ELECTRIC SHOCK

FROM THE GRAMOPHONE TO THE IPHONE –

125 YEARS OF POP MUSIC

PETER DOGGETT

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About the Book

Popular music changed the world.

Its rhythms have influenced how we walk down the street, how we face ourselves in the mirror, and how we handle our daily conversations and encounters. It has shaped our morals and social mores; it has transformed our attitudes towards race and gender, religion and politics.

Electric Shock tells the panoramic story of popular music, from the arrival of ragtime in the 1980s to the present day. From the beginning of recording, when a musical performance could be preserved for the first time, to the digital age, when all of recorded music is only a mouse-click away; from the straight-laced ballads of the Victorian era and the 'coon songs' that shocked America in the early twentieth century to gangsta rap, death metal and the multiple strands of modern dance music: Peter Doggett takes us on a rollercoaster ride through the history of music.

Within a narrative full of anecdotes and characters, *Electric Shock* mixes musical critique with wider social and cultural history and shows how revolutionary changes in technology have turned popular music into the lifeblood of the modern world.

About the Author

At the age of six, Peter Doggett's ambition was to be the drummer in the Dave Clark 5. Since then, he has been an avid consumer of popular music of all kinds. He began writing professionally in 1980, and is the author of numerous books about music and cultural history, most recently *The Man Who Sold the World: David Bowie and the 1970s*. His other works include *You Never Give Me Your Money*, chronicling the break-up of the Beatles and its personal and financial aftermath; *There's a Riot Going On*, a history of the collision between rock music and revolutionary politics in the 1960s; and studies of John Lennon and Lou Reed. He also edited and contributed to *Seperate Cinema*, a history of African American film, and collections by several leading twentieth-century photographers. Peter lives in London, with the artist and illustrator Rachel Baylis.

www.peterdoggett.org

Also by Peter Doggett

The Man Who Sold the World:
David Bowie and the 1970s

You Never Give Me Your Money:
The Battle for the Soul of the Beatles

There's a Riot Going On:
Revolutionaries, Rock Stars and the
Rise and Fall of '60s Counter-culture

The Art and Music of John Lennon

Are You Ready for the Country:
Elvis, Dylan, Parsons and the Roots of Country Rock

Abbey Road/Let It Be

Lou Reed: Growing Up in Public

As Rufus Lodge

*F**k: An Irreverent History of the F-Word*

As contributor

The 1960s Photographed by David Hurn

Art Kane

Separate Cinema: The First 100 Years of Black Poster Art

Tom Kelley's Studio

Mario Casilli

Hollywood Bound

For Rachel

Electric Shock

From the Gramophone to the iPhone –
125 Years of Pop Music

Peter Doggett

THE BODLEY HEAD
LONDON

Introduction

I

If, in 1973, you mailed a postal order for £2.50 to a box number on Merseyside, you might receive a record in an unmarked sleeve, processed-egg yellow or smoked-salmon pink. Or your money might vanish, all subsequent letters ignored.

Two times out of three, my parcel arrived; poor odds for an impecunious schoolboy, except that the prize justified the risk. It was illicit, occult, an experience unavailable from the ill-stocked record shop in my home town, where some of my schoolmates pilfered singles from the half-price box at lunchtime. Although I was too moral, or scared, to join them, I was still prepared to steal from corporations and millionaires. So I wrote to the mysterious people who made their living from selling illegal LPs – bootlegs, as they were known – via obliquely worded ads in the back pages of the London music papers.

That was how, at the age of 16, I first heard a recording of Bob Dylan and the future members of the Band, performing at the Royal Albert Hall in 1966. Or so it said on the yellow photocopy tucked inside the cover, the only validation of its contents.

By purchasing *Royal Albert Hall*, against the wishes of the artist and his record company, I was buying my way into a secret society: insider trading, if you like, in the mythology of rock ’n’ roll. I was already aware that this recording was regarded by many as the artistic pinnacle of Dylan’s career, and its aesthetic worth was multiplied for me by its

exclusivity. What I hadn’t anticipated was its sonic force, delivered with the fury and contempt of a man who sounded as if he were staring an apocalypse in the eye.

The album’s climax has become a piece of 1960s folklore. It documents a confrontation between audience members who had convinced themselves, against all aural evidence, that Dylan was only valid with an acoustic guitar; and a man who had staked his sanity on living with extremes, among them the crushing volume of an electric band. ‘Judas’, someone called from the stalls. Dylan drawled a contemptuous response, before leading his musicians into ‘Like a Rolling Stone’.

Adjectives wouldn’t begin to convey the effect of immersing myself in that moment, and that music, over the months ahead. As I slid towards a teenage nervous breakdown, it offered me not salvation, exactly, because my fate was sealed; not transcendence, because when it was over I still had to face my own existence; but recognition, the hint that I might not be entering the darkness alone; that one could go down into the pit defiantly, self-righteously; that someone else had been there before. Later, after the apocalypse, bemused to have survived, I gathered from that same performance the hope of renewal, just as Dylan had weathered the storm (in another mythological tale) to find respite in a Woodstock basement.

Thirty years later, returned to the scene of my adolescent collapse by a surreal sequence of romantic circumstances, I wandered through the air-conditioned limbo of my home town’s shopping centre, digesting impressions old and new. Amidst the echoing chatter was the distant sound of music: intended to ease our consumerist footsteps into chain stores or fast-food merchants; to smooth our passage, without being heard. But I can never register the presence of music without wanting to recognise it; and as I concentrated, I realised I had heard this sound before. For the contraband of 1973 was now legal tender: remixed, remastered,

repackaged (and relocated in the interests of historical accuracy from London to Manchester’s Free Trade Hall). It was offered by a multinational corporation as an authentic and fully authorised slice of rock history – still transcendent, but robbed of its underground lustre. The soundtrack for my own descent into the inferno was now being piped at almost subliminal volume through a soulless mall. Music which I would once have chosen to represent my identity, by an artist at the end of his own fraying rope, at war with his psyche and his society, had been rendered in perfect sound quality, at last, so it could serve as background for the sale of burgers and jeans. The music was the same, but its status had changed as radically as the now middle-aged man who was struggling to comprehend what it might all signify.

If the soundtrack of psychological decay and clinical depression could become muzak, then surely nothing was immune to a metamorphosis as shocking and, perhaps, comic as the fate of Kafka’s Gregor Samsa. Another scene came to mind. London’s Dominion Theatre, in 1991: a bill promising three 1960s hitmakers, the Merseybeats, Herman’s Hermits and the Byrds. Or, to be precise, half of the original Merseybeats; some vintage Hermits, but no Herman; and a Byrds line-up assembled by their first drummer, alongside two men who must have been in short trousers when the group had made their initial visit to Britain in 1965.

They were merely the backdrop for a bizarre clash of cultures. The musicians masqueraded unconvincingly as the elite of 1965, in front of an audience dominated by teenagers clad in recreations of the Carnaby Street fashions once worn by their parents. The youngsters responded to this ersatz nostalgia by throwing themselves into a display of hippie dancing which they can only have learned from vintage newsreels. The collage was surreal: music, motion and clothing utterly out of sync. It signalled a vain quest for

a golden age, from a generation who had been bottle-fed on the superiority of the 1960s to any other era of human history.

Or, again, an incident repeated daily: I'm queuing to pay for petrol, and over the loudspeakers comes 'The Game of Love' by Wayne Fontana and the Mindbenders. I relax into its familiarity, sing along in my head, and suddenly awaken to what's happening. In 2015, music that is almost fifty years old provides a constant soundtrack to our financial transactions and consumerist obsessions. Above our heads, it is always 1958, or 1965, or 1972, and the music of the rock 'n' roll revolution – two decades of radio hits, from Bill Haley to Fleetwood Mac – is universal currency so stripped of its value that it signifies nothing, evokes no surprise, triggers nothing more than a sense of belonging, whether or not we are old enough to remember when it was new and stood for something. Now it is culturally empty, but familiar to children and parents alike: as constant and faithful an ingredient of our daily lives as the logos of McDonald's or Tesco's. In 1965, 'The Game of Love' was a No. 1 hit. In 1966, it was forgotten, swept away by relentless waves of novelty. In the early 1970s, friends thought I was strange – and I was – because I supplemented my diet of new music with battered 1960s hits from junkshops. I was keeping the past alive, but I needn't have bothered: it was never going to die. It's easy to imagine returning to whatever will serve as a collective space in the twenty-second century, and still hearing 'Walk On By', 'Lola' and, yes, even 'The Game of Love' in the air, just loud enough to calm the fears and aid the impulse-buying of our great-grandchildren.

II

Somewhere amidst those eerie encounters with the musical past lie the seeds of this book. For most of the last half-century, I have been an active consumer of popular music,

in increasingly varied forms. For perhaps 70% of that time, I have been writing about the same subject; or, at least, a blinkered representation of it. Fortunate enough to have been paid to investigate pop history for several decades, I have been compelled to experience music that lay far beyond my personal aesthetic.

But I have still imposed that aesthetic judgement on everything I've heard; defined myself as someone who, for example, loves Bob Dylan but not Tom Waits; Crosby, Stills & Nash but not Emerson, Lake & Palmer; Sonic Youth but not the Smiths; soul but not metal; some MOR but not most AOR – a vast Venn diagram of choices and prejudices, at the interlocking heart of which stands just one man, constructed upon the music he loves.

As my experience in the local garage suggests, we live in a world where people like me have created an approved canon of popular music which is open to constant minor revision, as the latest issue of your favourite heritage rock magazine offers 'The Greatest Albums You've Never Heard' or slips a choice obscurity into the 'Best 100 Punk Singles of All Time'. There is an authorised list of momentous events in musical history, which we all agree to recognise, from Elvis Presley at Sun Studios in 1954 to, yes, Bob Dylan and 'Judas' in 1966 and on and on; a gallery of classic albums, life-changing singles, vital genres, halcyon eras, eternally fresh, eternally ripe for discovery.

Yet this is also an age in which all sense of a critical consensus and a carefully curated heritage has been demolished, almost at a stroke, by the catch-all expansiveness of the Internet. Anyone with a broadband connection can access almost every recording made since the invention of recorded sound. True, Beyoncé's music enjoys a higher profile on YouTube, iTunes and Spotify than her early twentieth-century equivalents, such as Mamie Smith or Marion Harris. But all that separates us from the music of 1920 is the same click of the mouse, or swipe

across the tablet, which brings us Beyoncé. The choice is entirely ours.

So this is a unique moment: for the first time, modern technology allows us to construct our own route through documented history. But it also strips that history of its context. Streaming and download sites offer you the music, but no hint of when or why it was made; and who it was made for. Also missing is any sense of why we enjoy the music we choose; how we have learned, down the generations, to react as we do when the hailstorm of contemporary media fires jazz or hip hop or punk in our direction.

III

The invention of recorded sound transformed music from an experience into an artefact, with physical and psychological consequences which reverberate to this day. It imposed a distance between the moment when the music was made and when it was heard. It allowed for endless repetitions of what would once have been a unique performance. And it facilitated the creation of an entire industry, now global in its span, devoted to the making, selling and disseminating of recordings, and the invention of technology to carry that music around the world.

This revolution in the nature of music-making has altered everyone and everything touched by it – the performer, the audience, and the music itself. The nature of that change has been far-reaching: it has left its mark on the way we think, the way we feel and even the way we move. (It’s even loosened our underwear, or so the horrified commentators of the 1920s recounted, as young women unfastened their corsets to dance the Charleston.) The most powerful changes have been those which involve a change in the rhythms that govern our lives, from the syncopation of ragtime and jazz to today’s unrelenting computerised dance

beat. They have altered the way we deal with each other; the language of love, the rhetoric of hate. They have enabled races to communicate and assimilate more easily; and provided the fuel that could engulf those relationships in flames.

At each step of the way, music has represented modernity, at odds with convention and tradition: the new world perpetually bullying and hectoring the young. But one of the qualities of music, regardless of its origins, is that its delights are inexhaustible. Each musical revolution has altered the soundtrack of the age, but left all its predecessors intact. Yesterday's mainstream becomes tomorrow's carefully guarded memory, reviving our individual and collective past every time that the listener pulls a favourite record off the shelf (or opens the appropriate download).

Technology and music have altered in tandem: revolutions in one field spurring changes in the other, backwards and forwards, to the point where it is difficult to tell Pavlov from his dogs. The development of new recording techniques in the 1920s allowed crooners to whisper their sweet nothings into our ears, raising the stakes for any mere mortal who wasn't Bing Crosby, but found himself with a girl in his arms. The invention of the Walkman and the iPod allowed us to become living enactments of the music we loved, parading down the road to the glorious rebel-rousing of metal, punk or hip hop. Before the advent of modern technology, music was made in the home, or witnessed in the concert hall or theatre. Now it can be omnipresent to the extent that we barely recognise its existence. It is literally the soundtrack of our lives – both the badge of our identity, and a background wash of noise whenever we turn on the TV, or walk through a supermarket. And that is one of the dominant themes of this book: what has changed is not just the music, and the technology, but the role that the

combination of those two unstable elements plays in our lives.

This is also the tale of how a world devoted to the lusty pleasures of the Victorian music hall and vaudeville was captivated by the African-American rhythms of ragtime, the first in a long line of musical genres which have entered our lives as if from outer space. Each arrival has been greeted as an outrageous threat to the sanity and sanctity of innocent women and children, while being instantly accepted by the young as a symbol of joyous independence from parental and adult authority. The invader is gradually accepted and tamed, just in time for the cycle to begin again. One generation's revolutionary becomes the conservative of the next; every musical innovation is both the death of civilisation as we know it, and the dawning of a multidimensional new world.

IV

The era of universal accessibility to the past and the present deserves a history that is open, not blinkered. In the arts as in politics, there is nothing more dangerous and deceptive than unanimity, which can easily become tyrannical. There is tyranny, too, in listening only to the masses, as anyone condemned to a world where music was defined by TV talent contests might agree. But it pales alongside the arrogance of a coterie of critics pronouncing that only they are capable of deciding what is worthy of everyone else's attention. As someone who has been part of that coterie, I know the seductiveness of offering up one's own artistic tastes for universal acceptance.

In my previous incarnation as a music journalist, I was as guilty as anyone of forcing my taste upon my readership, of using fancy language to justify aesthetic choices which were, ultimately, both arbitrary and entirely personal. But gradually the hypocrisy of my stance became inescapable.

Politically, I was a radical (and hardly alone in that, among the rock or jazz critics of the past century). But culturally, I was a snob. One hand held a placard screaming ‘Power to the People’; in the other was a more discreet sign, on which was written ‘Why Do the People Have Such Terrible Taste?’

So my first task in writing this book was to throw away decades of prejudice, however well argued and intelligently phrased; and to return to a series of deceptively simple questions – what were people listening to? Where did it come from? Why did they like it? And what did it bring to their lives? Approaching music in a spirit approximating genuine democracy offered me something of a blinding revelation. If I removed my blinkers and opened up my ears, I could find pleasure in music which had previously brought me none. For a cynical and opinionated critic (are there any other kinds?), it was something akin to being born again. That is how I found myself, for the first time in my life, hearing (to seize some names at random) Bing Crosby, Glenn Miller, Mantovani, Queen, Kylie Minogue and Metallica with genuine appreciation, rather than closing my mind as soon as I saw their names.

It wasn’t enough to adjust my focus. I also had to retreat far enough to be able to view the entire landscape. Various fault lines cut through the history of twentieth-century music, but the widest of them equates the arrival of rock ’n’ roll with a revolution that is musical, social and psychological. The exact co-ordinates of this great divide are open to debate, and refugees from either side of the border are often ushered across enemy lines. But the significance of this moment is apparent from the two rival narratives most commonly employed to explain pop’s progress through the century. The first harks back to the 1930s – the era of Cole Porter and Rodgers and Hart, Benny Goodman and Louis Armstrong – as a golden age, and views the teenage cacophony of the mid-1950s as a sorry falling-away from paradise. The second depicts rock ’n’ roll as

salvation from years of genteel boredom: a triumph of youthful excitement over decades of parental repression.

Setting out to chronicle popular music and its eternal quest for modernity, I knew where the story would end, in the here and now, but where should I begin? With Elvis Presley? Frank Sinatra? Louis Armstrong? There was a valid case to be made for each. But the more I listened, and plunged into the strange panorama of the past, the more I realised that the two most revolutionary moments in the life of twentieth-century music actually pre-dated that century. They were the creation of recorded sound as a commercial artefact, and the birth of ragtime; and they coincided in the 1890s. That was the moment when African-American rhythms first seized hold of popular entertainment, and spread across the Atlantic; when the anthems of youth first confronted and appalled older generations; when music was transformed from a kind of entertainment into a business that would eventually touch all of our lives, in ways that would have been unimaginable when ragtime was born. That was where the modern world began: with two concussions so profound that we can still feel their echoes shaking the ground beneath our feet today.

One final set of prejudices and assumptions had to be discarded, like a rock critic’s uniform. Writing this book, I no longer believed, automatically, that confrontational music is always better than comforting music; that experimental always trumps conventional; that rough beats smooth; that spontaneity towers over contrivance; that elitist counts for more than populist. This doesn’t mean that I have entirely abandoned my aesthetic preferences; merely that, as much as possible, I have tried to excise them from this book, to tell a popular story rather than a personal one. But at the same time, this is a very personal book: it’s based on years of my research, and my intense listening; my mental leaps to make connections between apparently disparate

subjects; my experience of more than a century's music from all our yesterdays.

The first requirement of popular music, surely, is that it should be popular (and musical, although the precise definition of that quality is buried beneath festering cans of worms). Much as I admire the cunning of the New York rock critic Robert Christgau in identifying the term 'semi-popular music' to describe the music he loves, the tastes of a mass audience tell us something about a society that the preferences of an elite may not. So this book is unashamedly about music that has proven to be popular – globally, racially, generationally – rather than that which has since been judged, by critics and other fools, to have the richest aesthetic value.

This is also, unashamedly, a book with a British perspective, about a world and a history that has increasingly been dominated by the music and culture of the United States of America. The accident of a (mostly) shared language has made it easy for American sounds, images and ideas to infiltrate and then dominate our lives. But one of the themes of this book is that the same process of almost invisible colonialism has been taking place around the world, speeding to its inevitable climax in the final decades of the last century. If you had travelled the world as the First World War broke out, visiting cities selected at random from every continent on earth, you would have been exposed to a multiplicity of sounds and sensations that would have seemed dazzling. Each country begat and cherished its own culture – or cultures, to be exact, as the centuries before the advent of rapid transportation ensured that every region on the planet owned its distinctive vision of the world, with a soundtrack to match.

Now you can stand on a street corner in Europe, South America, Africa, Asia – and hear Jay-Z, or Rihanna; Elton John or the Rolling Stones; or, perhaps, their local equivalents, sublimating their national traditions in favour of

the all-conquering rhythms of hip hop or stadium rock, Broadway musicals or Hollywood theme songs. Religious and cultural differences may be as savage as ever, and the means of transporting them around the world has carried the problems of each continent into all its neighbours. But the global network of multinational marketing, and the worldwide web, ensures that the dominant icons and events of the world's entertainment headquarters are transmitted instantly across the planet. Almost every nation may be in conflict or at risk; but when it comes to culture, we are finally one world – not the universal brotherhood envisaged by the creators of the United Nations, perhaps, but a race linked by the ubiquity of our heroes, and the rhythm of our lives.

That global heritage of popular music is the product of 125 years of artistic and scientific innovation. It represents a constant quest for modernity, which must be endlessly renewed. This is the story of that quest: of the musicians, the generations that they delighted and divided, and the technology which captured their music in the moment of its creation, and preserved it for our collective enjoyment and amazement. This is their story; and ours.

Two Near-Apologies

1. Recounting the history of popular music entails the use of language that is, and was, disrespectful and insulting towards African-Americans (and sometimes other races too). Racism has always been as entrenched in popular culture as in any other area of life. But omitting or censoring that language would only obscure that racism, and present a misleading account of our collective past.

2. It is quite possible that your favourite artists or recordings are not mentioned in the book. Before you rise up in protest, please remember this: neither are most of mine.

Speaking of the Past

There are towns[1] where one can enjoy all sorts of histrionic spectacles from morning to night. And, we must admit, the more people hear lascivious and pernicious songs, which raise in their souls impure and voluptuous desires, the more they want to hear.

Fifth-century saint

Such tunes, although whistled[2] and sung by everybody, are erroneously supposed to have taken a deep hold of the popular mind … [but] they are hummed and whistled without musical emotion … they persevere and haunt the morbidly sensitive nerves of deeply musical persons, so that they too hum and whistle them voluntarily, hating them even while they hum them … such a melody breaks out every now and then, like a morbid irritation of the skin.

John S. Dwight, journalist and composer of hymns, 1853

The California beetle[3] cannot stand [recorded] music. It kills him. Three playings of a slow piece like 'Home Sweet Home' put him out of misery, but ragtime will kill him in a few bars. The deadly tarantula falls into a stupor. Butterflies are not affected. The bumble-bee flies into a nervous fit. Wasps suffer from wing paralysis and are unable to fly again, though otherwise unaffected. Worms try to crawl nearer the phonograph horn, as though pleased. They evidently want to do the latest wiggle.

Amateur entomologist, California, 1913

[The 79-year-old music professor][4] listened for a few minutes to a jazz band playing at furious pace and turned to his nephew, declaring: 'That isn't music! Stop it!' Then he swayed and fell dead.

***Daily Mirror*, 1926**

Jazz is born of disorder[5] in the nervous system. Heart tests have shown that the original composers of jazz music suffered from irregular heartbeats.

American neurologist, 1929

Music begins to atrophy[6] when it departs too far from the dance.

Ezra Pound, *ABC of Reading*, 1934

'In time we may all get our music by mechanical means.'

Daily Mirror, 22 December 1903

CHAPTER 1

THE VOICE OF THE DEAD

'And the tunes that mean so much to you alone –
Common tunes that make you choke and blow your nose,
Vulgar tunes that bring the laugh that brings the groan –
I can rip your very heartstrings out with those ...
I, the everlasting Wonder-song of Youth.'

Rudyard Kipling, 'The Song of the Banjo', 1895

IT IS A matter of honour among judges that they should pretend ignorance about all matters of popular culture – even if the oft-repeated remark, 'Who *are* the Beatles?', was never actually uttered in the High Court. Not that such comments were unknown: Mr Justice Bicknill, officiating in a divorce hearing of 1903, enquired of one of Britain's most celebrated music-hall performers, Miss Vesta Victoria: 'May I ask what is[3] it you *do*? Do you *sing*?'

Judges of the Edwardian era delighted in their disdain for popular entertainment. In May 1904, Mr Justice Darling was called to adjudicate upon the ownership of a long-forgotten song, 'Oh Charlie, Come to Me'. Miss Gracie Grahame, aged 29, esteemed for her vivacity and golden curls, had applied to the King's Bench Division of the London courts for an injunction. She wished to prevent a fellow performer – Miss Katie Lawrence, seven years her senior, long linked in the public memory with the song 'Daisy Bell', and its bicycle made for two – from singing 'Oh Charlie', claiming that it was her own original composition. Mr Justice Darling did not attempt to hide his derision: 'anything less distinguished [4]' than the song in question 'I cannot imagine', he complained. He proceeded to mock the song's rhyming scheme, scansion and grammar, before pronouncing that 'it is rather a melancholy state of things that legal copyright should exist in such rubbish', and finding against Miss Grahame.

The case had a tragic denouement. A week after her appearance in court, Miss Grahame topped a variety bill at her husband's theatre, the Empress in Brixton. Her act was brought to an abrupt end when she launched impromptu into the chorus of the disputed song, whereupon her husband called for the curtain to be brought down. It was,

Miss Grahame declared later, ‘the worst thing that can happen[5] to an artist. I felt they had taken my very livelihood away.’ Gracie then set out with her fellow theatricals for a hostelry near Waterloo Bridge, but broke away from her friends, ran down the steps that led to the mudflats, and jumped headlong into the water. It was low tide, and the Thames was no more than three feet deep; but Miss Grahame’s voluminous skirts helped to drag her beneath the surface – until she was pulled clear by a constable who had witnessed her desperate plunge.

Miss Grahame was removed to a local infirmary, where she was found to have suffered no ill effects. She spent the night awaiting an inevitable court appearance on the charge of attempted suicide. Perhaps magistrates looked more kindly upon the music hall than did their senior legal peers, as Mr Fenwick examined the pathetic circumstances of the case, and declined to impose the standard prison sentence. Instead he demanded £20 (equivalent of £2,000 today) from the accused, to be held against proof of her good behaviour for six months, and required her to promise that she would not venture on to the mudflats again.

The copyright dispute left its mark upon the victor, too. Within days of the press reporting upon Miss Grahame’s vain efforts at self-harm, Miss Katie Lawrence took the stage of the Bedford Music Hall in Camden. She was greeted as the villainess of the affair, with a chorus of boos so prolonged that she was unable to begin her act. She could, she felt, have won the audience round had she been able to state the facts of the case, but the show’s producer had strictly forbidden her from speaking. Miss Lawrence died less than a decade later, remembered today only as the subject of a portrait by Walter Sickert in 1887.

Only the most celebrated or notorious entertainers could hope to survive in the collective memory beyond their lifetime. Likewise the material stuff of their performances. It is safe to assume, for example, that neither ‘Good Morning

Carrie' nor 'It's Up To You Babe' is remembered today. They were the subject of another copyright dispute, heard by Judge Lacombe in the New York Circuit Court in 1902. The two songs were both described as 'ragtime', about which a *New York Times* editorial declared: 'Its systematic lack of harmonic[6] coincidence suggests to the musical ear that this way madness lies … as a habit, it ranks with cocaine and morphine.' The paper added that ragtime songs should be restricted to 'the banjo, and other parodies of musical instruments'. This would ensure that anyone carrying a banjo could, like the possessor of burglar's tools, be treated as offering '*prima facie* evidence of the intent to commit crime'.

What differentiated this case from all previous legal rulings on the subject of musical copying was the evidence offered to the court. Lawyers brought forward phonograph records of both songs, to prove the similarity – or dissimilarity, as it might be – between them. Judge Lacombe laughed these artefacts aside, declaring that his time was too precious to be wasted by a 'musical concert, however good[7]'. When a legal clerk offered to provide a violin on which the melodies could be demonstrated, Lacombe packed away his papers and scampered from the court.

The *New York Times* heartily congratulated the judge on his actions: nobody whose nerves were comprised of a substance less than steel, it declared, would be able to tolerate a ragtime song on a phonograph. In its cynicism, the newspaper overlooked the significance of the phonograph and its rivals. These machines not only offered an instant solution to a debate about musical copyright, but ensured that both performers and their compositions would endure beyond their natural lifespans. More important still was their role in democratising the distribution of music, which was now available in the home of anyone – regardless of their musical ability – who could afford to purchase a phonograph record or cylinder.

You can study the great[8] artistes. It is not mere mechanical music – it is the living voice of the singer.
Gramophone advertisement, 1904

In your own home[9], miles and miles away from London, during the long dark evenings that are with us now, for a small outlay, you can be seated comfortably round your fire listening to the Best Songs, the Best Bands, and the best of the World's Musical Talent.
Anglophone advertisement, 1904

The birth of recorded sound, no matter how crude its early manifestations, represented a profound shift in the nature of human existence; as profound, it could be argued, as the representation of human speech and thought on papyrus, parchment, paper or, in due course, computer screen. Thomas Edison intended his invention as a means of documenting conversation or debate, or preserving the speeches and bons mots of great men, or as a vehicle for education of the young. He might have been amused to learn that his phonograph was used in 1903 by a suspicious wife to record conversations between her husband and another woman, which were introduced as evidence during their divorce proceedings.

Even before his device reached the public, an American scientist anticipated its ability to conjure up the past: 'How startling it will be[10] to reproduce and hear at pleasure the voice of the dead!' Edison himself believed that 'The Phonograph will undoubtedly[11] be liberally devoted to music. A song sung on the Phonograph is reproduced with marvellous accuracy and power.' Yet he appears not to have considered a more philosophical consequence of his machine: that a musical performance would not only be captured and held, but would thereby be changed in essence and in form.

The composer Claude Debussy reflected upon the strangeness of this transformation in 1913: 'In a time like ours[12], when the genius of engineers has reached such undreamed of proportions, one can hear famous pieces of

music as easily as one can buy a glass of beer. It only costs ten centimes, too, just like the automatic weighing scale! Should we not fear this domestication of sound, this magic preserved in a disc that anyone can awaken at will? Will it not mean a diminution of the secret forces of art, which until now have been considered indestructible?' Instead, it was performances that were now indestructible, as long as the artefact on which they were stored remained undamaged.

Those artefacts were often fragile, and assumed many forms. Edison's first phonograph, invented in 1877, was exhibited across the United States as 'The Miracle of the 19th Century … The Talking Wonder'. At its heart was a metal cylinder, wrapped in a layer of tin foil, which was 'inscribed' as a recording was made. A stylus was then used to retrieve the sound from the cylinder as it was turned by hand. Audiences flocked to see it in action, but the novelty was soon exhausted, and Edison abandoned the device to concentrate on the electric light. Alexander Graham Bell and Charles Tainter contrived a rival machine, the graphophone, in 1887, substituting wax for the tin foil. Edison countered by adding an electric motor; and in 1888 a company was formed to market both models.

In a preview of the 'format wars' that would mark each stage of technological development ahead, Thomas Edison's phonograph and cylinder were soon pitched into battle with Emil Berliner's gramophone. Berliner's recording was captured on a disc – originally made of metal, although he soon created a cheaper alternative from hard rubber. The cylinder was, in its virgin form, unique: each example represented an individual performance, and the musician who wished to make commercial capital out of his or her skills would have to reprise their piece as often as the market required. Faced with Berliner's gramophone record, which allowed for multiple duplicates of an original performance, Edison's team were forced to concoct their

own mass production, at some cost to the already dubious audio quality of their machine.

The gramophone record thereby seized a commercial advantage which would survive, through metamorphoses of recording technique, disc format and musical content, until the brief triumph of the cassette tape and then the more crushing dominance of the digital compact disc. Berliner's success imposed a crucial limitation on the preservation of music, however. Edison's cylinder method allowed anyone to play existing recordings, and also to make their own. Salesmen would carry their demonstration phonograph door to door, so that awestruck customers could hear the sound of their own voices, caught in one moment, replayed faithfully in the next. The gramophone of Herr Berliner, on the other hand, ensured that the making of records would remain a professional affair, imposing divisions between performer, distributor and consumer which seemed not only natural but inevitable to anyone born between 1900 and 1960.

In one field alone, Edison's technology remained triumphant. In the earliest days of the cylinder, many leading performers refused to waste their time on travelling to a distant studio to create something as ephemeral as a record. Instead, they insisted on being visited in their own homes, allowing the engineer to ensnare nature raw and in its own habitat: the earliest in a long tradition of what would become known as location recordings.

Without the cylinder, we would not have the earliest recording of a papal voice. Pope Leo XIII was captured at the age of 92, in 1903, chanting a frail 'Ave Maria' and 'Benediction'. These two recordings – neither longer than a minute – were issued in 1905 on cylinders, and later discs, at the cost of eight shillings apiece: the equivalent of a working-man's daily wage. The manufacturer conceded that 'The Pope was aged and feeble when the records were