Inventing Entertainment

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The Player Piano and the Origins of an American Musical Industry

Brian Dolan

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For Richard A. Dolan
Temporary steward of an American institution

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Preface

I HAVE SOME sort of inexplicable attraction to flea markets and garage sales. I long ago gave up on the idea that I was actually going to find a rare treasure—that diamond in the rough—in a dusty box labeled "Everything $1." But I remain drawn to the exploration of what people have finally decided to identify as their own junk. Perhaps it is not even their junk. Maybe it was inherited from their parents, filtered through a filial generation. But while perusing all sundry items displayed along folding tables, I am often struck by the idea that at some point, this stuff was probably important to someone. That thought alone suddenly gives more meaning—a sort of melancholy value—to the objects in front of me. The sellers are letting go of not only a material artifact but also of a memory. For them, it is time to let go, to offer it to others. They are at the spring cleaning stage of life. But for potential buyers like myself, sometimes such objects and memories are considered to be worth preserving.

My thoughts about preserving the past have turned into a professional bias. I received a degree in history, and for years I have pored through boxes of old manuscripts and turned the delicate pages of rare books, researching different aspects of the history of science, medicine, and technology. It is with some irony, however, that I

learned a profound lesson about the meaning of history from an American expat biologist, Lisa Fagg, who lived a few streets away from me in Cambridge, that esteemed medieval market town. She also has an affinity for flea markets, it turns out. One day in the early 1990s during a trip to New England, she and a friend were strolling through a market when she heard music emanating from a piano in the distance. Something about it captured her attention. At that point, she turned to her friend and exclaimed: "That's Grandpa!" Because her grandfather, whose name was J. Lawrence Cook, had died some fifteen years earlier, it was a comment that needed some explanation. As Lisa set off "following her ears" in search of the piano, she recalled distinct childhood memories of listening to her grandfather—a professional African American musician and recording artist—at work at the piano. She learned, in her words, to recognize "the unmistakable musical 'voice' of Grandpa."[1]

Upon reaching the corner of the flea market, she approached a huge van with a player piano in it. The perforated music roll that was running through this automated instrument was one of the rolls her grandfather had made. "I was thrilled," said Lisa, and when she introduced herself as one of Cook's granddaughters to the vendors, they were honored. Lisa watched as the piano keys danced around to the music that her grandfather had performed long ago. It was as if he was sitting at the vacant spot in front of the piano. She learned from that chance encounter that there was a "J. Lawrence Cook special interest group" in America, and that they collect, sell, and trade "JLC" piano rolls. They are connected to an international network of aficionados of mechanical musical instruments who not only enjoy listening to such rare recordings of America's musical past, but whose efforts to preserve these historical "records" keep the opportunity alive for others to enjoy them. If it was not for the people whom Lisa had met at the flea market, she would not have had the chance to feel the closest to her grandfather that she had felt in the decades since his death.

When I met with Lisa a few years ago, she shared with me her thoughts about what it was like to rekindle old family memories with the aid of the sounds of history. It so happened that by this time, I too had an encounter with a player piano that brought back memories of my childhood. As a result, I decided to embark on a pursuit to explore the world of the collectors and dealers who preserve this past, and to

learn more about the invention of the technology that allowed for the reproduction of piano music. I discovered that J. Lawrence Cook had an interesting role to play in this history, but Lisa's reminiscences brought it all alive in new ways.

Lisa grew up in Brooklyn and has vivid memories of visiting her grandparents in the Bronx when she and her grandpa sang the lyrics of new songs he had "reproduced" on piano rolls. He had been in the player piano business since its early days, since the 1910s, and over the decades had turned all types of new musical genres into "mechanical" music—from stride and jazz to Paderewski to the Beatles. "I remember the first time I heard 'Penny Lane,' 'Michelle,' and 'Eleanor Rigby'—and it wasn't coming from Liverpool," said Lisa. "I was sitting at the player piano beside Grandpa in my grandparents' house in the Bronx." I told Lisa that player piano rolls had a long history of spreading music around, before the gramophone or radio were used to popularize music. It was also an international trade. But what was intriguing about Lisa's story was that she was recollecting a moment in her grandfather's career and in the player piano industry that was struggling to survive compared to its heyday of the 1910s and '20s. By the 1930s, the industry had already fallen as a result of the Great Depression, witnessed a revival in the 1950s, and was about to face new challenges with jukeboxes, electronic synthesizers, and the apathy of the inheritors of an older generation's technology. Yet the business survived. The company that J. Lawrence Cook worked for—QRS, which was founded at the dawn of the twentieth century—had been purchased by a mechanical music enthusiast who vowed to keep it alive. It was "an American institution," he said. It is an institution that exists to this day, both as a contemporary company and as a legacy maintained largely through the efforts of collectors and enthusiasts of musical history.

What I learned when meeting people like Lisa or the "special interest groups" that she encountered at the flea market is that this history—about the sounds of history—is not merely a record of facts about the past. What I discovered in researching this book is that history can be kept alive in different ways. "I can still hear it all in my mind's ear," says Lisa. "Grandpa's gruff bass-baritone and my child's voice. He never seemed to grow weary of hearing—and singing—the same songs over and over again. It was incredible fun then, and listening to Grandpa's recorded music today takes me back to

those wonderful times." For Lisa, a chance encounter with an old technology that is still in use has kept the spirit of the past alive and audible.

This is a book about such connections between the past and the present, about the technology through which history is preserved and the love and money it takes to preserve it. This is also a story of an American musical institution set within the context of business entrepreneurship and popular entertainment in America's Progressive Era and early Jazz Age. It reveals an overlooked chapter in the social history of the American entertainment industry—the development of mass-mechanized or "recorded" piano music and the social relations of businessmen and a diverse community of artists involved with it. The story revolves around the player piano, the binary digital encoding of its rolls, the first mass production of machine music, and the impact these technologies made on the lives of entertainers and audiences, past and present.

The player piano is both a visual entertainer and musical instrument. The absence of a performer in front of a playing piano is unusual. So is the presence of a dilettante pumping pneumatic pedals rather than playing keys to produce the sounds of a virtuoso. This anomaly intrigues in ways that can transcend the impact of the musical score. In the first decades of the twentieth century, this made the player piano's presence in parlors, saloons, fairgrounds, and family rooms enticing. As Kurt Vonnegut later wrote: "Makes you feel kind of creepy, don't it, Doctor, watching them keys go up and down? You can almost see a ghost sitting there playing his heart out."[2] When one watches the player piano, the invisibility of the entertainer is conspicuous, even mysterious, especially for those who see it for the first time.

A musical machine of extraordinary popularity before the advent of an improved gramophone or radio, the player piano introduced quality recorded music and popularized new kinds of music in the early twentieth century. When the player piano made its debut in Manhattan showrooms and at concerts at Carnegie Hall, audiences were captivated. Sales soon soared. The player piano—often known by the trade name of one manufacturer, Pianola—began to outsell regular pianos, and by the roaring '20s, "the player" had created an industry that in annual sales was second only to those of automobiles.

Its success was owed largely to the absence of the person who performed its "live" music, particularly given the prominence of pianos and the respect that pianists commanded in an era when musicians' careers were fraught with social and ethnic prejudices.

"In the years before World War I," remembered James P. Johnson, the famous stride pianist and avatar of African American jazz music, "there was a piano in almost every home, black or white. . . . Most people couldn't play them, so a piano player was important socially."[3] It was so important, in fact, that a new social hierarchy was created in cities such as New Orleans, Chicago, and New York, where the black entertainer attained a new, privileged identity by becoming an accomplished pianist. With the help of the sale of music rolls, recording for which earned some pianists a living, their musical compositions spread across the world. Perhaps because automation rendered the pianist invisible, the player piano was that much more agreeable to its mesmerized audiences. This is only part of the story of this phenomenon, however.

The chapters that follow explore the relationship between business, art, and technology concurrent with the success of the radio and phonograph, revealing how the foundation was laid for the cultural reception of later recording and broadcasting technologies. Examining the collaboration between engineers, entrepreneurs, and entertainers illuminates diverse themes, including the aesthetics of mechanized musical expression, strategies for the commercialization of talent, patterns of consumption of new musical genres (foxtrot, stride, and ragtime), and the changing cultural values associated with musical performance and evolving critiques of mass culture. By drawing on private manuscripts, material artifacts, and interviews, this book provides a composite portrait of innovative musical technologies in America from 1900 to 1930, thus contributing to our understanding of the history of Americana, technology, unique musical genres, and the social history of entertainment.

The book develops along two main areas of inquiry. The first investigates how a new musical technology affected the lives of those who helped to create it and use it. We learn that it created new opportunities for employment as recorders, editors, and arrangers of popular piano music, but what were entertainers' feelings about the mechanization of music? How did it affect the aesthetics of expression? Historians have revealed that some musicians felt threatened by

the recorded music flowing into people's homes through radio waves and phonograph discs in the 1920s and '30s.[4] Some artists felt that the quality of the music being reproduced was not true to their talent, while others worried that the commercialization of music in the production of records and radio time might create unwelcome competition for an audience's patronage. These concerns would later play out in industry debates regarding copyright laws and royalties.[5]

However, this book demonstrates that there was a different attitude about the function of player piano recordings.[6] Contemporary advertisements proclaimed that the music on the rolls ''captured'' the artists' individuality and expression. While critics debated the extent to which a machine could embody human touch, many artists themselves embraced the player piano as a means of visually and audibly studying the compositions of others to *enhance* their skills. Nearly all the leading pianists in the world made piano rolls in the first three decades of the 20th century.[7] While historians of music have noted the breadth of individuals involved with recording rolls, no history has attempted to see this in a broader context, and to question the impact this technology had on the transformation of entertainers' lives or the degree to which the formation of a new musical industry transformed the business of Tin Pan Alley.[8]

As the historian of music David Suisman has recently shown, Tin Pan Alley in the late nineteenth and early twentieth centuries was an entrepreneurial hodgepodge of small companies competing for each customer's business. Built on the publication and sale of sheet music, Tin Pan Alley—originally referring to West 28th Street between Broadway and Sixth Avenue in Manhattan, where a number of music publishing houses were located—was noted for the public performances of the ''pluggers'' hired to publicize the latest songs and scores. It was largely owned by a German Jewish immigrant community, who promoted music as a tool of cultural and spiritual uplift.[9] While many other historical accounts have traced the ways that the phonograph transformed the music business—creating an industry driven by firms governed by a mentality of standardization and mass production—this book illustrates that another model of business practice developed just before the big bang of the record industry. Similar to the way that Tin Pan Alley forged new artistic and commercial relationships between different ethic groups, the early player piano industry—which arguably helped rather than hindered the traditional

piano sheet music sales—also saw new career opportunities and collaborations emerge for African American entertainers.[10] As Suisman says of Tin Pan Alley, "at every stage, the industry also benefited from African Americans' own participation, for they too contributed to the production of blackface minstrelsy, coon songs, and ragtime. Yet they did so in ways marked by uneven economic power and control."[11] While an uneven distribution of economic power and control also applies to the business relations of the early player piano industry, we also learn that it afforded new opportunities for creative expression and artistic independence. This is what allowed J. Lawrence Cook, for example, to develop his own unique "musical voice" that his granddaughter recognized.

Each chapter that follows looks at a different dimension of the business of entertainment, the player piano technology, and the social reception of what was the early twentieth-century equivalent to the iPod phenomenon. Subtle themes run throughout, exploring how the player piano transgressed boundaries of art and science, live and recorded performance, stylistic conventions, and notions of embodied skill, but how entertainers themselves moved between roles as artists, recorders, editors, arrangers, and engineers in the production of this unique form of music. By considering multiple facets to the story, I follow leads developed by other interdisciplinary historians who see music as embedded in a broader history of social relations, technology, taste, and popular culture.[12]

My second avenue of inquiry examines the impact of this technology on the "cultural consumption" of music.[13] How did the audience react to the new musical genres performed "live" in their homes, saloons, theaters, and concert halls across America? Many people to this day marvel at how a roll of paper with myriad tiny holes in it could be made to play music. These same coded rolls would later be adapted to creating guided missile codes in World War II, the "autotypewriter," the first flight simulator, and binary coded computer cards.

In the heyday of the production of player pianos between 1900 and 1930, over two hundred thousand of them were sold a year, along with a staggering five million rolls a year, generating revenues for the industry of over a hundred million dollars a year. Their curious technical design introduced new ways of experiencing, appreciating, and studying music. They generated new ideas about what it

meant to capture sound and soul. The player piano sparked dialogue between the realms of artistic expression and industrial creation. Was it an instrument or a technology? In the second half of the century, it infiltrated the literary imagination, becoming a symbol of industrial conquest over individual talent.

While the technology provided an opportunity to instruct aspiring musicians through demonstrable performance, the player piano also helped people engage with music by *de-skilling* the work involved in playing an instrument. A prominent marketing focus in this respect was white middle-class women in whose parlors sat "that shining monument to past girlhood—a silent piano" (in the words of a 1905 advert) who could now reach "perfection without practice" and entertain guests at home with a repertoire from Rachmaninoff to ragtime.[14] "What a leveler of distinctions" the instrument was, cheered the music critic Gustav Kobbé in 1912. The gendering of piano music also played on the masculinity of mechanization: men could now be interested in music through their interest in machines. By inviting middle-class consumers to effortlessly participate in, rather than passively listen to, musical performance, piano manufacturers forged a new way to pursue "a revolutionary musical democracy in America."[15] In short, the player piano was marketed and purchased as an instrument that made entertainers out of consumers. The technology to de-skill music performance invigorated popular imagination and stimulated much debate about what constituted real as opposed to artificial performance.

How did the emergence of a distinct style of player piano performance affect the way that other forms of music were appreciated by the public? How did the manipulation of mechanically reproduced music affect the way that new genres of music were understood and received by the public? Attention to the various ways that the public interacted with the player piano points to a key moment in the history of mechanical music: the invention of the "reproducing piano" at this time enabled the piano itself to recreate the dynamics, tempo, and other features of the way it was performed by the person who recorded it. Earlier player piano technology was based on the recording and playback only of notes—devoid of "expression." Reproducing pianos offered greater fidelity than acoustically recorded phonographs, and many pianists were therefore reluctant to record for phonographs.[16]

Within all the details and anecdotes about how these instruments were engineered, marketed, and used, another theme emerges: disappearance. The amount of time needed for practice to play a piano disappears in this story; the old Victorian pianos that did not play "by themselves" disappear from the marketplace; sheet music momentarily disappears in the abundance of player piano rolls; and finally, the human entertainer disappears. They become the invisible entertainers whose actions are only seen by the movement of the keys dancing around. What this book sets out to do is make these things reappear by looking at the rhetorical strategies, mechanics, and life of those behind the curtain who made the instruments appear to have a life of their own.

It is a life that is nearly extinct, save for the efforts of committed collectors, repairers, and the surviving legacy of the original American musical institutions whose history is here discussed. In contrast to the phenomenal international popularity of player pianos in the decades from 1900 to 1930, antique player pianos themselves virtually disappeared—eclipsed in history books by the rise of the radio and phonograph, and sent to landfills by families needing room for new kinds of entertainment centers. However, the 1950s saw a revival, and player pianos and all the music rolls once again found a market, fueled a growing community of aficionados and collectors of these now rare items. They set up associations and societies, hold annual meetings, and raise funds to repair, preserve, and enjoy these artifacts of Americana. They have prevented old sounds of history from disappearing. This book therefore takes this community as an entrée into this musical and cultural history, developing a narrative that follows the author's travels to meet collectors and historic collections that preserve the material culture of the past. What results is a book that not only explores history but reveals how history is maintained by contemporary society.

Chapter 1

Soundscape and Memory

I WAS ABOUT ten years old and just tall enough to reach the pedals of the piano. Sitting in my grandfather's living room in Florida during school breaks, I would entertain the family, and no doubt the neighbors, for hours with perfectly played scores. Stacked next to me on the bench was grandpa's prized collection of *New Yorker* magazines. In front of me was the upright Apollo player piano, which we simply called "the ol' player," where I watched the keys dance around while I pretended to be a virtuoso. On top of the player was a messy stack of long, narrow boxes containing all of the different music rolls he had collected in the 1950s. At the time, I didn't recognize the names of the artists or the titles of the songs. But I was a huge fan of ragtime.

As I pumped the pedals, watching the keys dance around below my fingertips, it never occurred to me that this music was anything but an expression of the capabilities of this magical instrument. I never thought about all of the musicians whose works I was replaying, nor did I wonder about how they managed to embed their talents into this machine. When I sat at the player, *I* was the musician. All of those entertainers of the past were invisible.

I did not think about that player piano for many years. In 2003, I went to Las Vegas to visit my uncle, Richard Dolan, whom I had

not seen for many years. I had heard that he had gone into "semiretirement" and moved to Henderson.

Uncle Dick was a man of charisma perfectly suited to Las Vegas. He became wealthy by selling analytic chemistry supplies internationally. He was also notable for having an exceptional sense of humor. At business meetings he was known to hand out vinyl ear covers called "B.S. Protectors" (Blatant Statement Protector is printed in small type). He would often have a pocketful of red foam clown's noses, which he would often distribute to everyone at his restaurant table before the waitress arrived. When he picked me up from my hotel on the Strip, he pulled up in one of Liberace's rhinestone-covered convertibles, with blinking candelabra attached to the front for turn signals. "He rolled it out during his final performances at Radio City Music Hall in the '80s," said Uncle Dick, with a grin. "It matched his grand piano."

Uncle Dick had acquired this automobile at an auction as an addition to his "collection of Americana," which included many musical items. As we drove toward the Henderson foothills, Uncle Dick was telling me about his collection of pianos made by Story & Clark, founded in 1896.

> "We put them on display in some of the casinos now and then, they sound great," he said.
>
> "Who plays them?" I asked.
>
> "Well, no one. They play themselves."
>
> "You have a collection of player pianos? I remember those. I used to pump the pedals."
>
> "We've retrofitted them. They are now completely automated, and they play music from a CD. It's all digital."
>
> "It's all digital, huh?"

I had a vague grasp of how information could be encoded to send and record digital signals, as in digital cable TV or digital cameras, and I understood that music was digitized for storage on my iPod. However, I didn't understand how a digital CD could make a piano play, or what advantage this provided since one was hearing real keys hitting real piano strings. I was silent for a few minutes trying to picture what an all-digital player piano might look like. I figured I

would explore these questions further when I had the chance to examine one of these retrofitted pianos in person.

"What do you mean?" I said. "Who's 'we'?"

Uncle Dick told me that some years back, in the mid 1980s, he had purchased a struggling company based in Buffalo, New York, called QRS Music Rolls. When he mentioned the letters, I remembered the Western-style, ornate, red printed label found on the end of every box of music rolls stacked atop grandpa's player.

"You make piano rolls? I thought you were retired."

He smiled, as one who loves surprising people does.

"The company doesn't make that many rolls any more," he said. "We still have the old equipment, but we've invented a new system. You'll see."

We arrived at his house overlooking the valley. His living room resembled a showroom of pianos: two old uprights and two shiny baby grands. Under each keyboard was a device resembling a portable CD player. He picked up a remote control and pointed it at the white baby grand. "You'll like this," he promised. A moment later, the keys became animated, background music kicked in, and Tony Bennett began singing "I Left my Heart in San Francisco." I could have anticipated it. Ever since I moved to San Francisco the year before, I had noticed that people like to demonstrate their fondness for the city.

"This doesn't remind me of the player piano of my childhood," I confessed. "Maybe it's this . . . modern music."

"You know what our best-selling music is, besides the Christmas CDs that people stuff stockings with? All the popular movies—the 'Titanic' song is huge. So is 'The Lion King' and 'Phantom.' "

"I always associate player pianos with ragtime," I said.

"Ragtime was *the* player piano music, when ragtime was hit music. But popular music changes. Tastes change."