**Hearing Things: Musical Objects at the 1851 Great Exhibition**

Flora Willson

Without things, we would stop talking.

Lorraine Daston, *Things That Talk*

In late May 1851, Martin Cawood—wealthy Yorkshireman, brass and iron founder, and amateur musician—visited the Great Exhibition in London. What he experienced there, as he described it in a letter to the editors of the *Leeds Mercury*, was “an incessant whirl of hustle and bustle.”[[1]](#footnote-1) As did so many other commentators and eyewitnesses, he praised the regular attendance of Queen Victoria; gushed that the central nave was “heavenlike for its elegance and transparency”; and admired the “fairylike splendor” of so many richly attired visitors converging in such a magnificent space. Yet he also offered a more unusual response, outlining the sensory effects of the Exhibition on the roaming visitor:

Some elegant work of art immediately attracts his eye—but before that organ of vision can dwell, even for a moment, upon its beauties, the ear is arrested by sounds foreign to the accustomed tones, and French, German, Dutch, Spanish, and other languages assail it in a strange medley of sounds. Attracted for a moment by this, he turns round to look at his next neighbor, and in doing so his eye is again caught by some new object. Forgetful of the first, he at once rushes to the second. Yet he grasps as it were at a shadow. [...] His ear is assailed with the pealing strains of an organ, or the brilliant tones of a piano, and he rushes to the place from whence they proceed. Here again he is disappointed. Some scores of anxious listeners surround the performer, and the buzz and noise around lead him to endeavor to reach some less frequented place. In vain he attempts it, and seeks the nearest seat, only to search for a vacant place in vain. Bewildered, perplexed, and confused, his brain becomes overpowered.[[2]](#footnote-2)

In Cawood’s account, the Exhibition visitor is overwhelmed not so much by the beauty of his surroundings as by the sheer variety of sights and sounds competing for his attention. His eyes and ears are constantly drawn in different directions: visual objects attract him and fade from sight in a constant stream; foreign tongues mingle confusingly; music heard from afar turns to noise once tracked to its source. Sustained concentration in such an environment was little short of impossible. Small wonder that Cawood describes the listeners crowded around a musical performer as “anxious.”

 Such descriptions of perceptual overload and auditory anxiety provide a fitting beginning to a chapter about music at the Great Exhibition. Indeed, as I attempt to trace its place in and contribution to that famous event, music’s absence—its tendency to dissipate, to dematerialize—will be as significant as its more stable or formal manifestations at the event. If the matter of concern here is “music,” I take my conception of what “music” might encompass from the evidence of the Exhibition itself, and so will consider the role and extent of musical performance alongside a more unusual perspective: one that begins by studying the classification of musical objects on display. This perspective, which does not take issues of musical ontology for granted, in turn raises much larger questions, even extending to what constituted a musical object in London, c. 1851. My broader aim is to interact with a theoretical discourse long established in musicology: the debate still accumulating—almost thirty years after its first appearance—around Lydia Goehr’s book *The Imaginary Museum of Musical Works*. The notion of what Goehr called the “work-concept” is now commonplace, as is her “central claim” about how that notion became regulative in the years around 1800.[[3]](#footnote-3) Yet, as this chapter will seek to demonstrate, the Great Exhibition’s classification of musical objects (and particularly its classification of musical instruments) might be productively understood as a putative, literal materialization of an epistemology of music indebted to and coterminous with (or ‘affording’? it buggers up the rhythm of the prose but may be clearer?) the emergence of the work-concept, as set out by Goehr. To put this another way, while much of the (vast) literature on the work-concept emerging since Goehr’s book has responded to her ideas about the “Musical Work,” one could—and perhaps should—press harder on the “Museum” in her now-iconic title.

**The “Great Exhibition of Things”**

The Great Exhibition of the Works of Industry of All Nations, as it was officially known, opened in London’s Hyde Park on 1 May 1851. It was housed in a vast, purpose-built structure of glass and iron that had already been christened the “Crystal Palace” by *Punch* magazine. This technologically innovative venue was the most visible expression of the Exhibition’s basic ideology and purpose: its objective (according to one contemporary announcement) was no less than to “chart the progress of mankind.”[[4]](#footnote-4) As such, the event was to epitomize the “Age of Machinery” so famously identified (and regretted) by Thomas Carlyle in 1829.[[5]](#footnote-5) In 1851, however, Carlyle’s machine age was not merely represented but also explicitly celebrated: its “whole undivided might” was now on show, gesturing towards an idealized industrial future.

 Notwithstanding the Exhibition’s claims to measure the distance traveled from its more technologically primitive past and the “watershed” rhetoric that consequently accumulated around it in 1851, such an event was not without precedent. National and local industrial exhibitions had been mounted with considerable success in France and Britain during previous decades; the Birmingham Exhibition of Manufactures and Art, which opened on 3 September 1849, was one particularly important precursor.[[6]](#footnote-6) The 1851 Exhibition did, however, depart from previous exhibitions in three significant ways. First, it constituted the earliest such event mounted in Britain under official government auspices: it was organized by a Royal Commission enthusiastically led by Prince Albert, who hoped thereby to foster both “competition and encouragement.”[[7]](#footnote-7) (French exhibitions had been explicitly national institutions since the first event in 1798.) Second, it was the first attempt to stage an exhibition that was international in scope. Given the biases of the era in general, and of the British imperial project in particular, it is hardly surprising that the promised participation of “All Nations” (as proposed in the Exhibition’s full title) was downgraded in the *Official Catalogue* to “almost the whole of the civilized nations of the globe.”[[8]](#footnote-8) The Royal Commission could nonetheless boast that it had accommodated approximately 15,000 exhibitors: roughly half—and thus half of the floor-space of the building—were either British or from British colonies; the remainder hailed, according to the *Catalogue*, from “over forty foreign countries.”[[9]](#footnote-9) This international purview in turn enabled the Exhibition’s third, and most important innovation: as *Eliza Cook’s Journal* explained, the event had the effect of “laying out the industrial progress of the world, as it were, on a race-course, and indicating the positions which the various countries occupy in respect to each other.”[[10]](#footnote-10) Thus not only was the Exhibition a celebration of its “Age of Machinery” and a materialization of “industrial progress” for all to see; it was also, crucially, a means by which to compare the relative progress made by different countries. As such, the Exhibition was to be “to industry what galleries of painting and sculpture are to art—what a library is to literature—what a museum is to science—what a zoological and botanical garden is to natural history.”[[11]](#footnote-11)

 There are rich seams of irony running through such rhetoric, widespread as it was in the run-up to the Exhibition’s opening. What interests me above all is how the Exhibition was understood—at least in theory—to encapsulate in a static, viewable form an ongoing process of change. It is symptomatic that the first so-called “histories” of the Exhibition were published long before its doors closed in October 1851: the event was monumentalized in something like real time, its own fundamentally historiographical rationale—its synthetic staging of “progress”—rendered newsworthy in and of itself. It was precisely for the purposes of monumentalization that such a prestigious literary magazine as the *Athenaeum* could, with unblushing confidence, declare the Exhibition “the great historical centre of the nineteenth century. In an age which has been full of wild revolutions, great deeds, stirring events, it is the greatest deed and event of all.”[[12]](#footnote-12) This view plays fast and loose with history. Writing at the close of an exhibition intended to demonstrate and celebrate industrial progress, the *Athenaeum* relocated the cause for celebration to the Crystal Palace itself. The Great Exhibition was no longer acclaimed simply as a collection of exhibits in space, but as a Great Event: a crucial moment in history and—despite the forty-nine years remaining—its century’s “great historical centre.”

 Such historiographical panache is striking from the pen of a mid-nineteenth-century writer. What is more thought-provoking, however, is that recent writers in a variety of disciplines have continued where such contemporary commentary left off. The Exhibition has been repeatedly positioned as a defining moment in nineteenth-century science, industry, and culture; above all, as a symbol of the final, unstoppable encroachment of industrial modernity into culture and everyday life, a juncture literally materialized for all to see. This fever-pitched claim is maintained even by the most recent (and declaredly revisionist) essay collection to appear on the topic in literary studies, its editors suggesting that although “Officially promoted as a comprehensive representation of global progress, the Exhibition also became an unofficial forum on the meanings of modernity.”[[13]](#footnote-13)

 These are high stakes. Yet amid such observations of the Exhibition’s central position as viewed from a variety of disciplinary perspectives, the contribution of musicology has been strangely muted. One might identify various reasons for such neglect. Most significant among them is the fact that musical performance has long been thought peripheral to, if not entirely lacking from, the events of the 1851 Exhibition.[[14]](#footnote-14) In this historical reading, music was put to the most perfunctory of uses in the opening ceremony before being silenced for the duration of the Exhibition itself. Only when the relocated, remodeled Crystal Palace opened in Sydenham in 1854 did the building become a venue for musical performance: most famously for the “monster” Handel festivals launched in 1857 and mounted triennially between 1859 and 1926. Michael Musgrave’s study of theCrystal Palace has done more than any other to examine all aspects of music-making in and around the iconic building, but even Musgrave passes quickly over the months of the Great Exhibition itself. There, he states, “music’s role was restricted to the mechanical,” and “musical performance on a broader scale had no place as such”; his account focuses instead on the building’s long and reverberant afterlife.[[15]](#footnote-15)

 All this argument might seem to be the prelude for an elaborate act of revision: an unearthing of forgotten performance at the 1851 Exhibition and an attendant claim for music restored to its rightful position. Or perhaps, following the lead of scholars elsewhere in the humanities, one might call for musicology’s immediate and whole-hearted embrace of the Great Exhibition as a glittering index of modernity. But such approaches would be at least as problematic in this field as they have proved elsewhere. What might be more valuable is to query the widespread assumption that musical performance was absented from much of the Exhibition; there may be room in our histories for other manifestations of musical experience that we might detect there. The Exhibition’s classification of musical objects provides a productive starting point for this inquiry. Its displays—of organs, pianos, and other finished instruments, as well as of numerous internal mechanisms and components essential to the workings of such instruments, and (just as significant) of printed scores—constituted the most obvious way in which “music” was incorporated into the world presented at the Crystal Palace.

 The decision to include musical items within an event that proclaimed itself as a celebration of “Industrial Works” seems not to have attracted the same controversy as did the Exhibition’s single so-called Fine Arts Court. (The latter paradoxically excluded most fine arts products in order to allow room for those demonstrating new methods and media; and its mediocre contributions were derided by many as an embarrassment to British art.) Musical instruments nevertheless proved difficult to categorize in an exhibition dedicated explicitly to industrial progress and innovation. Worse still, they threatened to disrupt a carefully maintained distinction between art and industry. To examine how the musical displays were sorted and then staged, as well as how they were understood by their viewing publics, thus seems one clear way to excavate aspects of musical thought around 1851, at least as such thought was manifest outside of London’s elite musical institutions.

**The classifying imagination**

The ordering and distribution of musical objects at the Exhibition can be understood, in the first instance, as only one element (albeit an especially problematic one) within a much larger taxonomic project. The Exhibition was, by all accounts, the century’s highest-profile staging of systematic classification to date. As such, it took place against the intellectual backdrop of a theoretical debate about classification that raged during the early nineteenth century in the field then known as natural history, and which requires a brief excursus here.

 Much has been made of the emergence of natural history. Its changing organization of knowledge – and the shifting political, social and scientific priorities on which such knowledge depended – has proven fertile ground for discussion of the history of the notion of “order” in Western culture. The resulting narratives are, inevitably, on the grandest scale; none more so than Michel Foucault’s iconic *The Order of Things* (first published in 1966).[[16]](#footnote-16) Foucault’s virtuosic sketch of a gradual separation of “the animal itself” from the knowledge handed down about it (what he calls “animal semantics”) is well known; more significant in the present context, though, is his subsequent identification of natural history’s emergence from a gap opened up between words and things, as accumulated knowledge of a given object came to be understood as a mode of representation rather than an intrinsic part of that object. The epistemological revolution described by Foucault brought nothing less than new descriptive orders—new ways of knowing the world.[[17]](#footnote-17) And although—as is characteristic of grand narratives—this particular revolution can boast neither a definite beginning nor end, it is clear that, during the eighteenth and early nineteenth centuries, naturalists gradually sought to distance themselves from what they considered a “disorderly past,” instead promoting a newly systematic present of tables and diagrams.[[18]](#footnote-18) The author of this brave new world—frequently proclaimed the “father of taxonomy”—was the Swedish naturalist Carl Linnaeus, whose *Systema Naturae* (first published in 1735, much revised subsequently) is usually cited as the first instance of systematic classification.[[19]](#footnote-19) Meanwhile Linnaean nomenclature, by which every organism is designated by a name created from two Latinate words (the first its genus, the second its species), largely persisted through the nineteenth century’s taxonomic frenzies and is still, famously, in use today.

 Yet the philosophy—what Harriet Ritvo has called “the classifying imagination”—underlying Linnaeus’s system was backward-looking even when it first appeared; and its adherence to an Aristotelian conception of the innate “natures” of organisms led to criticism of its apparently “artificial classifications.”[[20]](#footnote-20) The early decades of the nineteenth century saw repeated calls for a rival mode of classification, one that might take into account a broader range of data about the object being classified and thus generate taxonomic categories based on a more general understanding of nature as a whole. This gave rise to what the great evolutionary biologist Ernst Mayr identified as the “empirical approach” to taxonomy, which abandoned *a priori* considerations in favor of a supposedly unbiased assessment of the totality of an organism’s characteristics.[[21]](#footnote-21)

 Such self-declared empiricism was by no means the end of the story; according to most versions, by the mid-nineteenth century Charles Darwin was preparing to spark the next epistemological revolution with his *Origin of Species* in 1859. But, for the purposes of this chapter, what is most significant in the interminable nineteenth-century debates about classification is the constant tension between “natural” versus “artificial” categories. Although the value of a systematic approach itself remained undisputed, two basic taxonomic modes were at loggerheads at the mid-century: one understood classification to be following the unified plan of a divine Creator, with all individual taxonomic categories as variants of a single underlying type; the other maintained that all such categories were necessarily artificial—as Mayr put it, “the arbitrary products of the ordering human mind”—despite the fact that many *taxa* were empirically found to be natural. Taxonomic categories were, in short, disconcertingly flexible, shifting all too easily and ever prone to blurring.

 We might return at this point to the predictions made ahead of the Great Exhibition’s opening, that it would (and should) be what “a museum is to science—what a zoological and botanical garden is to natural history” while also functioning as “a race-course” on which nations might meet in peaceful competition. The vast spaces of the Crystal Palace had not only to display a “universe” of objects in an orderly fashion; they also had to celebrate and make visible the forward march of progress.[[22]](#footnote-22) To borrow Tony Bennett’s phrase from his classic essay on “The Exhibitionary Complex,” the Great Exhibition pivoted on “two new historical times—national and universal.”[[23]](#footnote-23) That is to say, the event enabled the comparison of individual nations’ claims to industrial modernity via a single, universal measure of progress, tailor-made to the strengths of Great Britain herself. In other words, the flexibility of prevailing taxonomic systems could be employed to the classifier’s own political advantage.

 Both contemporary commentators and more recent accounts have reported at length on the classificatory system employed at the Exhibition. Its rigor and sheer orderliness were celebrated as a particularly British trait—an impression reinforced by the fact that, following drawn-out arguments about modes of classification within the Royal Commission, Albert’s original plan for a universal system of classification according to object type had been abandoned as impractical. Seeking as it did to display similar objects together regardless of national origin (an optimistic embrace of the principles of free trade and an attempt to represent the “evolutionary” stages of industrial production), Albert was eventually overruled as a result of concerns that the staggered arrival of objects from across the globe would render classification impossible until all were in situ. It was thus decided to implement a dual system: on the largest scale, the Exhibition would be organized by country, with the British and colonial exhibits positioned in the Western part of the building and the rest of the world in the East. The British and colonial exhibitors were then subject to further triage according to a taxonomy much debated but eventually fixed by Leon Playfair, a professional administrator-turned-Liberal MP, in consultation with the British manufacturers themselves (the rest of the world was left to organize itself as it saw fit).[[24]](#footnote-24) The resulting classificatory system was split into four broad categories, the progression of which hinted at the “evolutionary” aspects of Albert’s original model—Raw Materials, Machinery, Manufactures, Fine Arts—and which were, in turn, divided into thirty smaller subcategories.

 Understood thus, as an event of lasting significance for an emerging “classifying imagination,” the Great Exhibition can be seen to harbor conflict at its very heart. Despite frequent comparisons between the Crystal Palace and various cathedrals, the Exhibition itself took as its conceptual foundation the secular idea that (as literary scholar Thomas Richards put it) “all human life and cultural endeavor could be fully represented by exhibiting manufactured articles.”[[25]](#footnote-25) This same idea evidently generated the critical trope of a visit to the Exhibition as a world-tour-in-miniature. The world on view at the Crystal Palace was one unequivocally populated by commodities. What is more, and although—as Richards has rightly observed—the Exhibition was torn between the functions of the museum (in some sense another religious institution) and those of the marketplace, it was the latter that dictated its modes of display (even in the much-contested absence of price tags). In the words of the *New Monthly Magazine*, the Exhibition was intended to “convey ... universal palpable truths in the most efficient way, in the smallest given time.”[[26]](#footnote-26) Whether museum or marketplace, that is, the Exhibition operated within a strictly capitalist economy of information, one in which efficiency was key. To put this another way: the Great Exhibition was understood (and disputed) from its early stages as an unprecedented celebration of commodities. It was, as Richards has described it, a “Great Exhibition of Things.”[[27]](#footnote-27)

That musical “things” featured in this hymn to the material raises difficult questions—not least in view of the particular taxonomic difficulties they generated as a category. Although they were present in the Royal Commission’s earliest lists of objects to be included in the Exhibition, musical instruments initially appeared in both the Manufactures and Machinery sections.[[28]](#footnote-28) In many cases the differentiation between the placement of objects in Raw Materials and in Manufactures was the subject of considerable debate: this happened with steel, for instance, and with leather.[[29]](#footnote-29) Yet musical instruments were distinguished by their crossing of a different boundary: between items of interest owing to their finished state (and thus, in this case, considered to have aesthetic worth as objects to be *looked* at) and mechanical devices valued because of what they could generate—because of their capacity, quite literally, to make music. What is more, we might even attribute this particular collapse of taxonomic categories to the fact that the musical instruments on display in the Crystal Palace gestured towards two distinct types of musical object. One typology involved the capacity of musical instruments (as machines) to produce sound and thus stood in some sense for the performance of musical works, grounded in the claims to immortality of elite culture; the other involved evaluating its value on the basis of its beauty as a material object, its aesthetic or pleasurable qualities deriving less from its musical affordances than from its decorative traits and assessments of its particular contribution to recent industrial innovation.

 What is most striking about music’s material presence in the Crystal Palace, however, is how little it appears to have been discussed by those organizing the Exhibition. The minutes of the Royal Commission’s meetings in the almost two years leading up to its opening reveal very little about what those in charge of sorting these musical things thought music *was*. For all that it is clear that the Commission was closely concerned with the classification of exhibits in general, and with criteria for differentiating raw materials and manufactured products in particular, there is no trace of debate about the status of musical instruments. When the Crystal Palace opened in May 1851, music was represented explicitly in Class X: a subsection of Machinery, which housed “Philosophical, Musical, Horological and Surgical Instruments.” Thus the place of metronomes, flutes, opera glasses and pianos in the Great Exhibition’s microcosm was located only meters from the ear trumpets, sextants, clocks and—most thought-provoking of all—armies of artificial noses, legs and teeth. This unholy jumble of objects did not go unremarked at the time. Indeed it is difficult not to be intrigued by the juxtapositions produced (however unwittingly) by these dismantled “human” bodies—bodies displayed literally as machinery, literally objectified—and the complete “ensemble” (of an entire orchestra contained within a single instrument) embodied by the pianos, for instance.[[30]](#footnote-30) Perhaps most striking of all was that one of the star musical attractions, Henry Willis’s so-called “monster organ”—an instrument also nicknamed “the Leviathan”—which boasted “the largest swell in Europe,” was located in the Western gallery, and so was placed next to a model man, 5ft tall but apparently capable of expanding to the height of 6ft 8in. Again, the peculiar juxtaposition was noted, one guide seeing fit to “assure our lady readers [that it is] no connection of the monster in Frankenstein”—apparently oblivious to its own otherwise explicit association of one monster with another.[[31]](#footnote-31)

 However, musical objects were not confined to this assemblage of resonant ciphers for modernity (the clock, the piano, the bionic arm). Particularly decorative pianos appeared in Class XXVI (“Furniture, Upholstery, Paper Hangings, etc.”), among them a controversial “Gothic Piano” placed in Augustus Pugin’s equally controversial Mediaeval Court. The response of a critic writing for *Newton’s London Journal* was curt but revealing—“We have already stated an objection to this kind of decoration,”[[32]](#footnote-32)—in ways that clarify the links between long-entrenched objections to ornamentation in virtuoso performance and negative responses to the construction of musical instruments. Nor was the idea that ornament (of any sort) would be detrimental to an instrument’s musical effect restricted to the pianos on display. Tallis’s *History and Description of the Crystal Palace* complained about instrument manufacturers’ use of “elaboration, in order to effect a very simple object.” Concerned above all by various innovations in horns and flutes, Tallis went on to insist: “Nothing injures tone more than a superabundance of mechanism.”[[33]](#footnote-33)

 Yet it was precisely the internal mechanisms of musical instruments that were most widely spread and most difficult to classify at the Exhibition, with objects sorted according to the principal type of material or manufacture produced by each exhibitor. Wire, hinges and locks for pianos were scattered across the “General Hardware” section, along with plates for music printing; drum heads were included with “Shoes and Leather”; bell ropes and decorative fretwork for pianos appeared as “Manufactures from Animal and Vegetable Substances,” while “specimens of lithographic music printing” and “ornamental printed music” were featured as the sole musical items in the Fine Arts Court. Entirely symptomatic of the status of these exhibits is the fact that nowhere is it recorded which pieces of music were offered as printed specimens: these instrumental components and associated technologies were displayed as just that—as material artifacts largely divorced from consideration of their use in musical performance.

**On hearing things or, Ghosts in the machine**

As represented by this series of classified, staged objects, then, music seems to have been manifested in a striking multiplicity of ways within the Exhibition. Indeed, the sheer variety of these manifestations in the Crystal Palace suggests that music was quite literally out of place in this most over-determined of Victorian taxonomies. Nevertheless, the various guidebooks, personal commentaries, and newspaper reports about the Exhibition—and perhaps above all the catalogues in which its contents were repeatedly listed—make the physical presence of musical objects abundantly clear. Individual musical exhibits are singled out for brief praise (or criticism) with regularity: most often the organs, but also other instruments gathered in the main British exhibit, and occasionally those placed in foreign sections elsewhere in the building. Yet none of these critical appraisals gives any sense that their authors were aware of the broader spread of component parts of musical instruments; none records anxiety about the presence of musical instruments in an exhibition of Works of Industry of All Nations. Indeed, the closest one comes to locating that sort of response—something reflecting explicitly on the status of musical instruments at the Exhibition—is Tallis’s observation that the fact that time improves the tone of string instruments “gives to this department of the manufacture of musical instruments a color of antiquarianism (so to say), which possibly removed it beyond the world of contemporary enterprise represented in Hyde-Park.”[[34]](#footnote-34)

 Tallis’s image, of the musical past threatening to encroach on a celebration of the industrial present, stands out among the surfeit of passing comments on individual instruments. But even this provocative response might be largely countered (if not entirely dispelled) by the fact that one of the Medals awarded in the Musical Instrument category was presented to French violin-maker J.B. Vuillaume “for new modes of making violins, in such a manner that they are matured and perfected immediately on the completion of the manufacture, thus avoiding the necessity of keeping them for a considerable period to develop their excellences.”[[35]](#footnote-35) In the technologically advanced present of 1851, it seems that even the passing of time could be artificially manufactured. And even the faint whiff of “antiquarianism” detected by Tallis in the musical instrument display was more symbolic than actual, since all objects in the Exhibition had to have been manufactured fewer than three years previously. As objects—however carefully or bizarrely ordered—these musical instruments thus remain stubbornly silent in the face of twenty-first-century interrogation.

 What is ironic in this context is that these instruments were evidently played. In addition to their presence as material objects, to be admired for their qualities as artifacts, or as evidence of “progress” made in manufacturing techniques and design, the musical instruments on display at the Exhibition were experienced as a sounding means to another, much less obviously “industrial” end. Percy Scholes’s survey of British musical culture between 1844 and 1944 as recorded in the *Musical Times* makes brief mentions of recitals by J.T. Cooper on Willis’s organ; the organ music of Hesse played (and apparently made popular) on “various instruments”; the “extempore fugues” on the organ built by Gray & Davison; and over forty recitals given by the pianist A.J. Hipkins on Broadwood’s pianos.[[36]](#footnote-36) Elsewhere, and despite the widespread absence of any explicit comment on the musical instrument displays as a whole, reports of visits to the Exhibition mention musical sounds as well as industrial noise: Martin Cawood’s overwhelming sensory experience, with which this chapter began, was a cacophony of “pealing strains” and “brilliant tones.” However, apart from a complaint (again from Tallis) about the ineptitude of the musicians demonstrating Sax’s new instruments and the recitals mentioned in the *Musical Times* (and listed by Scholes), virtually no trace remains of which instruments were played, how often and by whom. Given the absence of official mention in the Royal Commission’s minutes—which discuss in detail the timings and practical arrangements made for the demonstration of the large machinery on display—we must assume that decisions concerning the demonstration of musical instruments were left to individual exhibitors. And although the explanation seems strange in the context of an event as minutely overseen as this one, an alternative is difficult to find. Once again, traces of past musical experience remain stubbornly mute.

 Such encounters with historical objects—and noisy, musical ones at that—which have somehow lost the power of communication in our musicological present, must, if nothing else, call for a change of approach. We might take as our cue an account written by one of the Exhibition’s more distinguished musical visitors (and proud jury member), Hector Berlioz, who reported on his experiences in London in his regular *Journal des débats* column. Berlioz describes one occasion on which, unable to sleep after a particularly overwhelming concert in St Paul’s Cathedral, he decided to go to the Crystal Palace before it opened for the day. At 7:00 am, with the building deserted, he was deeply impressed by

the vast solitude, the silence, the soft light falling from the transparent roof, all the stilled fountains, the silent organ, the motionless trees, and the well-blended display of goods brought there from every corner of the earth by a hundred rival nations. Those ingenious works, the products of peace, those instruments of destruction, reminiscent of war, all those fomenters of movement and noise, seemed then to be talking to each other mysteriously in man’s absence, in that unknown language which one hears with the mind’s ear.[[37]](#footnote-37)

What is suggestive here is not simply that Berlioz marks the absence rather than presence of sound (musical or otherwise), but, more importantly, that he imagines in such absence an alternative form of communication: sounds emanating from the objects gathered in the Crystal Palace and audible in “the mind’s ear.” Invoking such apparently loquacious things might gesture in one sense towards the discourse surrounding material cultures and thingliness currently in favor in certain humanities circles; it would certainly be possible—perhaps also productive—to place a discussion of musical ontology c. 1851 in dialogue with such ideas. In what remains of this chapter, however, I want to do something else, switching my focus from asking what was on display in the Crystal Palace (those now-silent artifacts), to tracing the experience of the Exhibition visitor: a listener equipped with a mind’s ear.

**Materializing the musical work**

A week after the Great Exhibition opened to the public, the long bulletin from Hyde Park that had become a daily fixture in *The Times* was already showing signs of object-fatigue. A perfect antidote, the writer suggested, would be found in musical performance:

the overtaxed sight wishes and longs for relief in that great palace of wonders. The longer one stays and the oftener one visits the building, the more irresistible does the craving for music become. Everybody feels and expresses this want, and the occasional half-notes of an organ, or the faint tinkling sounds of a piano, as they fall upon the ear, only aggravate the general desire. That vast interior leaves ample scope for, and is suggestive of, action in some shape or other. Nor can the public be left entirely to the pleasures of meditation over inanimate forms and substances, however attractive.[[38]](#footnote-38)

The hypothetical visitor to the Crystal Palace invoked here was both a desiring subject—one capable of craving musical “relief”—and an object in need of animation. The “action” called for was not so much on the part of the visitor herself, but rather something to be provided externally: as a more potent form of stimulation than that offered by the mute “inanimate forms and substances” on display for visual consumption. This visitor was, moreover, sensitized to musical sound to precisely the extent that her sight was “overtaxed,” and her powers of “meditation” weakened. After a week of sustained consumption, that is, the visually empowered exhibitionary subject explored at length by Tony Bennett had become all ears: a listener as passive as any modern (even modern*ist*), disciplined mode of musical attentiveness might demand.[[39]](#footnote-39)

 As described by *The Times*, then, the army of objects on display vanquished the consumer through sheer excess of information and weight of numbers. As Charles Dickens (no fan of the Exhibition) complained, “I don’t say ‘there’s nothing in it’—there’s too much. [...] So many things bewilder me.”[[40]](#footnote-40) The impression here is of something approaching an overdose of materiality. Such, moreover, is the power of a certain type of “thing”: the commodity whose staging and apparent celebration has so frequently been thought to lie behind the Exhibition’s claim to cultural modernity. Yet on the basis of *The Times* report just mentioned, we might dispute Marx’s famous claim in his *Grundrisse* that “Consumption completes the act of production by giving the finishing touch to the product as such, by dissolving the latter, by breaking up its independent material form.”[[41]](#footnote-41) On the contrary, the ordered scenes of consumption characteristic of the Great Exhibition did not so much dissolve the product as they did the consumer herself. There is, after all, little trace of an individual experience in *The Times*’s description: “everybody” is imagined to feel the same desire; and this corporate emotion is intensified by the music heard (almost) always at a distance. Such distant sounds not only prevent any degree of aural absorption; they also, by extension, seem to recast the Crystal Palace as a dispersive, “centrifugal” auditory space, in contrast to what Richards has identified as the “centripetal” properties underpinning its economy of visual display (with the commodity once again as its “centre and axis”).[[42]](#footnote-42) Any temptations towards aural attentiveness at the Crystal Palace, that is, required the extension of the ear into the building’s remotest corners—in search of sounds beyond the reach of even the most advanced ear trumpets on show among Class X’s surgical implements.

 In such surroundings it was, in the end, musical performers themselves whose presence at the Great Exhibition was most prone to instability, even dematerialization, both in 1851 and in the years since. The opening ceremony on 1 May featured no new musical commission, no high-profile solo performance, and no large-scale works. It did, however, involve considerable musical forces. In his program for the ceremony, the musical superintendant Sir George Smart (“Organist and Composer to Her Majesty’s Chapel Royal”) listed no fewer than 783 participating musicians, ranging from star soloists on loan from London’s opera houses, to a brace of eminent organists, to three-figure-strong battalions of unnamed chorus members.[[43]](#footnote-43) The repertoire essayed by this vast group was, perhaps inevitably, predictable and unimaginative: trumpet flourishes to punctuate proceedings; two mass renditions of the National Anthem at the start and close; a triumphant “Hallelujah Chorus” following a prayer led by the Archbishop of Canterbury; unspecified contributions by the bands of the Coldstream and Scotch Fusilier Guards. These sonic explosions were reported (and have since been discussed) largely for their statistical interest: as a high-profile instance of the Victorian “monster concert” phenomenon. But what is immediately striking is that the massed musical forces seem to have been barely heard in the Crystal Palace. According to a reporter of the greatest conceivable eminence (Queen Victoria, in her diary), the “200 instruments and 600 voices [...] seemed nothing.”[[44]](#footnote-44) Enclosed within the great glass display case of the Exhibition, performing musicians were not so much elevated to the state of an exhibit as dissolved in the moment of their consumption: here, surely, is a musical instance of Marx’s much-repeated dictum that “all that is solid melts into air.”[[45]](#footnote-45)

 In the capitalist cathedral of the Crystal Palace and amid its clamorous celebration of material things—in gleaming array, stretching as far as the eye could see—music vanished and became inaudible. Peculiarly lacking in substance, it left hundreds of mute bodies in its wake. Standing metonymically for Handel’s great musical work (perhaps even for “the great musical work” as the emerging foundation of elite musical culture), the “Hallelujah Chorus” proved a frail object, having in performance none of the solidity and permanence of the commodities on display. Here we are confronted at last with our own, widely used sense of the phrase “musical object,” as a shorthand—perhaps even a euphemism—for the part-abstract concept, part-resonant phenomenon once (briefly) known as The Music Itself and, before that, simply called “music.” Yet in its fragile, sounding form, music’s place in this overwhelmingly object-oriented context seems a far cry from its epistemological state as sketched by Lydia Goehr:

As it entered the world of fine arts, music had to find a plastic or equivalent commodity, a valuable and permanently existing product, that could be treated in the same way as the objects of the already respectable fine arts. [...] The object was called “the work.”[[46]](#footnote-46)

In the 1851 Great Exhibition, music was indeed present as “a plastic or equivalent commodity, a valuable and permanently existing product”; but such commodities, and such products, were largely mute. No one denied the plasticity—the blunt materiality—of the lengths of piano wire, the drum heads, bell ropes, faux-antique violins, transposing pianos or new, improved flutes. These were musical objects to be sorted, marveled at and perhaps even (in due course) possessed; they were “Works of Industry,” signs of progress. Yet some of these musical objects were also machines in their own right. They were musical instruments displayed as mechanisms for the generation of musical sound: for the reproduction of an altogether less solid musical object. The musical displays at the Exhibition, in other words, once again offered two quite different perspectives on “music”: one that demonstrated, triumphantly, the progress made in technological innovation; another that deferred implicitly to the universalism of “great works” and an imaginary museum increasingly at the heart of mid-century elite culture. But in those ephemeral musical performances at the Crystal Palace (whether at the opening ceremony or in demonstrations, seemingly ever-distant, of instruments on display), the separation of these types suddenly collapsed. In the echoing dream-house of the Exhibition, music was presented not merely as collection of polished things in glass cases. Rather it was actualized as an object that dissolved the instant it was produced, before its promise of materiality had been fulfilled. The musical “work” may have originated as the art form’s entrance ticket to the cultural pantheon, in other words, but the Great Exhibition’s industrial pageant cast it in an altogether more problematic light: as a shining example of the commodity-form.

1. “The Great Exhibition,” *Leeds Mercury* (24 May 1851), 8. [↑](#footnote-ref-1)
2. Ibid. [↑](#footnote-ref-2)
3. Lydia Goehr, *The Imaginary Museum of Musical Works* (1994; 2nd edition, Oxford: Oxford University Press, 2007). [↑](#footnote-ref-3)
4. Jericho, “Exhibition of the Industry of All Nations,” *Eliza Cook’s Journal* (May 1850), 217. [↑](#footnote-ref-4)
5. Thomas Carlyle, “Signs of the Times,” *Edinburgh Review* 98 (1829), 317. [↑](#footnote-ref-5)
6. This Birmingham Exhibition led in due course to the construction in 1850 of Bingley Hall, the country’s first purpose-built industrial exhibition hall. More thought-provoking than its claim to novelty, however, is the fact that the building was apparently constructed using girders left over from the construction of Euston railway station in London, which were transported on the London and Birmingham Railway (which had opened in 1838). This gestures towards an unexpectedly literal instantiation of Walter Benjamin’s famous association between nineteenth-century railway stations and exhibition buildings as iron structures sharing “transitory purposes;” see Benjamin, *The Arcades Project*, ed. Rolf Tiedemann, trans. Howard Eiland and Kevin McLaughlin (Cambridge MA: Belknap Press, 1999), 154. For a brief but useful overview of earlier exhibitions mounted in Britain and elsewhere, see Richard D. Altick, *The Shows of London* (Cambridge MA: Belknap Press, 1978), 455-6. [↑](#footnote-ref-6)
7. The crucial meeting during which Albert proposed such an exhibition was held at Buckingham Palace on 30 June 1849; the attendees were Thomas Cubitt, Henry Cole, Francis Fuller, John Scott Russell, and Prince Albert himself. The minutes note that “His Royal Highness communicated his views regarded the formation of a Great Collection of Works of Industry and Art in London in 1851, for the purposes of Exhibition, and of competition and encouragement.” Archive of the Royal Commission for the Exhibition of 1851: “1851 Exhibition: Correspondence and Papers: 1849” [A/1849]. [↑](#footnote-ref-7)
8. *Official Catalogue of the Great Exhibition of the Works of Industry of All Nations, 1851* (London: Spicer Brothers, 1851), 5. [↑](#footnote-ref-8)
9. *Official Catalogue of the Great Exhibition*, 5. [↑](#footnote-ref-9)
10. Jericho, “Exhibition of the Industry of All Nations,” 217. [↑](#footnote-ref-10)
11. Ibid. [↑](#footnote-ref-11)
12. *The Athenaeum* (18 October 1851), 1094. [↑](#footnote-ref-12)
13. James Buzard, Joseph W. Childers, and Eileen Gillooly, eds., *Victorian Prism: Refractions of the Crystal Palace* (Charlottesville: University of Virginia Press, 2007), 1. For other modern accounts with comparable historiographical ambitions for the Exhibition, see for instance: Isobel Armstrong, *Glassworlds: Glass Culture and the Imagination 1830-1880* (Oxford: Oxford University Press, 2008); Carla Yanni, ed., *Nature’s Museums: Victorian Science and the Architecture of Display* (London: Athlone Press, 1999); Paul Young, *Globalization and the Great Exhibition: The Victorian New World Order* (Basingstoke: Palgrave Macmillan, 2009). [↑](#footnote-ref-13)
14. In marked contrast, for the next Exhibition held in London, in 1862, a quartet of eminent composers were invited to contribute new works to a large-scale opening ceremony: William Sterndale Bennett (representing England), Auber (representing France), Meyerbeer (representing Prussia), and Rossini (representing Italy). Rossini refused the invitation and was promptly replaced by Verdi, who—uncharacteristically—accepted, only to be told that his *Inno delle Nazioni* could not be performed as planned. For more on the saga that unfolded in relation to these commissions, see Roberta Montemorra Marvin, “Introduction” in Marvin ed., *The Works of Giuseppe Verdi, Series IV: Hymns* (Chicago: University of Chicago Press, 2007), xi-xxii. [↑](#footnote-ref-14)
15. Michael Musgrave, *The Musical Life of the Crystal Palace* (Cambridge: Cambridge University Press, 1995), 8, 9. [↑](#footnote-ref-15)
16. Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences* (London: Routledge, 2002); originally published as *Les Mots et les Choses (Une archéologie des sciences humaines)* (Paris: Gallimard, 1966). [↑](#footnote-ref-16)
17. See Foucault, *The Order of Things*, 140-4. [↑](#footnote-ref-17)
18. Harriet Ritvo, *The Platypus and the Mermaid* (Cambridge, MA: Harvard University Press, 1997), 20-1. [↑](#footnote-ref-18)
19. Binominal nomenclature was first applied consistently to animals in the tenth edition of *Systema naturae* (1758); see Ernst Mayr, *Principles of Systematic Zoology* (New York: McGraw-Hill, 1969), 58. [↑](#footnote-ref-19)
20. Mayr, *Principles of Systematic Zoology*, 58. [↑](#footnote-ref-20)
21. Ibid., 59. [↑](#footnote-ref-21)
22. Andrew H. Miller makes a similar point when he connects the Great Exhibition’s staging of progress to the topos (familiar from Wolfgang Schivelbusch’s work in particular) of the railway’s “annihilation” of time and space; in Miller’s words, the Exhibition “concentrated space so as to make time—understood as the relative historical progress of the various nations—more easily perceived. ... [It] brought objects and people from across the world to a single point, were their rates of development could be measured and compared;” Miller, *Novels Behind Glass: Commodity Culture and Victorian Narrative* (Cambridge: Cambridge University Press, 1995), 55. [↑](#footnote-ref-22)
23. Tony Bennett, “The Exhibitionary Complex,” in *Culture/Power/History: A Reader in Contemporary Social Theory*, ed. Nicholas B. Dirks, Geoff Eley, and Sherry B. Ortner (Princeton: Princeton University Press, 1994), 140. [↑](#footnote-ref-23)
24. For more on Playfair, see Steve Edwards, “The Accumulation of Knowledge, or, William Whewell’s Eye,” in *The Great Exhibition of 1851*, ed. Louise Purbrick (Manchester: Manchester University Press, 2001), 35. As a result of the building’s physical division into “foreign” and “British” parts, in which only the latter were classified according to the Royal Commission’s taxonomy, and since I am concerned with what we might uncover about the musical culture of mid-nineteenth-century London in particular, this chapter necessarily addresses only those musical objects exhibited by British manufacturers. It goes almost without saying that still more work remains to be done on the display of non-European instruments at the Exhibition; the one relatively comprehensive account (albeit one in catalogue form) of musical instruments on show across all parts of the Exhibition is Peter and Ann MacTaggart, *Musical Instruments at the 1851 Exhibition* (Welwyn: Mac and Me, 1986). [↑](#footnote-ref-24)
25. Richards, *The Commodity Culture of Victorian England*, 17. [↑](#footnote-ref-25)
26. Quoted in Andrea Hibbard, “Distracting Impressions and Rational Recreation at the Great Exhibition,” in *Victorian Prism*, 151. [↑](#footnote-ref-26)
27. Thomas Richards, *The Commodity Culture of Victorian England: Advertising and Spectacle, 1851-1914* (London: Verso, 1991), 17. [↑](#footnote-ref-27)
28. Minutes of the Fourth Meeting of the Royal Commission (31 January 1850), 8-9. [↑](#footnote-ref-28)
29. Ibid., 3. [↑](#footnote-ref-29)
30. The presence of various innovations in self-playing instruments within the musical displays offers still more food for thought in this regard. [↑](#footnote-ref-30)
31. *A Guide to the Great Exhibition* (London: George Routledge, [n.d.]), 193. [↑](#footnote-ref-31)
32. Quoted in MacTaggart, *Musical Instruments at the 1851 Exhibition*, 34. [↑](#footnote-ref-32)
33. Tallis, *History and Description of the Crystal Palace*, Vol. I, 119. [↑](#footnote-ref-33)
34. Tallis, *History and Description of the Crystal Palace*, Vol. III, 59. [↑](#footnote-ref-34)
35. John Timbs, *The Year-Book of Facts in The Great Exhibition of 1851* (London: David Bogue, 1851), 306. [↑](#footnote-ref-35)
36. Percy Scholes, *The Mirror of Music, 1844-1944* (London: Novello, 1947), 853; 595; 601 and 854; 776. [↑](#footnote-ref-36)
37. Hector Berlioz, “Twenty-first Evening,” in *Evenings in the Orchestra*, trans. C. R. Fortescue ([1852] London: Penguin, 1963), 211-12. Berlioz’s account originally appeared as a letter to the editor (dated 9 June) in the *feuilleton* of the *Journal des débats* (20 June 1851), 1-2. [↑](#footnote-ref-37)
38. *The Times* (7 May 1851). [↑](#footnote-ref-38)
39. According to Bennett, exhibitionary institutions such as the Crystal Palace “sought not to map the social body in order to know the populace by rendering it visible to power—the power to command and arrange things and bodies for public display—the sought to allow the people, *en masse* rather than individually, to know rather than be known, to become the subjects rather than the objects of knowledge;” Bennett, “The Exhibitionary Complex,” 126. [↑](#footnote-ref-39)
40. Letter to Mrs Watson (11 July 1851), *Letters* VI, 427-9; here 428. Cited in Juliet John, *Dickens and Mass Culture* (Oxford: Oxford University Press, 2010), 63. [↑](#footnote-ref-40)
41. *Marx’s “Grundrisse,”* ed. and trans. David McLellan (London: Macmillan, 1971), 25. [↑](#footnote-ref-41)
42. Richards draws a distinction between the “centrifugal” space of the advertisement, which he figures as directing attention away from the centre of representation, and the Crystal Palace’s “centripetal space of representation that took the commodity as its centre and axis;” Richards, *The Commodity Culture of Victorian England*, 52-3. [↑](#footnote-ref-42)
43. British Library, Papers of Sir George Thomas Smart, vol. 7: MSS/Additional/41777, p. 280 ff. [↑](#footnote-ref-43)
44. *Queen Victoria’s Journals*, Vol. 31 (accessed 2/10/13, http://www.queenvictoriasjournals.org/home.do); (1 May 1851), 213. [↑](#footnote-ref-44)
45. The most famous use of this phrase is Marshall Berman’s in *All That Is Solid Melts Into Air: the Experience of Modernity* (London: Verso, 1983). It is no coincidence that Berman includes a brief discussion of the Crystal Palace as “one of the most haunting and compelling of modern dreams” (p. 236) and quotes an account of the Palace’s interior that he reads as exemplifying the tendency towards decomposition observed by Marx: “If we let our gaze travel downward it encounters the blue-painted lattice girders. At first these occur only at wide intervals; then they range closer and closer together until they are interrupted by a dazzling band of light—the transept—which dissolves into a distant background where all materiality is blended into the atmosphere”; *All That Is Solid Melts Into Air*, 239. [↑](#footnote-ref-45)
46. Goehr, *The Imaginary Museum of Musical Works*, 173-4. [↑](#footnote-ref-46)