios. Scholars have produced histories and ethnographies of the recording studio and placed it within a broader “soundscape of modernity” characterized by the ability to control the depiction of sonic spaces (Horning 2013; Morton 2004; Thompson 2002). Performers were not the only creative presence in the studio, and Eisenberg took a keen interest in the “genealogy of the popular producer” (Eisenberg 1988: 124). *The Recording Angel* is attentive to the evolution of mixing and overdubbing in studio production, such that popular recordings were often “pieced together from bits of actual events... like the composite photograph of a minotaur” (Eisenberg 1988: 109). Likewise, one of Katz’s phonograph effects was “manipulability,” the ability not to simply capture sounds in the studio, but to manipulate them, and so create sonic performances that “could never have existed” (Katz 2010: 41). Kittler took an interest in “time axis manipulation” and “time axis reversal”: the ability of studio producers to speed up, slow down, or reverse sound recordings (Kittler 1999: 34–5).

Eisenberg wrote primarily about classical music, opera, jazz, and rock, but in the decades since the 1980s, the cutting edge of sound production has moved to dub, hip hop, and electronic music. Michael Veal explores the aesthetics of Jamaican dub, a style in which the “pop song was electronically deconstructed and reconfigured by a generation of studio engineers” (Veal 2007: 34). DJ culture popularized the use of the turntable as a musical instrument, and Mark J. Butler explores the live performance of recorded sounds by DJs and laptop artists. Butler describes the various techniques by which performers have interfaced with recorded sounds, as well as performative modes like “passion-of-the-knob moments,” which are characterized by the “strange incongruity” that arises when “a musician directs exceptionally intense expressivity toward a small, technical component associated with sound engineering” (Butler 2014: 101).

Another trajectory of recorded sound production involves moving outside of the studio. Inspired by the work of John Cage and the Canadian composer R. Murray Schafer’s influential work on soundscapes, a cohort of sound artists and field recordists including Hildegard Westercamp, Bernie Krause, Francesco Lopez, Jana Winderen, Annea Lockwood, and Chris Watson have developed a genre of phonography that relies upon the use of portable sound equipment (Schafer 1994; Lane and Carlyle 2013). For Krause, there is a political and scientific dimension to this type of recording, since field recordings can serve as data sets that track the loss of habitat in our era of eco-crisis. Krause tells the story of recording in a forest before and after the area was opened to logging. To the eye, the site appeared “wild and unchanged,” but his recordings revealed the loss of biodiversity. Krause concludes that “wild soundscapes are full of finely detailed information, and while a picture may indeed be worth a thousand words, a natural soundscape is worth a thousand pictures” (Krause 2012: 70–1). The genres of field recording and environmental sound art provide another indication of the historical variability of what might count as an “icon of phonography,” and feature a new set of sonic icons such as the song of humpback whales, the creaking of melting glaciers, the buzz of tropical insects, and the sonification of weather data.

### The social record

Returning to the EMI logo of the recording angel, we might wonder about the uses to which the angel’s etchings will be put. Given that EMI was a large corporation aiming for a mass

market, their recordings were most likely destined to create what Kate Lacey calls a “listening public” (Lacey 2013: 7–8). That is, the recording angel logo reminds us that recorded sound circulates. As Katz puts it, “when music becomes a thing it gains an unprecedented freedom to travel” (Katz 2010: 14).

Michael Denning describes how new vernacular musics emerged during the era of electrical recording in the 1920s and traveled through “an archipelago of colonial ports, linked by steamship routes, railway lines, and telegraph cables” (Denning 2015: 38). As Denning demonstrates, the portability of recorded sound can have important social effects, altering musical history, upsetting aesthetic hierarchies, reconfiguring listening publics, and even helping to pave the way for a post-colonial sensibility. Scholarship on recorded sound’s portability has often focused on compact cassette technology. Consider Peter Manuel’s classic study of cassette culture in India, as well as work on cassette sermons in Islamic culture by Annabelle Sreberny-Mohammadi, Ali Mohammadi, and Charles Hirschkind (Manuel 1993; Sreberny-Mohammadi and Mohammadi 1994; Hirschkind 2009).

The portability of sound creates a certain paradox whereby sonic commodities circulate through public spaces but are often experienced in isolation. Eisenberg was fascinated by such solitary listening, referring to the trope of the “desert island disc” to assert that

the paradox of music for a desert island is right at the heart of phonography. To take the sounds of a full-fledged culture, sounds made possible by the efforts of thousands of musicians and technicians over the course of centuries, and enjoy them privately in your own good time: that’s the freedom records give you.

*(Eisenberg 1988: 44)*

The ethical dimension of solitary listening has been central to scholarship on mobile music listening, from the cassette Walkman to the Apple iPod. Michael Bull writes that iPod users move through space in an “auditory bubble,” and asserts that iPods are “tools enabling the urban citizen to move through the chilly spaces of urban culture wrapped in a cocoon of communicative warmth whilst further contributing to the chill which surrounds them” (Bull 2007: 3, 18). David Beer counters by claiming that the users of mobile music remain “an integrated yet distracted part of the aural ecology and informational structures of the city” (Beer 2007: 848; see also Gopinath and Sanyek 2014).

Mobile music is only one social use of recorded sound. Environmental or ambient recordings were part of Eisenberg’s study, and he tracks a lineage from Erik Satie’s “furniture music” to the Muzak corporation (Eisenberg 1988: 75). Subsequent work on environmental or “ubiquitous” music has been published by Sterne, Timothy Taylor, Tim Anderson, Joseph Lanza, and Anahid Kassabian (Sterne 1997; Taylor 2009; Anderson 2006; Lanza 2003; Kassabian 2013). Eisenberg also writes about the use of recorded music in courtship, referring to the phonograph as the “Cyrano machine” (Eisenberg 1988: 87). Other facets of recorded sound in social life explored by sound studies scholars include wiretapping, mood regulation, sound as a military weapon, as erotica, as accompaniment to exercise, and as a component of product design (DeNora 2000; Smith 2008; Daughtry 2015; Goodman 2010; Gopinath 2013; Beckerman 2014; Bijsterveld 2008).

Eisenberg pays particular attention to record collecting as a social practice. In one chapter, he describes a collector whose home contains stacks of discs on every available surface (Eisenberg 1988: 1, 17). In another chapter, Eisenberg describes his college friend Tomas, who is a passionate collector of opera records and an out gay man (Eisenberg 1988: 41). The case of Tomas’s opera fandom indicates how the portability of recorded sound could foster not only listening publics, but listening “counterpublics” (Warner 2002). Wayne Koestenbaum describes the

connection between gay culture and opera fandom, and he notes that opera records “changed home’s meanings. Home bent to accommodate opera.” “The category of ‘homosexuality’ is only as old as recorded sound,” he writes, and “both inventions arose in the late nineteenth century, and concerned the home. Both are discourses of home’s shattering” (Koestenbaum 1993: 47). Koestenbaum describes vernacular practices of what Kittler called “time axis manipulation”:

turn Caruso into a woman by speeding him up; turn Galli-Curci into a man by slowing her down... A recorded voice is genderless sound waves. Thus a disc’s revolutions teach something truly revolutionary: that the pitch of a voice, which we take to be an indicator of gender, can be changed once sound passes into the home listener’s magic cabinet.

*(Koestenbaum 1993: 61)*

Eisenberg’s chapters on record collectors were ahead of their time in their concern for the reception of media texts, but they also highlight how much has changed in the culture of recorded sound since 1986. In our current moment, collections of sound are found on hard drives and smartphones rather than stacked on the surfaces of one’s home (although the sale of vinyl discs has been making a notable comeback). Likewise, iTunes and online services like Spotify have mainstreamed “mix tape” and playlist culture. As recorded sounds continue to proliferate they will certainly take on new social functions, and scholars of sound will have to keep their ears open to emerging developments.

### **The recording angel of history**

At one point in his book, Eisenberg suggests that the recording angel logo reveals the record company to be in the business of determining “what each musician’s afterlife shall be” (Eisenberg 1988: 63). The phonograph, after all, is a “durative” form of media; that is, it is a modern communication technology that transforms moment-to-moment human communication into a form that endures over time (Williams 1980: 55). This ability to reanimate communicative events from the past has meant that recorded sounds have been frequently associated with the afterlife, ghosts, and death. “Record listening is a séance where we get to choose our ghosts,” Eisenberg writes (Eisenberg 1988: 57).

Early phonograph industry promotion praised the device for its ability to preserve the voices of loved ones and capture the words of “great men” before they died. Sterne writes of the RCA-Victor mascot Nipper as illustrative of “the peculiar Victorian culture of death and dying into which sound recording was inserted,” since some have postulated that the dog is seated on a coffin, listening to the voice of a recently deceased master (Sterne 2003: 301–2, see also Brady 1999: 47–8). Such discourses are part of a broader tendency to associate modern media technologies with the supernatural and uncanny, a tendency that Jeffrey Sconce has discussed under the rubric of “haunted media” (Sconce 2000). In the domain of recorded sound, examples include the use of tape recorders to record the voices of the dead, the playing of records backwards in order to reveal hidden occult messages, and a fascination with the sonic reanimation of the voices of dead celebrities (Sconce 2000; Smith 2011a, 2011b; Stanyek and Piekut 2012).

A related set of questions has to do with recorded sound and memory. William Howland Kenney examines the relationship between recorded music and collective memory in early twentieth-century American cultural life, and finds that “the phonograph’s repetitive function acted as a major aid to memory by resounding the patterns of sensibility embedded in commercialized musical formulas from the past” (Kenney 1999: xix). Theodore Gracyk refers to research

on the human perception of timbre to suggest that our difficulty in retaining specific timbres in memory is the basis for a desire to play the same records again and again (Gracyk 1996: 59–60). The result is that popular recordings tend to saturate the everyday experience of listeners at a given time, such that the specific sounds of a given record, heard years later, can powerfully trigger the memory of a bygone era.

There is an irony here, that the most “contemporary” sounds at a given moment are destined to be the ones that most powerfully index the past. Some critics have identified a crisis with regards to popular sound and collective memory that occurred during the first decades of the twenty-first century. That crisis was given aesthetic expression by a genre of electronic music dubbed “hauntology” and associated with artists such as Philip Jeck, Burial, the Advisory Circle, and the Caretaker. Mark Fisher writes that by the mid-2000s, “it was becoming clear that electronic music could no longer deliver sounds that were ‘futuristic’” (Fisher 2012: 16). Fisher holds that hauntological recordings restore “the uncanniness of recording by making the recorded surface audible again,” via “the foregrounding of the sound of vinyl crackle,” which “unsettles the very distinction between surface and depth, between background and foreground. In sonic hauntology, we *hear* that time is out of joint” (Fisher 2013: 48–9).

With this invocation of the contour of recorded sound’s thingness, I would like to conclude by returning to the image of the angel etching onto a disc. The hauntological crackle transforms the cherub-like angle into an uncanny phantom. Moreover, recorded sound in the digital era might be imagined as the angel unbound from the materiality of the disc, with sounds existing everywhere and nowhere in a heavenly and dematerialized “cloud.” The hauntological crackle serves as a reminder however, that digital sound technologies still leave a material footprint via data farms and the “high tech trash” of our digital devices (see Smith 2015).

The figure of the recording angel and Eisenberg’s pioneering book help us to track a set of recurring tensions across the century-long experience of recorded sound: tensions between material object and dematerialized presence; between acts of embodied performance and studio-enhanced writing; between solitary listening and far-reaching listening publics. *The Recording Angel* is now part of a growing bookshelf on the history and theory of recorded sound, but scholars and practitioners may still find it to be a useful point of reference as they track the new figures, tensions, and historical trajectories that they discover in the widening spiral of phonography.

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