Listening to Museums:
Sounds as objects of culture and curatorial care

by John Kannenberg

Thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy at the London College of Communication, University of the Arts London

Supervisors:
Professor John Wynne (DoS)
Professor David Toop (CoS)
Dr Lucy Steeds (CoS)

Abstract

This practice-based project begins with an exploration of the acoustic environments of a variety of contemporary museums via field recording and sound mapping. Through a critical listening practice, this mapping leads to a central question: can sounds act as objects analogous to physical objects within museum practice – and if so, what is at stake in creating a museum that only exhibits sounds?

Given the interest in collection and protection of intangible culture within contemporary museum practice, as well as the evolving anthropological view of sound as an object of human culture, this project suggests that a re-definition of Pierre Shaeffer's oft-debated term 'sound object' within the context of museum practice may be of use in re-imagining how sounds might be able to function within traditionally object-based museum exhibition practices. Furthermore, the longstanding notion of 'soundmarks' – sounds that reoccur within local communities which help to define their unique cultural identity – is explored as a means by which post-industrial sounds such as traffic signals for the visually impaired and those made by public transport, may be considered deserving of protection by museum practitioners.

These ideas are then tested via creative practice by establishing an experimental curatorial project, The Museum of Portable Sound (MOPS), an institution dedicated to collecting, preserving, and exhibiting sounds as objects of culture and human agency. MOPS displays sounds, collected via the author's field recording practice, as museological objects that, like the physical objects described by Stephen Greenblatt, 'resonate' with the outside world – but also with each other, via their careful selection and sequencing that calls back to the mix tape culture of the late twentieth century.

The unconventional form of MOPS – digital audio files on a single mobile phone accompanied by a museum 'map' and *Gallery Guide* – emphasizes social connections between the virtual and the physical. The project presents a viable format via which sounds may be displayed as culture while also interrogating what a museum can be in the twenty first century.

Table of contents

Figures List

Acknowledgements

The critical eyes and ears of my supervisors – John Wynne, David Toop, and Lucy Steeds – helped me navigate a difficult research journey. My sincere thanks for all of their hard work and perseverance in seeing me through this project. Many thanks also to my Viva examiners, Nicky Ryan and Fiona Candlin, for their honest and critical discussions which have been crucial in my efforts to refine this document.

This thesis was born out of presentations. Mark Peter Wright asked me to present the MOPS Grand Opening Gala at London College of Communication, which unlocked my ability to present my ideas with humour; several conference presentations taught me to speak critically about MOPS. Thanks to all who invited me: Anette Vandsø, Rikke Hansen, Andrew Cappetta, Lauren Rosati, Morten Søndergaard, Rasmus Holmboe, Ina Čiumakova, Burçak Madran, Wells Fray Smith, Alixe Bovey, Fern Insh, Annie Jamieson, Leena Ahonen, and Kimmo Kestinen. Tim Boon, Head of Research & Public History at the Science Museum in London, invited me to a series of workshops on sound and museums – a free crash course. Oonagh Quigley of the University of Leicester Museum Studies Programme edited my first published article from this project, an affirmation at a critical point when all seemed bleak. Victoria Karlsson invited me to Art Arcana, which taught me what to change to make the museum work. Rachel Souhami invited me to Museums Showoff in London, a positive, open, and supportive event that taught me less is more. I spoke at a number of universities – Kwame Phillips, Alice Stevenson, Emily Candela, Matt Smith, Harry Whalley, and Robert Hardcastle gave me the opportunity to engage with talented and curious students. Eric de Visscher of the V&A has been an ardent supporter and mentor. His enthusiasm, trust, and respect have been a remarkable inspiration.

Although MOPS is a one-person operation, it has benefitted from the work and generosity of Cheryl Tipp, Lydie Valentin, Ekaterina Yonova-Doing, Matthew Sansom, Eric Powell, Louise Gray, Dubreq LTD, Ryan Maguire, Dr Irene Noy, Jessica Akerman, Daniel Toca, Khaled Kaddal, Mike Hallenbeck, Christopher DeLaurenti, Tara Rodgers, and Viv Corringham. MOPS also somehow engaged the services of a curatorial intern, Cristina Sousa Martínez. Dr Meri Kytö has been a valued colleague, critic, and friend ever since a fateful meeting on Corfu between an innocent breakfast table and a despicable leaf.

Apart from being the first MOPS visitor and board member, CJ Mitchell, along with his wife Karen Christopher, have both been a surrogate family for me during my time in London. For their support, encouragement, and invaluable help, my heartfelt thanks also to Reem Gibriel, Reed Esslinger, James Rotz, Colin Leix, Terry Wilfong, Esmeralda Kale, Crystal Martin, David Easterbrook, Philip von Zweck, Monika Lozinska, Ishamea Harris-Wolff, Ivan Albertson, Paula Clemons, Kris Hunt, Dan Curley, and Gene, my actual brother. Sonia Avasthi listened to me when no one else could. Oh yes, and John Ritterbush did a couple of nice things for me once (eg. 'Call, Don't Fall').

The colossal intellect of my partner Lara Torres is only matched by her wonderfully dark sense of humour and passion for everything creative and/or morally just. Her love, support, and critiques have been unconditional and unmatched. Plus, not only did she introduce me to the concept of the paleonomy, she also introduced me to the pastel de nata.

Finally, MOPS would not be a museum without its visitors. I owe them a debt of gratitude for showing me that my project isn't a joke – it is actually a museum.

Right now, before we go anyplace else

I want you to go with me to a special place that I know

It's a museum

But it isn't an ordinary museum

It is a very abstract museum in which they show *sound* paintings

If you can say that you 'show' sound

(But, I don't see why you can't)

– Ken Nordine
'The Sound Museum'
From the album *Word Jazz* (1957)

The Artist In Front of His Museum **(Photoshopped self-portrait of the author based on *The Artist In His Museum*, self-portrait by Charles Willson Peale, 1822. Peale founded the first natural history museum in the United States, the Peale Museum, originally located in his house in Philadelphia and opened to the public in 1786. It was one of the first museums in the world to organise its collections according to Linnean taxonomy. Image used as frontispiece of the second edition of the Museum of Portable Sound** *Gallery Guide***.)**

0. Introduction

> If a sound liberation is to occur it will mean confronting the meaning(s) of the noise we produce, challenging the context of its reproduction and transmission, and engaging in an active, rather than passive, investigation of sound recording technologies. (Lander, 2013: p.14)

> [C]urator and anthropologist Gloria Cranmer Webster tells a story about an encounter she had with the Canadian anthropologist Wilson Duff in the early 1970s. Duff came upon her one day while she was working in the store room of the old University of British Columbia Museum of Anthropology. 'He picked up a raven rattle, brought it over to me and asked, 'Isn't it beautiful?' 'Yes,' I replied, and went back to my typewriter. He then asked, 'But how do you read it?' Impatiently I said, 'Shit, Wilson, I don't read those things, I shake them.' (Edwards, Gosden, and Phillips, 2006: p.1)

This artistic practice-based research project explores the sonic experience of museums from two perspectives: the way museums currently sound, and how museums might exhibit sounds as objects. Over the course of my research journey, my area of focus has shifted from the former to the latter: I began this project creatively mapping the sounds I listened to within the acoustic environments of currently existing museums, which eventually inspired an experimental curatorial project that has resulted in the establishment of my own museum, The Museum of Portable Sound (MOPS see Figure 1). This thesis references the history and historical development of the modern museum primarily in order to give context to my artistic practice, rather than as a claim to particular expertise in that history. As an artist active at the border between sound studies and museum studies, it has proved to be a delicate balancing act to satisfy the demands of both of these disciplines simultaneously, and this tension will become apparent to readers of this thesis from one or the other discipline. However, in my creative practice's 'role' as MOPS's Director and Chief Curator, I have always considered the 'lay person' – i.e. someone outside of both disciplines – to be the primary audience of the creative work, remaining mindful of the sophisticated and conflicting intellectual positions of the two academic disciplines while developing

Figure 1. The Museum of Portable Sound on Exhibition Road, 2017.

artistic outputs that can appeal to an audience outside of the specialists within either field.

I have used MOPS as a laboratory through which to experiment with ideas of exhibiting recorded sounds as museum objects. This thesis will argue for the collection, preservation, and exhibition of sounds as objects within museum practice – an idea that, for my own art practice, also inspired a shift in the language of objects: a redefinition of the term 'sound object' within a museological context rather than the experimental music context from which it originated. As an artist working with sound who has also studied museology, the 'sound object' term served as an inspiration and connecting point between recorded sound's previous usage within experimental music and the concept of exhibition/display within museum practice. As Chapter 2 will demonstrate, this term has caused conceptual conflict within sound studies, and my own redefinition of the term within museum practice has helped me to think through the object-based potential of sounds within museum practice – which will hopefully encourage further exploration of the ability of sounds to be handled as objects of curatorial care by other practitioners.

During the course of this project, I have explored the theoretical tensions between sound studies and museum studies. Sound studies – particularly the branch that concerns itself with sound art – often seeks to break down categories and labelling (Licht & O'Rourke, 2007; Voegelin, 2014a: pp.13–14) in order to create dialogues between traditionally separate practices, such as music, sound art, film sound, radio art, history, anthropology, etc. The modern museum evolved in part from the Enlightenment tradition of categorisation and labelling (Huxley, 2003: pp.70–79), which has remained an influential – though not uncontested – part of museum practice ever since. At the same time, museum studies describes a wide variety of institutions as 'museums' – from art galleries and natural history collections to institutions dedicated to science, archaeology, anthropology, and even zoos and botanical gardens; these subject-specific institutions alone can be viewed as categories of world culture.

My creative practice has seen considerable change in both creative output and theoretical/disciplinary focus since the beginning of my PhD studies. My artistic research began firmly within the realm of 'sound art': it involved a practice of making field recordings of the acoustic environments within contemporary museums, with the intention of creating 'sound maps' of those spaces – maps that took both sonic and visual

forms. Concurrently, I had also begun thinking about the potential contents of a 'museum of sound' – something I originally envisioned as a large physical museum. However, my conceptual museum of sound felt inherently flawed as a potential area of research because a physical institution of the size and scope I had imagined was not something that could ever be feasibly tested within the time and budgetary restraints of a PhD thesis.

Throughout the first year of my research, my interests in the idea of displaying sounds as museum objects became increasingly incompatible with my creative practice of listening to what museums already sound like. Although my idea for a physical, architectural 'museum of sound' felt flawed, it had also raised a series of questions relating to museums and museum practice that I felt were extremely fertile areas of research. These new questions increased the tensions within my practice, and led to a new creative project: a conceptual museum based on listening, freed from the need for an architectural space; an artist's museum capable of not only examining the role of sound within museological ideas of display, but also of exploring the idea of what a museum is or could be.

Over the first two years of my research journey, it became apparent that the creative practice needed to focus either on the sound mapping project or MOPS in order to develop a more precise question upon which to focus my research. Subsequently, MOPS became both my main artistic practice and the focus of my project's research. As a result, the 'balance of power' between the disciplines my project navigated between – sound studies, museum studies, and fine arts practice – shifted a great deal. What began as a sound art project became an experimental curatorial and performance project. Although ultimately I view MOPS as a piece of sound-related art due to its preoccupations with questioning the why, what, and how of listening, the research questions this project investigates are located most precisely within museology: Can sounds act as objects analogous to physical objects within museum practice? How can sounds be exhibited in a museum context? What is at stake in creating a museum that displays sounds as objects?

0.1 What is the Museum of Portable Sound?

The form of MOPS is simpler than my initial rejected concept for a physical museum of sound. In order to set the stage for the discussions throughout the remainder of this thesis, a brief explanation of what MOPS is – and is not – is necessary. The project has six major

components:

• A single mobile phone – an iPhone 4S;

• A collection of field recordings (primarily my own) and other sound files – the museum's displayed objects – that have been selected, edited, sequenced, and categorised into a series of themed 'galleries' stored in the standard Music application on the mobile (the sounds are not accessible online, and there is no 'MOPS app' to download. In order to experience MOPS, visitors must meet me and listen to my phone);

• A map of the galleries, via which visitors can quickly gain an understanding of the organisation of the sound files;

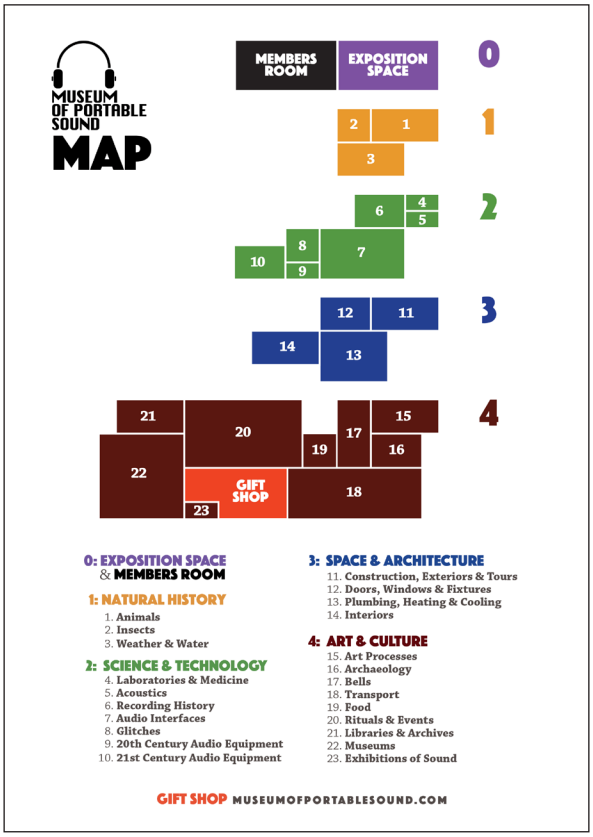


Figure 2. Map given to MOPS visitors, designed by author.

• A *Gallery Guide* book filled with didactic information, further classifications and deeper organisation of the sounds displayed on the mobile phone (it is a guidebook rather than a catalogue – its primary use is to guide visitors' in-person experiences of MOPS);

• A performance and social encounter between visitors, the museum's collections, and its Director (myself), collaboratively manifesting a museum from the above components in tandem with a predefined set of rules that I enforce during the visit – rules that echo policies used by physical museums, even if following them may not always seem logical;

• A series of supporting events including guest curated temporary exhibitions, private views, lectures, an Education department, active presences on multiple social media platforms, a website, and an online Gift Shop.

These six components are the road map via which the research will be discussed in the following chapters.

0.1.1 What the Museum of Portable Sound is not

The sound recordings exhibited in MOPS have been selected primarily from my own personal archive of field recordings, which I have made since 1999. In some rare cases I have included field recordings made by other artists, but have preferred to maintain curatorial control over what is included. Due to the large number of sound files currently installed on the MOPS mobile (two hundred at the time of writing, with a total duration of five hours), it is tempting to argue that MOPS is a sound archive rather than a museum; indeed, the existence and identity of archives of recorded sound are well-established within the European cultural institution tradition; examples include the recent Europeana Sounds project based at the British Library that saw European sound archives collaborating to digitise and upload large portions of their collections to the internet from 2014 through 2017 (Franzen, 2015: p.104); as well as the half century-old International Association of Sound and Audiovisual Archives (Seay, 2019: p.5). While there are some similarities in mission between MOPS and the sound archives of the world, an extensive clarification of the history of archival theory is outside the scope of this thesis. However, my thoughts why MOPS is a museum and not an archive should be clarified.

Archives are typically established by governmental institutions, private organisations, or individuals, and serve as 'repositor[ies] or ordered system[s] of documents and records, both verbal and visual, that is the foundation from which history is written' (Merewether, 2006: p.10). As with many institutions, the archive was scrutinised by postmodernist thinkers such as Derrida, whose *Archive Fever* (1996) focused on the archive's ties to the state and their control over the formation of memory and history.

Archival practice has been preoccupied with the adoption of increasingly professionalised standards of practice since the publication of the so-called *Dutch Manual* in the nineteenth century (Ridener, 2006: p.21), particularly in terms of the condition or quality of the materials accepted into an archive – an issue that has been deemed problematic in regards to the crowdsourcing of sound recordings for archival projects (Chester, 2019: p.24). If professional archival standards were applied to MOPS, it would undoubtedly fail that test, as the field recordings I capture adhere neither to audiophile nor archival standards; they have generally been made with the built-in microphones of budget or mid-range digital audio recorders such as the Olympus LS-10 and the Zoom H2.

My art practice of field recording has never been concerned with capturing recordings of 'audiophile quality,' but rather with capturing content I personally find to be intellectually engaging – I am less interested in the technical quality of a recording than I am in what activity or event the recording has captured.

While archives do occasionally exhibit their materials, access to the materials they hold tend to be user-driven rather than directly curated by staff – visitors to archives search for materials themselves, rather than only relying upon a curator to show them what the curator views as important. Archivists, like museum curators, select and prioritise the materials they keep in their collections, but museums construct narratives – stories created by curators 'that cannot emerge simply from the presence of the artifacts themselves' (Hedstrom and King, 2003: p.11) – via the designed display of selected objects. Museums often keep archival collections, but it is the narratives of their curated exhibitions that are publicly accessible.

My own field recording archive, where the sounds exhibited in MOPS come from, currently contains over 3,400 individual digital files, ranging in duration from less than one minute in length to well over an hour each – while MOPS only contains 200 recordings, nearly all of which are under two minutes long, with a total duration of just over five hours. In addition to the digital files currently in my possession, I have a further archive of recordings made on MiniDiscs in storage outside the UK which contains at minimum 64 full discs; each disc stored up to 74 minutes of audio. If my digital files are very conservatively averaged to last one minute per file, this makes my complete archives at the very least 136 hours long, with the current duration of MOPS no more than 3.68% of my recording archives. The sounds in the MOPS galleries have been selected with care and precision to illustrate specific ideas, while the remainder of my field recording archives are inaccessible to members of the public.

0.2 How MOPS is visited

A standard visit to MOPS includes a one-to-one meeting with me – the Director and Chief Curator. Due to the portable nature of the museum, the location of each visit varies. Potential visitors fill out a contact form on <museumofportablesound.com>, and we then have a brief email dialogue to set up a time and place to meet. Visits have occurred in

cafés, libraries, parks, pubs, and other museums (Appendix 6). Admission to MOPS is free.

On the day of a visit, I arrive at the agreed-upon location early, and set up the materials for the visit (Figure 3). I provide visitors with their complimentary map of the museum's galleries (Figure 2) and the printed *Gallery Guide* (see *Gallery Guide* 2nd Edition PDF) containing object labels and other didactic information about the sound objects on display. This arrangement also includes a portable sign that I assemble and rest on the table where the visit takes place in order to announce the opening of the museum to visitors and others in the vicinity, and delineate its boundaries (Figure 3). The museum's own explanation for arranging a visit can be found on its website, <https://museumofportablesound.com/plan-your-visit/how-to-visit> (see also Appendix 3).

Figure 3. MOPS setup for a visit in the lobby of the British Library, 22 November 2017. Photo by author.

Figure 4. The author (left) hosting a MOPS visit in the lobby of the University of Westminster, London, 8 December 2016. Photo by a passerby.

Figure 5. The first MOPS group visit using a headphone splitter, Clara Clara café, Lisbon, Portugal, 24 August 2016, before the *Gallery Guide* had become a professionally printed volume – note the use of a stapled printout (center) and a PDF version on another mobile (far right). Photo by author.

In July 2016, MOPS acquired a headphone splitter in order to begin accommodating small group visits of up to five people at once. During the one-to-one and small group visits, I perform the role of the museum's Chief Curator, but also take on all front of house duties as well: I enforce rules (such as 'no audio recording'); I explain the various modes of accessing the galleries (via self-directed exploration or one of several 'guided tours' available as playlists); I provide a complimentary coat check service; and I also act as combined security guard and information desk (see full details on MOPS Visitor Services at <https://museumofportablesound.com/plan-your-visit/visitor-info/>. While visitors spend time in the museum, I am available to answer questions if they wish, otherwise I sit silently with them. Visit durations are up to visitors, with the shortest visit so far lasting about 30 seconds and the longest well over five hours. At the end of each visit, I point visitors back to the MOPS website and social media accounts, encourage them to make a purchase in the MOPS online gift shop, and encourage them to purchase a museum membership. While this process may sound needlessly inconvenient, it has proven useful in not only providing a space that encourages visitors to focus upon listening in a way they may have been previously unaccustomed to, it has also provoked lengthy discussions about sound, listening, and museums with nearly all one-to-one visitors. These discussions have provided feedback that has helped me to improve the MOPS visitor experience.

0.3 Key terms

In order to lay the conceptual groundwork for this thesis, this section will briefly discuss the key terms related to the project – other secondary terms will be defined in subsequent chapters.

0.3.1 Defining 'museum'

The Oxford English Dictionary defines 'museum' as 'a building in which objects of historical, scientific, artistic, or cultural interest are stored and exhibited'. While this architecturally-dependant definition may be useful to the general public, the current definition of 'museum,' according to the 22nd General Assembly of the International Council On Museums (ICOM) in Austria on 24 August 2007, states:

> A museum is a non-profit, permanent institution in the service of society and its development, open to the public, which acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of education, study and enjoyment (<icom.museum>, 2017).

Having used the above definition for more than a decade, ICOM is set to revisit it at their 2019 Kyoto conference (Brown and Mairesse, 2018: p.525). This search for a new definition of museums within the field of museology is nothing new; throughout history, defining 'museum' has constantly evolved (Abt, 2006: p.115) as perceptions about what museums are and what they are meant to do have remained 'in flux' (Knell, MacLeod, and Watson, 2007: p.xix). Even a brief survey of the literature leads to multiple perspectives on what 'museum' may mean.

In 1971, Duncan Cameron suggested two identities for museums: 'the temple', an antiquated notion where museum collectors were elite and separated from the public, only concerned with serving the middle to upper middle classes and resistant to change; and 'the forum,' a more forward-thinking view of museums as 'an equality of cultural opportunity,' incorporating 'mass media' and a more populist approach open to a more diverse audience – an early forerunner to contemporary notions of museum inclusivity (Cameron, 1971). Later in the twentieth century, Eilean Hooper-Greenhill took an historical approach, claiming museums to be educational institutions born from a 'universal' human desire to collect where relationships between subjects and objects were as clear cut as

the division between visitors (public) and curators (private). Viewing the development of museums through the lens of philosopher Michel Foucault's notion of epistemes – historical (but not temporal) sets of relations within which knowledge is produced and rationality is defined – Hooper-Greenhill suggested that museums moved from the Classical episteme, when knowledge was considered fixed and controllable; through the Renaissance episteme when the interpretation of the world existed as a series of hidden relationships that could be endlessly rewritten; and finally into the Modern episteme, where not only the relationships of knowledge were in flux but the nature of objects itself began to be questioned (Hooper-Greenhill, 1992). By the end of the twentieth century, Stephen Weil (1999) suggested that museums were not about the things they collect, but rather for the social benefit of the people who visit them. The following year, philosopher Hilde Hein discussed the difficulty in fixing a definition of museums by critiquing the ICOM definition mentioned above as:

> subject to de facto challenge from within and without the profession, and no single feature is viewed as essential by the general public. Disagreement continues not only over the true nature of museums but even as to what sorts of entities are properly to be counted as museums. Many people are surprised to find that zoos and botanical gardens, as well as libraries, are listed among museums in professional and touristic publications; museum workers are equally shocked that visitors are unable to discriminate between museums and theme parks or commercial demonstration sites such as the New York SONY Centre. When considering what the objectives of museums are, it is important not to conflate these with the ambitions of all other cultural institutions (2000: p.3).

Half a decade later, museum practitioner and scholar Elaine Gurian (2005a: p.48) chose not to define 'museum' without one of the following categorical qualifiers: object-centred, Narrative, Client-centred, Community-centred, or National/governmental.

ICOM's *Key Concepts in Museology* introduces its own survey of museum definitions with the following:

> The term 'museum' may mean either the institution or the establishment or the place generally designed to select, study and display the material and intangible evidence of man and his environment. The form and the functions of museums have varied considerably over the centuries. Their contents have diversified, as have their mission, their way of operating and their management (Desvallées and Mairesse, 2010: p.56).

Several of the definitions offered by Desvallées and Mairesse mention the interchangeability between the concept of institution and architecture as a key component

of what may be referred to by the term 'museum,' yet they point to one particular definition, suggested in 2007 by Tereza Scheiner, that the museum is a 'phenomenon' that may include 'institutions, different places or territories, experiences, and even intangible spaces' (p.58).

Faced with the need for a foundational definition from which to build my own institution at the outset of my research project, I decided to use ICOM's official definition, as a guide for the design and operation of MOPS as closely as possible. However, while ICOM's definition for museum has functioned for an international organisation with aspirations of all-inclusivity, it remains too broad for an academic research project.

Although I was able to find an established definition of 'museum' to use as a starting point, deciding upon an established museum type to use in describing MOPS remains extremely difficult. Since the MOPS sound objects cover a wide range of types and topics, it is challenging to narrow the focus of MOPS down to something akin to 'a history museum' or 'a science museum'; similarly, the sound objects are generally not in themselves artistic works, which makes the categorisation of MOPS as 'an art museum' debatable. Based on the creation and presentation of MOPS as an artist's museum, it can be considered not only a functional museum, but also a piece of art – does this make it 'an art museum'? Due to this slippage between process, content, and institutional narrative, I feel it is essential to view MOPS as an amalgam of museum types and practices realised through the sensibility of an artist. This thesis will therefore refer to multiple types of museums as inspirations, far more than can be narrowed down into a single definition of 'museum', yet I will conclude in Chapter 5 with a more personal definition of 'museum' that began to emerge over the course of this project.

0.3.1.1 Avoiding music museums

One museum type I will avoid discussing in this thesis, however, is the music museum. While music museums are devoted to the display of objects that make sound, my focus within MOPS has been on what I can only refer to (somewhat problematically) as non-musical sounds. Music is, in my view, a specialised type of sound with a vast amount of preconceived notions among general audiences towards what that sound is, why it is made, and how it is received. Although some traditionally musical sound is included within

MOPS, for the sake of scope I will primarily discuss sounds beyond the musical and oral traditions. This dismissal may seem simplistic or regressive to those in sound studies, as it treats music as if its experimental expansion – the result of years of development since composer John Cage's 'silent piece' *4'33"* (Gann, 2010) dramatically altered music – ever occurred; in fact, the point of view towards music I have grappled with throughout this project does sidestep much of the discourse surrounding music in the post-Cage world, but with considered reason. As I have suggested above (pp.19–20), the intended audience for MOPS is the lay person, and per my conversations with dozens of MOPS visitors since beginning this project, it is clear to me that general audiences do not recognise the post-Cageian notion of expanded music. The stance I take in this project 'against music' is from the perspective of the MOPS audience, not my own – a change in thought that has, I believe, inspired the creation of a unique perspective towards the cultural importance of sounds that has not often been explored by other museums.

Many of the highest-profile sound-related exhibitions and activities in museums tend to focus on music and the musicality of sound, as will be seen via several examples mentioned throughout this thesis. A significant early exhibition that helps to illustrate how music tends to overshadow non-musical sound for both museum practitioners and the general public occurred in June 1935 at the Science Museum in London. *The Noise Abatement Exhibition* was produced in cooperation with London's Noise Abatement League (Mansell, 2017: p.52), a public advocacy group dedicated to reducing the amount of 'needless noise' present on the streets of then-rapidly modernising London; therefore, *The Noise Abatement Exhibition*'s curatorial direction focused on a perceived need to reduce or entirely silence many of the types of non-musical sounds I have collected for exhibition in MOPS, including public transport, traffic, heavy equipment, etc. *The Noise Abatement Exhibition* was a tool of anti-noise advocacy, using a perceived negative impact of noise on the human nervous system and therefore on health and wellbeing. This condition, which physicians in the United States referred to as neurasthenia beginning in the 1890s (Mansell, 2017: p.30), is now viewed as a behavioural condition rather than a physical one (Evengard et al, 1999: p.464). As Mansell suggests, the concept of neurasthenia was an almost logical outgrowth of the philosophical notion of hearing as a 'superstitious sense' that developed in the seventeenth and eighteenth centuries (p.63). Mansell also notes the ancient belief in

listening to music as a physical therapy, which had an impact upon the earliest writings on neurasthenia by American neurologist George M. Beard, as well as British throat and ear physician Dan McKenzie, who considered noise to be part of an 'order-disorder dualism' where 'music played an important role in what sonic order should sound like' (p.35).

While my lack of discussion of music museums may be perceived as an oversight, I instead view it as a feature: by focusing on so-called non-musical sound instead of music, my intention is to bring attention to sounds that are often ignored; yet I believe these sounds to be as culturally relevant as music. In engaging with sounds in this way, I feel I have been able to devise new exhibition strategies for sounds that I perceive as having more in common with material culture than with solely aestheticised sound, i.e. music – MOPS attempts to present sounds in a context beyond or outside of music, as pieces of culture in their own right rather than as source material for film, video games, or music.

0.3.1.2 Micromuseums

A recent development in the study of museums, Fiona Candlin (2016) established 'micromuseums' as a subset of 'small' and 'independent' museums. As museology had previously neglected to come to a consensus as to what exactly makes a museum 'small' (with square footage, number of employees, and accreditation or charitable trust status historically key factors), Candlin suggests that micromuseums are not merely smaller, less staffed versions of their larger counterparts, but have their own unique perspectives on museum practice (p.6–8). While the most obvious commonality MOPS has with micromuseums may be its tiny physical presence and staff, two points from the definition of micromuseums are particularly resonant from the outset. Candlin mentions that micromuseum subject matter is 'focused on things that are commonly placed in the lower strata of classificatory tables' – much like MOPS focuses on sound, a subject overlooked by the majority of museums – and the fact that 'many micromuseums do not adhere to conventions of impartiality' (p.8) – as will be seen in Chapter 3 below, the curatorial voice behind MOPS both echoes conventional museum impartiality but also at times blatantly disregards it. While it is tempting to classify MOPS as a micromuseum, it fails to fit precisely within all of Candlin's criteria. However, the micromuseum concept will be referred to below in the instances I feel MOPS overlaps with it and supports the claim that

MOPS is indeed a museum.

0.3.2 *'l'objet sonore'* – the sound object

In 1966, twentieth century French composer Pierre Schaeffer first defined the sound object (*l'objet sonore*), referring to any recorded sound that could then be manipulated into musical compositions (Schaeffer, 2005: pp.76–81). Enmeshed with Schaeffer's creation of the compositional form using pre-recorded sound known as *musique concrète*, Schaeffer's sound object was a perceptual object reliant upon the listener's inability to identify the original source of the sound captured and subsequently manipulated on tape. Schaeffer suggested that sound objects were possible through what he called 'reduced listening,' a process described by Michel Chion (2016: p.170) as 'tak[ing] a sound…as an object of observation in itself, instead of cutting across it with the aim of getting at something else'. However, reduced listening requires a belief that modes or hierarchies of listening exist, considered problematic by contemporary sound theorists like Tom Rice (2015: p.104):

> [T]axonomies of listening have also created what can feel like an infinite regress, where modes of listening continually proliferate without necessarily interlinking or building on one another in productive ways.

While I tend to agree that taxonomies of listening can appear to be justifications for seemingly random assertions about the ways in which human beings receive and perceive sound, this thesis will go on to propose taxonomies of sounds within a museum practice context. I consider these taxonomies to be ongoing in their development – one of the most crucial components of the exhibition portion of MOPS, yet a component that will continue to evolve every time the museum's Permanent Collection Galleries are updated.

The status of Schaeffer's sound object within the worlds of sound studies and sound art continues to be debated, as I will further discuss in Chapter 3. Simultaneously, I will propose redefining Schaeffer's term within the context of museum practice – arguing that, via this redefinition, sounds may be viewed as objects of human culture, and be collected, preserved, and displayed to the same ends as tangible objects within museum practice.

A relevant example of the impact of Schaeffer's sound object concept upon museum practice can be seen in the *Reel 2 Real* series at the Pitt Rivers Museum at Oxford, which presented field recordings of indigenous songs and ceremonial music from the Pitt Rivers' collections in the form of a live DJ-style remix, a musical backdrop to a candlelit walk

through the museum's galleries <http://web.prm.ox.ac.uk/reel2real>. While exciting, engaging, and even ground-breaking, this programme benefitted from preconceived ideas about musical sounds and how they are to be delivered to and received by an audience, particularly a museum audience. The sounds on display during *Reel 2 Real* were background music – a texture providing sonic ambience for a primarily visual experience. The music was not presented in real dialogue with the visual objects; there was no attempt to contextualise the sounds in relation to specific visual objects on display – rather, the music was remixed so that its form was altered, further distancing it from the original intent of those who made it. Rather than explore why the music being played was originally created, the DJ re-sculpted the music into a form of entertainment. This decontextualisation via remixing is something I have actively avoided doing to the sounds displayed within MOPS. Many MOPS sounds were originally emitted by human-made machines, or human interactions with a space or place. These types of sound recordings are often used to either create background soundtracks in films, or as samples to be manipulated into music, such as in musique concrète as discussed above. I wanted MOPS to display sounds as interesting and valid in their own right, not as source material for the creation of music or as a background to a visual experience: I wanted the sounds and their original contexts to be what visitors experience, beyond any subsequently imposed musical context.

0.3.2.1 Soundscapes and acoustic environments

This thesis does not refer to sounds or sound recordings as 'soundscapes', a common practice within sound studies. 'Soundscape', according to Canadian composer R. Murray Schafer (1994: p.7) who popularised the term, means

> any acoustic field of study. We may speak of a musical composition as a soundscape, or a radio program as a soundscape or an acoustic environment as a soundscape. We can isolate an acoustic environment as a field of study just as we can study the characteristics of a given landscape.

While often useful as a catch-all term for the complex world of environmental sound, Schafer's notion of soundscape is problematic for multiple reasons, including its presupposition that certain sounds have more value than others – Schafer prefers the sounds of nature to those made by humans (Eisenberg, 2015: pp.193–207).

Contemporary researchers and field recording practitioners continue to debate the usefulness of the term. For example, the research project Acoustic Environments in Change (AEC) was established in 1998 to re-mount Five Village Soundscapes (FVS), a project originally conducted in 1975 by R. Murray Schafer and the World Soundscape Project which scrutinised the acoustic environments of five European villages. AEC revisited the same villages as FVS, analysing their contemporary sounds via the previous project's techniques and new practices. In AEC's 2010 report, they acknowledged that their own report's use of the term was inconsistent, deliberately not including it in their new project's title since 'soundscape' was not a familiar term in Finland, where the AEC project was based; they also noted the ongoing debate around the term:

> with the concept of 'soundscape', it is far more interesting to explore why some people want to distance themselves from the concept, while others find it useful, developing it as a positive tool (Järviluoma et al., 2010: p.13).

In this project, I favour the term 'acoustic environment' over soundscape. This decision has been made for reasons of clarity, most important of which relates to Schafer's aforementioned connection of the term to nature:

> For Schafer … soundscape is meant to invoke nature, and the limits and outsides of industrial society. Even as it reaches into the modern world to describe its ambiance, Schafer's soundscape carries with it a fairly strict – if sophisticated – anti modernist politics. For him, the concept is meant to light a way out of consumer culture (Sterne, 2013: p.183).

This project's curatorial practice attempts to examine sounds heard in cities; calling the MOPS recordings 'soundscapes' risks implying that the sounds within them are of the same idealised variety that Schafer favours.

Additionally, MOPS attempts to display sounds outside of a musical context, neither composition nor ethnomusicology, to focus on their object-ness. The sounds in MOPS are museum objects, not samples to be composed into musical pieces – another reason for not distributing the MOPS sounds online, as the practice of remixing online sounds is a common one amongst contemporary musicians[1]. Schafer's perspective as a composer of

---

[1]Examples of this practice include the following, accessed 20 January 2020:

<https://citiesandmemory.com/>
<https://disquiet.com/2012/01/27/the-disquiet-junto/>
<https://freemusicarchive.org/genre/Field_Recordings>
<https://www.stonesthrow.com/news/beat-battles/>
<http://ccmixter.org/media/view/media/remix/latest>
<https://freesound.org/>

music leads him to assert that soundscapes – and, in turn, all the sounds of the world – are to be interpreted as music. Schafer's directive to 'regard the soundscape of the world as a huge musical composition' (1994: p.205) follows composer John Cage, as argued by Sterne (2013: p.190) who compares Schafer's notion of soundscapes to the following Cage quote:

> The sound of a truck at fifty miles per hour. Static between the stations. Rain. We want to capture and control these sounds, to use them not as sound effects but as music (Cage, 1967: p.3).

Other members of Schafer's World Soundscape Project share the view that 'soundscape' equals 'music;' Barry Truax, composer and co-founding member of WSP, clearly states as much in the title of his article 'Soundscape Composition as Global Music: Electroacoustic music as soundscape' (2008: p.103). While recorded sounds were the original musical 'sound objects' of Pierre Shaeffer and viewed as source material for musical composition, the museological sound objects that this project presents are intentionally displayed in a non-musical context; though some MOPS sound objects may contain music, the objects themselves are not displayed as musical compositions or parts thereof, but rather as objects to be observed on their own terms. The overtly musical connotations of the term soundscape make it incompatible with this project's line of reasoning.

0.3.3 Culture

I have been most interested in using MOPS to exhibit sounds related to urban life that are not traditionally listened to in a museum context – as objects by themselves, with their own relationships to the concept of culture. As an artist, my own views on what 'culture' is tend to align closely with the definition of culture proposed by musician and visual artist Brian Eno (1996: p.317):

> 'culture' is everything we don't have to do. We have to eat, but we don't have to have 'cuisines', Big Macs or Tournedos Rossini. We have to cover ourselves against the weather, but we don't have to be so concerned as we are about whether we put on Levi's or Yves Saint-Laurent. We have to move about the face of the Earth, but we don't have to dance. These other things, we choose to do. We could survive if we chose not to.

For the purposes of my art practice, 'culture' refers to, like Eno suggests, the layer of extra effort put into refining the activities necessary for human survival. I am an artist, not a philosopher, anthropologist, or cultural theorist, therefore my use of 'culture' in this thesis

comes from this artistic perspective.

0.4 Methodology

> …artistic research seeks not so much to make explicit the knowledge that art is said to produce, but rather to provide a specific articulation of the pre-reflective, non-conceptual content of art. It thereby invites 'unfinished thinking'. Hence, it is not formal knowledge that is the subject matter of artistic research, but thinking in, through and with art (Borgdorff, 2012: p.44).

Borgdorff's view of artistic research as a practice of 'unfinished thinking' yet a thinking 'in, through, and with' is particularly resonant with my own project's methodology – my art practice has guided my thinking, and has also been the tool through which I have thought through the subjects in this thesis.

This project began with my previously-established art practice of producing sound maps of contemporary museum spaces. However, I was also thinking about the display of sounds as objects within contemporary museum practice – something I was hoping to hear more of in my listening practice, but discovered was rare, even though a multisensory turn has recently begun within museology and museum practice. If my creative practice were to lead the project, I needed to adopt an iterative, 'methodologically responsive' workflow – the methodology needed to evolve along with the creative practice.

While working on sound maps of museums during the first year of my research project, I began to realise that what I had been listening for in the acoustic environments of museums were sounds themselves on display, but I was rarely hearing them. I wanted to hear museums displaying sounds in an analogous way to how they displayed physical objects – as things in and of themselves, with their own relationships to human beings.

Via an introduction to Timothy Boon, Director of Research at the Science Museum in London, at the beginning of my research journey I was invited to attend a series of workshops put on by the Science Museum in London throughout 2015. Loosely structured around the concepts of silence, music, and noise, the three workshops brought together artists, researchers, musicians, and museum practitioners to discuss how museums have previously (and could potentially) work with sound within museological practice (Boon et al., 2017). Over the course of these workshops, I began speaking about my own ideas related to displaying sounds as cultural objects with the other researchers in attendance,

and received enough positive feedback on the idea that I began to work on realising it.

Eventually, my curiosity surrounding the concept of displaying sounds as objects within a museum context led to the establishment of my own museum to test if this might actually be possible. Due to the lengthy and bureaucratic time schedules of most large museums, I decided that it would be most efficient to establish my own museum – one that I initially believed would be a temporary side project.

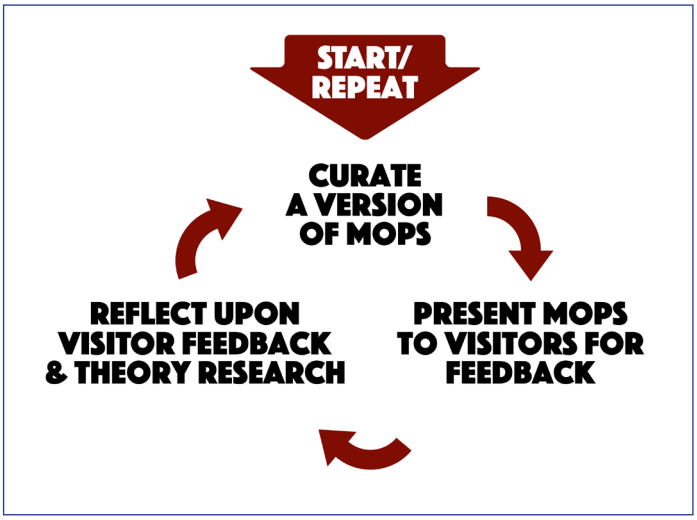


Figure 6. The iterative methodology of curation, presentation, and reflection that the project has followed to create four versions of MOPS. Image by author.

However, once MOPS was established and its value as a research tool became apparent, it was the ongoing development of the museum that provided the structure by which the research was conducted. The project's iterative working method is represented by Figure 6. This process has played out three times within this research project, but could continue along a similar path to develop future versions of MOPS.

0.4.1 Overview of the iterative working method: the four versions of MOPS

The iterative methodology of this project has led to four distinct versions of MOPS (Table 1, p. 38–39). MOPS was opened to the public on 11 November 2015, with a Grand Opening Gala during the Points of Listening lecture series at London College of Communication, part of University of Arts London's Creative Research into Sound Arts

Figure 7. Professor Angus Carlyle cuts the ribbon to officially open the Museum of Portable Sound to the public during its Grand Opening Gala at London College of Communication, 11 November 2015. Photos by Lara Torres.

Table 1. The Four Versions of MOPS with Event Highlights (below and continued at right). Presents key events in the evolution of the Museum of Portable Sound research project, highlighting my interactions with audiences (beyond the one-to-one museum visits) which provided crucial feedback for the development of each successive iteration of the museum across its first three years. Photographs by author unless otherwise noted.

DATES & VISITS	MUSEUM ITERATION	DOCUMENTATION	DESCRIPTION
11 Nov 2015 – 17 June 2016 **One-to-one visits:** **2**	 **Version 1.** Galleries: **7** Sound Objects: **25** Duration: **35 mins.**	 *Photo by Lara Torres*	**Grand Opening Gala** • *11 Nov 2015* MOPS is presented for the first time, London College of Communication. The *Gallery Guide* is a 23 page PDF. Selections from the Permanent Collection and the first tempo-rary exhibition, by Ryan Maguire, are played to an audience via a PA system. The Q&A points to larger questions that could be investigated by the project. Plans are made for the next temporary exhibition to be guest curated.
			**First one-to-one visit** • *21 Nov 2015* MOPS receives its first visitor, in the café at Foyles book shop in Charing Cross Road. The *Gallery Guide* is presented as a PDF on my iPad. The visitor, accountant CJ Mitchell, listens to the full Permanent Collection Galleries display and temporary exhibition. His feedback is positive, but offers several key suggestions including making the museum 'big enough to get lost in' and adding more detail to the *Gallery Guide* – specifically, 'more pictures.'
17 June 2016 – 4 Nov 2016 **One-to-one visits:** **22**	 **Version 2.** Galleries: **7** Sound Objects: **24** Duration: **33 mins.**		**Private View** • *17 June 2016* A new solo exhibition by London artist Jessica Akerman, guest curated by Dr. Irene Noy, opens in the MOPS Exposition Space for temporary exhibitions. Event at London College of Communication.
			**Art Arcana** • *25 July 2016* MOPS is presented at Dead Dolls House, London as part of a local art showcase. First time MOPS is visited in small groups with a headphone splitter. Visits are 'speed dating'-style, lasting about 15-20 minutes with visitors queuing. *Gallery Guide* printed out for quicker access by multiple visitors simultaneously.
			**Museums ShowOff** • *19 Oct 2016* MOPS is presented to a group of London-area museum professionals in an informal setting at The Phoenix Pub, Cavendish Square.

DATES & VISITS	MUSEUM ITERATION	DOCUMENTATION	DESCRIPTION
4 Nov 2016 – 21 Nov 2017 **One-to-one visits:** **99**	 **Version 3.** Galleries: **21** Sound Objects: **117** Duration: **3.5 hours**	 *Photo by Thais Aragao*	**Grand Re-Opening** • *4 Nov 2016* The Permanent Collection Galleries are expanded to 117 sound objects; a new temporary exhibition, a solo show by Daniel Toca, is guest curated by Cristina Sousa Martínez. A listening party of selections from the new Permanent Collection Galleries, and private view presentation of Toca's show with live performance by sound artist Viv Corringham takes place at Chalton Gallery in Kings Cross. Debut of the first commercially printed *Gallery Guide*, 143 pages long.
		 	**Res|Fest** • *15 March 2017* MOPS is once again presented 'speed dating' style as part of a large event, this time dedicated to experiments in art history organised by the Sackler Research Forum at Somerset House, London. I also give a gallery talk about listening to museums at the Courtauld Gallery during this event.
		 *Photo by Ina Čiumakova*	**Resonant Worlds: Sound, Art & Science** • *29 Sept 2017* MOPS is presented at the ZKM Centre for Art and Media in Karlsruhe, Germany as part of the International Sound Art Curating Series. The talk focuses on the relationship of the sound objects on display in MOPS to wider cultural topics.
		 *Photo by Pieter Neirinckx*	**Museums, Collections, and Industrial Heritage** • *5 Oct 2017* Presenting at ICOM's International Committee for Museums and Collections of Archaeology and History Conference in Baku, Azerbaijan helped deepen the connection between the sound taxonomies developed for MOPS and the concept of industrial heritage. This proves crucial to the development of the next iteration of the MOPS Permanent Collection Galleries.
21 Nov 2017 – Time of Writing **One-to-one visits (to date):** **64**	 **Version 4.** Galleries: **23** Sound Objects: **200** Duration: **5+ hours**	 *Photo by Mert Kyle*	**Sounds of Changes** • *12 June 2018* New taxonomies for the sound objects in the fourth iteration of the MOPS Permanent Collection Galleries make clearer connections between post-industrial sounds and their identities as soundmarks within contemporary urban communities, which I discuss in a conference presentation to an international consortium of industrial heritage museums at the Werstas Workers Museum in Tampere, Finland. The printed *Gallery Guide* is now 200 pages.

Practice research centre (CRiSAP).

For this event, I created a small test version of a mobile phone-based sound museum. Version 1 of MOPS contained 25 sound recordings with a total duration of approximately 30 minutes, selected from field recordings I had collected myself since my phonography practice began in 1999. At this point, the *Gallery Guide* existed solely as a PDF file which I decided would be available to download from the museum's website; initially I intended for visitors to download the *Gallery Guide* PDF before visiting the museum, and bring their copy of it on their own device for their visit, much like a podcast; this would prove inefficient.

Version 2 (17 June 2016 – 4 November 2016) was a small update removing one sound object from the Permanent Collection Galleries. However, a new temporary exhibition by London artist Jessica Akerman was guest curated by Dr Irene Noy, then a researcher at the Courtauld Institute in London. Version 2 opened with another live event at the London College of Communication on 17 June 2016.

Version 3 (4 November 2016 – 21 November 2017) introduced entirely revamped and greatly expanded Permanent Collection Galleries: there were now four main topical categories (Natural History, Science & Technology, Space & Architecture, and Art & Culture) subdivided into 21 galleries containing 117 sound objects. The MOPS *Gallery Guide* became a professionally printed publication, still available as a downloadable PDF, but it was now unwieldy to use digitally during one-to-one visits – its page count had risen to 143 pages, with trial and error having revealed that visitors preferred a paper book to a PDF file. This version replaced the Jessica Akerman exhibition with a show by Mexican artist Daniel Toca, guest curated by Cristina Sousa Martínez, who had also volunteered as MOPS' first curatorial intern. This version was launched with a live event at Chalton Gallery in King's Cross, London on 4 November 2016. This iteration saw a significant increase in one-to-one visitors, with 99 people making private appointments to visit MOPS during the year-long period it was in use.

Version 4, the current iteration of MOPS as time of writing, debuted on 21 November 2017. No private view event was organised. The Permanent Collection Galleries were expanded to 23 in number, now with a total of 200 sound objects and a duration of slightly more than five hours. An updated *Gallery Guide* was printed, now nearly 200

pages in length. Although I had been in talks with multiple possible guest curators about scheduling a new temporary exhibition, none was ready in time for the launch.

This iterative methodology has led to a constantly evolving practice that has allowed the museum to grow in ways directly responding to visitor input, ensuring that MOPS is not merely one man's version of the world. I control any changes to the museum, and the museum consists primarily of sound objects that I have collected myself, but the flexible design of the project's methodology has allowed room for audience feedback and responsive change to their suggestions.

0.4.2 Critique of the method

While establishing my own museum has proved to be more successful from the standpoint of number of visitors than I imagined it would be, it has not been without its limitations, both conceptual and practical. My insistence upon not allowing any form of online distribution of the museum's content not only severely limits who is allowed to visit the museum, but has also led to the actual practice itself becoming exceedingly time-consuming: I agree to meet museum visitors anywhere in London they choose, and agree to stay with them for as long as they wish to visit, and as the museum has expanded to five hours of content in its current form, accommodating visitors' needs for my time has become a challenge as it has become more popular – I have hosted more than one visitor who has spontaneously listened to the entire contents of the mobile.

0.5 Relevant previous practice

My art practice is rarely a series of discrete, self-contained events – instead, it is a continuum, with projects often built upon ideas explored in previous works. In order to properly contextualise MOPS within my art practice, it is necessary to briefly summarise a handful of my previous projects that directly influenced this thesis project.

0.5.1 Stasisfield.com (2001–2015)

Stasisfield.com was a website I created, produced, and curated that acted as a 'netlabel,' a record label which:

> promote[s] and distribute[s] free music over the Internet. Music distributed by netlabels is released under Creative Commons licenses, which

means that it can be download free of charge, while at the same time an artist retains copyright (Galuszka, 2012: p.66).

Stasisfield released free mp3s of experimental electronic music by musicians from around the world. It also contained an online art gallery that featured several group multimedia exhibitions containing sound, video, and text, and organised live performance events at contemporary art galleries and radio stations in Chicago. For fourteen years, I was steeped in the practice of online Creative Commons distribution of experimental audio art. My decade and a half experience running Stasisfield had a significant impact on the decision-making process involved in creating MOPS – from the policy of not distributing the MOPS sound files online, to the tone of how to interact with the museum's audience (Stasisfield's visual design and textual communications were decidedly non-humorous, echoing what I perceived as the standard, desirable approach to the promotion of experimental music).

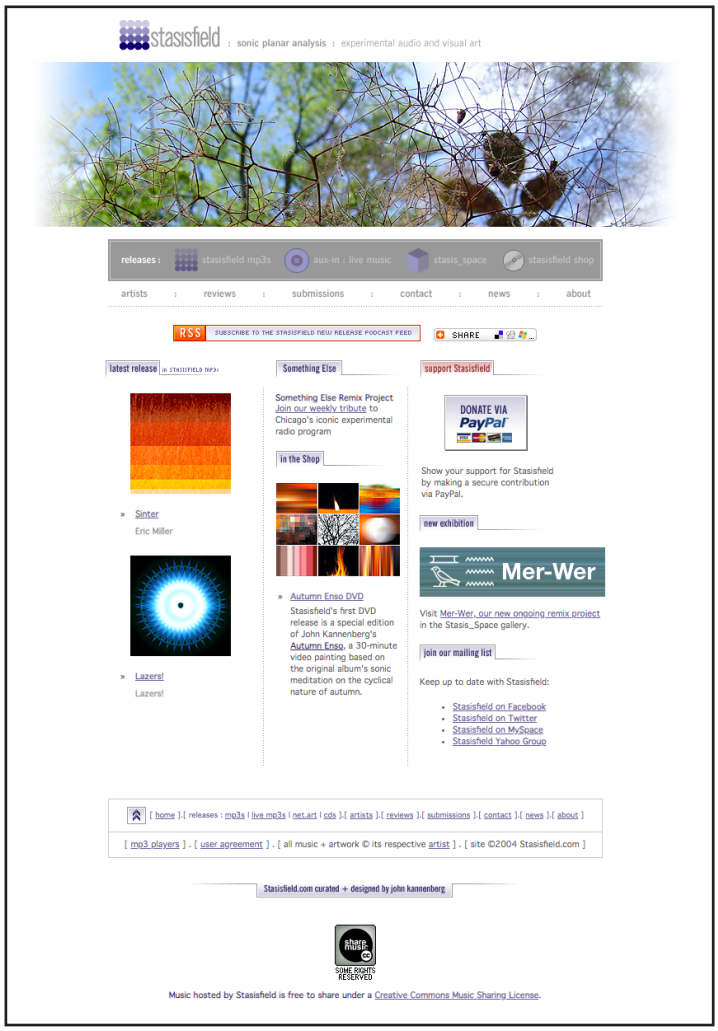


Figure 8. Screenshot of the Stasisfield.com website circa 2014, designed by author.

0.5.2 *Anachronistic Nostalgia* (2009)

In 2009, I exhibited a compact cassette tape (Figure 9) upon which I had recorded a sequence of my own field recordings collected in the city where the university was located. The tape, along with its handwritten label and case, was displayed inside a circa 1979 Walkman with period headphones. The title written on the mix tape included the phrase 'For You From John', suggesting I was offering the collection as a personal gift to

Figure 9. ***Anachronistic Nostalgia*** **installed in the Stamps Gallery, University of Michigan, October 2009: listener (above left); Walkman, headphones, and compact cassette tape case on plinth (top right); handwritten insert with names and locations of field recordings (bottom right). Photos by author.**

each listener. This piece was intended to be an experiment in challenging a contemporary audience to confront antiquated portable sound technology in order to access contemporary field recordings instead of music. The recordings have never been released online, and remain on the single audio cassette made for the exhibition – though two of them are currently in the Permanent Collection Galleries of MOPS.

0.5.3 *Monsters of Experimental Music* (2009)

This compilation CD (Figure 10) contained 16 pieces of experimental music that were time-compressed, without altering their pitch, to the length of four minutes (the duration that Apple, Inc declared to be 'the average length of a song' in their marketing materials for the original iPod). The pieces selected for inclusion represent the canon of Western experimental music at the time, including pieces by composers such as John

Cage, Pauline Oliveros, Alvin Lucier, Eliane Radigue, and Tony Conrad. Each of the originals are significantly longer than the four minute duration of these remixes, using the same time compression technique used in one of the sound maps in this thesis project. The album's title, artwork, and format as a 'greatest hits compilation' were references to a popular compilation album series released by Razor & Tie Records in the United States beginning in 1998 entitled *Monsters of Rock*. The album was exhibited in a gallery on a plinth, playable via a portable CD player and contemporary headphones, along with a CD jewel case, printed artwork, and liner notes. This piece is significant to MOPS not only due to its references to iPods, MP3s, and CDs, but also for its somewhat flippant attitude towards experimental music – evidence of the inner conflict that led me to break away from an overtly musical sound-based creative practice.

Figure 10. *Monsters of Experimental Music* as installed in the Robinson Gallery, University of Michigan Stamps School of Art and Design, November 2009. Photo by author.

0.6 Conclusion

This introduction has explained the form of MOPS; the key concepts behind its inspiration involving museums, sound, and objects; the project's methodology; and finally, its roots within my previous artistic practice. The following chapters will expand on these key concepts while presenting greater detail about the form, execution, and history of MOPS as a creative tool via which to research how sounds are able to function as displayable objects within a museum context.

While the act of listening to a museum was the focus of this research from its outset, creating my own museum was not my original intention. Therefore, the following chapter will briefly discuss the initial creative work conducted at the beginning of this project's research journey, and the thought process that evolved this work into MOPS.

Chapter 1
From looking to listening: the acoustic environments of traditional museums and their influence upon the design of the Museum of Portable Sound[1]

At the outset of this project's research journey, I focused upon listening to, and recording, the acoustic environments of currently existing museums. The original intention behind this practice was to continue making a series of museum sound maps – each a lengthy sound composition consisting entirely of edited, but otherwise unaltered, audio recordings made inside a specific museum, a collection of a single museum's sounds.

Through this process of listening, recording, and composing, I came to the realisation that I was listening to museums in part because I was trying to hear something that wasn't there: sounds themselves displayed as objects. Finding this practice a rarity at the museums I was listening to fed into the thought process that eventually led to the creation of the MOPS.

1.1 Critical listening practice

Rather than think of museums as a 'natural' environment to be simply observed and documented, I realised at the beginning of this project that I would need to adopt a critical listening practice – one in which I would become engaged with what the sounds I heard in museums represented in terms of an institution's relationship with its visitors and objects; one that would seek out evidence that museum staff were aware of the acoustic environment within their institution, and actively engaged with it as not only an element of their visitors' experience, but as another element within exhibition space that could be used as a tool for curatorial storytelling. As I began to use my listening practice as a critical tool, I began to think less about standard acoustic environmental topics such as 'noise pollution', and more about how the sounds present in museums act as an extension of the institutional power dynamics at play.

Museums design themselves in order to communicate concepts and data to their

[1]This chapter is based upon my article 'Listening to Museums: Sound Mapping towards a Sonically Inclusive Museology,' *Museological Review* Issue 20, 2016.

audiences. This communication is, the vast majority of the time, accomplished via visual means: displayed objects accompanied by didactic texts and other signage intended to be read silently by visitors. This leaves visitors the primary generators of the sounds heard within museum spaces; it is visitor reactions to the institution's visuals that are most often heard when listening to a museum: muted conversations, footsteps, coughing, crying children. If the institution beyond its ticket booth is heard at all within a museum's acoustic environment, its voice tends to be either mechanical (e.g. environmental control systems, elevators, etc.) or overtly authoritarian: security guards admonishing visitors for photography, touching objects, or wandering off into places the institution does not want them to go; or occasionally, announcements made over public address systems to inform visitors of something they are expected to do – most often to vacate the building at the end of its opening hours. The institutional voice as an acoustic event is most often commanding, instructional, and formal. And yet when we read promotional materials produced by museums, such as their own social media posts intended for their visitors, the institutional voice attempts to be friendly, speaks of inclusivity, and apologises for any inconvenience caused. There is, more often than not, a disconnect between the audible institutional voice of a museum and the one that is looked at.

This disconnect led to another thought: what if museums expanded their audible voice to include more objects that were meant to be listened to rather than just seen? What would museums sound like then? Would they feel somehow less authoritarian and formal? These thoughts accompanied me on my trips to museums at the outset of my research project, where I began collecting their sounds via the act of field recording.

1.2 Field recording as artistic practice

Field recording, or phonography as it is also referred to, is the act of collecting sounds on a recording device in the area in which the sounds originate. It is out of this tradition of recording sounds for re-use in subsequent creative practice that the aforementioned notion of soundscapes was developed (0.3.2.1). Within creative sonic arts practice, field recording/phonography has become closely associated with soundscape composition, a practice of editing together field recordings into a musical composition, in turn often associated with the acousmatic music tradition (Drever, 2002: p.21) – 'a form of music which is presented

through loudspeakers to an audience from an analog or digital tape-recording' (Windsor, 1995: p.9) – a direct descendent of Pierre Schaeffer's aforementioned musique concrète. It is within this tradition of soundscape composition that I have previously located my own practice of creating sound maps of the acoustic environments of museums. Although soundscape composition is, as John Drever has suggested, most often categorised as acousmatic music, he also suggests that

> the notion of soundscape composition can have significantly distinct concerns and consequently may be appreciated and explored more fully if approached from different perspectives to that normally associated with acousmatic music (2002: p.21).

Drever further suggests that one of the strategies behind the construction of soundscape compositions that can aid in separating their approach from a purely musical one is to compose the field recordings with an ethnographic approach, organising the source material in ways that draw attention to the process of how it was collected or collaborating with the subjects of the recordings; he also suggests that ethnographers such as Steven Feld have already begun using the techniques of soundscape composition to present their research findings as soundscape compositions rather than via writing academic papers (2002: pp.24–25). It is in this area that I would argue that my museum sound maps reside, a discipline that has come to be known as sensory ethnography:

> a process of doing ethnography that accounts for how … multisensoriality is integral both to the lives of people who participate in our research and to how we ethnographers practise our craft. (Pink, 2009: p.1)

Etymologically, the term phonography means 'sound writing' and was initially used to reference writing that attempted to capture the feeling of sound via multiple strategies including onomatopoeia – words that are pronounced in a way that, when read aloud, are approximate mimics of the sound they refer to (such as 'crash' or 'bang'). Patrick Feaster (2015: p.140) describes how the original concept of phonography as sound writing evolved over time, stating that phonography 'has come to be associated less with writing sounds down than with fixing them repeatedly as sounds'. Feaster's definition of phonography places the practice at odds with museological conceptions of authenticity, claiming that, since sound recordings are only representations of live sound, not reproduction, by being so they are incapable of displaying Benjaminian aura (2015: p.144).

While I agree with Feaster that no sound recording can be a reproduction of a live sound, I believe that the medium upon which the recording exists might contribute to a feeling of authenticity or aura experienced by a listener, as evidenced by the continued resurgence of vinyl collecting in the post-digital music age (Morris, 2016). This feeling of aura is increased upon handling an object such as an original wax cylinder recording, an object physically etched in real time as a sound was made at a specific point in history, or even handling one of the pieces of sound writing that Feaster himself has digitally reconstructed sound from, such as the phonautogram image containing the first recording of a human voice made by Édouard-Léon Scott de Martinville in France in 1860 (Feaster, 2012: pp.75–80) – an image and sound featured in MOPS as Object 1, Gallery 6 – Recording History (see *Gallery Guide*: p.37).

Feaster suggests that the phonographer is the sonic equivalent of a photographer, acknowledging the now widespread practice among sound artists worldwide of field recording (Feaster, 2015: p.145). Like anyone with a camera who snaps photos in a museum, my own museum field recordings have been collected during museum open hours. Rather than working within a formal artist residency structure, I conducted the work unannounced, on view but essentially in secret, recording the sounds that 'naturally' occur within museum spaces. Giving attention to museum visitor experiences – i.e. a museum in action – was more interesting to me than any idealised notions of what a museum's architecture might sound like on its own, in a state of inaction. In my view, a museum is not actually a museum until it contains visitors – otherwise it was merely a storage space for old objects; so I felt my recordings needed to document museums as they were being used. The resulting sound recordings help to unravel the stereotypical notion of the 'silent' museum acoustic environment.

I began this research project hoping to explore overlaps between contemporary sound arts practice and contemporary museum practice. While my research journey saw my creative practice evolve from passive listening and recording to actively creating my own museum for the display of sounds, this initial thought process – finding poetry within the sounds of contemporary museum spaces – led directly to the launch of MOPS. It is therefore necessary to briefly document and discuss this initial phase of the research journey.

1.3 A cartography of listening

The acoustic environments of museums are unique in that they contain layers of ambience that include highly specific sonic interactions between museum visitors and architecture, exhibitions, objects, staff, and each other. Within this uniqueness is a common and essential human skill, the conscious interpretation of physical space: 'we use the environmental image to orient us, both in the immediate physical sense but also as a general frame of reference. A highly differentiated landscape can structure activity and order knowledge' (O'Rourke, 2013: p.103). Museums are spaces that are architecturally arranged for the purpose of organising knowledge and disseminating information, with exhibition design operating as a language through which to communicate curatorial intent (Hillier and Tzortzi, 2006: p.282). While working on my museum sound maps, I was attempting to locate connections between these two concepts: the process of using the senses, in my case listening, as a method of understanding within the sonic and spatial idiosyncrasies of museums – institutions designed with the intent to convey knowledge by way of their physical organisation. The idea of moving around a museum via the act of listening became one of my project's preoccupations, leading eventually to the use of a visual map to quickly communicate the conceptual layout of MOPS to its visitors (Figure 2).

My sound mapping strategies involved the collecting of sounds, but not simply acts of cataloguing – they were acts of selective listening, where I sought out sounds that could help me to find meaning within the sonic experience of museums: 'If "to hear" is to understand the sense…to listen is to be straining toward a possible meaning, and consequently one that is not immediately accessible' (Nancy, 2007: p.6). My listening during this phase of the research journey was an exploration of experience, since the act of listening is (to those with the ability to hear) an integral part of how humans experience the world:

> [Listening is] a means by which we sense the events of life, aurally visualise spatial geometry, propagate cultural symbols, stimulate emotions, communicate aural information, experience the movement of time, build social relationships, and retain a memory of experiences. (Blesser and Salter, 2007: p.4)

Ultimately, in the sound maps I made while listening to the museums I chose for this

project, I did not wish to map the exact sounds I heard inside museums, but instead to map my own acts of listening – so the maps were part cartography and part journal.

1.4 Artistic soundwalking, sound mapping, and the mix tape

My sound mapping strategies began with a process of collection, an activity I saw as a metaphor for the roots of museum practice itself. After choosing a museum I wished to map, I took a series of soundwalks – 'excursion[s] whose main purpose is listening to the environment … exposing our ears to every sound around us no matter where we are' (Westerkamp, 2007: p.49). Soundwalking is often undertaken in natural or urban environments, with sound artists and composers listening to complex environments as a way to heighten perception of the everyday (Drever, 2009: pp.163–192), while soundwalking in museums has been conducted as part of the MA Sound Arts course at the London College of Communication since 2012 and subsequently published by course leader Salomé Voegelin (2014: pp.119–130). In this case, soundwalking museums is proposed as a curatorial responsibility in order to better understand their visitors' experience of the museum, since Voegelin identifies the museum as 'not a visual place but an audiovisual environment' (p.120). The aforementioned 'multisensory turn' within museum practice has slowly led to the development of museum displays that engage with senses beyond the visual in order to communicate information to museum visitors, using a multitude of sensory information to better 'appreciate human imagination and experience' (Stoller summarised in Edwards, Gosden, and Philips, 2006: p.25), and this type of museum activity became the focus of what I was listening for – yet found little evidence of.

The practice of artistic sound mapping has existed since the mid-twentieth century. The previously mentioned World Soundscape Project included composers such as Barry Truax and Hildegard Westerkamp, whose practices of soundscape composition also included sound mapping activities (Schafer, 1977: pp.86–91).

With the advent of the internet, sound mapping has become nearly synonymous with visual maps, usually based on the Google Maps API, often crowdsourced, containing clickable areas where the user can listen to recordings (Rawes, 2018) or even live streams of microphones (Joy et al., 2018). The ubiquity of crowdsourcing amongst many online soundmapping projects was a key factor twoards my decision to keep MOPS focused on

sounds I had collected myself.[2]

While these online maps offer the user a certain (limited) freedom of choice within their listening experience, they have also come under scrutiny for displaying the same tendencies towards hierarchy and cultural bias as early acoustic ecology projects (Waldock, 2011). I would argue that these types of 'sound maps' are actually more akin to sound archives rather than a sound-based mapping experience. Clickable maps provide a visual interface which dominates the user experience rather than the sound itself; users choose where they want to listen next because of what they see and read rather than what they hear. Moving from sound to sound on a clickable visual map often involves skipping over large swathes of territory that remains unrecorded, with sound clips often disrupted between each other with silence, unlike a visual map's constant flow of lines and shapes.

The work of New Zealand composer Annea Lockwood, who took the idea of sound mapping and made it her own art form, has had the most influence upon my own sound mapping work. Lockwood has conducted an ongoing practice of creating sound maps of rivers, beginning with her installation and album *A Sound Map of the Hudson River* in 1989 (Rodgers, 2010: pp.116–121). Lockwood's sound maps of rivers most often take the form of linear compositions accompanied by visual maps presented either as commercially released recordings or sound installations. Lockwood's maps are more overtly ethnographic in nature than my own, often incorporating recorded interviews and oral histories featuring people who live or work along the rivers she maps. However, her focus upon creating a linear sonic experience made up of separate recordings placed in a specific sequence to guide the listener made the most sense to me in terms of what an artistic practice of sound mapping should be, as they are truly a cartography of the ear – the composition leads the listener along a path of listening, from place to place, freed from the burden of visual reference. I chose a similar format for my own sound maps of museums in order to communicate an individual visitor's personal acts of listening to a specific museum's spaces. I felt that the sounds should be the guide, so I would select and sequence sounds in a linear order that the listener could follow, like following a path drawn on a visual map.

---

[2]A brief selection of online, crowdsourced sound mapping projects (accessed 20 January 2020):

<https://sounds.bl.uk/Sound-Maps/UK-Soundmap>
<http://www.soundcities.com/projects.php>
<http://www.soundaroundyou.com/>
<http://www.firenzesoundmap.org/>
<https://citiesandmemory.com/sound-map/>
<http://www.soundmapofscotland.co.uk/>
<https://aporee.org/maps/>
<https://map.opensourcesoundscapes.org/>

This juxtaposition of sounds in order to lead a listener along a listening path eventually evolved into the sequencing of sound objects within the MOPS galleries. As I will discuss in detail in 3.3, this deliberate sequencing of sounds draws upon my personal experience in making 'mix tapes' of selected and sequenced music for myself and others, a common practice in youth culture in the 1980s and 1990s when I was growing up. The collecting, editing, and deliberate sequencing of field recordings has been a common thread between the early sound mapping research I conducted and the curatorial strategies I would later apply to MOPS.

1.5 Museum selection methodology

At the outset of my research journey, my initial practice had been to conduct an analysis of the sonic experience of contemporary museums of multiple types by collecting my own field recordings of their acoustic environments. Realising that the notion of 'contemporary museums' needed to be refined beyond massive generalisation, I selected a small group of institutions closely related to the cabinet of curiosity tradition for whom collection, curation, and display were central to their practice; in this way, I had hoped to explore conceptual resonances between my own practice of collection and that of the institutions I was recording. I found myself drawn towards institutions that hold and display permanent collections that deal with material culture, in order to emphasise the contrast between the physical objects collected by the museums and the ephemeral sounds collected in my own practice.

I recorded and mapped two of the museums in my intended survey before beginning my PhD course; these two projects served as the model by which I planned to approach the mapping of a further three institutions. The first museum sound map I completed was of the Egyptian Museum in Cairo, a museum of archaeology steeped in colonialist history. I recorded it in 2010 near the end of its original life (it has subsequently been radically altered, as many of its contents have been moved to the new Grand Egyptian Museum near the pyramids at Giza, opening in 2020). My second sound map was of the Art Institute of Chicago, an encyclopaedic museum of the history of Western art from an American perspective, recorded soon after it had built a massive new wing making it the second-largest art museum in the United States – as well as an institution struggling to

maintain and unify its two disparate architectural halves without a major increase in staff.

Upon relocating to London and beginning my PhD research, I began mapping Tate Modern in London, a museum of exclusively modern and contemporary art inhabiting a repurposed architectural structure, the former Bankside Power Station. I also began to record the Pitt Rivers at Oxford, a physically small yet visually overwhelming archaeology and anthropology museum noteworthy within museology for its display cases packed to the brim with objects that have been acquired for over a century since the original collection was moved to Oxford in the 1880s (O'Hanlon, 2014: p.42), as well as the pioneering typological displays created by its founder, General Pitt Rivers (O'Hanlon, 2014: pp.28-31); and the Science Museum in London, whose focus on science and technology makes it the only museum on this list to widely encourage visitors to physically interact with many of the exhibits on display.

These institutions were to offer a brief yet substantial cross-section of contemporary museum practices and subject matters on three continents, as well as a variety of architectural styles and sizes: the Egyptian Museum, the Art Institute of Chicago, and the Science Museum are large purpose-built spaces for the housing and display of museum collections; Tate Modern is a large former power station converted into a working museum; the Pitt Rivers is relatively small and occupies space inside another museum that is housed within an architectural complex at Oxford University. These five institutions also represent a variety of relationships between institution and audience, including a museum established by a geographically dislocated colonial power, now under control of the country's own government, operated by a government agency that charges for admission (the Egyptian Museum); a vast anthropology museum whose collections and exhibits have expanded beyond its initial founder's objects and curatorial point of view, based at a university and offering free entry to the public (the Pitt Rivers); a museum dedicated to preserving objects related to science, including displays whose stories may be communicated via direct physical engagement with the audience, partially government-funded and offering free admission (the Science Museum); and two museums dedicated to fine art, one privately funded – yet charging a mandatory admission fee – that has a remit to educate its public about the entirety of Western art history (the Art Institute of Chicago) and the other a partially government-funded museum of modern and contemporary art offering free

admission (Tate Modern).

1.6 Precedents and critical performative listening

Recording the sounds of museum spaces and objects is not a unique pursuit. Aleks Kolkowski's project recording objects in the permanent collection of the Science Museum in London (personal communication, 26 February 2015) and Matt Parker's *Imitation Archive* at Bletchley Park (Parker, 2016) have involved the development of sizable archives of sounds generated by objects within a museum's physical object collections – projects that have accomplished important work in generating sonic material for possible future display. Other institutions have invited sound artists to make recordings of their acoustic environments, such as Jez Riley French's *Audible Silence* after-hours recordings of Tate Modern (French, 2013). These projects share some of the same interests as my own work – recording the visual, the sounds of museum objects, etc. – yet they operate from a different conceptual space. While Kolkowski and Parker's projects create archives of museum object sounds, they are archival efforts meant to preserve the sounds of the objects themselves, devoid of their context within the museum – they are sounds that, hopefully, the museums will someday display within their own acoustic environments. French's project deals with the sounds of a museum after hours, without interactions from visitors or staff, and looks outside the realm of what a working museum actually does: interact with and educate people. While engaging in its own right, French's project lies more within the tradition of R. Murray Schafer's idealist acoustic ecology – it is an attempt to capture a purely architectural acoustic environment bereft of sounds made by human interference.

While actively listening to the sounds within the museum, I also collected sounds that I generated myself in museum spaces: my own footsteps, unintentional interactions with museum security, even my own clumsiness (such as falling off a bench in a gallery in Tate Modern while trying to simultaneously record audio and take a photograph). As I spent more time gathering source material in museums, I found myself becoming more of a willing performer within each museum's acoustic environment.

This performative aspect of my work quickly became apparent to me during the making of *A Sound Map of Tate Modern* (2015). As I walked through the museum, I noticed that some of the ventilation ducts in the gallery floors were a bit loose, and if

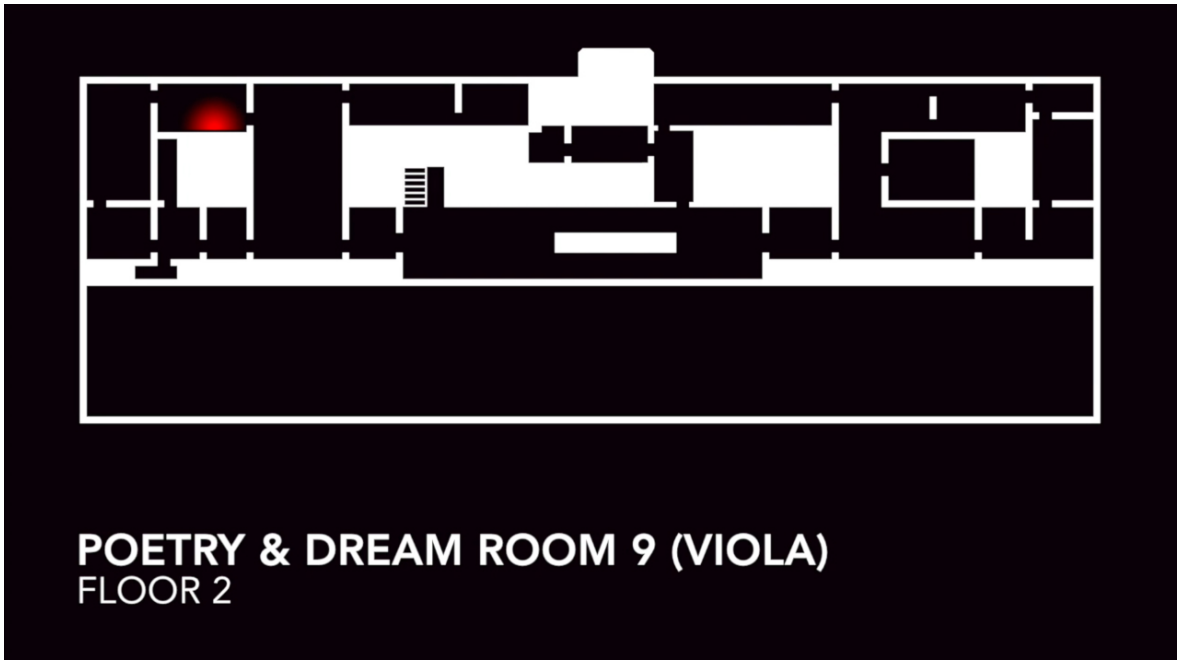


Figure 11. ***Montage For Wobbly Ventilators*** **(excerpt from** ***A Sound Map of Tate Modern*****). See video in Appendices, or on Vimeo at <https://vimeo.com/131003131>.**

stepped on in a certain way, they made a banging sound; so I began methodically stepping on every ventilation duct inside the galleries at Tate Modern, collecting recordings of the sound of my feet 'playing' them. The resulting composition made from these recordings, *Montage (for Wobbly Ventilators)* (Figure 11) became one of the movements within the final sound map piece. This focused attention on one specific sonic repetition within the architecture of a single museum is one example of collecting and presenting what Blesser and Salter (2007: p.2) have called aural architecture:

> The composite of numerous surfaces, objects, and geometries in a complicated environment … In each contrasting space, even if the sound sources were to remain unchanged, the aural architecture would change.

My field recording practice had become a performative listening; I was not just finding meaning in the sounds I heard, I was also making meaning via sounds that I consciously performed. The practice of artistic field recording has been evolving to acknowledge the audible presence of the recordist over the past two decades as more artists have taken up field recording (Voegelin, 2014b), and some artists have begun to specifically identify their recording practice as a performance (Anderson, 2015). I began performing an increasing number of sounding actions within the museums I recorded, and included them within the final edits of my sound map compositions. This allowed me to become a more active character within the sound maps, and would also contribute to the decisions I made

regarding the requirement of my own performance to complete the experience of a visit to MOPS (Chapter 4).

1.7 Changing the research journey's direction

Although I had initially considered recording a sound map of the British Museum, its vast size felt too intimidating for the project; however, I kept returning to one area of the British Museum, the Enlightenment Galleries, which had been installed in 2003 to commemorate the museum's two-hundred-and-fiftieth anniversary. Its installation was intended to not only celebrate the British Museum's founding during the eighteenth century, but also the origins of the modern museum (Sloan, 2004: p.14). One question I had kept asking myself during this initial portion of my research journey concerned whether the sounds of contemporary museums had any relation to the 'essence' of the modern museum, and the sound of the Enlightenment Galleries eventually inspired a new sound

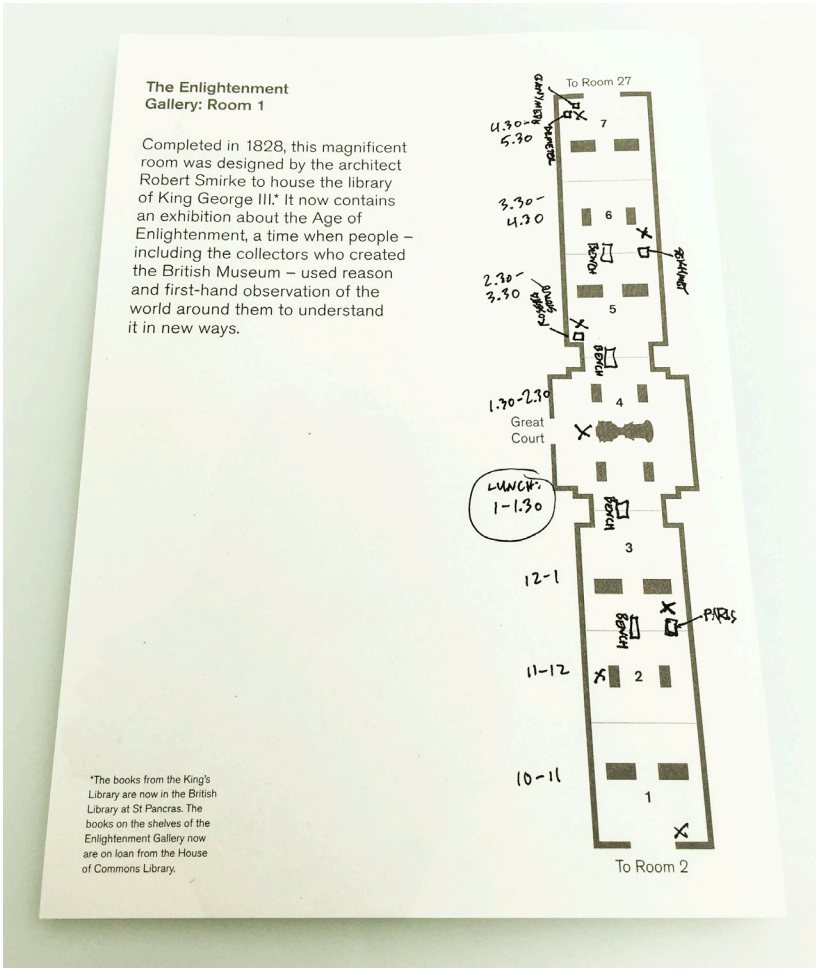


Figure 12. Plan for *A Sound Map of the Enlightenment Galleries at the British Museum*, drawn on the map provided in the gallery. 'X' marks the locations where I planned to sit, numbers in the margin note the time schedule for each recording, including a 30 minute lunch break.

Figure 13. Selfie taken while reading the British Museum's published translation of the Rosetta Stone while sitting next to the touchable Rosetta Stone copy, *A Sound Map of the Enlightenment Galleries at the British Museum*, 19 April 2016.

mapping project not included in my original research proposal. This project, *A Sound Map of the Enlightenment Galleries at the British Museum*, pushed my sound mapping practice in a new direction of conceptually performance-based field recording, and the final output was pre-designed in a way that was able to be executed much more quickly than the other sound maps I was working on.

I made a detailed plan (Figure 12) and followed it, spending a single day in the Enlightenment Galleries, sitting in each of the gallery sections for one hour (including a thirty minute lunch break). I also spent a portion of each hour reading a book related to the section of the galleries in which I was sitting, including reading the British Museum's own publication of a translation of the Rosetta Stone while sitting next to the Enlightenment Galleries' touchable copy of the Rosetta Stone (Figure 13).

At the conclusion of the day, I had produced seven hours of field recordings; I then compressed each of these hour-long recordings into seven minutes, without altering the recording's pitch. What remained were ghosts of the sounds I had recorded, samples so tiny as to be only barely recognisable. I viewed this act of compression and loss of sound as a (likely clumsy) metaphor for the acts of compression and loss of historical context embedded within museum practice by institutions like the British Museum – an institution that attempts to collect and display the art and culture of the entire world.

This mapping project became a decisive factor in solving the tensions within my practice; although I was pleased with the results of this sound map in relation to my other sound maps, it brought a clarity of focus about my research project's direction. Soundmapping was no longer the best way to investigate the questions my project was now asking. I finally understood that my research had evolved into an investigation of the possibility of displaying sounds as museum objects. My sound mapping projects had developed out of my previous career as an experimental musician, and were tied to the experimental music tradition; completing this British Museum sound map made me realise I was still treating my sound recordings like musical source material to be manipulated for the purpose of listening as a primarily aesthetic or emotional experience, which was hindering my ability to perceive sounds as truly analagous to museum objects. If what I was looking for was a way to present sounds as objects to an audience, it became evident that I would need to separate them from as many musical or music-like contexts as possible, so that they could be experienced as sounds on their own merits; not as background to a visual experience, not as a melody or rhythm to become lost in. I could no longer think of sound in general – as some amorphous, mystical whole – instead, I had a duty of care to analyse sound as an interconnected continuum of specifics: from 'sound' to 'sounds'; not soundscape, but sound objects – not as music, but as museum. That was the only way forward for me – beyond music, to culture and cultures. I needed to turn my attention back to the term that had first inspired me to think of the possibilities within the museological display of sounds: the 'sound object.' I began working on a new definition of this term in order to help guide my thought process about the possibilities of exhibiting sounds in a museum context.

Chapter 2
Contextualising MOPS: a museological definition of 'sound object' and historical precedents for a portable sound museum[1]

2.1 Introduction

Early in my research journey, the notion of sounds as museum objects became central to my line of thinking regarding the acoustic environments of museums, which eventually shifted my creative practice from sound mapping to creating my own sound museum. I had spent more than a decade before this research project creatively working with sounds directly influenced by Pierre Schaeffer's concept of sound objects: I collected field recordings of natural and mechanical sounds, forcibly separating the sounds from the context of their sources; I then manipulated these recordings to create musical compositions. When I began formally studying museology at the University of Michigan, the discussions in our seminars around museum objects inspired me to think of sounds as objects, but instead of creating music with them, I began to think about displaying them in museums; having rarely encountered this, the idea became a question: how could museums display sounds as objects?

This chapter documents two major conceptual areas I worked through while creating MOPS. The first concept, redefining the term 'sound object,' relates to my creative practice's shift towards the idea of exhibiting recorded sounds within a museum context. The second concept relates to the form that MOPS itself would take – how should a museum dedicated to listening look and feel? What, if any, type of architecture should house it? What are the historical precedents for a portable museum of sounds?

2.2 The foundation for a museum of sounds: redefining the 'sound object'

> ...the moment we pose the question of objects we are no longer occupied with the question of objects, but rather with the question of the relationship between the subject and the object. (Bryant, 2011: p.14)

A slightly different point of view on Bryant's suggestion that objects are perceived

[1]Portions of this chapter are based in part on my article 'Towards a more sonically inclusive museum practice: a new definition of the "sound object",' *Science Museum Group Journal* Issue 8, Autumn 2017.

due to their relationship with their subject is central to my own interest in displaying sounds – particularly recorded sounds – as objects within a museum context: it is within each sound's relationship to that which generates it, as well as its relationship with who listens to it, that I find most compelling about the musealising of sounds.

In chapter 14 of *The Palgrave Handbook of Contemporary Heritage Research*, Noel Lobley, formerly of the Pitt Rivers Museum, provides case studies of two projects – one with the International Library of African Music in 2007 and theother with the Pitt Rivers Museum in Oxford in 2012 – wherein he organised the display of archival recordings in the cities and towns where they were originally made, via local community distribution channels and outside museum walls. In this way, the historical descendants of the people who had originally been recorded were able to help gather further information about the recordings through a process he refers to as 'sonic elicitation' (2005: pp.234–247).

In his chapter, Lobley routinely refers to these archival recordings as 'sound objects,' the same term originally proposed in 1966 by the French experimental composer Pierre Schaeffer. However, Lobley does not use the term in the Schaefferian sense – he uses it to refer to multiple kinds of recordings as collected by museums and never explicitly defines the term 'sound object'. Further research has also not produced evidence that this term has ever been defined within a museological context.

In contemporary sound studies literature, conceptualising sounds as objects has been criticised, particularly by Brian Kane (2014). However, this concept, recontextualised within museum practice, has proved useful to the curatorial approach I used when constructing MOPS. It was the idea that sounds, presented without structural/timbral manipulation, within a system of categorisation that echoes the way traditional museums often classify physical objects, might lead to a new way of perceiving sound's role within human culture. Based on the feedback I have received from museum professionals and museologists who have visited MOPS, classifying sounds in this way seems likely to be useful for a discipline that tends to think in terms of objects and is itself in the midst of a disciplinary turn towards the multisensory within its own practice.

Rather than construct a new term for sound as a collectable material within a museum context, this chapter will instead discuss the use of Schaeffer's term within my practice as a foundation for the creation of MOPS.

2.2.1 Resonance and authenticity

One of the ways museums engage audiences via their exhibition of objects is through what is referred to by Stephen Greenblatt (1991: p.221) as resonance and wonder. Greenblatt defines museological resonance as 'the power of the displayed object to reach out beyond its formal boundaries to a larger world, to evoke in the viewer the complex, dynamic cultural forces from which it has emerged and for which it may be taken by a viewer to stand'. Wonder, he suggests, is 'the power of the displayed object to stop the viewer in his or her tracks … to evoke an exalted attention'. These 'special powers' over audiences held by museum objects are thought to be derived from the aura of authenticity that surrounds them (Benjamin, 2007: p.221). Audiences feel in awe of museum objects because of their acceptance of the museum's authority as an arbiter of the truth – without that, the viewers' questions regarding an object's origin, provenance, and acquisition would counteract the resonance of the experience (Greenblatt, 1991: p.45).

Attitudes towards Benjamin's notion of authenticity and its role of importance within contemporary art and culture have evolved significantly since Greenblatt's 1991 assertion – after all, museums have a long and continuing history of exhibiting reproductions. Benjamin's original Marxist argument was a reaction to the rise of photography versus the world of painting and sculpture; his conceptual axis of art's 'cult value' on one end (its usefulness to the world of rituals and magic) and 'exhibition value' on the other (art's turn towards pure image, to be used as a device for teaching and explanation) is, as Melissa Gronlund (2017: p.23) states, 'deeply attuned to materiality'. With the recent turn towards digital practices of creating, presenting, and archiving culture, new forms of art and preservation rarely possess a material, authentic 'original.' The sounds that I have used in my own practice have been captured with digital audio recorders – there is no physical original beyond digital data.

Greenblatt and Benjamin's notions were, of course, based solely upon the visual experience of physical objects of material culture. While universally defining the term 'object' has long been a contentious exercise across multiple disciplines including philosophy (Adorno, 1990a and 1990b; Baudrillard, 2005: pp.75–113; Heidegger, 2009; Miller, 2008), art history (Fried, 2009; Gronlund, 2016; Krauss, 1979), and museology (Conn, 2010; Dudley, 2012; Dziekan, 2012; Geismar, 2018; Gurian, 2005b; Pearce, 1993),

it remains difficult to agree upon a single accepted definition of what an object is. It is not my intention to settle that argument here; what this chapter will propose, in 2.2.5, is a definition for a type of sonic object within a very specific context, suggesting that visual tangible things are not the only objects capable of functioning within the resonances generated by museum display.

2.2.2 Contemporary sound art curation

Art museums have made more progress in the display of sounds as objects than their counterparts in the fields of natural history, anthropology, and science, inspired by the burgeoning interest in sound as a medium of art. Beginning with the Hayward Gallery's *Sonic Boom* (Toop, 2000), these steps towards a 'sound art blockbuster exhibition' have seen many curatorial strategies put forth for the display of sound art in exhibitions such as 2012's *A House Full of Music* at the Mathildenhöhe Darmstadt (Beil et al, 2012); 2012's *Sound Art: Sound as a Medium of Art* at ZKM in Karlsruhe (Weibel, 2019); 2013's *Soundings: A Contemporary Score* at MoMA in New York (London et al, 2013); 2014's *Art or Sound* at the Fondazione Prada in Venice (Celant, 2014); 2015's *Soundscapes* at the National Gallery, London (Moore Ede and Noy, 2015); and 2016's *This Is A Voice* at the Wellcome Collection, London (Currall and Muñoz, 2016). Two of these exhibitions – *This Is A Voice* and *Art or Sound* – stand out as having been particularly successful in their approaches to the display of sounds for different reasons and have been influential upon my own curatorial project.

The Wellcome Collection's *This Is A Voice* exhibited sounds within the context of the human voice. It included physical scientific objects that described human anatomy related to vocalisation and hearing alongside creative works of music, sound art, and multimedia. This dialogue between the scientific and cultural approaches to the voice was an influence on how MOPS displays scientific information (eg, Galleries 5 and 6; the sidebar on electromagetic induction on *Gallery Guide* p.54)) alongside cultural documentation (eg, Gallery 15 - Art Processes) to discuss sound's role in multiple areas of experience. According to the exhibition's curator, Bárbara Rodríguez Muñoz, in a presentation she gave at the Science Museum in London's 2016 symposium *Acoustics on Display*, she was attempting to explore the voice beyond linguistic terms, focusing on

communication through melody and rhythm. Muñoz described an early intention of the exhibition's designers to 'work with sound ... as a friend as opposed to an enemy, and to use it to create a narrative across the gallery space' (Currall and Muñoz, 2016). This led to a variety of architectural approaches that primarily kept the space open rather than attempting to compartmentalise sounds in isolated chamber-like spaces, using sounds in the distance to entice visitors to keep moving through the space towards the sources of the sounds on display. However, one of the most important strategies, according to Muñoz, was in managing visitor expectations by advertising the exhibition as an experience where visitors would be 'surrounded by voices', leading to an audience which she suggested was more prepared to listen to an exhibition than is usually the case.

Setting aside the exhibition's curatorial discretions that forego any pre-twenty-first century contributions by non-Western artists, Fondazione Prada's *Art or Sound* displayed sounds alongside and connected to their original sources, including many functioning authentic historical physical objects. Several of the sculptures, instruments, and decorative objects on display played their own sounds live into the gallery space and created a tension between the sounds and their physical sources – which was the object: the sound or the material producing it? This display offered rarely seen solutions for the display of sounds as objects within a museological context, such as cushioned plinths that helped isolate and absorb sounds (Figure 14). The show was a blend of conceptual and technical aspects of the exhibition's curation and design, e.g. the exhibition's catalogue states that the sounding objects in the exhibition were treated with a quasi-musical intent, in the hopes that visitors would accept the sounds of multiple objects as parts of a whole rather than as intrusions upon each other. As with any exhibition of sound taking place in a visual gallery space, there were inevitable areas of sonic conflict, but in terms of physical objects displayed as sounding objects, *Art or Sound* stands out as particularly successful in both concept and execution.

This exhibition was a significant influence upon my creation of MOPS; while its notion of the exhibition's sounds forming a musical composition may not have served as a model for my own museum, its steps towards altering how its objects were displayed based upon their sonic properties did serve thus. The aforementioned plinths covered in soft, dark grey sound-absorbing material were anti-white cube, their form following their function as

Figure 14. Examples of acoustically designed plinths in the *Art or Sound* exhibition, Fondazione Prada, Venice. Above left, a cuckoo clock in the shape of a bird cage; above right, clocks with musical chimes; below left, gallery view showing acoustically insulated plinths and floor coverings as part of the overall exhibition design. Photos by author.

Two field recordings of this exhibition are included in the Enclosures (see Appendix 1).

a display for sound rather than for a visual object. Also, these sound-making objects were not just resonating with the outside world and the culture from which they had been taken – they were resonating against each other. Objects found their positions within the exhibition not just due to a conceptual theme, but also sonic ones. The curators appear to have thought through questions like 'Does this sculpture sound "good" alongside this one?' They did not simply look to chronology, geography, or topic for guidance in their placement, but to the sound itself. *Art or Sound* influenced me to choose my museum's physical structure based solely upon the listening experience, and helped reinforce my idea that there could be important resonances between sounding objects themselves – not just their physical sound waves colliding in a space, but a sort of museological resonance as well – their ability to 'sound right' next to each other creating a potential for meaning-making – that referred to Greenblatt's ideas of object resonances but moved beyond them toward the idea of sounds resonating against each other acoustically and conceptually – like songs on a mix tape..

The presentation strategy in *Art or Sound* appears to align with sound art theorist Christoph Cox's call for a sonic materialism within aesthetics. Cox suggests that it is the intangible quality of sound that has caused philosophers to regard sounds as 'secondary attributes of the objects we see: the sound *of* a bird, the sound *of* an air conditioner' (Cox, 2011: p.156, emphasis in original). If we remove the visual as our primary focus of the interpretation of sounds, however, it is possible to perceive sounds as distinct from their sources, and Cox's thoughts on the subject are worth quoting here at length:

> Visual objects persist through time and survive the alteration of their properties. (The door, for example, remains when it is painted a different colour.) By contrast, properties do not survive in this way. (The redness of the door does not survive its repainting.) In this respect, sounds appear to be much more akin to independently existing objects, since they survive changes to their qualities. A sound that begins as a low rumble may become a high-pitched whine, while remaining a single sound. In such an occurrence, the object that produces it (a car, for example) does not lose one sound and gain another. The sound remains what it is throughout, though its sensible qualities change … [W]e can experience a sound without experiencing its source, and the source without the sound. So while sources *generate* or *cause* sounds, sounds are not bound to their sources as properties. Sounds then, are distinct individuals or particulars like objects … This is precisely what – albeit in the idealist language of phenomenology – Pierre Schaeffer … aimed to show in his analysis of the objet sonore. [emphasis in original] (2011: p.156)

Cox is not, however, arguing for the consideration of sounds as objects. While arguing for

a more materialist attitude towards sound theory, he also insists that sound, as it is decoded by listeners' sensory systems over time, is not an object but an event (Cox, 2015: p.126). Divorced from its source and its physical effects upon space and listeners' bodies, the sonic event is what Cox views as its ultimate identity, distinct from objects of the physical world.

2.2.3 Problems with the original notion of the sound object

Twentieth-century composer Pierre Schaeffer's concept of the sound object (0.3.2.) referred to the recording of non-musical sounds, separated from their sources, that could then be manipulated into musical compositions, giving rise to a form of musical composition known as musique concrète (Schaeffer in Cox and Warner, 2005: pp.76–81). Schaeffer's sound object relied upon the listener perceiving these recorded sounds while ignoring its source entirely, via a process he labelled reduced listening. The notion of reduced listening, and to hierarchies or taxonomies of listening in general, has since fallen out of favour with many sound theorists, who prefer to perceive sounds as events rather than objects (see Cox above). According to Brian Kane, Schaeffer conceptualised his sound object through a close reading of phenomenology as practised by Edmund Husserl; however, Schaeffer's methods of conceptualising the sound object display inconsistencies, creating an ontological problem that, for Kane, 'emerges when sounds are conceptualised as sound objects that reify sonic effects, rather than events that bind source, cause, and effect together' (2014: p.37).

Although Schaeffer's 'improvised ontology' may or may not be inherently flawed, contemporary sound studies invoke the sound object as a primary point of reference, often naming it as a conceptual forerunner to the sampling culture of DJs and other methods of composition that use pre-recorded non-musical sounds as their source material, to the point where the concept of sounds as malleable musical objects has become generally accepted (McLeod, 2005; Saiber, 2007; Smith, S., 2007). However, theorists such as Cox suggest that sound is incapable of being an object and is instead an event, although sounds are still capable of being considered object-like in some respects.

Cox derives this notion from the work of Casey O'Callaghan (2007: p.64), who proposes that 'sounds are particular events in which a medium is disturbed or set into motion in a wavelike manner by the activities of objects or interacting bodies.'

O'Callaghan's methodical build-up to this definition begins by claiming that, from a certain point of view, sounds are indeed objects:

> Sounds are public objects of auditory perception. By 'object' I mean only that which is perceived—that which is available for attention, thought, and demonstrative reference. (p.13)

Yet there is one crucial element for O'Callaghan which removes all doubt that sounds are not objects but events: time.

> [W]e intuitively think of objects, as opposed to time-taking particulars, as being wholly present at each time at which they exist. Intuitively, all that is required to be the desk is before me … Sounds, instead, are things that occur over time … What is clear is that sounds are in important respects different from ordinary objects in their ways of extending through time (p.27).

It is this philosophical notion – that sounds are distinct events that exhibit object-like qualities, separate from the objects that generate them – which has led me to advocate for a revised, museologically contextualised, definition of the term 'sound object'. I believe that, within my own curatorial practice, sounds can be connected to their sound sources while also being independent from them, similar to O'Callaghan's philosophy. As O'Callaghan suggests, sounds 'have identity, individuation, and persistence conditions that require us to distinguish them from properties of the sources that we should understand to make or produce [them]' (p.22). MOPS exhibits recordings of sounds accompanied by information about their sources in its printed *Gallery Guide*, yet each sound's source is physically unavailable to MOPS visitors.

2.2.4 Events as objects within art history

If sound theorists are comfortable with the notion of sound as event rather than object, why do I insist on retaining the term 'sound object' within museology? Beyond the obvious connection between museum practice and objects, there are other reasons to support the notion that museums have firmer ground than music upon which to stand in order to work with sounds as objects – including a precedent within the history of painting for perceiving an artwork as simultaneously an object and an event.

While discussing the origins of art forgery, art historian Alexander Nagel (2004) traces the beginnings of a shift within the Western art world from what he calls a 'copy culture' (where copies of previous artworks are viewed as continuations of the previous

object because their purpose is merely to educate viewers about what the image represents) to the era of the connoisseur, a period he suggests began in the fifteenth century, when artists began to assert themselves as unique creators possessing remarkable technical skills and aesthetic sense:

> When images inhabit a copy culture, there is no room for forgery. Without a cult of the originally produced work, appreciated as a singular and unrepeatable performance—without a conception of the work as an event—forgery has no function … The emergence of art forgery presupposes a culture in which what matters above all is not the content a work of art transmits but the irreducible qualities that make this work an unrepeatable event. Eventually this conception of art would form the basis of a discipline called the History of Art, which devoted its energies to putting each artistic performance on a timeline, and to studying it as the product of an author and a historical moment (Nagel, 2004).

Museums of art therefore have embedded within their origins the idea that objects are events and vice versa. In terms of a professional syntax, museums collect and display objects, which are also events – and with the advent of digital art, where there is no tangible record of the creative event, whenever a digital creation is re-presented it is, in effect, a restaging of that work's own 'historical moment'.

Art events, particularly performances, are accepted as repeatable events. The same idea could be applied to native digital objects within other types of museums, such as software on display in a science museum, digital photographs as historical records in a history museum, or digital audio recordings in a sound museum. The term 'sound object' is already in use, but at the moment it remains the purview of a discipline that finds it problematic; but within museology, it could be used to help clarify an underused resource – the world of sonic culture – for a discipline that is eager to utilise it yet still unclear as to its conceptual place within the world of cultural heritage.

2.2.5 Defining a museological sound object

My interest in a museologically contextualised definition of 'sound object' has come about as the result of my own experiments in conceptualising the curation of sounds. Mieke Bal (1994: p.11) has suggested that meanings are 'the result of interpretation … not a fixed, objectified thing, but a complex process.' There is also a precedent for the re-definition of a term to move it from the lexicon of one tradition to another: Jacques Derrida proposed such

a process for terms he believed to be outdated:

> Hence the necessity, today, of working out at every turn, with redoubled effort, the question of preservation of names: of paleonomy. Why should an old name, for a determinate time, be retained? Why should the effects of a new meaning, concept, or object be damped by memory? (Derrida, 1981: p.3)

Cultural theorist Gerhard Richter (2007: p.1) in turn used Derrida's notion of the paleonomy to redefine the thought-image, or 'denkbild,' for his own purposes, stating that 'the paleonomic gesture requires us to stand inside and outside a tradition at the same time, perpetuating the tradition while breaking with it, and breaking with the tradition while perpetuating it.' It is with both Bal's notion of the fluidity of meaning and Derrida's paleonomy in mind that I have attempted my own redefinition.

I suggest that a museological sound object – a sound object for use within museum practice – is a listenable sonic event generated by a physical object, animal, human, or force of nature, heard independent of its source (but not necessarily divorced conceptually from it), able to be preserved, categorised, interpreted, exhibited, and experienced in ways that affirm its value within human culture beyond its potential as source material for a musical composition. It is here that my redefinition overlaps with Schaeffer's original, in that I view the sonic event separated from its source as the museological sound object. However, it is the reception event – the act of the sound being heard, received, and acknowledged by museum visitors – that I want to consider as truly object-like in a museological sense: a thing that is to be collected, interpreted, and displayed to museum audiences in a similar manner to a visual/physical object, regardless of its source or its technical requirements for exhibition.

These sonic events would need to be linked to their original contexts, particularly a source object – either a material object that generates the sound, or a recording format via which the sound object is played back – but the museological sound object could be considered independent, in that the sonic event – the listening back by visitors – could be included within an exhibition with or without acknowledgement of the material source of the sound, depending upon its role in the story being curated.

My own implementation of a museological sound object has relied upon reproducibility. In order for a sound to be collected, interpreted, and exhibited by my

own museum, the sound must be able to be repeated. Therefore, in the case of MOPS, a museological sound object does not require the sound's original source, just a source – in the context of MOPS, that source is a digital audio file.

Any sonic event that can be reproduced and heard by a listener in an exhibition context – regardless of the identity or presence of its generating object – is, in the curatorial practice I am documenting in this thesis, a museological sound object. Although my own museum's sound objects consist entirely of digital audio recordings of sounds, I do not see reproducibility as equal to recording. Archaeologist Jeffrey Benjamin has deemed his own notion of a 'sonifact' to be dependent upon its host artifact – a 'tangible object' (Benjamin, J., 2014: p.120). While it would be preferable to display a sound via its tangible object source if that physical object were capable of being sounded without causing damage to itself, within my practice of establishing a museum of sounds, the need to display and preserve every host object in working order would have been unfeasible. For the purposes of my research, digital recordings of sounds accessed via headphones have remained the most functional, elegant, and flexible option for the display of sounds as museum objects; however, I hope this work can be expanded upon by museum practitioners who may find better solutions in the future.

2.3 MOPS as a non-traditional museum

In refocusing my project from listening to sounds inside physical museums to creating my own museum of sounds, work that began by broadly asking 'why listen to museums?' shifted to a specific question: 'how can sounds be exhibited as objects within a museum context?' In order to think through this question, I would need to decide what form a museum needed to take in order to provide visitors easy access to a number of sound objects.

The logical conclusion was to establish MOPS as some form of digital, possibly virtual institution. As MOPS was a part of my creative practice, the idea of an artist's museum in non-traditional architecture felt appropriate. Since MOPS was to be an institution dedicated to the act of listening, and the sound objects were already in a digital format, at least some form of digital architecture seemed most sensible. As mentioned in 0.5.1, I was opposed to distributing the museum's sounds online in part as a reaction

against my previous online sound distribution project, Stasisfield.com. However, the decision to keep the sound objects offline was also an attempt to present recorded sounds as something inaccessible, slightly mysterious, and worthy of being displayed as objects in their own right within a museum; not only that, it also would impose a performative encounter between artist, institution, and audience, which I hoped would help transform MOPS from merely another output of my creative practice to a functioning institution.

Establishing an unusual, or what I will refer to as a 'non-traditional', museum has a lengthy history within artistic practice that needs to be unpacked before further discussing any contribution MOPS makes to the field of non-traditional museums. This section of this chapter will discuss relevant historical precedents to MOPS, how my museum fits into this lineage of non-traditional museums, and how my own experience of non-traditional museums as a visitor and artist helped decide my museum's final form.

This brief survey of non-traditional museums will focus on the following characteristics shared by my own project: institutions that are (1) imaginary, (2) portable, (3) created by an artist, (4) sound-based, or (5) virtual. Any of these characteristics could fill a thesis-length survey, so rather than a comprehensive overview, I will only discuss examples that specifically relate to either the form of or the questions asked by MOPS.

2.3.1 Imaginary museums

In 1673, British polymath and scholar Sir Thomas Browne wrote a humorous treatise which he published in 1684 as a chapter in *Certain Miscellany Tracts*. Its title:

Musaeum Clausum

Or, Bibliotheca Abscondita

Containing some remarkable books, antiquities,

pictures and rarities of several kinds,

scarce or never seen by any man now living

What followed was a list of imaginary items alleged by Browne to belong to a single collection. This list would probably have been at least partially considered a humorous send-up of current trends in the newly-developing practice of museology by his contemporary readers (Preston, 2012). Although Browne's tract is predated by Rabelais' list of imaginary book titles in the sixteenth century *La vie de Gargantua et de Pantagruel*,

Browne's list builds on Rabelais' imaginary library concept to include other types of objects and works of art, influenced by sixteenth-century notions of categorising the world through objects such as the first known treatise on museums, published in 1565 by Samuel Quiccheberg (Quiccheberg et al., 2013). Browne's list speaks to the attitudes within the intelligentsia of his time regarding lost knowledge, such as the scores of books lost when the ancient Library of Alexandria (famed for holding a copy of every book in the world) was burned (Barnes, 2004). Browne's imaginary museum was a nostalgic parody, filled with make-believe objects that resonated with the notions of culture familiar to its creator's contemporary society, and questioned what these new institutions calling themselves 'museums' could or should be. While MOPS is not an imaginary museum, it is composed of several imaginary elements, such as its architectural map. This playfulness can be traced back to Browne's Musaeum Clausum.

Imaginary museums have been a recurring theme in fiction and literature since Browne. Rachel Morris (2009) traces a history of imaginary literary museums that she suggests began when Rustichello da Pisa first wrote down the alleged memories of Venetian traveller Marco Polo around 1300 CE and has since seen many retellings, most notably in the fictional interpretation in Italo Calvino's 1972 novel *Invisible Cities*. Morris suggests a kind of kindred spirit between museums and authors of fiction via their shared focus upon storytelling.

The interconnected relationship between museums and fiction writers is intriguingly embodied by the Turkish author Orhan Pamuk, who used his own 2009 novel *The Museum of Innocence* as the template for a real-world physical museum of the same name he opened in a nineteenth-century house in Istanbul. The Museum of Innocence (the physical museum) presents real objects Pamuk collected relating to the fictional story depicted in his historical novel (Pamuk, 2012). Pamuk's novel/museum project is thematically almost completely separate from MOPS, yet his novel-museum structure is very much resonant with my own project's tendency to be self-referential and simultaneously honest and guarded about notions of 'truth'; Pamuk's use of authentic physical objects that were allegedly used by characters in a fictional story displays a playfulness with the truth in the same way that my own museum occasionally blurs the boundaries between history and fiction in its social media content (Chapter 4).

2.3.2 Portable museums

There are numerous precedents to the portability of MOPS. Arguably the most famous example, Marcel Duchamp's *Boîte-en-valise* (1935–41) is an elaborate artist portfolio museum. Intended as a series of individualised duplicates, Duchamp's museum contained miniaturised, portable reproductions of his most famous works, and was itself reproduced multiple times in an edition of 300, the first of which he sold to the art collector Peggy Guggenheim (Bonk, 1989: p.258). A used copy of a 2016 paperback facsimile edition was, at the time of writing, available on Amazon.co.uk for £1,307.12. For this project, Duchamp collaborated with – and was undoubtedly influenced by – the artist Joseph Cornell, whose art practice included the creation of boxes containing sculptural assemblages. Cornell himself constructed his own series of portable museums, each a small wooden box containing other containers containing objects. Cornell's 1949 *Museum* (Figure 15) included a series of sealed containers whose contents could not be seen, and the museum's visitors were invited to shake the containers and try to guess the objects inside each container by listening to the sounds they made. According to Cornell's notes on this particular museum box, one of the sealed containers was filled with 'silence' (Cornell, 2015: p.185).

Figure 15. Joseph Cornell, *Museum* (1949) at the Royal Academy of Arts, London. Photograph by author.

Contemporary portable museums owe at least a partial debt in their conception to André Malraux's *Le Musée imaginaire* and his book *Museum Without Walls* (1967). Malraux's suggestion that museums could be replaced by books due to newly affordable mass-market printing was based on the notion that museums were (and always would be) a visual experience; therefore, reproduced photographs could, in theory, replace physical museums. While this changeover never fully occurred, the concept of a museum without walls remained influential to museum theorists, practitioners, and artists ever since, and Malraux's notion of book as museum resonates significantly with the MOPS *Gallery Guide*.

In the early twenty-first century, 'pop-up' (temporary) galleries have become a way

for curators to present exhibitions without the financial burden of maintaining a permanent structure (Arisohn and Murphy, 2017). This practice has also been adopted by entire museums, with the most ironic example being London's Museum of Architecture <https://museumofarchitecture.org> which, as of this writing, still has no permanent building, opting to present its exhibitions and events in a variety of different venues. Zagreb's Museum of Broken Relationships <http://brokenships.org> operated for four years as a pop-up museum before it found a physical space in Zagreb (they have since opened a branch in Hollywood, CA). The lack of a physical structure for a museum may also be conveniently resonant with an institution's identity; for example, Sweden's Museum of Failure has failed to retain its own physical space in Helsingborg and is, as of this writing, currently searching for a new home <http://museumoffailure.se>. While MOPS does have a physical home within a mobile phone, its ability to uproot itself at a moment's notice – travelling easily to different cities, countries, or continents – shares a do-it-yourself ethos with pop-up and other temporary forms of gallery spaces.

2.3.3 Artist museums/museums and artists

Numerous artists have used and continue to use museums as working spaces or even as raw material for their own artwork, often making work that examines museums and museum practices. As Lisa G. Corrin writes:

> Indeed, artists have returned to the museum, no longer just looking at it as the "apparatus the artist is threaded through" but using its format to create their own "exhibitions" and "museums" or acting as "curators," manipulating permanent collections to question the boundaries of the museum and its usefulness for addressing contemporary aesthetic and social issues (2012: p.332).

Corrin suggests artists who create their own museums and exhibitions cannot be considered professional museum practitioners, and those who claim to 'curate' are not even curating. Her opinion reinforces an impermeable social barrier between artists and museum practitioners. The examples in her essay attempt to bolster this view, as she focuses upon artists such as Fred Wilson who create installation works inside museums using the museum's own permanent collection as source material – and Wilson himself insists the installations are his artworks and not acts of curation (Putnam, 2009: p.134). By using its artist's own collection of field recordings, MOPS departs from existing art practice relating

to museum interventions like Wilson's.

While Wilson's museum interventions comment upon museum practices, a similar project by John Cage expanded the composer's musical works to include physical museum objects. Cage's *Rolywholyover A Circus for Museum by John Cage* (1993) was an elaborate musical composition that toured a number of museums in the early to mid-1990s. While Cage's project is often referred to as an exhibition, it was explicitly intended by Cage to be a musical composition: 'Musical terms were used throughout: "composition" for exhibition, "movement" for a section of the exhibition, "score" for installation concept, and "pages" for installation charts' (Skurvida, 2017). At each stop on the tour, the composition would include objects from the host museum's permanent collection, along with works on loan from other institutions and large selections of works by Cage himself (Cage, 1993). These objects were laid out in vitrines on wheels which could easily be moved, as Cage's score demanded the objects be constantly reconfigured based on chance operations. Unlike Wilson's remixes of museum collections, Cage's project appears to be less about the museum as institution and more about Cage's own working methods: 'The exhibition's title may have led "John Cage" to be taken as its theme, interpretation of which was nonetheless open' (Skurvida, 2017).

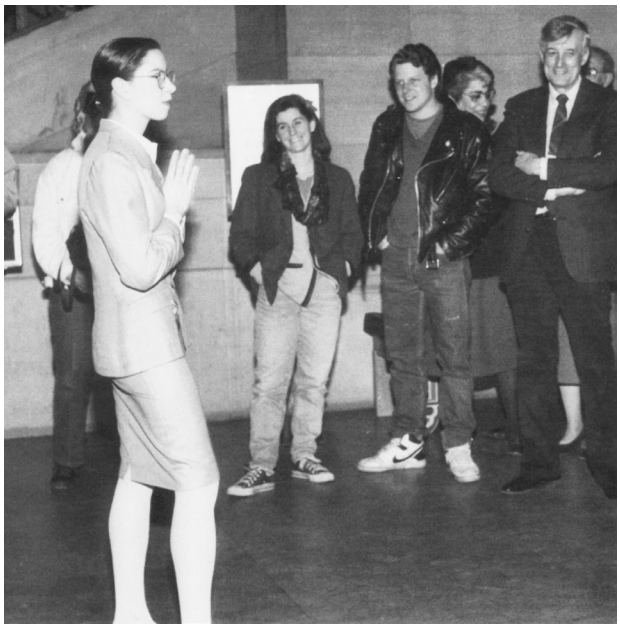


Figure 16. Andrea Fraser performing *Museum Highlights* in 1989 (Fraser, 1991).

Artist Andrea Fraser's 1989 performance *Museum Highlights: A Gallery Talk* at the Philadelphia Museum of Art (Fraser, 1991) saw Fraser assume the character of Jane Castelton, a museum docent giving tours of the museum, who discussed the works on display as well as the building's architecture and the museum's economic relationship with the city of Philadelphia, pointing out absurd, banal, or offensive aspects of the museum in order to critique the detached and lofty approach museums of the time took towards educating their audiences (Figure 16). Fraser plays the role of a museum expert who uses the language of

absurdity to comment upon the museum, a precedent for my own absurdist character role-playing as the MOPS Director.

Several of the above-mentioned examples of portable museums are also artist museums, created and curated by artists as part of their own artistic practice, which often involve performative museum critique. One of the most elaborate examples of this is the Musée d'Art Moderne, an institution created by Marcel Broodthaers that existed from 1968 to 1972. Broodthaers' museum was an elaborate fiction intended as parody:

> This Museum is a fictitious museum. It plays the role of, on the one hand, a political parody of art shows, and on the other hand an artistic parody of political events. Which is in fact what official museums and institutions like documenta do. With the difference, however, that a work of fiction allows you to capture reality and at the same time what it conceals (Broodthaers quoted in Snauwaert, 2017: p.123).

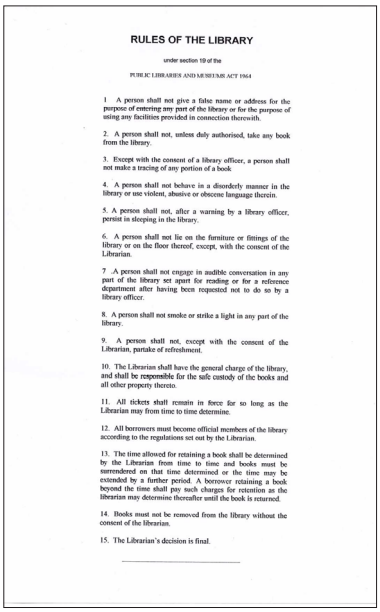
While Broodthaers created a fictional museum to investigate museums from a generalised standpoint, the Museum of American Art in Berlin is a non-museum of another museum, according to its most vocal public supporter: the resurrected Walter Benjamin (ten Thije, 2014). In 1986, thirty years after his death, Walter Benjamin 'reappeared' and gave a lecture entitled 'Mondrian '63–'69' at the Marxist Centre in Ljubljana. 'Benjamin' (whoever he may be) has remained active ever since, most closely associated with the Museum of American Art, an institution dedicated to re-presenting exhibitions originally mounted by the Museum of Modern Art in New York from the 1920s to the 1960s by exhibiting copies of the works included in the original exhibitions along with other forms of documentation. This absurdist yet still somehow logical extension of Benjamin's 'Work of Art in the Age of Mechanical Reproduction' exists as a museum of a museum, though Benjamin insists it 'is not an art museum. In fact, by not being an art museum it is the "real museum of art", a place where art, art history, and the art museum are being remembered' ('Benjamin' quoted in Kopsa, 2010).

Broodthaers and Benjamin used factual information within their museums to make their points, but some artist museums blur fact and fiction. The Museum of Jurassic Technology in Los Angeles is probably the most refined example of this, as artist David Wilson's institution exhibits a complex collection of sculptural displays of pseudoscientific objects accompanied by elaborately fictitious didactic information designed to evoke wonder in the audience. Wilson's performance as curator is steadfast, engaging in lengthy

and misleading discussions with his visitors. According to Marcia Tucker, the director of New York's New Museum in 1995, Wilson is the kind of person who 'never ever breaks irony' (quoted in Weschler, 1996: p.39). To return to Corrin's point mentioned above that artists cannot be museum professionals, Wilson's project is the only artist-produced museum project Corrin suggests is able to successfully blur the boundaries between artist and museum professional, suggesting it might be 'the first serious museum of museology' (2016: p.333).

A project that challenges Corrin's argument that artists cannot act both as artists and institutional professionals is the Bristol Art Library <http://thebristolartlibrary.co.uk>. While it is not a museum, the Bristol Art Library's form and implementation operate in a similar conceptual space to MOPS, an example of an artist both making art and acting within another professional capacity as a part of their creative practice. Established in 1998 by artist Annabel Other, the library is a portable collection of artist books. Other transports the books while, much like Andrea Fraser, dressing in stereotypical fashion as 'The Head Librarian' while signing up visitors for borrowers' cards. The library exists in a custom-built cabinet (Figure 17) containing books on bookshelves, a card catalogue, a noticeboard, and a copy of the rules of the library per 'section 19 of the Public Libraries and Museums Act 1964' (Figure 18).

Figure 17. The Bristol Art Library, via <http://thebristolartlibrary.co.uk>.



RULES OF THE LIBRARY

under section 19 of the

PUBLIC LIBRARIES AND MUSEUMS ACT 1964

1. A person shall not give a false name or address for the purpose of entering any part of the library or for the purpose of using any facilities provided in connection therewith.

2. A person shall not, unless duly authorised, take any book from the library.

3. Except with the consent of a library officer, a person shall not make a tracing of any portion of a book.

4. A person shall not behave in a disorderly manner in the library or use violent, abusive or obscene language therein.

5. A person shall not, after a warning by a library officer, persist in sleeping in the library.

6. A person shall not lie on the furniture or fittings of the library or on the floor thereof, except, with the consent of the Librarian.

7. A person shall not engage in audible conversation in any part of the library set apart for reading or for a reference department after having been requested not to do so by a library officer.

8. A person shall not smoke or strike a light in any part of the library.

9. A person shall not, except with the consent of the Librarian, partake of refreshment.

10. The Librarian shall have the general charge of the library, and shall be responsible for the safe custody of the books and all other property thereto.

11. All tickets shall remain in force for so long as the Librarian may from time to time determine.

12. All borrowers must become official members of the library according to the regulations set out by the Librarian.

13. The time allowed for retaining a book shall be determined by the Librarian from time to time and books must be surrendered on that time determined or the time may be extended by a further period. A borrower retaining a book beyond the time shall pay such charges for retention as the librarian may determine thereafter until the book is returned.

14. Books must not be removed from the library without the consent of the librarian.

15. The Librarian's decision is final.

Figure 18. The Bristol Art Library's 'Rules of the Library', via <http://thebristolartlibrary.co.uk>

Other's project features an artist portraying her institution's authority figure, similar to MOPS; however, the books in Other's library are all made by other artists and her performance is intended to support the dissemination of artwork by others to the public, while my museum puts my own field recordings and myself on display. Often the didactic information in the MOPS *Gallery Guide* consists of personal memory, anecdote, or opinion; as an artist's museum, MOPS allows me the luxury to make deliberate personal choices about what is exhibited in MOPS and how it is interpreted. While not actually putting my own body on display as part of MOPS, my presence is required in order for a museum visit to take place; this recalls the artist/audience relationship in Timm Ulrichs' 1961 art piece/performance *The First Living Work of Art*, allegedly the earliest example of an artist putting themselves on display in a vitrine while alive – Ulrich's work was preceded by the *Auto-Icon* of philosopher Jeremy Bentham, still on display at University College, London (Putnam, 2009: p.15).

2.3.4 Sound museums

The concept of a 'museum of sound' is often discussed poetically rather than practically, due to the obvious contrast between traditional, visually based museums and the non-visual nature of sound, but a few museums dedicated to sound exist. Vienna's Haus der Musik labels itself 'an interactive sound museum', but is primarily focused on displaying physical objects relating to the lives of classical composers and interactive displays that allow visitors to conduct symphony orchestras. The museum's 'Sonosphere' – the second of the museum's four floors – contains interactive displays exploring the anatomy of the human ear as well as acoustics, not unlike those usually seen in hands-

Figure 19. The 'wall of sounds' in Vienna's Haus der Musik in use and labels for two of the juxtaposed sounds. Photos by author.

on science museums; it also contains a listenable ‘wall of sounds’ grouped into various categories (Figure 19). However, these displays are mostly preparation for the floor’s primary educational focus, which is the composition and experience of music. Visitors are led past the scientific sound displays into areas focusing on concepts like the function of musical instruments, digital sound processing for electroacoustic composition, and the human voice as a musical instrument (Gruber and Wildner, 2016: pp.25–37). Much of the interaction in the Sonosphere is based on visitors being invited to musically ‘remix’ sounds, which are then burned onto CDs to be sold back to them in the museum’s gift shop (Figure 20).

Figure 20. An example of Haus der Musik’s attempts to monetise user-generated content. Photo by author.

The Museum of Pop Culture in Seattle, Washington, US, features a permanent exhibition entitled Sound-Lab <https://www.mopop.org//exhibitions-plus-events/exhibitions/sound-lab/>. Similar to Haus der Musik’s ‘interactive sound museum’ subtitle, Sound-Lab uses the general term ‘sound’ as a label for a musically-themed exhibition which, according to their website, is a display of ‘Multimedia installations [that] invite hands-on interaction so that visitors can explore the tools of rock ‘n’ roll through electric guitars, drums, samplers, mixing consoles, and more.’ The continued equating of ‘sound’ with ‘music’ omits an overwhelming amount of sound-based culture, which MOPS attempts to bring out of music’s shadow for a general audience.

Conserve The Sound <conservethesound.de/en/> is an online archive of sound recordings of post-industrial machines in use, which began in 2013. This extensive collection adopts a culture-centric approach to sound similar to my own, grouping their recordings by a classification system, yet their recordings tend to be isolated ‘portraits’ of machines in operation rather than mingled with other sounds in the machine’s native acoustic environment, so the displays lack any audible connection to each sound’s cultural

context, unlike the recordings in MOPS.

The mechanical reproduction of sound is the primary subject matter of Setúbal, Portugal's Museu da Música Mecânica (Museum of Mechanical Music), established by the museum's owner and director Luís Cangueiro in 2016 after gradually building the museum's collection since 1986 (Cangueiro, 2017). Cangueiro's extensive collection of functional mechanical sound reproduction equipment includes gramophones, phonographs, and organettes that the director operates during the museum tours he gives to the public every Saturday (Figure 21). While the collection is fascinating, vast, and full of wonder, the subject matter is, as the museum's name suggests, almost exclusively the mechanical reproduction of music. Sound's sole contribution to world culture, as displayed in most museums, continues to be music – an aesthetic experience – rather than any of the significant roles for non-musical sound within the realm of human culture, an oversight that MOPS attempts to directly address by focusing primarily on non-musical sounds in its displays.

Figure 21. Panoramic view of one of the many galleries that display the extensive collections on view at the Museu da Música Mecânica. Photo by author.

2.3.5 Virtual museums

MOPS is not a virtual museum in the traditional sense, yet it shares many of the distinguishing features of virtual museums: its contents are born digital; it must be accessed via a computer – though one in the form of a mobile phone; it is organised into non-existent 'gallery spaces' that reference traditional museum architecture; and it maintains a significant presence on the Internet via its website and social media. The Virtual InterModal Museum project (VIMM), a European consortium on virtual museums and digital heritage, begins defining the virtual museum (VM) as

> a digital entity that draws on the characteristics of a museum, in order to complement, enhance, or augment the museum through personalization, interactivity, user experience and richness of content ... VMs perform as

> the digital footprint of a PhM [Physical Museum] or act independently and are committed to the public access to knowledge systems, the long-term preservation of collections and the delivery of exceptional experiences. In addition, the VM provides new opportunities for the public in ways not previously viable through the modification, experimentation and combination of collections based on the digital iteration of the analog original. Users actively participate in novel ways such as through enhanced 'presence', immersive experiences, multidirectional communication, and interactive storytelling (Polycarpou, 2018).

VIMM's definition here emphasises virtual museums as extensions of physical museums, while acknowledging the existence of standalone virtual museums. Much of the remainder of VIMM's definition focuses upon online-based interactivity, which does not apply to MOPS. However, its final point does, stating that virtual museums 'showcase objects that have no physical presence and are born digital'. While MOPS may not technically be a virtual museum according to VIMM, enough of its characteristics overlap with virtual museums to warrant a brief survey of relevant virtual museum history.

Although the notion of a 'virtual museum' is currently intertwined with the internet, they actually began offline. As Media Archaeologist Erkki Huhtamo (2002) has suggested, the roots of the virtual museum concept reach back to the origins of modern exhibition design. German architect Frederik Kiesler's 1924 design for the *International Theatre Exhibition* in Vienna incorporated what he referred to as a flexible *L and T system* (*Leger und Träger*), a complex series of horizontal, vertical, and diagonal supports that filled a gallery space. Objects could be hung on the supports, allowing the entire interior space of a gallery to be used for display – and could be accessed randomly according to visitors' own chosen paths: 'The exhibition hall was on its way to becoming a non-linear data space' (Huhtamo, 2002: p.6). In 1930, artist László Moholy-Nagy began work on *Raum der Gegenwart* ('The Room of Our Time'), another room-filling installation system utilising the *Lichtrequisit* ('light prop'), a device he had built that produced projections, shadows, and other visual imagery via user input to continuously alter the visible space of the gallery's walls. This system presented projections of photographic reproductions, rather than authentic objects, as artworks – the only 'original artwork' inside *Raum der Gegenwart* was the Lichtrequisit. Moholy-Nagy had abandoned the original for the copy more than half a decade before Benjamin's 'Work of Art in the Age of Mechanical Reproduction' (Huhtamo, 2002: p.7). Moholy-Nagy's ephemeral objects, made accessible

via a system of his own design that provided a theatrical space in which visitors might engage with the collection, can be seen as a kind of predecessor to MOPS and its untouchable sound recording reproductions accessible only via an elaborate situation of my creation.

Even as digital tools allowed for the creation of museums constructed entirely from code, at their outset they were untethered from the online world. The first entirely digital virtual museum was a CD-ROM manufactured by Apple Inc. in 1992. *The Virtual Museum* was a showcase for Apple's recently-developed QuickTime video technology more than a museological project (Huhtamo, 2002: p.2). Apple's virtual museum was part natural history museum and part art museum, presented via a user interface that has continued to be used by virtual museum designers up until the present day: a 3-D rendered virtual space that attempted to replicate stereotypical museum architecture, filled with digital Ionic columns, carpeting, plants, and animated visitors sharing the space with the user (Figure 22); it was also (based upon my own first-hand experience) frustratingly slow and repetitive. My own copy of this CD-ROM, to my current shame and regret, disappeared into the rubbish soon after I received it with a Macintosh Performa desktop computer I purchased in 1994.

Figure 22. The interface of Apple's *The Virtual Museum* CD-ROM (1992).

Apple's 3-D museum architecture interface lives on in Google's Art Project <https://artsandculture.google.com/project/street-view>, a vast online archive of virtual tours of the world's great art museums accessible via Google's Streetview interface (Figure 23).

Though Art Project is the most comprehensive archive of art and museums online, and the Streetview interface evokes a nominal sense of 'being there,' it is built on roughly

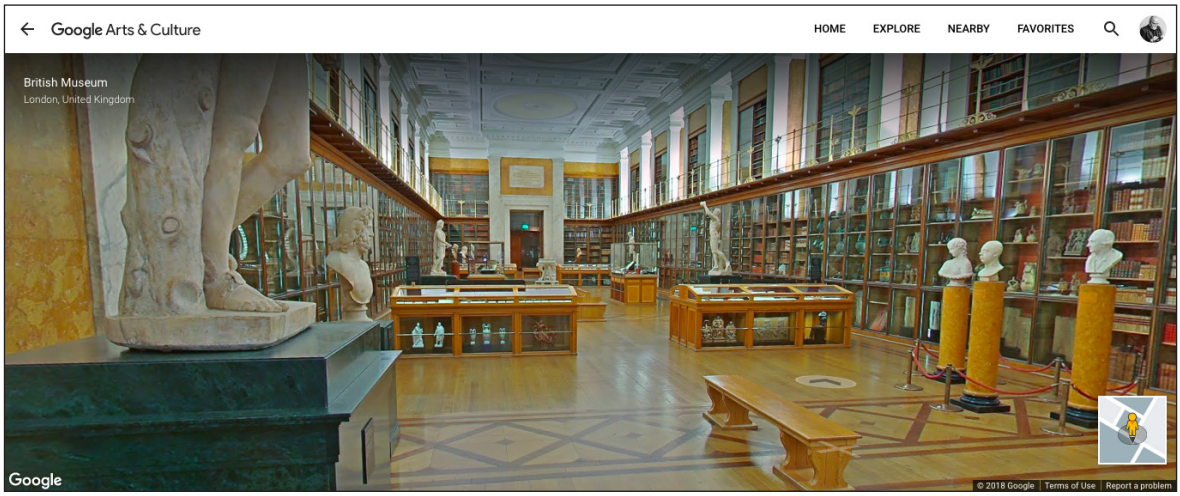


Figure 23. Google Art Project's representation of the Enlightenment Galleries at the British Museum.

the same design foundation as Apple's was in 1992: stitching together panoramic photos to approximate visual movement through three-dimensional space, without any other sensory information. While the results can be quite beautiful, the movement through space is slow: each step forward causes a pause while the image adjusts and reloads, disrupting the user's ability to suspend their disbelief long enough to believe they are in an actual space.

In 2010, a large-scale corporate virtual museum opened when Adobe, Inc., manufacturers of media-making software like Photoshop, Premiere, and, at the time, Flash, launched the Adobe Museum of Digital Media <http://adobemuseum.com> – a virtual museum created to showcase the company's technology. Adobe created a 3-D rendered 'museum architecture' digital interface for its virtual museum's website. A notable real-world architect, Filippo Innocenti of Zaha Hadid's studio, was hired to design the virtual museum space (Berwick, 2011). Like some museum buildings of the physical world, Adobe's virtual museum building tended to overshadow the art that AMDM displayed inside it; at launch, the entire museum consisted of (1) a video welcome message from Tom Eccles, a curator from Bard College Adobe recruited for the project; (2) a single piece of art, by Tony Oursler, which was essentially another video of Eccles that Oursler had slightly manipulated; and (3) a walkthrough of the virtual building, along with

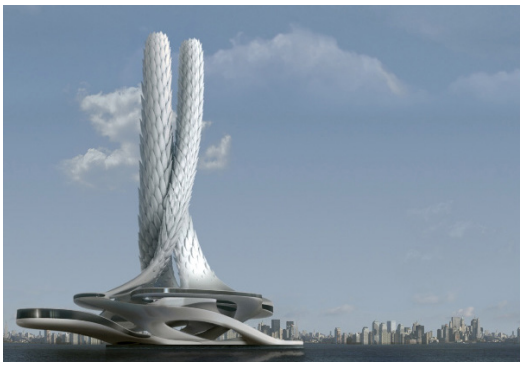


Figure 24. The Filippo Innocenti-designed Adobe Museum of Digital Media (Berwick, 2011).

a video of the virtual building Photoshopped into notable city skylines (Figure 24). AMDM lasted about two years – details online are vague, and it is impossible to view the museum's website in the Internet Archive's Wayback Machine as it was coded using Adobe's Flash – a proprietary technology which has since been abandoned. When Adobe ended the project, the entire museum disappeared, with only its domain name and a 'thank you' graphic remaining (Figure 25).

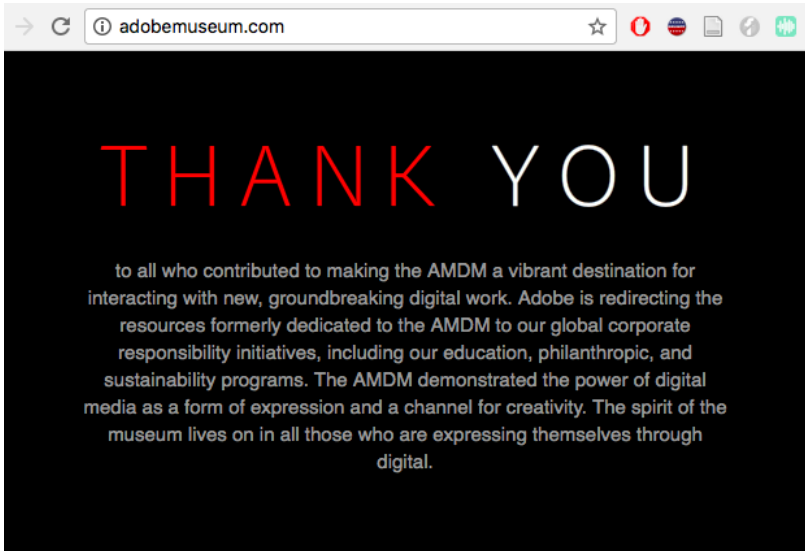


Figure 25.
The current contents of <adobemuseum.com>.

Early virtual museums were implemented by many of the world's largest physical museums. In 1999, the Guggenheim Virtual Museum was launched, an all-digital museum that connected all Guggenheim Museum branches in the world but would also house digital-only content, collecting and preserving the latest in digital art, according to a staff-attributed article in *Wired Magazine* (2000). This groundbreaking project was designed as a natively digital space rather than a virtual version of an already established physical space; while it was described at the time as being architecturally unrelated to any of the

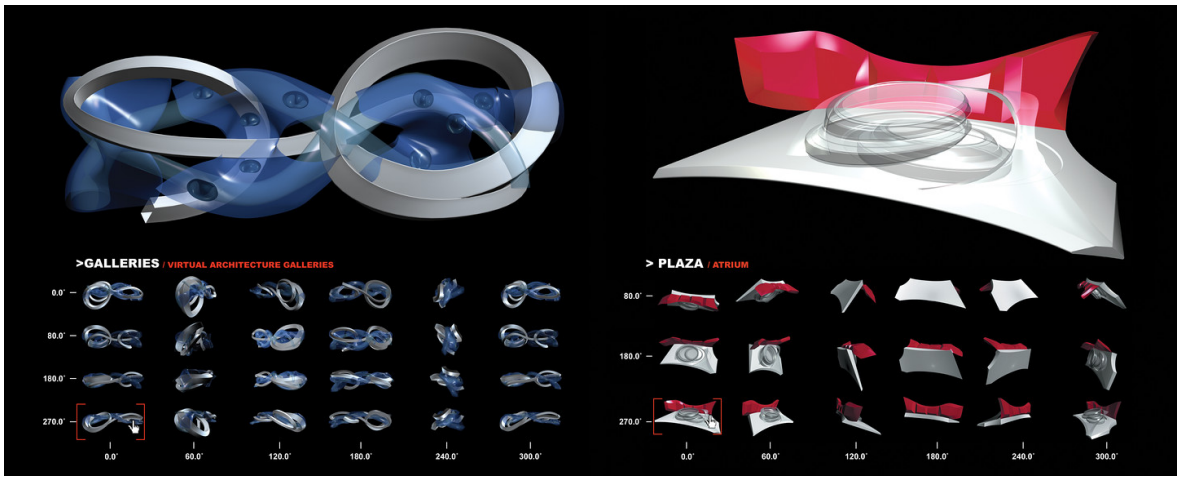


Figure 26. Primary interface of the Guggenheim Virtual Museum (Rashid, 2017)

branches of the Guggenheim that were concurrently in existence at the time, the virtual museum's circular pathways (Figure 26) were evocative of both Frank Lloyd Wright's original Guggenheim New York and Frank Gehry's Guggenheim Bilbao (Plaza, 2007). The Guggenheim Virtual Museum (GVM) was launched in 1999, when dial-up modems and slow internet connections were still the norm. As GVM had been coded using the text-heavy VRML coding language (Staff, *Wired*, 2000), the GVM's three-dimensional virtual architecture was rendered so slowly across dial-up internet connections that users found the experience frustrating, and the project was eventually abandoned.

Apple's digitally rendered 3-D architecture navigational paradigm has continued to be applied to the virtual museums of today. A new wave of home-accessible VR has become possible via products such as Facebook's Oculus Rift VR system. The Guggenheim partnered with Google in 2016 to bring a Google Cardboard VR version of the museum's original Frank Lloyd Wright building using Google's Streetview interface, via Android apps running on mobile phones that are then placed inside a low-cost, cardboard-constructed VR headset. A March 2016 Guggenheim blog post about the project began with an introductory paragraph about what it feels like phenomenologically to experience a visit to the Guggenheim NY building, then reports:

> Since the imagery was captured on a day when the museum was closed to the public, the virtual reality experience is quiet and peaceful, rather than noisy or bustling. We also did not capture footage of the entire museum due to copyright limitations, so certain parts of the building, such as our Thannhauser and Tower galleries, aren't accessible via Google Street View or Cardboard … A virtual experience of a museum will, necessarily, be fundamentally different from a visit to the physical building … by extending the museum experience using virtual reality, we make the magic of our Frank Lloyd Wright building available to more people throughout the world, and get them excited about the possibility of visiting in person. That's why we enthusiastically agreed to be a content partner for Google's Expeditions Pioneer Program (Mir, 2016).

While investigating the history of virtual museums, it became clear to me that their interface designs are often entirely dependent upon visual-only museum experiences. Although some sort of virtual museum seemed the best option for MOPS, it was not until I realised that a museum of sound's user interface needed to be based upon an elegant, simple listening experience that I was able to decide on the MOPS design.

2.4 MOPS finds its home: an iPhone 4S

Rather than attempt to replicate a three-dimensional physical architecture experience in a virtual space, I realised that the most important navigational factor for a museum based on listening to digital audio files was that the audio needed to be easily and quickly accessible to visitors, preferably in a way that could present distinct groups of sounds together in order to mimic the physical experience of galleries filled with visual objects. Instead of relying on a visual interface that looked like a traditional museum, I decided to strip away as many barriers between visitors and the sounds as possible, since I believed accessing the sound objects in MOPS should ideally involve no more thought or effort on the part of visitors than it does to walk from painting to painting in an art museum. This ease of use would allow visitors to begin their museum experience as quickly as possible with minimal orientation or additional learning time.

It was this need for simplicity that led me to not construct anything new at all, but rather appropriate a device already widely in use, if not almost ubiquitous, for listening to audio – an iPhone. Using the iPhone's built-in ability to organise and play back audio files would not only allow visitors to use a system they were most likely already familiar with, it would also allow me to concentrate on the selection and interpretation of the sound objects I wanted to display instead of needing to design my own software or hardware solution.

Coincidentally, I already owned an iPhone 4S from the United States; its hardware was altered by its American mobile service provider, and it was unable to connect to UK mobile networks – so it could be solely dedicated to MOPS, with the added benefit that I would not be entrusting my regular mobile to strangers once the museum opened. When my iPhone 4S became dedicated to MOPS, I resolved to no longer connect it to the internet or update its operating system. As of this writing, the MOPS mobile still functions normally and has not required any software updates. As time has gone on, the MOPS mobile has now become a museum object itself, an outdated mobile with outdated software, a moment of portable sound technology frozen in time.

2.5 Conclusion

Museum collection and display practices are influenced by the language of museum practice. Since Quiccheberg's treatise on museums in 1565, museums have been influenced

by a language of organisation and categorisation – the language of objects. Since the fifteenth century, when the emerging culture of the connoisseur saw artists begin to assert their works as worthy of special attention within the realms of taste, Western art historians have conceptually conflated the unique performance event of a painting or sculpture with its status as an object. MOPS itself may be an artwork, yet I do not claim the MOPS sound objects to be artworks themselves; however, they have been collected via an artistic practice of field recording, organised using classifications inspired by iconic London-based examples of the modern museum, displayed within an institution that is part museum, part conceptual art project – situating these sound objects within the lineage of art history. Perhaps this artistic approach to the curation of sounds as museum objects might inspire future museum practitioners to likewise display sounds (which are currently accepted as events by philosophers and sound theorists) as objects within their collections.

By acknowledging a sonic event as both a component of another object and an independent object itself, MOPS displays audio recordings in a way that echoes the experience of visiting a traditional object-based institution, even though it is a digital construct free of physical architectural space. Yet by storing digital sound objects on a mobile phone, the organisational systems applied to them do refer to museum architecture, as will be seen in the next chapter's discussion of MOPS exhibition strategies.

Chapter 3
Organising and displaying sounds as museum objects: designing the MOPS Permanent Collection Galleries[1]

3.1 The galleries of a sound museum: MOPS taxonomies and interpretation

Once I had decided to use the iPhone 4S as the delivery system via which MOPS would display its sound objects, designing how to display the sounds on it became the next task. In order to make access to the sounds as simple as possible for visitors, I decided to simply use the built-in 'Music' application that is preloaded on all iPhones, since a large portion of the MOPS audience would already be familiar with it, and its usability as a sound delivery system had already been designed, tested, and refined by Apple. The MOPS iPhone became an exhibition space; in ICOM's *Key Concepts of Museology*, exhibition is defined as 'the result of the action of displaying something, as well as the whole of that which is displayed, and the place where it is displayed' (Desvallées and Mairesse 2010: pp.34–35). MOPS can be said to exhibit the sound objects in its galleries via the one-to-one visits to the museum, as well as occasions when MOPS has been presented to larger audiences, such as during the conference presentations and public talks during which I have played MOPS sound objects to explain what my museum is and how it works. The MOPS mobile became its metaphorical architectural space – also referenced in the MOPS Map which presents the museum's contents in a visual, spatial representation.

With a device and software selected, I next needed to establish exhibition strategies that communicated the cultural approach to listening that I was interested in exploring. I needed to create taxonomies of sounds – a method for organising the sound objects I wanted to display. My approach would be a departure from the way most taxonomies of sound tend to function, which are usually constructed for one of three primary purposes: to analyse acoustic environments for the purpose of controlling noise pollution; to design pleasant sounds for urban shopping/eating spaces; or for use in creative sound design projects for films and gaming (Salamon et al., 2014). Previous practices of sound

[1]Portions of this chapter are based in part upon my article 'Soundmarks as Objects of Curatorial Care' *Curator: The Museums Journal* v. 62, issue 3, July 2019, pp.291-299.

classification have tended to focus mostly on intent and physical context:

> The typical approach to sound classification makes a distinction between three domains: (1) speech sounds; (2) musical sounds; and (3) environmental sounds. This division only arises as a consequence of the division of scientific domains: (1) is studied by phonologists and phoneticians; (2) by musicologists and musicians; and (3) by psychoacousticians. That is, the description of speech sounds is often performed for different scientific motivations than the description of musical and environmental sounds. This explains some of the heterogeneity of the approach to sound classification. (Galliard et al., 2015: p.1524).

Very few of the sound objects I selected for display in MOPS contain music or speech; most would fall into the 'environmental sounds' category mentioned above. I was also not concerned with controlling noise pollution, designing my own sounds for public spaces, or using the recordings for sound design purposes. I wanted to explore how the sounds I had selected to display connect to various cultural contexts, so I decided to first break them down by general cultural or scientific theme, then explore more specific topics within those broad themes.

3.2 Organising sounds as culture: the four main themes of MOPS

Utilising my iPhone's Music app for delivering sound objects to the MOPS audience was time-saving, but it also had its limitations. Being an application designed for listening to recorded music meant it was designed for a limited number of very specific data points such as artists, albums, tracks, composers, etc. The most obvious design decision was to equate an 'album' with a 'gallery,' and have the tracks inside each album be the sound objects. This, however, only allowed for one level of granularity in terms of categorising the objects (Gallery Name and Object Name). I wanted MOPS to cover topics across disciplines; this would not be an art museum where everything on view was a piece of art, but would include sounds related to science, natural history, and other general categories for classifying the contents of the world. A solution to this was devising a set of main themes which could be communicated on the mobile via the different colours of 'cover art' for the sound objects. This way, if visitors sorted the contents of the Music app by 'album,' they would see by colour which main theme each gallery was located within. Within the app, I named each album/gallery beginning with its corresponding number, so that when sorted by 'album,' the entire contents of MOPS is listed in gallery order. This means all

galleries within a major theme are clustered together, so the ‘album art’ next to each gallery name visually communicates the top-level thematic structure alongside the text names of the galleries which communicate the secondary level of gallery topics (Figure 27). Tapping on a gallery in this list displays its contents (Figure 28). When a sound is played, the album art is displayed full-screen, including the name of the main theme, the name of the gallery, and the name of the sound object (Figure 29).

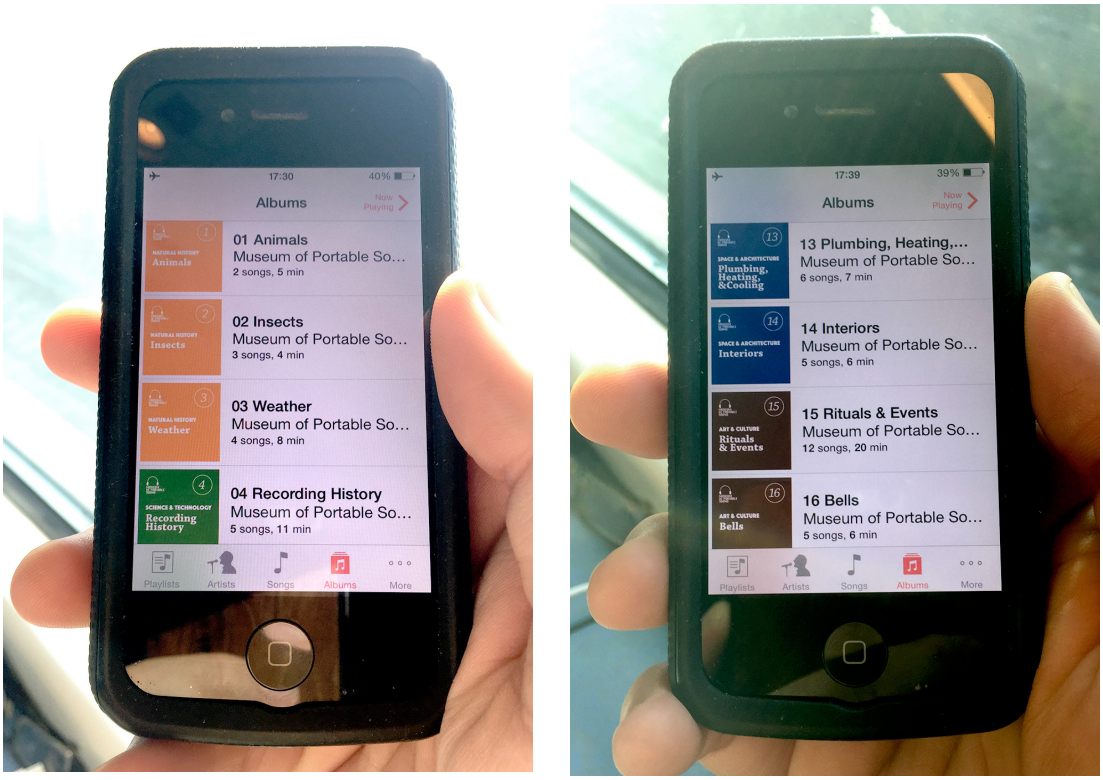


Figure 27. As a MOPS visitor scrolls through the galleries by sorting the Music app by ‘album,’ the ‘album art’ image next to each gallery’s name displays the colours of the four main themes: (1) Natural History (*yellow*) (2) Science & Technology (*green*) (3) Space & Architecture (*blue*) (4) Art & Culture (*red*). Photos by author.

The four main themes of MOPS are deliberately expansive in nature so that the galleries beneath them could be used to more narrowly define the contents of each main theme. The themes were chosen to reference concepts for categorising the world that would be familiar to visitors of traditional physical museums:

(1) Natural History (yellow)

(2) Science & Technology (green)

(3) Space & Architecture (blue)

(4) Art & Culture (red)

As museum practice evolved in the nineteenth century, institutions began to specialise in subject areas including science, art, or history (Casey, 2005: p.83). MOPS,

Figure 28. The sound objects inside MOPS Gallery 13 as viewed on the MOPS mobile. Photo by author.

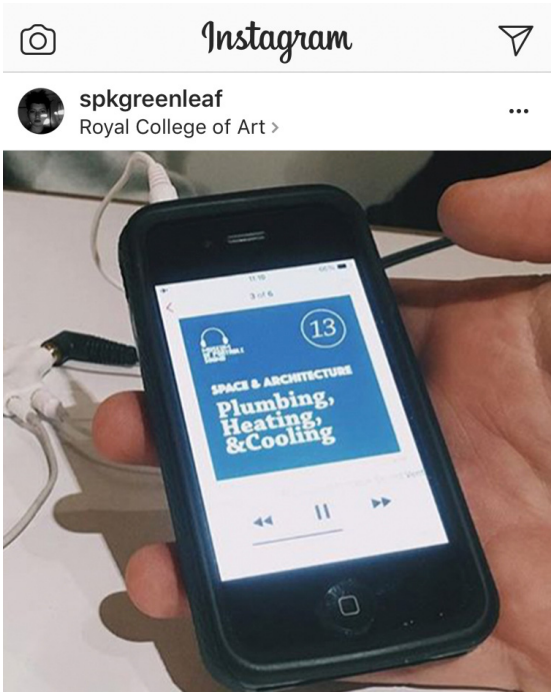


Figure 29. View of MOPS mobile as a visitor plays an object inside Gallery 13. Photo courtesy of visitor's Instagram account.

with its four primary themes that divide the museum into its four distinct 'floors,' (Figure 30) makes reference to this precedent of subject matter specialisation, yet collects these diverse topics under one roof – in this way, MOPS begins to break down an overly broad general topic – the connections that sounds have to nearly all categories of knowledge and culture – into four topics familiar to museum-goers. Visitors to London's Natural History Museum would likely recognise floor 1 of MOPS as a sound-based homage to that institution's methods of categorising the world, much like floor 2 is inspired by science museums such as the one next door to the NHM on London's Exhibition Road. MOPS floor 3, Space & Architecture, takes some of its inspiration from the architecture galleries

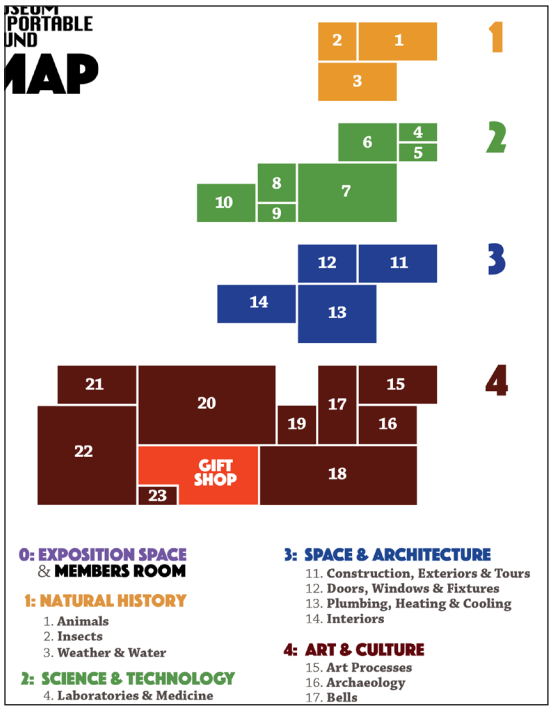


Figure 30. MOPS Map detail showing its four main themes communicated via the 'floors' of the museum. They are shown on the map in the opposite order as a physical building because visitors scroll through the floors from top to bottom of the screen on the MOPS mobile. Image by author.

at the Victoria & Albert Museum across the street from the NHM, with sounds of doors, windows, heating systems, and spaces of various sizes exploring sound's relationship with architectural space. The contents of the fourth floor of MOPS, Art & Culture, refers not only to the V&A's overall subject matter of art and design, but also to that of the British Museum, with its attempts to categorise the cultures of the world. While these four main themes refer to previous museum practice, they are also intentionally broad; this type of generalisation was built into the design of MOPS from the beginning as part of the iterative methodology I decided to adopt, so I could continue to refine the language, categorisation, and design of the MOPS materials.

Each of the four main themes/floors are themselves divided into a series of galleries, which are dedicated to more specific topics within the four main themes; it is in these Permanent Collection Galleries where the sound objects of MOPS are exhibited to visitors. As of this writing, MOPS currently has twenty three galleries in its permanent collection display; no doubt this will expand as more sounds are added to its collections. The numbers of objects in each gallery range from two to thirty-one (see Appendix 2 for the current object list).

Figure 31. MOPS as a series of nested mix tapes. L-R: The museum as a whole is a giant mix tape; each of the four main categories of the Permanent Collection Galleries are a mix tape; each gallery within the four main topics are mix tapes; and finally, the objects themselves are often divided into subgroups that function as self-contained mixes. Image by author.

3.3 Sound objects in dialogue: MOPS and the nostalgia of mix tapes and soundmarks

MOPS was designed like a giant mix tape – more specifically, like a series of nested

mix tapes wrapped around each other (Figure 31). When organising the sound objects in MOPS, I was inspired in part by Greenblatt's concept of museological resonance. (2.2.1). However, I was thinking not only of the sound objects in MOPS as resonating with the outside world, but also about how the objects would resonate with each other – resonating with meaning as well as with their own sonic qualities, like songs on a mix tape. Multiple factors have gone into the organisation of the sound objects within the MOPS galleries: what the sounds themselves represent to people who hear them in their original context; the sounds' physical source objects; and how listening to the sound objects in particular orders by MOPS visitors will sound together – for example, I would ask myself questions such as: Does this church bell contrast too much with this other church bell when listened to in sequence? Should I put these two sounds of visual artists sculpting with clay next to each other to compare them, or separate them? This type of considered placement of the sound objects references the tradition of the mix tape (Jansen, 2009), a practice of historical audio culture that was a considerable influence upon people in my generation and earlier who grew up in the era when LP records and cassette tapes were the dominant formats of commodified sound recordings – when recorded sound (or, at least, music) was more easily equated in the popular consciousness with object-like qualities.

One example of this considered juxtaposition occurs in Gallery 20, Rituals and Events. Object 15 is an audible signal made to alert a Portuguese neighbourhood that a specialist worker (*amolador*) is available to hire; this is displayed next to Object 16, the sound of a UK-based bird whistle salesperson sounding a bird call to attract customers. They are juxtaposed on page 110 of the *Gallery Guide*, visually pairing them into a subgroup. They are the only objects included on that page of the book; they are also next to each other in sequence when Gallery 26 is viewed on the MOPS mobile. Sonically, they are vaguely similar: they are whistle-like sounds, with the amolador sounding overtly musical and the birdcall sounding vaguely so, as it mimics the 'song' of a bird. When visitors encounter these two sounds next to each other, the similarity between them in sound and purpose could potentially lead to a line of questioning such as: How are these sounds similar? How are they different? How do their acoustic resonances reverberate against each other's cultural resonances? While subgroups are not always explicitly stated in MOPS, both the visual design of the *Gallery Guide* and the sequencing of the tracks in each album/

gallery invite visitors to compare sounds, to think about them in their relationship to one another as well as how they may act as (semiotic) signs in the world outside the museum. This pair of objects is discussed in more detail in 3.7, Subgroup 4.

I have hoped to evoke a sense of nostalgia within my museum's visitors. Nostalgia is a craving or longing for some form of the past (Niemeyer 2014: p.1), and media – along with the technology that delivers it to us – is a significant, and complex, source of this melancholic longing for a perceived simpler time in our lives (Niemeyer 2014: pp.5–11); indeed, in terms of media-based nostalgia, Niemeyer suggests that there are so many types of longing involved with media and mediation that we should arguably refer to media nostalgias in the plural (p.6). While exploring the history of nostalgia studies – even that only related to media, or even audible media – is beyond the scope of this thesis, there is a nostalgic element to MOPS that should be acknowledged in arguing for its ability to conjure up the sonic memories of its own visitors. One of the nostalgias that MOPS operates within is that for the mix tape, a nostalgia that has become increasingly referenced within popular literature and media in the past three decades as the way we listen to music has shifted from analogue technologies to digital (eg. see Hornby, 1995; Sheffield, 2007; Bittner, 2009; Cullum, 2009). The juxtaposition of songs on a mix tape – the selection, the sequencing, and often the care put into the creation of a mix tape's packaging label – all of these actions help to communicate specific ideas or emotions, from the mind of the mix taper to the receiver of the mix tape (Jansen, 2009: 43). As popular media formats transitioned to the digital realm, the practice of making mix tapes also changed – first to the mixed CD-R, then to the digital playlist (Fenby-Hulse, 2016: p.178). The 'hand-crafted' quality of a mix tape was lost in this transition, making the mix tape a symbol of a particular nostalgic moment. Mix tapes were often given as gifts from one person to another, an act of generosity and a willingness to share part of one's own collection of sounds with the receiver of the mix tape (Fenby-Hulse, 2016: p.174). The fact that MOPS is a museum made by one person, who not only recorded its sounds, but also designed the museum's *Gallery Guide*, references the act of sharing sounds as a visually packaged gift.

Many people's concept of museums seems to be formed in part by memory and nostalgia (Crane, 2006: pp.102–107); therefore, it has been my hope that through my design of MOPS – carefully organising the sound objects in each of the MOPS galleries; putting

together a visually elaborate *Gallery Guide*; and categorising sounds using language familiar to any visitors of large-scale museums of art, science, or natural history – that their listening and reading experience might 'resonate' with their past experiences of museums, which in turn might help their experience of MOPS feel connected not only to practices of sound sharing from the past, but also to exhibitions experienced in traditional physical museums.

Alongside these references to the nostalgia of museums and mix tapes, I believed that the sounds themselves would help visitors connect with their own pasts. Although visitors more than likely have not heard the same sounds I have put on display, it has been my hope that, given attentive listening and focus, hearing these sound objects might trigger sonic memories. The convenience of listening to a portable audio device allows listeners to customise their own personal soundtrack that triggers their favourite memories: 'Traversing space and time, portable stereos also serve as auditory mnemonics – personalised apparatuses which help recreate past experiences' (Bijsterveld and Dijk, 2014: p.18).

Although this type of auditory nostalgia is most recognisable within the realm of music, it is also part of the experience of what are known as soundmarks: site-specific sounds that become identifiers of a community that composer and researcher R. Murray Schafer suggested should be preserved once identified (1994: p.10). Soundmarks can exhibit an evocative sense of place, transporting a listener to another place or time. Since many of the sounds displayed in MOPS can be considered soundmarks, my intention was to use these sound objects to remind visitors of their own sonic memories of place and time.

3.4 MOPS exhibition strategies: constructing the galleries

I set about assembling the various MOPS galleries and their contents with two influences in mind: exhibitions I had observed (particularly in museums dedicated to science, anthropology, archaeology, and natural history) during site visits to a number of museums I attended during the Museum Studies course at the University of Michigan[2]; and my own strategies I had applied for many years in the creation of mix tapes (intended for

[2]The Museum Studies 2010 cohort at the University of Michigan made site visits to ten museums in the American midwest. Site visits usually lasted several hours and included private tours and discussions with museum staff. Museums visited during the 2009-2010 academic year included: The Henry Ford (Detroit), Detroit Science Centre, Toledo Museum of Art, Toledo Zoo, Kelsey Museum of Archaeology (Ann Arbor), Nichols Arboretum (Ann Arbor), University of Michigan Herbarium (Ann Arbor), the Edsel and Edna Ford House Museum (Detroit), The Heidelberg Project (Detroit), and the Detroit Historical Museum.

myself or others) throughout the 1980s and 1990s – which I had also applied to my curation of the online record label Stasisfield.com. Each gallery in the MOPS Permanent Collection Galleries would display objects relevant to the subject matter referenced in each gallery's title. It was in the individual gallery topics that I began to formulate the dominant curatorial perspective of MOPS: to explore human relationships with non-musical sounds – sounds that serve functions beyond simply an aesthetic listening experience, that are connected to tasks, systems, and other areas of experience that occur outside of a concert hall – in order to call attention to unique roles that non-musical sounds play within everyday experience. Even then, a few MOPS sound objects contain music; it would be particularly difficult to tell even a brief history of sound recording like Gallery 6 without including at least some music. Yet wherever possible, I have attempted to bring attention to sounds that a general audience would not consider music or musical. Each gallery tells a story of how its namesake topic (eg, 'Audio Interfaces,' 'Interiors,' 'Food,' etc.) relates to human experiences of sound.

While I intended to use classification systems within the organisation of the MOPS galleries, I was also aware that simply comparing multiple examples of the same type of sound (such as Gallery 18 – Transport) could become monotonous for visitors. The ability for museum audiences to wander amongst objects and topics freely is, I believe, one of their strengths, and one of the things that separates them from a library or archive. This is why many of the galleries have compound names, eg. Weather & Water; Laboratories & Medicine; Plumbing, Heating & Cooling, etc., which allowed some flexibility in the choice of objects to be displayed, as well as opening up some topics to multiple object types depending on how many examples of each sound I had in my recording archives. I have been less concerned with the number of sound objects in each gallery than in being able to present concepts that helped foreground the idea that non-musical sounds can be displayed as museum objects – no gallery in MOPS is named after a purely musical concept.

Several of the organisational rules I set for the objects have been treated either inconsistently or with slight variations. Many of these inconsistencies happened as the result of self-imposed deadlines, with the intention being that they are temporary solutions that will change as the museum itself continues to evolve and change. Temporary solutions have a long heritage within museum practice; indeed, the so-called 'father of modern

taxonomy,' the eighteenth-century Swedish scientist Linnaeus, created his Natural Method classification system for botany as a 'stop-gap' solution: 'This artificial method used just a few arbitrary characteristics selected for convenience to divide the plant world into manageable groups' (Huxley, 2003: p.77). However, the Linnaean system became a widely adopted standard for natural historians throughout Europe for nearly a century. While I have no delusions that my systems will become widely adopted, this precedent for temporary standards helps to support my hope that this project might inspire others to refine and expand upon what I have begun.

The MOPS gallery organisational systems can be generalised into five strategies, with some galleries utilising multiple strategies. These strategies are: (1) Typologies; (2) Chronologies; (3) Deductive Analysis; (4) Spatial Analysis; and (5) Sonic Aesthetics.

3.4.1 Typologies

Several galleries within MOPS present multiple versions of the same sounds, usually differentiated by their place of origin. Gallery 6: Audio Interfaces contains six examples of audio pedestrian crossing signals for the visually impaired, each from a different city. Similarly, Gallery 18: Transport presents several instances of trains, buses, and trams from various cities, a total of 28 objects. The objects there are subsequently organised alphabetically by city, a method not used elsewhere in the museum, in order to emphasise their geographical connections so that visitors might begin to associate the sound with a specific place – encouraging comparisons of, say, the sound of a commuter train in Chicago versus a commuter train in Cairo. Gallery 18, therefore, is the most direct example of MOPS presenting urban sounds as soundmarks, which are discussed in the *Gallery Guide*'s didactic panel introducing the collection of street crossing signals within Gallery 7: Audio Interfaces (p.42). These two examples will be discussed in detail in 3.8.1 and 3.8.2.

Another method of comparison is slightly more subtle, but no less significant. Gallery 20: Rituals & Events contains 31 objects, several of which are examples of a similar cultural event from different geographic locations or traditions. As the largest gallery in the museum, its sequencing is somewhat more complex than the other galleries, yet it makes extensive use of comparison and contrast in the way it presents its objects. The

sequencing strategies of Gallery 20 are discussed in 3.7.

3.4.2 Chronologies

A common exhibition strategy, yet one that has currently fallen from fashion particularly in art museums, is the display of objects in chronological order. Sound is obviously a time-based medium, and the act of listening to a recording follows a linear progression from beginning to end; however, it has been my intention to encourage visitors to listen to the museum's objects in whatever order they choose, even though I have organised them in ways I felt made sense. Nevertheless, I have included chronological displays very briefly (Galleries 6, 9, and 10) when dealing with subjects related specifically to history. Splitting Galleries 9 and 10 (the ones dealing with the sounds made by home audio equipment) by century allowed me to present sounds of seemingly outdated, perhaps unfamiliar, equipment to some segments of the audience, in their own space, allowing visitors to seek them out for purposes of nostalgia or unfamiliarity, or to avoid them for these same reasons. Gallery 6, dedicated to the history of audio recording, was the most logical choice for chronological display in order to represent the progression from analogue technologies to digital.

3.4.3 Deductive analysis

Movement from the general to the specific recurs in several places throughout the MOPS galleries. By beginning the galleries with sounds from the natural world, then shifting to examples of audio recording technologies, then sounds from architectural spaces, and finally to sounds that represent various cultural practices, my intention was to guide visitors from more familiar contexts of listening towards more unfamiliar, complex contexts, applying deductive analysis to the collection as a whole as well as within individual galleries.

One reason why the MOPS presentation of nature-related sounds is so much smaller than the other categories is because these sounds tend to be familiar as a listening exercise, and are also well documented and preserved by other institutions, most notably the British Library Sound Archive. Recordings of nature sounds have been popularised in the past, most often marketed as a tool for relaxation, such as the best-selling *Environments*

series recorded and produced by Irv Teibel in the late 1960s and 1970s (Vandsø, 2016: p.201). While many MOPS visitors would likely be familiar with the practice of listening to recorded sound via technologies like LP records, cassettes, and digital audio, most would probably not think to listen to the sounds of these devices in action; hence, there are galleries devoted to the history of sound recording (Gallery 6: Recording History, one of only two galleries to include sounds sourced from historical sources), as well as to the sounds made by conventional audio equipment while in operation (Gallery 8: Glitches; Gallery 9: Twentieth Century Audio Equipment; and Gallery 10: Twenty-First Century Audio Equipment).

The galleries within the theme of Space & Architecture introduce visitors to the idea of listening to urban spaces, foregrounding sounds that are often heard but rarely noticed. Finally, the Arts & Culture galleries introduce the concept of listening to sounds in relation to different aspects of culture. If listened to in numerical order, this section of galleries becomes increasingly meta-referential: beginning with sounds of cultural events, the galleries display sounds of libraries, archives, and museums, until the final gallery displays recordings of sounds on display in other exhibitions related to listening to sounds (Gallery 23: Exhibitions of Sound). The four main themes of MOPS thus build towards the concept of listening to sounds on display within a museum context, which is what visitors have been doing all along during their own visit.

3.4.4 Spatial analysis

The entirety of the Space & Architecture section, which is subdivided into four galleries, is presented as a progression through architectural space. Gallery 11: Construction & Tours begins outdoors, first with sounds of buildings under construction which then segues to the sound of a tour guide discussing a city's buildings from an exterior perspective, on a riverboat tour. Galleries 12: Doors, Windows & Fixtures and 13: Plumbing, Heating & Cooling move inside buildings, first via crossing the thresholds that provide interior/exterior access (doors and windows) and then listening to their 'guts' – the physical systems that circulate air, water, and waste. Gallery 14: Interiors invites visitors to listen to sounds experienced while physically inhabiting architectural spaces; these sounds are organised into an unlabelled sequence, with the *Gallery Guide* asking visitors to think about why the

sounds have been organised in such a sequence, which is finally revealed to be determined by the relative size of the spaces – moving from a small pub, a slightly larger café, to a hotel's interior swimming pool, the interior of a cathedral, and finally the sound of a giant central train station in a major city.

3.4.5 Sonic aesthetics

The final exhibition strategy within the MOPS galleries is also the most nebulous, intuitive, and difficult to qualify – what I refer to as 'sonic aesthetics.' This method of sequencing the objects in the galleries is most similar to strategies employed by the participants of mix tape culture referred to in 1.4 and 3.3, and relies on what is best described as 'feel'. Objects in several galleries appear to not have a meaningful sequence – they are out of chronological order, or were collected from multiple geographical locations, and seem to have little relation to each other beyond their own relationship to the title of the gallery in which they are displayed. These objects have been sequenced according to how they sound, in an attempt to construct a listening sequence that feels cohesive, in much the same way as songs sequenced on a mix tape. This approach to the sequencing of objects capitalises on some of the same sensations induced by mix tapes: feelings of nostalgia, memory, and connection between the 'mix taper' (i.e. the person making the mix tape – or in my case, the curator sequencing sounds in a gallery of sound objects) and the 'gift tape recipient' (the person listening to the mix tape), to borrow the language of Bas Jansen's writing on mix tapes and memory (2009).

Although it may be possible to argue that the galleries in MOPS are simply 'playlists' due to their digital nature, I would suggest that, if they must have something in common with the tradition of home audio recording, it is with mix tapes. First and foremost, and to be slightly pedantic, from the perspective of format each gallery is actually an 'album' within the interface of the iOS Music app, not a playlist (although playlists are employed for the six thematically curated Guided Tours – see *Gallery Guide* p.7-11). Secondly, the contents of each gallery consists of sounds that I have personally collected via my own field recording practice, selected, and edited – a practice that more closely resembles the real-time labour-intensive practice of compiling a mix tape than the drag-and-drop convenience of a digital playlist (Jansen, 2009: p.43).

While the MOPS sound objects are digital and listened to on a single mobile phone, the absurdist rule that the digital files cannot be distributed on the internet and may only be accessed by meeting me adds to the experience of visiting the museum as a metaphoric mix tape experience; I meet all visitors personally, and hand them the 'gift' (albeit temporarily) of my mobile for them to listen to. The experience is shared between myself and visitors, and the preciousness attributed to the museum as a singular location reflects the artifact-like nature of a mix tape, one that, as Jansen says, 'preserve[s] the mix taper's being-in-connection with his or her immediate surroundings' (2009: p.51).

3.5 Designing the MOPS Map

Aside from a two-dimensional graphic representation of an imaginary museum map based on the taxonomies used to organise the sound objects within the MOPS 'galleries,' there is no attempt to represent or replicate the physical experience of walking through museum architecture while visiting the Museum of Portable Sound. This was a deliberate decision from the outset of the project; initially there was to be no visual representation of a corresponding museum space whatsoever, leaving visitors to only listen to and read about the MOPS sound objects. However, as the number of galleries and objects continued to grow, the need arose for MOPS visitors to quickly view the museum's contents as a whole, which could help them choose where to begin listening.

There was also more information that could be instantly conveyed via a visual map than merely the names of the museum's galleries: a visual map could also show the relative sizes of each gallery based on how many sound objects were contained within them. The MOPS map is designed using a grid system, so that each gallery is made up of a number of

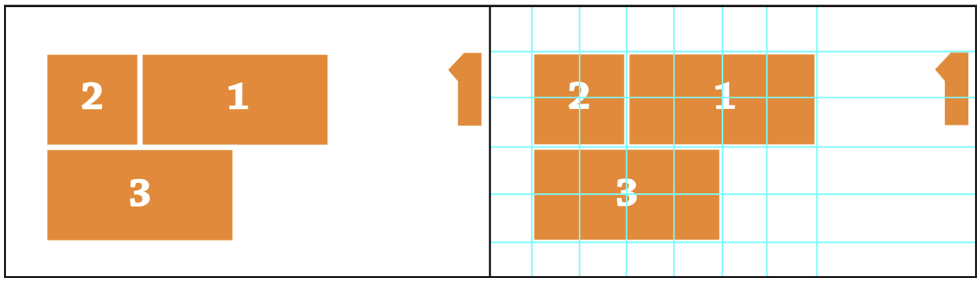


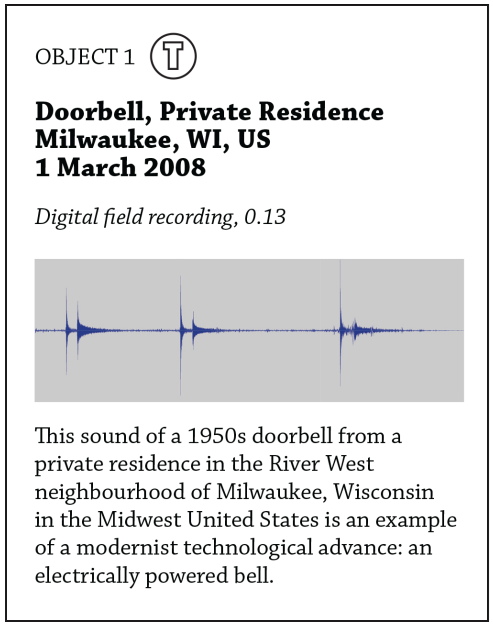
Figure 32. Left: Detail of the MOPS Map representing 'Floor 1', the galleries of Natural History; Right: Detail of the Natural History galleries with grid lines overlaid. Galleries 1 and 3 are composed of 8 squares each, while Gallery 2 is composed of 4 squares. When checked against the MOPS Object List, Galleries 1 and 3 contain 8 sound objects each, while Gallery 2 contains 4 sound objects; the MOPS Map as a whole also functions as an infographic that depicts the relative sizes of each Gallery's collection of sounds. Images by author.

square units that corresponds to the number of sound objects within the gallery – the map does not only illustrate an imaginative space, it is also an infographic (Figure 32). Visitors can use the map to determine how extensive each gallery is at a glance, to see if a topic they are interested in is covered in depth compared to other galleries; this has helped some visitors prioritise depending on how much time they have set aside for their visit.

While the MOPS map may appear to be created only for its absurdity, I only created the map once I realised the multiple ways it could improve the visitor experience; this approach differs from the first person-perspective architectural interfaces of many virtual museums (2.3.5), which actually slow down visitor access.

3.6 'Wall text': the MOPS *Gallery Guide*'s interpretation strategies

MOPS interpretive 'wall text' is contained in its *Gallery Guide* book. The book has already been through several revisions (Previous *Gallery Guide*s, Appendix 1) since its start as a PDF that I showed to museum visitors on my own iPad. As each subsequent version of the *Gallery Guide* has been produced, it has not only included the latest sound objects added to the galleries, but the visual design of the book itself has also evolved, adding more visual cues related to the four main themes of the museum, subgroupings of objects, and wayfinding through the museum; in the future, I expect to continue refining the design of the book to further aid usability based on visitor input, as with the revisions included in Appendix 1. The current *Gallery Guide* contains an opening 'didactic panel' for each of the MOPS galleries; each sound object receives a 'wall label' (or 'tombstone', per museum practice jargon [Schaffner, 2015: p.161], a label that declares title, artist where applicable, date, and provenance).


OBJECT 1

Doorbell, Private Residence
Milwaukee, WI, US
1 March 2008

Digital field recording, 0.13

This sound of a 1950s doorbell from a private residence in the River West neighbourhood of Milwaukee, Wisconsin in the Midwest United States is an example of a modernist technological advance: an electrically powered bell.

Figure 33. Example sound object 'tombstone' label from the MOPS *Gallery Guide* (p. 61).

Accompanying each wall label is a waveform image of the sound object; these provide a visual reference for every sound on display (Figure 33). Multiple visitors have claimed that these waveform images help to 'objectify' the

sound for them. I have observed many visitors following along with the waveform images, usually by placing their finger atop the waveform picture and moving it as the sound progresses. Some visitors have also mentioned the waveform images became what attracted them to the next sound they would listen to, similar to seeing an enticing physical object in a distant vitrine in a traditional museum.

Object labels and wall text are often an integral component of the presentation of the objects on display in museums. According to F.J. North, many labels in cabinets of curiosity (at least, those that had them) tended to be handwritten by the collectors themselves (Part B, Section 3: 4), while the personal touch of writing labels by hand was North's own preferred method of label design (North, 1957: 'Fabric and Style': p.19). Candlin has noted that handwritten object labels are often encountered in micromuseums (2016: p.14). While the object labels in MOPS are not handwritten, many labels are written in the first person singular, an attempt to contrast with the detached or omnipotent narrative point of view sometimes used by label writers in contemporary museum practice.

As collecting institutions began to shift to specialised subject areas in the nineteenth century, their object labels began to shift from instruction to interpretation (Casey 2005: p.83). Interpretive object labels 'tell stories; they are narratives, not lists of facts. Any label that serves to explain, guide, question, inform, or provoke—in a way that invites participation by the reader—is interpretive' (Serrell, 2015: p.19). As often as possible while writing the MOPS object labels, I have tried to make them interpretive.

Many types of contemporary museums use wall labels for their objects on display, often publishing their own style guides for the writing of labels and texts. Ingrid Schaffner identifies several key elements for writing wall texts, including 'An active voice and short sentences' (2015: p.165). The J. Paul Getty Trust, whose in-house style guide is available online, suggests that texts should convey 'no more than one to three ideas' (2011: p.5), while authors are asked to keep in mind that the audience 'have their own priorities and organisational approach to taking in information and navigating space' (p.4). George Hein, who has written extensively on museum education, considers a constructivist model of learning as a potential ideal (1998: p.154), where museum visitors are gently guided through their own personal 'meaning making' while visiting a museum exhibition (2006: p.347). A common practice derived from the constructivist learning theory is 'interrogative

labelling,' the practice of including questions – rather than declarative statements – on object labels; when written from the perspective of visitors, questions can encourage thinking about how an object connects with their own experience. Bitgood points to several studies that claim 'labels that ask questions can be effective at provoking label reading' (2000: p.36)

Interrogative labelling is used throughout the MOPS *Gallery Guide* (nearly every gallery's opening didactic panel ends with questions); however, there is variety in how the tombstone labels and didactic texts have been written. Some texts are written in a clinical, detached voice, while other texts are sarcastic, which attentive readers may understand as an indication that some of the sounds on display have been chosen ironically (Gallery 7, Object 4, p.43). Still other label texts are written in the first person and tell the story behind the sound object's acquisition (Gallery 1, Object 5, p.18; Gallery 13, Object 6, p.67). In Gallery 16, Object 5's label (pp.84–85) explains why a recording of an ancient Egyptian temple interior includes the sound of an overhead helicopter. While this story is entertaining, it also connects the act of recording the sound inside an ancient temple to the contemporary identity of its archaeological site – in this case, a remote area that is heavily patrolled by the military. My label writing for MOPS has attempted to, as Serrell suggests, remind visitors of the 'big idea' (1996: p.21) behind the museum's curatorial perspective: to discuss the cultural connections related to the daily experience of sounds – as an argument for the preservation and exhibition of non-musical sounds as objects within their own right. MOPS labels also take positions, express opinions, or even complain; this personalised curatorial voice is similar to that within micromuseums, where 'the labels often have a distinctly autobiographical tenor and act as proxies for the owners' (Candlin 2016: p.159). The complexity – and honesty – of the MOPS institutional voice reflects my attitudes about the humanity of museums, which I will discuss further in Chapter 5.

3.7 Case study, Gallery 20: Rituals & Events

Gallery 20 (p.102 of the *Gallery Guide*) is the largest gallery in the museum, containing thirty one individual objects. Like the four main themes of MOPS, 'Rituals & Events' was an intentionally vague title – the earliest version of this gallery was less than half the size it is at the time of writing, a catch-all gallery for a few small subgroups of

sound objects that I wanted to include but did not feel were significant enough to warrant separate galleries of their own. As MOPS continues to expand, this gallery's title and overall organisation will most likely be refined to better reflect its contents and may be broken up into multiple smaller galleries.

Each subgroup within the gallery builds upon the previous one, moving towards an end point. As the largest gallery in the museum, Gallery 20 is the best example of the 'mix tapes of mix tapes' concept discussed in 3.3. Like the rest of the museum, these subgroups have a combination of themes, some serious, playful, or sarcastic. Only two of these subgroups are explicitly mentioned in the *Gallery Guide* text – subgroup 6, Street Music, and subgroup 8, Protest – with the rest of the subgroups implied by the *Gallery Guide*'s page designs, which group like-themed objects together but leave deducing the intention behind their placement up to visitors. Some of these unnamed subgroups are fairly obvious, while the objects within others may be more difficult to connect, leaving visitors to determine what exact meaning may be made from them, if any.

OBJECT INFORMATION ·115

LISTENING CLOSE-UP

Protest

Making Voices Heard

The sound of mass protest can at once terrify and electrify the listener. Unruly voices, portable musical instruments, and raw noise rebound against walls and windows while other strophic chants, delayed by distance, fuse into canonic chorales of anger and discontent. You might not know the words but you can hear the emotion. Are we hearing the sound of freedom?

Mass protests also remind us that political democracy does not necessarily reflect popular sovereignty. A protest may be an expression of political will free of scheduled (and possibly rigged) elections and outside the preordained (and often tendentious) process of electoral recall. Or do we hear a prophetic rehearsal, a utopian pre-echo or apocalyptic herald of what society might be?

In his classic 1968 essay 'The Nature of Mass Demonstrations,' John Berger suggests that 'demonstrations are meant to reveal the strength of popular opinion or feeling: theoretically they are an appeal to the democratic conscience of the State. But this presupposes a conscience which is very unlikely to exist. If the State authority is open to democratic influence, the demonstration will hardly be necessary...'

But not all demonstrations arise from a mass of common consent or purpose, nor do all communities exert democratic influence outside of protest. Nonetheless, a mass protest, as Berger writes 'is an assembly which challenges what is given by the mere fact of its coming together.'

Protest is a place to talk and hear other opinions. Protest opens a route to reconnect amid a society where close social bonds of friendship and family and the chance of random social connection have begun to evaporate into a cloud-based commodity seen (and seldom heard) through phones and laptops.

Protest presents the listener with binary choices: Join or flee. Think or forget. Activist Deray McKesson offers the following credo: 'Protest is confrontation. Protest is disruption. Protest is the end of silence. It is not the solution, it creates space for the solution.'

– Christopher DeLaurenti

OBJECT 25

PETA protest:
Chicago, US
3 January 2007

Digital field recording, 1.31

The PETA organisation (People for the Ethical Treatment of Animals) often stages protests to raise awareness about animal cruelty. This particular protest occurred on a cold winter day in Chicago.

GALLERY 20

Figure 34. Listening Close-Up sidebar introducing Subgroup 8: Protest, p.115 of MOPS *Gallery Guide*. Note: Navigational tab in lower right corner of page added to entire *Gallery Guide* design due to visitor suggestion. Design by author.

Not all subgroups within the Galleries are called out by name in the *Gallery Guide* or on the mobile. As mentioned in 3.2. above, using the built-in Music app on the iPhone brings limitations to the amount of granular data that can be easily communicated about the sound objects on the mobile itself; therefore, it is up to the *Gallery Guide* to communicate the subgroups. Most subgroups are implied via the *Gallery Guide*'s page

design, grouping like types of objects on either a single page or a two-page spread, sometimes accompanied by a 'Listening Close-Up' – a didactic panel that introduces a concept related to the subgroup (Figure 34). This lack of overt subgroup labelling allows the objects as much independence as possible, letting visitors make their own connections between objects. Part of this decision stems from wanting to keep the design of the *Gallery Guide* as clean and uncluttered as possible so as to not visually overwhelm the visitors. Again, the iterative process of the project allows for this to potentially change in a future version depending on visitor feedback.

The subgroups in the Rituals & Events gallery begin with ceremonies of worship within the religious traditions of Islam, Hinduism, and Christianity. The subgroups move through different types of activities that are either repetitive within a single person's life or within the life of a larger community, taking a political turn with the sounds of protests (subgroup 8), a brief examination of United States nationalism (subgroup 9), and finally, death (subgroup 10), ending with a recording of a famous cemetery.

Subgroup 1: Worship

Object 1. Call to Prayer: Talaat Harb Street, Cairo, Egypt

Object 2. Madhavi: Jewalikar Family House, Gurgaon, India
Recorded by Cristina Sousa Martínez

Object 3. Chanting: Al-Azhar Mosque, Cairo, Egypt

Object 4. Sunday Services: Munich Dom church, Munich, Germany

Beginning with a series of religious activities prepares visitors to interpret the sound objects that follow as recurring activities within human culture. The order of the objects here reflects the idea of beginning a ritual, then personal connection to ritual, and then two instances of group ritual from different traditions.

Subgroup 2: Forms of drinking

Object 5. Public Water Fountain: Corfu, Greece

Object 6. Pub Worker Sweeping Street: Chez Paul II, Appenweier, Germany

Object 7. Hofbrauhaus: Munich, Germany

While there is a gallery dedicated to Weather & Water in the Natural History floor of the museum, this subgroup begins with a ritualised use of water as a necessary component of human survival and daily ritual. Next up, drinking alcohol is presented as

another ritual that some might see as a necessary component of human survival as well.

Subgroup 3: Children's entertainment

Object 8. Penny Arcade: Brighton Pier, Brighton, UK

Object 9. Carousel: Santa Cruz Boardwalk, Santa Cruz, California

Object 10. Rollercoaster: Centreville Island, Toronto, Ontario, Canada

Reacting to the previous subgroup's final sound object – festive pub music for adults – the next subgroup explores instances of fun: specifically, childlike fun based around activities in theme parks and carnivals.

Subgroup 4: Commerce

Object 11. World's Oldest Bookshop: Bertrand, Lisbon, Portugal

Object 12. Street Market: Cairo, Egypt

Object 13. Feira Da Ladra Flea Market: Lisbon, Portugal

Object 14. Shop Owners Banter: Stratford Centre, London

Object 15. Amolador trumpet: Lisbon, Portugal, recorded by João Caldas

Object 16. Bird Whistle Salesman: Brighton, UK

After being taken for a ride on a roller coaster, visitors are then taken for a ride of another kind: they are introduced to the sounds of capitalism and commerce. While the first four objects in this gallery deal with fairly traditional forms of commerce, the last two objects reveal a slightly more melancholy version of capitalism. Before finishing on the slightly eccentric idea of a man walking around Brighton all day selling bird whistles, the second-to-last sound of this subgroup presents a soundmark related to Lisbon, Portugal, and was contributed to the collection by the Portuguese artist João Caldas. It is the sound made by amoladors, men who ride around the city of Lisbon on bicycles to provide to the inhabitants of local neighbourhoods a variety of services, such as sharpening knives or repairing umbrellas, for a small fee. Amoladors each carry a small plastic trumpet and play a very specific short tune to alert neighbourhood residents that they are on the street and ready to serve them. According to Caldas, this was a sound he heard often during his childhood in the 1980s, but has since nearly all but disappeared from the local acoustic environment. He also suggested that this was the one sound he always equates with Lisbon – 'I hear an amolador song and I instantly know I am home,' he told me (Caldas, 2017). In the corresponding object text in the *Gallery Guide*, I ask visitors: '[S]o what happens to

people like João when the amoladors are gone? What will sound like home?' (110).

Subgroup 5: Marriage

Object 17. Wedding Musicians Practising: Maulbronn Monastery church, Germany

Object 18. Pride Parade: San Francisco, US, 6 July 2008

From commerce, the topic briefly returns to rituals with a religious connotation. This pair of recordings is one of the more politically charged curatorial decisions in the museum designed to challenge visitor notions of sexuality and gender in relation to ritual. The first recording, from Maulbronn Monastery in Germany, is of a pair of musicians rehearsing music for a traditional Christian wedding ceremony that will be happening later in the day; an organ player and a male vocalist perform formal music, with the vocalist's high-pitched vocal range challenging stereotypes about what a male singer might sound like. The second recording was made at the annual Pride Parade in San Francisco in 2008, the year California legalised gay marriage. In this recording, a lesbian marching band sings 'Chapel of Love', a pop song written in 1964 by Jeff Barry, Ellie Greenwich, and Phil Spector, which tells the story of a protagonist who is on their way to become married and is ebullient because they will 'never be lonely anymore'. The crowd at the parade erupts with screams of joy at the end of the song.

Subgroup 6: Street music

Object 19. Myra (Street music from Crete): Athens, Greece

Object 20. Busking Band: Underground District Line train, London

Object 21. Duelling Buskers: South Bank, London

This subgroup presents three very different experiences of street music, one from Athens and two from London. The third recording makes use of stereo recording to illustrate the potential cognitive dissonance when too many buskers perform in the same place. This section of Gallery 20 was partially inspired by a survey of London buskers in 2012 (Kytö and Hytönen-Ng, 2016). As one of the only subgroups dedicated to musical sounds, it was included because the musicians need to be highly cognisant of the sounds that surround them, with Object 21 presenting a situation where two buskers were playing within earshot of each other, the two songs mixing together into near-incoherency.

Subgroup 7: Sport

Object 22. Chicago White Sox Stadium: Chicago, IL, US

Object 23. Running Bases on a Softball Diamond: West Park, Ann Arbor, MI, US

Object 24. Zamboni: Red Arrow Park, Milwaukee, WI, US

A vague thematic continuation from the competitive nature of the last sound of Subgroup 6, this trio of objects was added after I received feedback from Burçak Madran, the secretary of the International Committee for Museums and Collections of Archaeology and History, who noted during the Q&A at an ICOM conference related to industrial heritage in Baku, Azerbaijan in October 2017 that MOPS lacked any sport sounds. I subsequently added these recordings, the only ones in my archives related to sport (at the time of writing).

Subgroup 8: Protest

Object 25. PETA Protest: Chicago, US

Object 26. Xalapa Protest: Xalapa, Mexico, recorded by Cristina Sousa Martínez

Object 27. Anti-Austerity Protest: Corfu, Greece

Object 28. Friday Of Departure: Egyptian Revolution Protest, Alexandria, Egypt, recorded by Khaled Kaddal

From the competition and conflict of sport, the next subgroup documents political conflict. While visiting Corfu, Greece in October 2011 to present at a conference, I was accidentally caught up in an anti-austerity protest, and made a recording of it. When originally compiling the objects for my museum, I had hoped to include a section of protest recordings, but only had access to this recording. Upon meeting the Egyptian sound artist Khaled Kaddal, he told me that he recorded the Egyptian revolution protests in Alexandria, Egypt the day Hosni Mubarak stepped down from the presidency. He agreed to donate his recording to the museum's permanent collection. Soon after, the museum's former curatorial intern Cristina Sousa Martínez, donated a recording of a political protest she made in her hometown of Xalapa, Mexico. Finally, I invited sound artist and composer Christopher DeLaurenti, a sound artist and researcher who has previously written about and recorded the sounds of political protest (DeLaurenti, 2015), to contribute the introductory text for this subgroup's display in the pages of the museum's *Gallery Guide*. See 3.9 for more detail about DeLaurenti's contribution.

Subgroup 9: United States nationalism

Object 29. 4th of July Fireworks: Albany Park, Chicago, US

Object 30. Flagpoles: University of Michigan, Ann Arbor, MI, US

Presented as a kind of 'flip side' to the previous subgroup, these two sound objects are related to American pride: the sound of fireworks on Independence Day, and the sound of flagpoles (which usually fly the US flag, but on this day were empty); most institutions in the US fly the country's flag each day, another form of ritual. As someone born a US citizen, these are expressions of love of country that I am most familiar with and felt most comfortable including as a counterpoint to the protest recordings. The transition between these two subgroups could potentially be seen as an opportunity for constructivist learning – that draws upon a milieu of contexts including an individual's personal experience – among visitors when they follow the curatorial paths laid out for them within the galleries or the Guided Tour playlists, similarly to the same types of meaning-making accomplished by galleries of physical objects (Falk et al., p.325); Subgroups 9 and 10 offer two very different relationships between citizens and their countries of origin, communicated via sound.

Subgroup 10: Death

Object 31. Père Lachaise Cemetery: Paris, 30 September 2012

While the object labels of the two sound objects in the previous subgroup are presented without editorial comment, there are two clues as to what I might be trying to say about nationalism via these objects – the first being that the flagpoles in the second object are empty; the second that they have been placed on a page in the *Gallery Guide* that faces a page with a recording of a cemetery. Not everyone in the MOPS audience might pick up on these clues, nor even agree with my own negative opinion of nationalism, but the information is there in a subtle way – possibly so subtle that I may be the one capable of understanding what I am trying to say. Nevertheless, this is an instance of mix tape-inspired object positioning and a subtle inclusion of the artist's personal opinion that I have allowed to become a MOPS institutional opinion, in an attempt to humanise my museum's point of view. In the end, however, death is the ultimate event, with its acknowledgement and mourning a ritual that is an integral part of the human experience.

3.8 Displays of mechanical soundmarks

How do people interact with mechanical post-industrial sounds in their daily life?

What follows are case studies of two MOPS collections that compare similar mechanical sounds across multiple cities. The first, Gallery 18: Transport, features sound objects of public transport systems; the second, Gallery 7: Audio Interfaces, contains recordings of the sounds made by audio traffic signals – electronic sounds triggered at pedestrian crossings to assist the visually impaired in crossing the street.

These collections are primarily artistic collections that, through their long-term accretion, have begun to share a commonality with an anthropological study; however, I do not view them as scientific collections, but as the output of a creative practice – there was no hypothesis to test, and the collection is organic, based upon my own travels, similar to creative projects of visual collection like *Semáforos*, an ongoing video project begun in 1995 by the Belgian-born Mexico-based artist Francis Alÿs <http://francisalys.com/semaforos/>. In this project, Alÿs collects photographs and video of the iconographic indicators for walking that are displayed on lampposts in cities around the world. They are presented in no apparent order, stripped of context except the name of the city in which they were documented. While not intended to act as a museum installation, Alÿs' video displays a similar notion of intuitive collection and careful documentation that I have attempted with many of the MOPS recordings. These two displays play with the notion of appearing to be scientific classification through their presentation (providing provenance, corresponding waveform images, and other didactic information). Yet they have inconsistencies between them: e.g. the pedestrian crossing signals include their date of collection, and are arranged in a seemingly random order not by date of acquisition, geographic region, or any other noticeable classification system; while the transport recordings are presented in alphabetical order by name of city collected, with no date of acquisition provided. As previously mentioned, I chose to display the transport sounds in city order to reinforce their value as local soundmarks; due to the large number of objects, their ordering by location becomes noticeable. Conversely, the small subgroup of traffic signals are introduced by a didactic panel that defines them as soundmarks, along with photographs of some of the signals that were collected. Again, page layout and clean design are a factor in these inconsistencies, which will most likely be readdressed if MOPS is updated again.

Through the examples discussed below, I hope to demonstrate that both these sound

types – the transport sounds and pedestrian crossing signals – function as cultural objects, linked to particular places and local notions of place, via their identity as soundmarks. By listening to multiple instances of like-intended mechanical sounds from different cities and countries, I believe it becomes clear that these sounds, once noticed, are significant events within the sensory experiences of local people who regularly hear them within their acoustic environments.

3.8.1 Soundmarks in the MOPS Transport Gallery

There are twenty eight sound objects related to public transport in Gallery 18. Although the sound objects could have been subdivided by type, within the gallery they are presented in alphabetical order by city name. This was implemented for the initial version of this gallery when it held far fewer sound objects, and has been carried through to the gallery's current incarnation. Having completed the analysis below, it now feels that the gallery could be improved by presenting these sounds in grouped typological categories, which will be implemented when the Permanent Collection Galleries are next updated. For the purposes of analysis of the collection and curatorial strategies at work behind their display, I will discuss them as a series of nine typological subgroups: (1) Inter-city Trains, (2) Intra-city Trains, (3) City Trams, (4) City Buses, (5) Personal Street Transport, (6) Water Transport, (7) Air Transport, (8) Tourism Transport, and (9) Mechanisms of Transport.

Subgroup 1: Inter-city trains

Object 1. Alexandria, Egypt: Train To Cairo

Object 9. Chicago, US: Amtrak Hiawatha Train, Quiet Car

Object 23. Speyer, Germany: Train to Karlsruhe

Each of the above examples is a train travelling directly between two cities, on a return trip to the location I was currently calling 'home'. Each train sounds unique, even though all three examples were recorded during times when the trains were particularly quiet: Object 1 was recorded early in the morning, Object 9 was a train carriage specifically designated as a 'Quiet Car', and Object 23 was a late-night return from a day trip.

Subgroup 2: Intra-city trains

Object 5. Athens, Greece: Metro train

Object 11. Chicago, US: Squeaking Metra Train

Object 18. Paris, France: Métro Train to Montmarte

Object 20. San Francisco, US: BART train to 24th street

Object 25. Toronto, Canada: Subway, Museum Station

These objects represent train systems that serve the inhabitants of a single city; all operate underground save for Object 11, the Chicago Metra train. Again, due to the mechanical sounds of each train, plus the sounds of their announcement systems, these trains are easily identifiable with a corresponding location, placing the listener immediately in the sound recording's city of origin.

Subgroup 3: City trams

Object 2. Amsterdam, Netherlands: Tram To Rijksmuseum

Object 12. Detroit, Michigan, US: People Mover tram

Object 14. Lisbon, Portugal: Night tram

Object 16. Minneapolis, Minnesota, US: Tram Approaching

Object 22. San Francisco, US: Cable car

Object 24. Strasbourg, France: Tram

Like Subgroup 2 above, these recordings are intra-city systems, but run via electricity on tracks built into city streets that share the road with automobile traffic. The outlier in this group is Object 14, due to its late night provenance as well as the changing face of Lisbon's public transit. As Lisbon's tourist economy expands, more and more tourists have begun to flood the public tram system. Their lack of knowledge of local customs has made tram travel more inconvenient for the local population, and some tram drivers such as this one have taken to drastic measures most likely to preserve their own sanity: in this recording, the tram driver had masking-taped a portable radio to the dashboard of the tram to play Brazilian dance music, imposing his own acoustic environment upon his travelling workplace.

Subgroup 4: City buses

Object 3. Ann Arbor, Michigan, US: Number 9 Bus

Object 10. Chicago, US: Moaning Bus

These recordings do not present buses in their best light, nor are they particularly iconic examples of the sounds of public buses. They are both from the United States, so their use as scientific representatives of a broad scope of bus sounds from around the

world is limited. Object 3 is simply an average-sounding trip on a bus I often used while living in Ann Arbor, while Object 10 was a particularly strange-sounding bus that in no way represents the Chicago Transit System's bus services. Yet in terms of listening to this gallery's objects from start to finish, they provide transitions from one type of transport to another and break the monotony of listening to trains. Their inclusion was approached similarly to the contents of a mix tape, where their acoustic quality serves as a transitional sound while still adhering to the gallery's main topic.

Subgroup 5: Personal street transport

Object 8. Cairo, Egypt: Cab ride

Object 15. Milwaukee, WI, US: Harley-Davidson Motorcycles

Object 27. Warsaw, Poland: Horse-drawn carriages

This subgroup covers the private area of urban transport, sounds of transport that carry only one person or a small group of people from place to place and are either privately owned or individually hired. Object 8 was originally included because of the pop music radio station that was also playing in the cab at the time – I was pleased by the odd juxtaposition of capturing the sound of Gary Numan's 1979 single *Cars* playing on a car radio surrounded by the acoustic environment of busy Cairo traffic. Object 15 represents the tendency to fetishise personal transport in the United States: it is a recording of Harley Davidson motorcycles made during the annual 'Harley Fest' event in the city where the Harley Davidson motorcycle was invented. Object 27 represents a form of transport that was once commonplace in urban areas and now exists primarily as both a luxury and a curiosity.

Subgroup 6: Water transport

Object 4. Ann Arbor, Michigan, US: Paddle Boat, Gallup Park

Object 7. Cairo, Egypt: Boat Ride To Nilometer

Object 19. Pelee Island, Ontario, Canada: Ferry boat

Object 26. Venice, Italy: Boat in a canal

Object 4 is a recreational form of water transport, available when the seasons permit it in the cold Michigan climate. Object 7 was captured as the result of a friend hiring a local man's personal boat to see if it was possible to travel with it inside the ancient Nilometer, an architectural structure built on the Nile in order to keep track of its annual

flooding in the days before the Aswan High Dam, since the Nilometer's pedestrian entrance was locked at the time of our visit. The boat was not an official tourist boat and its pilot more than likely knew we would not be able to enter the Nilometer. The other recordings in this subgroup represent more public forms of water transport, with Object 26 being the sole exception since it may have been a private boat; however, boat travel in Venice's canals is more analogous to road-based intra-city travel.

Subgroup 7: Air transport

Object 6. Baku, Azerbaijan: Flight to London take-off, 2017

This object currently has the longest duration of any MOPS sound: at 7 minutes and 39 seconds, it poses a challenge to visitors with short attention spans. It is also the only object currently on display in MOPS accompanied by a health and safety warning in the *Gallery Guide* (p.94), as this extended recording of the flight crew preparations for the take-off of a passenger jet could potentially trigger an aviophobic reaction. I believe this recording also disproves R. Murray Schafer's assertion that 'No sound contains less interesting information than that of an airplane' (1969: p.58).

Subgroup 8: Tourism transport

Object 13. Karlsruhe, Germany: Steam Train, Schloss Grounds

Object 28. Zagreb, Croatia: Funicular

These sound objects have been included mostly because they function as curiosities. Object 13's train is a tiny replica of a steam train that transports visitors (mostly families with young children) around the grounds of the Karlsruhe Schloss, the city's castle. Object 28 is a funicular, a specialised train designed to traverse the steep incline of a mountain; as such it is not inherently a transport solely designed for tourism, but this particular funicular seems to cater to the tourist crowd, judging by the driver's repeated boasts (in English) that this funicular is 'the shortest in all of Europe'.

Subgroup 9: Mechanisms of transport

Object 17. Paris, France: Escalator at St Lazare train station

Object 21. San Francisco, US: Cable car underground cable

These recordings represent mechanical sounds not made by the primary mode of transport associated with their sources, but which serve vital functions in a public transport system's operation: a slightly wobbly escalator in a Paris Métro station, and the sound

of an underground cable responsible for keeping a San Francisco cable car on its track, recorded via an open access hatch in the pavement nearby. These sounds are integral to the experience of these modes of transport; regular commuters using these systems would notice the sound of the faulty escalator and also notice its disappearance once repaired; a local commuter would be familiar with the sound of the cable mechanism issuing forth from the pavement.

3.8.2 Soundmarks in the MOPS Audio Interfaces Gallery: street crossing signals

Gallery 7 contains a subgroup of eight street crossing signals for the visually impaired from different cities. The recordings have been edited to last approximately one minute, in order to achieve the best balance between duration, information, and engagement with visitors' attention. The similar running time also helps visitors in making comparisons between them. Below is a brief description of each example sound object.

Object 8. IIT Campus, Chicago, US

This pedestrian crossing was the first example I ever recorded; it caught my attention because the road junction was quiet, and the electronic chirping sounds appeared to be echoing off the surrounding buildings. I made several recordings, trying to isolate the sound of the signals from the sounds of traffic or pedestrians – a misguided strategy that led to more frustration than success, and which I have abandoned as I am now more interested in foregrounding a particular sound within its 'natural environment' for contextual reasons.

Object 9. Port of San Francisco, California, US

This recording features a crossing signal that is a combination of beeps (indicating the presence of the pedestrian crossing) and a grinding tone (indicating when it is safe to cross). Besides the obvious presence of traffic, a street musician plays percussion at an 'island' in the middle of the rather large pedestrian crossing.

Object 10. Ann Arbor, Michigan, US

This signal uses beeps similar to those in Object 8 above; however, the beeps play at two speeds, with the faster speed indicating that it is safe to cross. In combination with this, a voiceover also chants when the 'walk' sign is on, and a countdown from ten indicates that

time is running out.

Object 11. Munich, Germany

This signal features beeps loud enough to be heard on both sides of the street simultaneously regardless of traffic noise level, captured in this recording as one beep per stereo channel – accomplished by standing partially in traffic to hold the microphone at the proper angle. The beeps never change speed, pitch, or timbre, and only sound when it is safe to cross.

Object 12. Toronto, Ontario, Canada

This pedestrian crossing uses electronic whistling tones that sound vaguely bird-like in the resting mode (indicating the pedestrian crossing's presence) and then switches to a double beep similar to the Munich system when it is safe to cross. Notably, this is the same system and sound that appears in the above recording at the Illinois Institute of Technology in Chicago, in 2002, as well as a pedestrian crossing I lived near in Milwaukee, Wisconsin, US before I began making field recordings. Due to the three cities' geographical closeness, this possibly indicates the presence of localised standardisation that I have yet to find evidence of elsewhere.

Object 13. Antwerp, Belgium

This signal uses an analogue ticking sound at two speeds: slow for wait, fast for walk. It is similar in speed and timbre to the Zagreb system below, yet appears to be fully analogue in nature rather than electronic or synthesised.

Object 14. Zagreb, Croatia

This signal uses two different sounds to indicate opposite sides of a street: an electronically generated click on one side, and a beep on the other. When it is safe to cross, the sounds on either side of the street increase their speed in unison, and the extreme difference in the tones aids the perception of how far across the street the pedestrian has crossed as the sound shifts from one side to the other, a feature I have yet to experience elsewhere.

Object 15. Aarhus, Denmark

This recording captures primarily one side of a pedestrian crossing; due to traffic, the opposite side of the street's tones are difficult to hear, but occasionally become audible for a few seconds. This system uses the same tone on either side of the street, but the

sound itself is a curious blend of a click and a beep, a hybrid of the clicks and beeps heard separately in Object 9 above. The relatively slow pace of this signal make it particularly lugubrious when compared to the other objects in the gallery. The single strike of a neighbourhood church bell is also heard in the distance.

3.8.3 Soundmarks as objects of curatorial care

The two collections of mechanical sounds I have just surveyed above are examples of soundmarks as defined by R. Murray Schafer. Although Schafer often found the majority of 'man-made' sounds detrimental to the acoustic environment, he did once describe the sound of a train whistle as 'the unifying soundmark of [Canada]' (1994: p.72).

In the MOPS Transport gallery, each of the cities' transport systems displays a particular sound – not just specifics like the vocal announcements of train stations, but also the particular timbres of beeps to alert passengers, the sounds of different types of automatic doors, engines, etc. These sounds alert passengers that they are travelling within a specific community.

Although the traffic crossing signal sounds described above are designed for use by people with a visual impairment, they are also heard by everyone capable of doing so and heard consistently in specific locations. These signals not only assist in crossing streets, but their presence helps to remind all members of a community which road junction they are currently at, or which neighbourhood they are in; they become part of the auditory signals that locals use to navigate. The unique design of each city's street crossing signal system is a soundmark that not only guides traffic flow, but also helps to identify a community – one only has to think of the marketing and merchandising of a phrase such as the London Underground system's 'Mind the Gap' announcement to realise the power that the sounds of transport systems possess to become symbols of a community.

As such, there is a vast world of sonic cultural material that, if it is collected at all, is usually done so by libraries and archives rather than museums, where it is (mostly) left to languish unheard. Institutions such as the British Library's Sound Archive hold phenomenally large collections of recorded sound; and although they do exhibit selections of their sound collection, the majority of their collection remains locked away in the archive, with only portions of it currently digitised and available online. There is a great

difference, however, in accessing sounds in an archive (or even on a website) versus encountering them on display in a museum – people interested in the collections of the British Library Sound Archive must do their own digging to discover what may be relevant to their interests. Museums remain the world experts at the curation and exhibition of cultural heritage, and as such, I believe they could develop new audiences for sonic heritage if they chose to display sounds, particularly soundmarks, as objects.

3.9 Conclusion: MOPS as exhibition

In ICOM's *Key Concepts of Museology*, the word 'exhibition' is defined as 'the result of the action of displaying something, as well as the whole of that which is displayed, and the place where it is displayed' (Desvallées and Mairesse, 2010: pp.34-35). MOPS can be said to exhibit the sound objects in its galleries via both the one-to-one visits to the museum, as well as the multiple occasions when it has been presented to larger audiences at conference presentations and public talks I have given during which I have played selections of sounds from the MOPS collections. The mobile phone upon which the MOPS sound objects are kept is a metaphorical architectural space – also referenced by the MOPS map which presents the museum's contents in a visual, spatial representation – the 'place' where its sound objects are exhibited. This place happens to be portable, and exists wherever the mobile, the map, and the *Gallery Guide* are handed over to visitors. In a world where pop-up galleries and exhibitions are an increasingly regular occurrence across many areas of museum practice (Grant 2015; Sutton 2019; Zinn 2018), as well as the extensive lineage of non-traditional museums to this point, MOPS is less radical in its portability than in its curatorial perspective of displaying recorded sounds as non-musical museum objects.

Just as the definition of museums has changed over time, attitudes towards what makes a display an exhibition have also evolved. One long-standing notion is that exhibitions are essays created by a curator's 'vision' (Schaffner, 2015: p.165); however, beginning in the 1990s, the idea of 'discursive exhibitions' – displays that are allowed to accumulate and evolve over time (O'Neill, 2012: p.128) – saw curators and artists collaborating together to produce exhibitions that could be seen as open, creative works intended to be constantly revised. As both curator and artist within MOPS, I have applied

an iterative methodology that has unfolded over time, with each new version of MOPS adding new narratives to its collections based on visitor feedback; for example, Version 3 of MOPS added a fourth main theme, Space & Architecture, in order to begin telling stories about sound's relationship with space. Version 4 added new galleries of sounds related to medical practice, as well as the preparation and eating of food. New subgroups within galleries appeared, such as the protest sounds in the Rituals & Events gallery; this subgroup is also accompanied by a text about the sound of protests contributed by artist and researcher Dr Christopher DeLaurenti, an expert in the sound of political demonstrations. The form of this text, as an offset sidebar labelled as a 'Listening Close-Up,' is another form of storytelling used throughout the MOPS *Gallery Guide* – a way to tell more detailed stories about the ways sound intersects with human culture. Version 4 added several new Listening Close-Up texts on subjects like the invention of the electric doorbell (p.61), the disappearing bell sounds of London (pp.90–91), and the culture of busking – musicians performing on the street who must contend with other sounds of the city (p.112). Version 4 also saw a gallery relocated from one of the four main themes to another: Archaeology was moved from Science & Technology to Art & Culture, to better reflect the connection its contents has with ancient world heritage. These and other revisions came about as a result of allowing the museum to change through conversations conducted with MOPS visitors. Feedback from visitors is one of the most significant features within the subject of the following chapter: the performative nature of visiting MOPS.

Chapter 4
Performing the museum: visiting the Museum of Portable Sound

4.1. Introduction: MOPS as an exhibition space and performance piece

MOPS is both a functioning museum and an art project. Along with interrogating the possibility of sounds as museological objects, it also explores the concept of museums and museum objects in the post-digital age through its absurdist conceit of putting sounds on a non-networked mobile phone and calling it a museum. This exploration is re-explored every time MOPS is visited. In this chapter, I will unpack the performative nature of MOPS via a discussion of the overlaps between museums and performance as viewed through the lens of what occurs during a typical MOPS visit. I will explain how I have attempted to design a shared, slightly improvised performance between myself, the MOPS materials, and the person visiting the museum in a way that reinforces traditional notions of what a museum can be, yet also manages to question traditions of institutional authority by empowering visitors to bring MOPS to life each time it is visited.

4.2 Performance and museums

As an artist's museum and an art object itself, the MOPS's performative elements illustrate that performance 'locates the viewer and the environment as vital elements in the making of the art object' (Casey, 2005: p.80). Museologists have asserted that museums and exhibitions are imbued with a kind of theatricality; as Casey also states, 'museums have always been elaborate stagings' (2005: p.79). As the study of museum visitors began to scrutinise types of behaviours demonstrated by museum visitors (Falk, 2010; Hooper-Greenhill, 2006), the notion of the visitor-as-performer has been embraced by museum practice, with curators and exhibition designers treating visitors as collaborative partners in the performance of knowledge (Bennett, 2013: p.19). Duncan (1995: pp.7–20) suggests that museum visitors perform a sort of preordained ritual when visiting art museums, while Vivian Patraka (1996: p.99) claims museums are performative sites due to their architecture, design, and use of objects as representations of culture. Museum theorist Barbara Kirschenblatt-Gimlett assigns the role of performer to the museum itself,

noting that a museum's exhibitions are the tools through which institutions 'perform the knowledge they create' (1998: p.3).

As noted in studies related to material culture (Mitchell, 2006: p.385), one aspect of performance across many cultures is as a means of transformation, both of people and objects. If museum visitors can be viewed as performers, I believe the person-to-person meetings I have held with MOPS visitors have shown evidence of such transformations; multiple visitors have stated their visit made them think differently about the meaning of sound in their life and their relationship with museums. One visitor (McKinney, 2018) writing in a post-visit email said 'visiting your museum has changed the way I'll think about every museum I visit going forward.'

MOPS' ability to transform opinions may be due in part to my insistence upon meeting with MOPS visitors and engaging them in conversation, which provides the museum with a human face; as Candlin notes, it is unusual for museum visitors to engage in a private meeting with an institution's curators (2016: p.21), so my presence as the person responsible for MOPS empowers visitors by allowing them to directly engage me with questions and, most importantly, suggestions. In the introduction to this thesis, I briefly described the format for a typical visit to MOPS (0.2). This chapter will expand on the specifics of the MOPS visit from the perspective of visitors and myself. Through this description, I intend to demonstrate how the visit encounter 'performs' MOPS, and subsequently acts as a site of performative meaning-making.

4.3. The MOPS visit encounter: a shared performance

Visitors to MOPS usually begin their experience via a contact form on the MOPS website (Figure 35) to express their interest in visiting. Upon receipt of their request, I respond with a variation of the following standardised email (Figure 36).

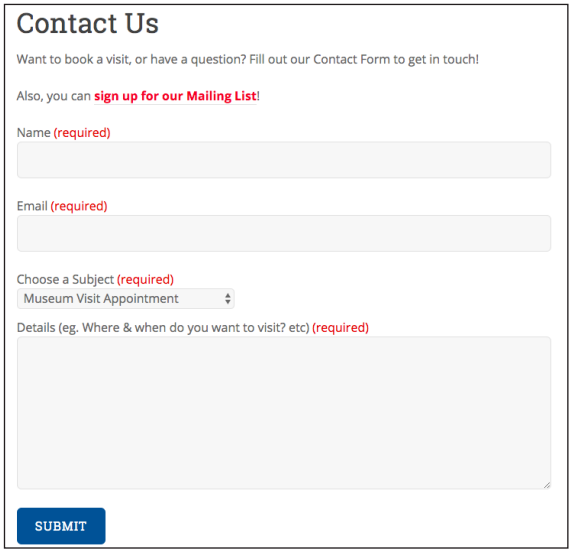
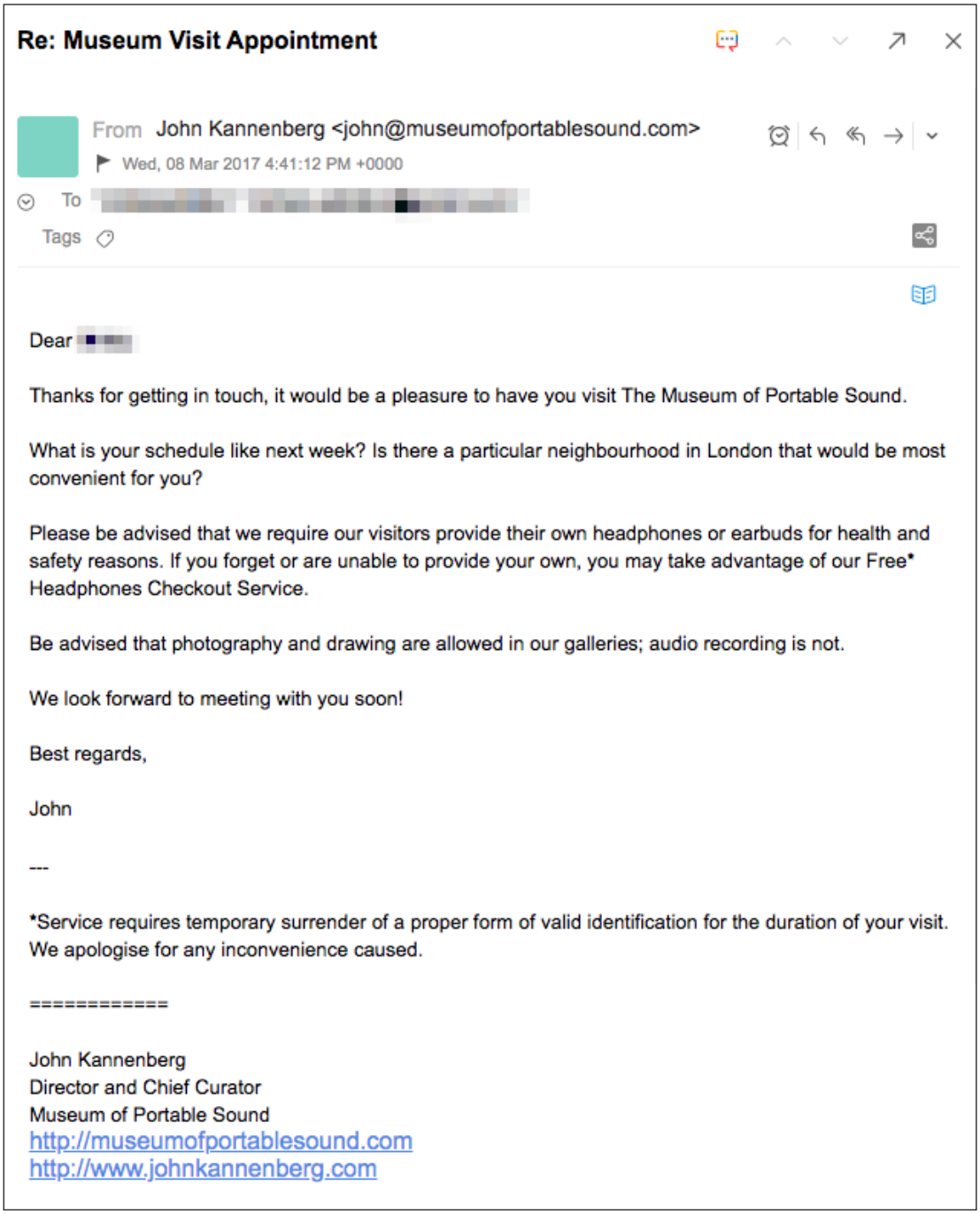


Figure 35. Online Contact Form for use by potential MOPS visitors to initiate a museum visit, < https://museumofportablesound.com/contact-us/>



Re: Museum Visit Appointment

From John Kannenberg <john@museumofportablesound.com>
Wed, 08 Mar 2017 4:41:12 PM +0000
To [redacted]
Tags

Dear [redacted]

Thanks for getting in touch, it would be a pleasure to have you visit The Museum of Portable Sound.

What is your schedule like next week? Is there a particular neighbourhood in London that would be most convenient for you?

Please be advised that we require our visitors provide their own headphones or earbuds for health and safety reasons. If you forget or are unable to provide your own, you may take advantage of our Free* Headphones Checkout Service.

Be advised that photography and drawing are allowed in our galleries; audio recording is not.

We look forward to meeting with you soon!

Best regards,

John

---

*Service requires temporary surrender of a proper form of valid identification for the duration of your visit. We apologise for any inconvenience caused.

==========

John Kannenberg
Director and Chief Curator
Museum of Portable Sound
http://museumofportablesound.com
http://www.johnkannenberg.com

Figure 36. Standard reply from MOPS email account to a request for a visit.

While I created the situation for a meeting, this email leaves room for input from visitors by asking them if they have a preferred meeting spot, a subtle indication that they will share a level of control over the visit with me. While that co-conspiratorial signal is hopefully apparent, the 'voice' of the message is cordial but professional, immediately establishing the museum's policy towards headphones while acknowledging the absurdity of a one-person institution communicating on behalf of themselves ('We apologise for any inconvenience caused' is a typical phrase used on signage in major museums throughout

the UK; in this context, 'we' might either not be noticed by visitors, taken as a legitimate apology, or interpreted as an absurdist use of the plural form by one person referring to themselves). The tone and word choice in these initial emails attempt to mimic the formal tone of communications with a large traditional museum institution while also hinting that I am aware of the potential absurdity of asking a stranger to meet me in a public place to listen to my mobile.

On the day of the visit, I make every attempt to arrive early to secure seating and set up the museum materials (Figure 37). Immediately visitors are put in the position to

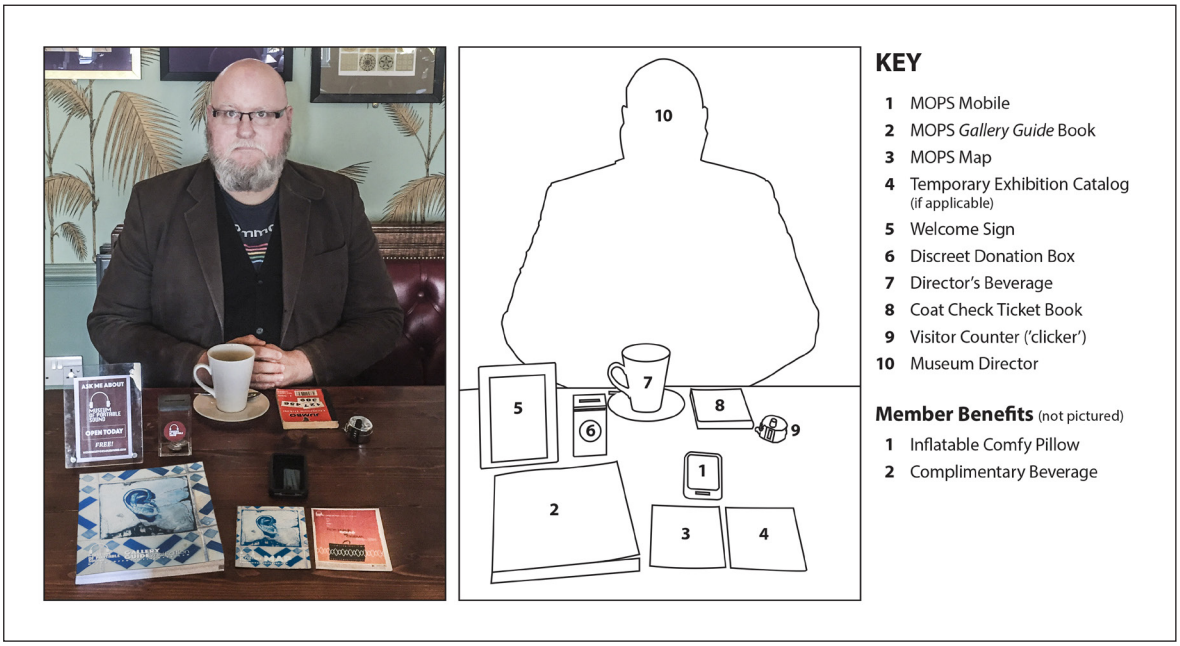


Figure 37. *What To Expect Upon Your Arrival*, infographic posted to <https://museumofportablesound.com/plan-your-visit/what-to-expect/>, designed by author.

choose whether they want to actively participate in performing the museum or not – I place the museum materials on the table in a way that claims the entire table as my own area, to let them know that this is the main objective of my time there. Often visitors begin to laugh, because they have no place to put their own belongings or, if we are meeting in a café, the food they may have purchased. At this point I have assumed the role of the 'Museum Director', and will often act slightly annoyed at having to rearrange my materials to accommodate visitors' belongings.

In Figure 37 above, I have not only shown the museum's visitor-centric materials, but also the other props that remain on display for the duration of the visit and add to visitors' perception that they are visiting a 'real' museum: a 'clicker' (to count them for my

visitor statistics); a miniature perspex donation box with a 3-D printed lid I designed; a small stand-up sign that announces the museum's presence and alerts any outside observers that it is open and free to visit; and finally, a small book of coat check tickets (Figure 38).

I ask visitors if they would 'like to take advantage of our free coat check'; this either provokes a laugh and an immediate affirmative response, or a puzzled look and a negative response – rarely is there any other reaction. If visitors agree, I give them a ticket and tell them I will watch their coat for them while they visit the museum: however, 'The Museum of Portable Sound does not accept responsibility for any lost, stolen, or missing items. We apologise for any inconvenience caused.' The absurdist nature of offering to watch someone's coat while we share the same table coupled with the formal language of my follow-up qualifying statement reminds visitors of a usually forgotten component of the traditional museum ritual.

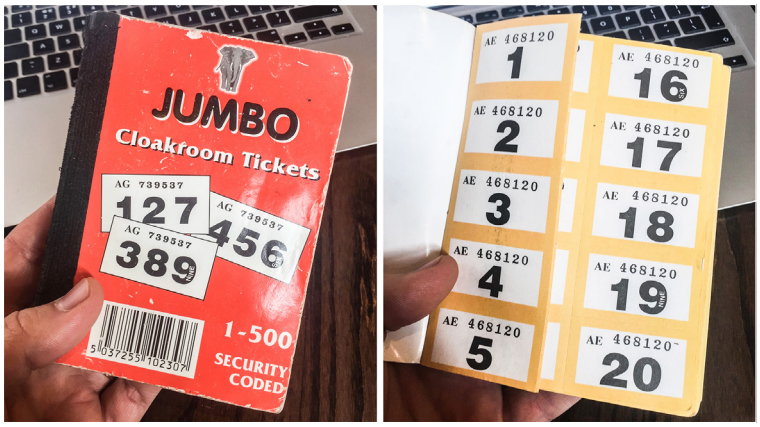


Figure 38. Coat Check Ticket Book for MOPS, photos by author.

After a brief period of pleasantries that usually involve me asking visitors how they found out about MOPS, I provide an orientation. This includes:

1. Explaining that the sounds in the MOPS Permanent Collection are organised into themed galleries, each of which is an 'album' within the mobile's Music app – so it is easiest to find a particular sound by sorting the Music app by 'album,' scrolling down to the gallery number that contains the sound, tapping on that gallery, then using the object number to find the exact sound;

2. If visitors are unsure where they would like to begin, there are options for guided tours. These include a list of ten 'Highlights from the Permanent Collection' inside the printed MOPS Map (Figure 39). There is also a series of six thematic Guided Tours (pp.7–11 of the *Gallery Guide*) which are organised as playlists within the mobile's Music app. Each playlist lasts approximately 30 minutes and includes sounds from all four themed floors of the museum. The subjects of each guided tour in the 2nd Edition *Gallery Guide*

are related to what visitors might be 'in the mood' for listening to: Learning, Music, Relaxation, Technology, Walking, or Holiday (i.e. sounds related to international travel). Although I have attempted to shift focus away from a musical interpretation of the sounds on display, there are a handful of purely musical sounds in the galleries; due to the undeniable popularity of listening to music, I hesitantly began including a guided tour featuring these musical sound objects; as of this writing, only two visitors have ever taken the Music Guided Tour. If none of the Guided Tours or Highlights are of interest I explain that many visitors merely look at the map, find a gallery that sounds interesting to them, and begin there; after that, visitors usually feel comfortable with exploring on their own.

Figure 39. Highlights from the Permanent Collection, MOPS Map, in use by visitor at the V&A museum. Photo via visitor's Instagram account.

3. I let visitors know that there is no time limit for their visit (unless I have another visit booked later in the day) and that they should feel comfortable to use the time as they see fit – I let them know I am available to answer questions, but they should not feel pressured to speak with me if they do not feel comfortable. I show them that I have either brought reading material or my laptop to do work while they visit.

4. I inform visitors that photography and drawing in the galleries are not only permitted but encouraged; however, sound recording is forbidden.

5. Finally, I ask permission to photograph them during their visit for documentation and posting to the MOPS social media accounts (Appendix 6).

Occasionally, visitors will arrive having forgotten to bring a pair of headphones, or having brought a pair of wireless Bluetooth headphones which are incompatible with the outdated MOPS mobile. When this happens, I offer the use of the museum's Free Headphones Checkout Service (Figure 40), and ask them to surrender a valid form of

identification for the duration of their visit in exchange for the use of my personal pair of over-the-ear headphones, which provide more isolation and better sound quality than most earbuds. Only once have I forgotten to return a visitor's identification, and luckily was able to catch up with them to return it, since they were on their way to the airport to fly back to the United States, and what they had given me was their current student ID card.

Once visitors begin listening to the museum, I click the clicker to count them for the museum's visitor statistics (Figure 41) and turn to my own work. At this point in the visit, it is visitors' own behaviour that controls the performance; I have set the stage, providing props and 'rules', but visitors takes over the event from here; once their orientation is complete, their experience of the museum becomes a result of their own decisions. I see my surrender of control of the situation as similar to the text scores of Yoko Ono (Ono, 2000), the wall drawings of Sol LeWitt (Lovatt, 2010), or the generative music of Brian Eno (Eno, 1996: pp.330-332): I have set up a situation/system with which someone else completes the artwork – MOPS. The design of the museum's map and *Gallery Guide* can also be seen as evidence of what Dobbs and Eisner refer to as silent pedagogy: 'the way works are displayed, the themes that relate one work to others, the content of the signage (wall panels and labels) that is provided, comprehensibility of the text, and

Figure 40. ***Free Headphones Checkout Service*** **- advert posted to MOPS social media to explain the policy. Photo by Kristina Dziedzic Wright, the first visitor to take advantage of the service (her identification is partially visable in the foreground).**

Figure 41. The MOPS Clicker counts visitor number 499, 19 February 2017. Photo by author.

the overall effectiveness of the installation' (1988: p.7). While MOPS uses no physical 'signage' per se, there are instances of written directions within the *Gallery Guide* that provide direction to visitors. The text label for Gallery 7, Object 1 (p.43) directs visitors to a related recording in another gallery, since both sound objects document the same rainstorm. Gallery 5, Object 1 (p.33) refers to Gallery 22, Object 23 (p.139) and vice versa as each of these objects contain the sound of reverberation chambers, each of which is used for different purposes. The text label for Physical Object 5 (p.169) lets visitors know that the same iPhone 4S they use to listen to the MOPS galleries is not only part of the Physical Objects Collection, but its electromagnetic field has also been recorded and is on display as a sound object (Gallery 10, Object 3, p.55).

Some visitors conduct a quick solitary visit, staying completely to themselves until they have finished listening; others immediately begin to ask questions about individual objects in the museum, or the taxonomies used to organise the sounds, or to clarify a concept they do not understand; still others immediately begin making suggestions of sounds they think should be included. Many visitors with academic backgrounds come equipped with a notebook, jotting things down as they listen or read, which they refer back to when asking questions after they have completed listening.

To date, only one visitor has implied they may try to damage or sabotage the mobile by changing its settings or trying to delete the sounds, and luckily she was merely kidding. There has been one incident where I forgot to pack the MOPS mobile when I left after a visit which occurred in the British Library; luckily, I realised the mobile was missing while in St Pancras Station across the street, went back, and found the mobile still lying upon the table where the visit took place. Visitors almost universally respect the mobile; the printed *Gallery Guide* less so, perhaps because it is a professionally printed book that seems easily reproducible – in reality, due to the expense of the print-on-demand service that produces the book, I have only purchased one copy of each edition for myself. Multiple visitors have assumed I was giving them the *Gallery Guide* for free. During a large group visit in a London restaurant, one of the waiting staff (who was not a visitor) picked up the *Gallery Guide* and disappeared to the employees-only area of the restaurant. When I discovered this, I went to retrieve it, but they initially refused to give it back because they 'need[ed] it for [their] course at school'. I offered them a map instead, and directed them to the MOPS

website where they could purchase a copy of the *Gallery Guide*; the book was reluctantly (and luckily) returned.

Unless visitors have spent all of their allotted time listening, each encounter usually ends with a discussion between us. On the rare occasions visitors have no questions, I will try to begin a conversation by asking them if they felt like they were visiting a museum; overwhelmingly the answer has been yes. One visitor stated that, because they had brought earbuds rather than over-the-ear headphones and our visit took place in a particularly noisy space (the café at the Victoria & Albert Museum in London), it had been difficult for them 'to get lost in the experience' the way they normally do in a physical museum (MOPS visitor, 22 February 2019). However, another visitor who experienced sound bleed-through in the same venue found it a rewarding part of the experience, claiming that hearing both the museum's sounds and the sound of their immediate surroundings made the experience feel 'otherworldly' and like they 'were nowhere and everywhere at the same time' because the sound objects on display in MOPS have been collected in so many different places around the world (MOPS visitor, 14 July 2018). Experiencing the MOPS personal listening environment in a public space can be seen as a museological version of what Shuhei Hosokawa has named 'the Walkman effect' (1984: p.165): like Hosokawa's Walkman listener, MOPS visitors take control over their own sonic environment by choosing their own path through the museum's galleries via the MOPS mobile.

MOPS visitors in quiet physical venues and/or who use headphones that more effectively block out the sounds of their surroundings have mentioned the ease with which they found themselves getting lost in the MOPS galleries and losing track of time; this has occurred more often as the museum has expanded. On 21 November 2015, the very first MOPS one-to-one visitor, C.J. Mitchell, suggested vastly increasing the amount of content in the museum, both sonically and visually in the *Gallery Guide*, because he wanted to 'find [himself] getting lost in it', and this input became crucial to how I began to revise the museum. As the displays of sound objects have expanded, the visual content in the *Gallery Guide* has expanded to match; visitors often comment that they lose track of time or forget where they are – much like the intention of some contemporary physical museums to overwhelm their audience with impressive architecture and vast numbers of objects: 'Density of content complements the intensity of architecture. The effect is to obliterate the

everyday world. You have entered a spectacle and you are in its grasp' (Bruce, 2006: p.138). This surrender places visitors in a liminal space, a sort of non-place in which they believe that listening to a stranger's mobile in a café is, in fact, the equivalent of visiting a bricks-and-mortar museum of tangible objects.

Part of the spectacle of visiting MOPS relates to the physicality of the sounds on display. Properties of sounds such as volume or frequency have a direct physical impact: 'It hurts my ears,' more than one MOPS visitor has said upon hearing Gallery 8, Object 2: the sound of a malfunctioning MacBook (*Gallery Guide* p.49). Simon J. Knell has discussed the entanglements between the tangible and intangible qualities of museum objects:

> When we stand before the material object, its intangible qualities seem a part of it; we cannot isolate them. In a similar way, the material reality of the object seems implicitly present whenever we think about or discuss the object even though our conversations only ever invoke its intangible and mutable form. In both cases we perceive only one object. The illusion, then, is this: that this one object is actually two, one tangible and real but not always present, the other intangible, the product of experience and negotiation, which seems to us to be the real object but is not. The intangible object exists in our world but is made in our thoughts; it is ever present and inescapable. The material object also exists in our world but it never really exists in our thoughts. (2012: p.326)

Just as physical museum objects embody intangible qualities that visitors perceive as the real essence of that object, the physical properties of a sound object displayed in a museum context remain with visitors: the sound of the malfunctioning MacBook is one of the most popular sounds in the MOPS collection, and triggers a large number of visitors to recall their own experiences with malfunctioning technology. The sound's discordant timbre is not the only reason visitors recoil – the memory of their own stress related to a technological malfunction may also make visitors physically cringe. Placing such sounds in a museological context of listening provokes similar empathies and reveries to those that physical objects do in physical museums. The sensation of listening to the sound objects on display often inspires visitors to talk with me about their own experiences of sounds.

My conversations with MOPS visitors have varied dramatically in length. Some last moments, like those during one of the 'speed dating'-style events like the Courtauld Institute's Res|Fest in 2016. As of this writing, the longest MOPS visit has lasted about six hours, when a visitor listened to the entire collection presented in version 3 of the museum, and our subsequent conversation lasted nearly three hours – this visitor, Thais Aragao,

was also pursuing PhD research regarding the intersection of sound studies and museum studies, which no doubt contributed to the length of the conversation.

When the visit's conversation has run its course, I usually remind visitors about the MOPS Membership programme and online Gift Shop, as well as its social media presences, and the visitor departs. On rare occasions, departing visitors will leave a small monetary donation in the tiny perspex donation box. If visitors have accepted the offer to use the MOPS Coat Check, I hand them their belongings back. To date, all visitors using the Coat Check have kept their ticket as a memento.

4.3.1 How the shared performance creates the museum

There is a shifting balance of power between artist and visitors during MOPS visits. Visitors are encouraged to participate in the activity in multiple ways, and conversation between visitors and the institution are a significant part of the experience. Contemporary museum practice seeks to abandon the stereotype of ideal visitors as quiet, passive observers obeying the museum's authority: 'Visitors are no longer imagined in hushed contemplation but are given a much more active role. They are conceived as collaborators, at the very least, in the production of a museum's meanings' (Bennett, 2013: p.19).

MOPS invites its visitors to both perform the stereotype – the quiet observer, or listener – but also embraces the contemporary notion of museum visitors as collaborators, or even co-conspirators, in performing the ritual that brings the museum to life. This performance requires that visitors use their imagination, in conjunction with the scenario I have imagined, to complete the experience of visiting a museum of sounds. Reliance upon visitor imagination is frequently under-utilised by museum practitioners according to Rachel Morris, Director of London-based cultural heritage company Metaphor as well as her own imaginary museum, the Museum of Marco Polo <http://momarcopolo.com>. Morris cites a 2008 report by international research consultancy Morris Hargreaves McIntyre on the British Museum's exhibition *The First Emperor: China's Terracotta Warriors*, which concluded that four motivations – educational, social, spiritual, and emotional – brought visitors to the exhibition. Morris suggests that while museums tend to emphasise education and overlook the other three motivations, 'visitors come to museums with their imaginations ready to be deployed, only to find that their imaginations are not

required' (2009: p.6). The McIntyre report also suggested that:

> [V]isitors move through museums ready to use their empathy, creativity and understanding in order to reach a state of emotional and imaginative openness. It's a journey that requires museums also to play their parts, by offering back to the visitors atmosphere and opportunities to feel (2009: p.6).

In actively engaging visitors' imaginations by establishing a conceptual framework for attentive listening, MOPS provides its audience with the opportunity to explore objects composed of sound. Visitors imagine themselves inside a museum that, outside of their imagination, is delineated only by a two-dimensional map and a mobile phone's software. They listen to sounds recorded in different times and places around the world (using headphones, which locate the sound objects' vibrations as close as possible to visitors' ears, increasing the physical contact between the visitor and the sound). The rules I have set, as well as my own absurdist behaviour during the encounter, establishes a playful, creative, and evocative atmosphere within which visitors learn and ruminate about the place that sounds – non-musical sounds, in particular – have in their own life experience. This conceptual space could not be created without the agreed-upon participation of both the museum and its visitors.

My role as the Director who sits across from visitors while they go exploring puts a human face on the museum institution, offering an empathetic presence whose implied expertise is always available for reference or advice as visitors embark upon an experience of close listening to the sonic minutiae of the world that may be utterly foreign to them. Likewise, my own demonstrable enthusiasm for the subject matter of the sound objects within the museum provides an example of how listening to usually ignorable sounds can potentially inspire wonder and excitement. In my own experience, MOPS has worked best when slightly sceptical visitors suspend their disbelief and treat MOPS like a 'real' museum; this can lead to most lively conversations. The unspoken agreement amongst the performers – myself as the Director, the mobile phone/*Gallery Guide*, and the person acting the role of visitor – produces an imaginative and resonant contact zone within which meaning can be made, while the dialogue between myself and the visitor ensures that this learning can move in both directions, not merely from institution to visitor; with each new visitor I meet, I gain a new perspective on my museum's mission, collections, design, and curation; I also learn about another person's experience of sound in their own life,

expanding my knowledge of sound's impact upon daily life in general (Figure 42).

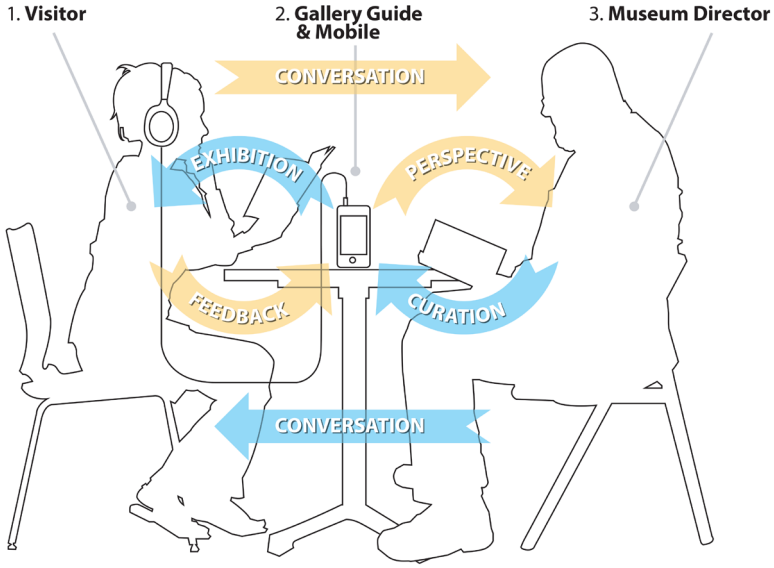


Figure 42. The MOPS Visit Encounter as Contact Zone. Diagram by author.

4.4. MOPS visitor studies and feedback

According to Eileen Hooper-Greenhill, the study of museum visitors has a long and varied history, but had yet to develop useful standards and practices by the beginning of the twenty-first century (2006: p.363). Although there is a growing literature on the subject, including a two decade-old peer-reviewed journal in the United States entitled *Visitor Studies*, a 2015 survey of recent literature by Cerie Jones confirms that the discipline still exists as pockets of knowledge, with a lack of standardisation (p.540). Many typical methods for studying museum visitors include counting, mapping their movements, charting their demographics, and surveys. The observation of museum visitors has led Carol Duncan to suggest that

> In art museums, it is the visitors who enact the ritual. The museum's sequenced spaces and arrangement of objects, its lighting and architectural details provide both the stage and the script – although not all museums do this with equal effectiveness (1995: p.12).

The identification of museum visitors as performers on a stage resonates with the MOPS visitor experience, which relies upon a shared suspension of disbelief between visitors and me. Performing, however, is not the only character trait identified across the many studies of museum visitor types. John H. Falk has synthesised identity, motivation, and modes of learning to categorise museum visitors into five types: the Explorer, the

Facilitator, the Professional/Hobbyist, the Experience Seeker, and the Spiritual Pilgrim (2010: p.156).

Falk's visitor types have aided the training of front of house staff in becoming 'relationship brokers' who identify potential visitors for the purpose of collaboration (Simon, 2010: p.55). As a growing number of museums in the twenty-first century have begun encouraging active participation among visitors rather than merely studying them from a distance, museum practitioners, particularly in the United States, have begun implementing visitor collaboration and participation initiatives inspired by the research and practice of Nina Simon. Simon (2010, p.235) defines two broad types of collaborations between institutions and visitors: consultative projects where visitors are asked to give input to staff, and co-development projects that bring visitors and staff together to design exhibitions or other museum programmes. The UK's contribution to visitor and participation studies expanded with the 2016 publication of *Museum Participation: New Directions for Audience Collaboration*, a volume of case studies profiling projects from the UK, Europe, the Middle East, Canada, and the United States. MOPS has also collaborated with its visitors, such as the temporary exhibitions guest curated by MOPS visitor Dr Irene Noy in 2016 and MOPS visitor-turned-curatorial intern Cristina Sousa Martínez in 2017 (5.3.2 and 5.3.3).

I have attempted to collect as much visitor data as possible. As of 5 September 2018, MOPS has been visited 990 times; I count visits to include one-to-one arranged visits, small group tours, and lectures to larger audiences where sounds from MOPS collections have been played. There have been 196 one-to-one or small group (five or fewer) visitors. Of these, their 'professional' demographic breaks down to:

Sound Artist/Musician:	34
Museum Staff/Art Historian:	52
Other:	109

'Other' above includes, but is not limited to: Accountant, Fashion Designer/Professor, Visual Artist, Library/Archives Staff, Janitor/Custodian, Barista, Café Manager, Graphic Designer, Journalist/Editor/Writer, Student (secondary school), PhD student (philosophy, literature, archaeology), Professor (archaeology, film, museum studies, sociology, sound), MA student (museum studies, experience design, fashion design, journalism), Curator

(visual arts/gallery/fashion). It has been difficult to collect written feedback data from all visitors, particularly those who have visited during 'speed dating'-style events such as Res|Fest and Art Arcana (5.4.4 and 5.4.6). I have set up an online visitor survey, but participation has been too low to provide a useful amount of data; therefore, much of my reporting has relied upon my own notes from visits.

Nevertheless, based upon the conversations I have conducted with visitors, my intention to inspire memories of visitors' personal soundmarks has had success. The personalised nature of the MOPS visitor experience has allowed me to develop an in-depth knowledge of my institution's visitors; I engage them in detailed conversation beyond that of most other museums' front of house staff – the length of many conversations I have had with MOPS visitors can be measured in hours rather than minutes. These conversations have become a regular occurrence during MOPS visits, and have led to the sharing of ideas, memories, and stories between 'the museum' and its visitors – similar to James Clifford's notion of museums as contact zones, places where stories, songs, and opinions are shared (1997: pp.189–190). Many conversations with MOPS visitors have turned to their memories of sounds in places that have been important to them, such as grandparents' houses, artist studios, first flats, etc. Several visitors have suggested that listening to the objects on display in MOPS brought back memories of sounds they had not thought of for years, and reminded them of the importance those sounds once had in their lives.

During a weekend residency in March 2017 with the Tyneside Sounds Society and the Tyne & Wear Archives and Museums, I was invited to present MOPS to staff throughout the Tyneside museums community. Soon after beginning a two-person visit at the Discovery Museum, two museum staff members created a game with the MOPS sounds: one person chose a sound from the *Gallery Guide*, and the other was challenged to identify what the sound was. To date, this has been the only time visitors have created their own method for navigating the museum. This visit took place in a staff office, and approximately thirty minutes into the visit, a member of the museum's cleaning staff stopped in on her daily rounds. We invited her to join the visit, and all three played the game together (Figure 43). Eventually the first two staff members left, but the cleaning woman kept on, paging methodically through the *Gallery Guide*; when she was finished, she spoke to me about how she had never thought to listen to sounds like those in MOPS

Figure 43. Staff members at the Tyneside Discovery Museum play a listening game, March 2017. Photo by author.

before but she now wanted to spend more time listening to her surroundings.

Also in March 2017, MOPS was visited by Eric de Visscher, former director of the Musée de la Musique in Paris, as well as IRCAM, the electronic music studio affiliated with the Centre Pompidou. He visited MOPS at the café inside the Victoria & Albert Museum in London (Figure 44). He claimed that, due to the short duration of most of the sounds on display, it helped him perceive the sounds as objects, akin to the visual experience he has with sculpture, which he said usually consists of a slow walk around the piece if it is free-standing. He believed that, in conjunction with reading the object labels in the *Gallery Guide*, his visit to MOPS felt very similar to that of a traditional museum (de Visscher, 2017).

Figure 44. Eric de Visscher, March 2017. Photo by author.

There has only been one visitor so far who has reacted overwhelmingly negatively to the museum. We met at a café in Shoreditch in November 2016 while he was visiting London from Paris to attend a sound art-related conference. He listened to the temporary exhibition and about thirty minutes of sounds from the Permanent Collection Galleries. During our post-visit conversation, he mentioned that he found traditional museums oppressive, and MOPS was, in his opinion, organised too much like a traditional museum, so he therefore found it also oppressive. He suggested it should do more to subvert the notion of what a museum is by mis-identifying the sounds in the *Gallery Guide*; his suggested example was that an object should be labelled as the sound of crickets, but the actual sound on the mobile should instead be 'a porn soundtrack'. This desire for puerile forms of anarchy unfortunately misses the other, less misogynist forms of subversion that MOPS employs, such as the relaxing of power relationships between museum staff and visitors; the use of an imaginary architectural map to guide visitors through a non-existent, non-architectural 'space'; an insistence upon collecting and displaying digital sound files rather than physical objects; the refusal to distribute these digital files online; and the

absurdist requirement that visitors and I must mutually suspend our disbelief in order to accept that listening to sounds on my mobile becomes a visit to a museum.

4.5 Conclusion: MOPS as exhibition experiment

In their introduction to *Exhibition Experiments* (2007, p.2), editors Paul Basu and Sharon Macdonald suggest 'the realms of experiments and exhibitions are perhaps not so distinct.' Their collection of essays investigates the exhibition as laboratory, a venue for new ideas to be tested, attempted, and critiqued. Experimentation and critique were my motivators when designing MOPS – experimentation with a potential form of museum designed to be a listening rather than a looking experience, and a critique of something I felt while visiting many large contemporary museums: the lack of a believable, honest human voice behind many institutions' curation and presentation; to me, experiencing the collections of large museums such as the British Museum has always been a combination of wonder and intimidation, with a substantial barrier between myself as a visitor and the staff who care for the collections. In my personal experience as a visitor to the British Museum, curatorial staff are as untouchable as the sound objects in my own museum, which makes it difficult to perceive that the institution is controlled by staff who are truly empathetic to their audiences – even after decades of 'the new museology' has been demanding more open institutions across the UK, evidence suggests that ongoing bureaucratic tensions and polarisations within museum organisations have prevented many, if not all, UK major museums from fully embracing the aspirations of balanced museum-to-audience power relationships that the literature behind the new museology movement called for (McCall and Gray, 2014: pp.31–32).

This perceived barrier between myself as the audience and the staff making curatorial decisions at institutions like the British Museum led to my embrace of humour and absurdity within the entire MOPS project, beginning with the visit encounter. The tradition of humour as subversion against power within art practice has been traced at least to Pre-Christian Roman art, as well as Medieval art (Gérin, 2013: p.156), and is therefore far beyond the scope of this thesis – yet humour's place in MOPS is too large and important not to acknowledge, particularly within the performance aspect of the project. Malcolm Muggeridge, a former editor of the satirical *Punch* magazine, stated that 'By its nature,

humour is anarchistic...and implies when it does not state, criticism of existing institutions, beliefs, and functionaries' (cited in Dudden, 1987: p.xvii). By injecting my performance, and the rules for access to MOPS, with humour based on an absurdist viewpoint, I use humour to acknowledge yet undercut the authority of large museums like the British Museum – much of the language I use has been directly or indirectly borrowed from signage I have regularly encountered on visits to traditional museums; what sounds normal when viewed on a sign in a large physical museum becomes ridiculous coming out of the mouth of a solitary man asking a stranger to listen to his mobile.

The self-imposed rule to not allow access to MOPS' sound objects online necessitated that I embrace the idea of conducting my own performance if it were to succeed. I would need to become 'The Curator' who would vet potential visitors, arrange meetings, educate visitors about MOPS' policies, and supervise their visits to ensure the mobile and *Gallery Guide* were safely returned. Likewise, visitors would need to surrender to the project by meeting me in public and following my rules. In order for the project to succeed, both the visitors and I would need to agree to 'perform' together.

This element of performance is essential to MOPS as a project, with a dependence upon what Weibel and Latour refer to as 'enactment':

> The aesthetic object of Modernity was a closed object…In the information society...the work as such disappears and is replaced by instructions for enactment, for communicative action, and for options for action. Open fields of enactment mean new alliances arise between author, work, and observer, in which new actants such as machines, programs, multiple users, and visitors operate on the same level … Forms of enactment for sculpture, images, texts, and music define their practices, and we can therefore speak of a 'performative turn' (2007: p.107).

Weibel and Labour suggest that enactment has replaced the collapsed aesthetic object of modernism, and that, like museums, art has become reliant upon human interaction: 'Art as a social construct helps to construct the social' (2007: p.107). MOPS relies upon enactment and social interaction for its identity as both an artwork and a museum; it is not just digital audio on a mobile phone, it is the act of visiting it itself. What could otherwise have been an antisocial experience via a downloadable app became a social one: performing a museum, constructing meaning via the confluence of a mobile, digital audio files, and discussions resulting from visitors and the artist/Director sharing the same time and space.

MOPS helps its visitors construct meaning by displaying sounds as museum objects rather than as source material for music, offering an unexpected perspective on the importance sounds have within human experience. The sounds on display in MOPS are exhibited without excessive editing, aural manipulation, or the application of any compositional techniques such as pitch alteration, melody, rhythm, etc. Their object labels describe how the sounds function within everyday experiences such as crossing a street (Gallery 7, Objects 8–15, pp.46–47), visiting a park (Gallery 15, Object 7, p.79), or having a coffee in a café (Gallery 19, Object 1, p.101). In tandem with its demand that visitors make an appointment to spend time listening to and thinking about these sounds – the enactment of a performance event – MOPS encourages focused listening from a perspective that leads its visitors to new understandings of the importance of sounds in their lives – many of which they may have heard, but never actually listened to. In this way, MOPS acts as a catalyst for meaning-making for its one-to-one and small group visitors. How MOPS engages with larger audiences beyond its one-to-one visits – its broader 'publics' – will be discussed in the following chapter.

Chapter 5
Beyond the visit: the Museum of Portable Sound as a public institution

5.1 Introduction

Similar to the difficulties inherent in defining 'museum' (0.3.1), the notion of what constitutes a 'public museum' is also continuously evolving. Ideas of what 'public' might refer to in relation to museological practice, institutions, and audiences is constantly changing (Abt, 2010: p.115). The history of the term 'public' as traced by Abt sees its meaning shift radically over time, attaining a new importance at the end of the nineteenth century when museum practice began its move toward professionalisation; it was within this newly developing set of professional standards that the idea of the public museum became, according to Abt, 'an idealised standard against which individual institutions would be measured' (p.132). In recent years, there has been an interest in addressing how public museums have played a political role in 'maintaining the cultural values of elite or privileged groups in society' (Ambrose and Paine, 2006: p.18). Contemporary operational factors such as access policies (Sandell, 2011: p.130–135) and staff-to-audience demographics (Charr, 2019) continue to contribute to the ongoing evolution of what it means for a museum to be a truly 'public' institution.

Although the MOPS visit encounter described in the previous chapter remains the core of this research project, several ancillary activities based around my interest in directing MOPS as a 'public institution' have also been conducted during my research journey. As my development as the museum's Director continued, I became aware of opportunities to engage with a larger audience that could potentially raise awareness of the core MOPS mission of conducting listener visits, as well as to experiment with additional aspects of museum practice that I could adjust from their more typically visual-oriented focus to a listening-based approach. These ideas began to develop once I began establishing a social media presence for the museum: a MOPS Facebook page < https://www.facebook.com/MuseumOfPortableSound/> went live on 1 December 2014, nearly a year before MOPS held its Grand Opening Gala. Beyond an online presence, I also decided to add an additional 'gallery' to the MOPS mobile: the MOPS 'Exposition Space' dedicated to

temporary exhibitions, which I hoped might attract other curators to populate it with an ongoing series of small shows dedicated to topics not covered within the MOPS Permanent Collection Galleries.

The Grand Opening Gala on 7 November 2015 brought the project to the attention of some London-based sound and curatorial practitioners who attended, which led directly to several other live events – and word-of-mouth reporting on these events via social media led to still further live events, most of which became collaborations with other institutions and further served to introduce MOPS to new audiences, providing me with opportunities to publicly solicit critique of the project, leading to further refinements via my iterative methodology. It was during one of these public presentations that I was approached by an audience member who offered to become the first MOPS curatorial intern: Cristina Sousa Martínez began helping me in July 2016 and stayed with the project for nearly a year, assisting on multiple projects and guest-curating a temporary show in the Exposition Space. Museum of Portable Sound Press, a publishing branch, is an outgrowth of the need to print the MOPS *Gallery Guide*, providing a way to make the MOPS guidebook available for purchase by visitors and, to date, one academic library – the University of Texas at Austin (Figure 45). I conducted multiple conference presentations of the MOPS project throughout Europe (see Appendix 4), which led to feedback suggesting MOPS open an Education Department that could be utilised as an experimental laboratory in which to conduct classroom exercises that combine close listening techniques inside other museums with group discussions of contemporary and experimental museum

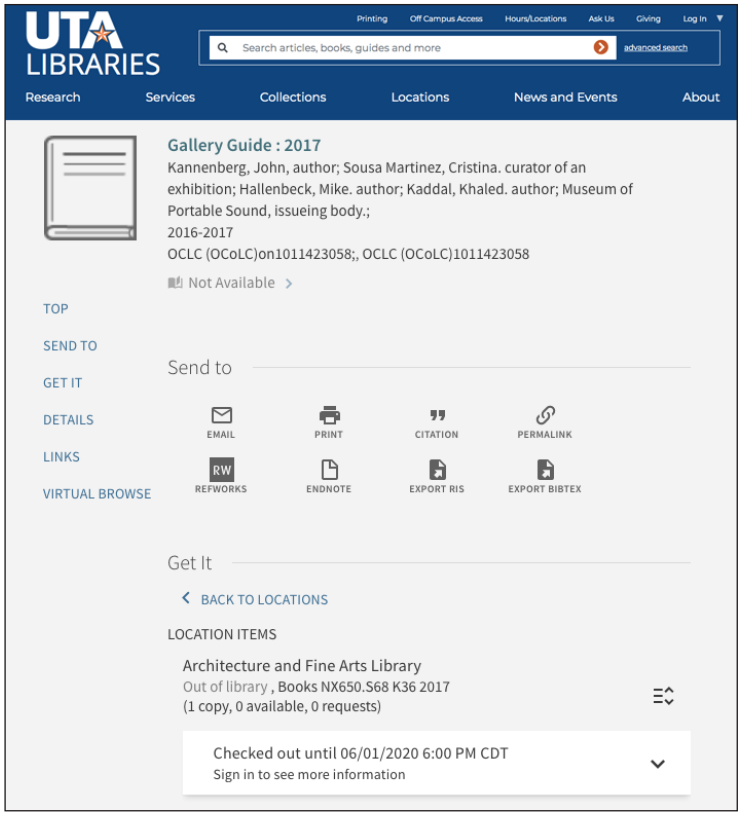


Figure 45. Online catalog listing for MOPS *Gallery Guide* in the library of the University of Texas at Austin, accessed 20 January 2020.

practices. Also, one of the questions during the MOPS Grand Opening Gala's Q&A – 'Do you sell canvas tote bags?' – helped lead to the establishment of a MOPS online Gift Shop (Appendix 9).

None of these extracurricular activities could have taken place to the extent they did without using the internet – and particularly, social media – to refine the museum's institutional persona, invite potential visitors to the live events, or promote the museum's visits and Gift Shop. Although MOPS itself cannot be visited online, the internet – via MOPS' own website and social media – connects the project to a worldwide public. While my previous experience of curating an online record label and art gallery (0.5.1) partially inspired the offline-only access to my museum's collection, it also provided me with the skills necessary to operate MOPS as a public institution via the internet. All of these seemingly extracurricular projects – beyond the one-to-one listening visits at the core of the MOPS experience – have contributed to my understanding of who makes up the MOPS 'public'. I initially believed MOPS's public might only consist of other artists and academics like myself whose research interests are related to sound, but this has not been the case, as previously mentioned in regards to the demographics of MOPS one-to-one visitors (4.4).

5.2. Social media and the MOPS institutional voice

Since its Grand Opening Gala in November 2015, the MOPS social media presence has grown to also include Instagram < https://www.instagram.com/museumofportablesound/>, Twitter < https://twitter.com/museumsound>, and YouTube <https://www.youtube.com/c/museumofportablesound>. I maintain these accounts, though they were also contributed to by the MOPS intern, Cristina Sousa Martínez, during her tenure (from about July 2016 – August 2017).

Each of the MOPS social media accounts shares content that is posted across all the platforms, but each account also contains unique content as well. A handful of recurring content types have emerged, as well as some occasional experiments with various technologies such as live streaming or interactive polls.

5.2.1 Visitor documentation

In order to raise awareness of how MOPS works, I use social media to document visits to the museum (Appendix 6). As often as possible, I have photographed the people who visit MOPS and, with their consent, publish the photos across the museum's social media accounts. This practice has helped to both document and communicate how the museum visit portion of the project works in practice.

5.2.2 Self Promotion

Using social media to promote the museum to its public has been another ongoing online practice (Appendix 8). It is in the promotion portion of the MOPS social media activities that much of the project's interrogations of contemporary online culture are most fully explored. A series of advert types have emerged: parody versions of famous artworks (Figures 46–47); classic sound-related advertisement parodies (Figure 48); fake celebrity endorsements (Figure 49–50); images inserting myself and/or the museum's mobile into historical images (Figure 51); images from popular cinema (Figures 52–53); and images of

Figure 46. ***This Is Not An App*****, shared on MOPS social media. Image by author.**

Figure 47. ***Group Tours Available*****, shared on MOPS social media. Image by author.**

Figure 48. ***Break the sound barrier*** **(author's head on musician Peter Murphy's body in a 1983 advert for Maxell compact cassette tapes), shared on MOPS social media. Image by author.**

Figure 49. ***Serena Williams Endorsement*****, shared on MOPS social media. Image by author.**

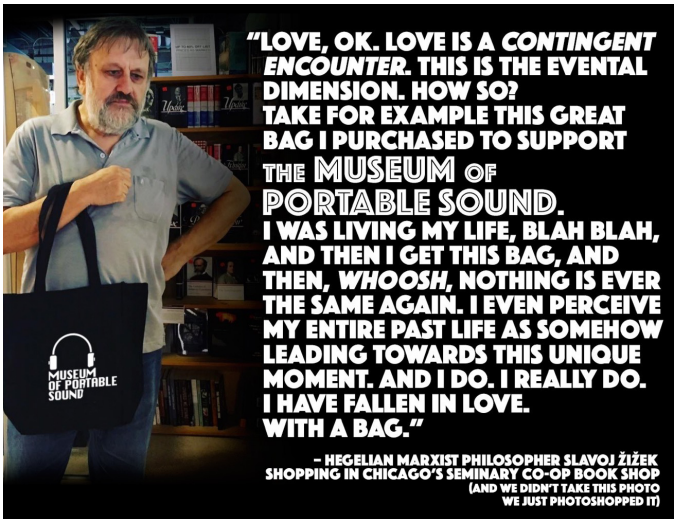


Figure 50. ***Slavoj Žižek Endorsement*****, shared on MOPS social media. Image by author.**

Figure 51. ***Le musée du son portable*** **- my head on Andre Malraux's body and soundwaves of the MOPS sound objects replacing the photos for his** ***Le musée imaginaire,*** **shared on MOPS social media. Image by author.**

Figure 52. ***That Sound Belongs In A Museum,*** **shared on MOPS social media. Image by author.**

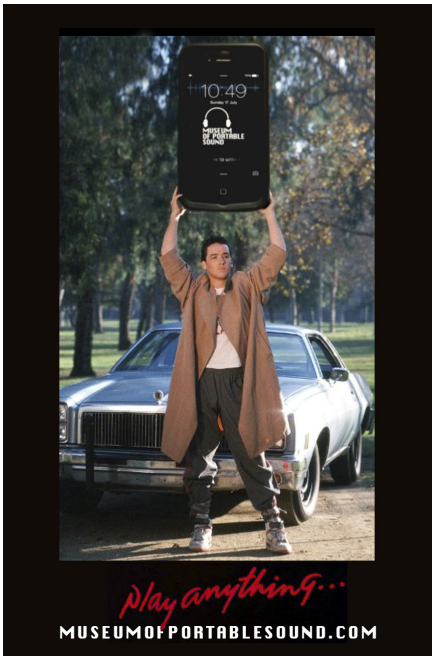


Figure 53. ***Play Anything,*** **shared on MOPS social media. Image by author.**

Figure 54. ***Fortified With 4 Major Categories of Culture,*** **shared on MOPS social media. Image by author.**

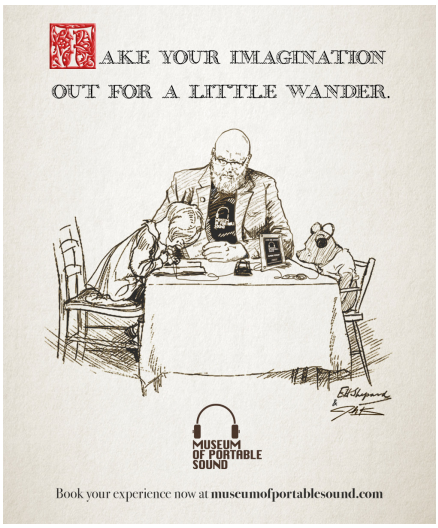


Figure 55. ***Take Your Imagination Out For A Little Wander,*** **shared on MOPS social media. Image by E.H. Shepard & author.**

other relevant popular culture appropriated by MOPS (Figures 54–55).

5.2.3 Behind the scenes

A portion of MOPS social media posts are focused on documenting behind-the-scenes activities, such as making field recordings for the permanent collection of sound objects or acquiring items for the Physical Objects Collection. These posts include references to what is referred to as Museum of Portable Sound Laboratories, which contains various departments within the museum such as Acquisitions, Conservation,

etc. (Appendix 5). These departments are further extensions of my Museum Director performance – for example, the MOPS Acquisitions Team consists of my portable digital audio recorder, my headphones, and my left hand (Figure 56); the Conservation Lab is my left hand wearing a white conservator's glove (Figure 57). These other departments are absurdist attempts to make MOPS appear to be a significantly larger organisation than it actually is; some casual followers of MOPS social media accounts have asked to speak to the Conservation Lab or the Acquisitions Team, not realising they are all the same person.

Figure 56. Instagram post of MOPS Acquisitions Team recording the final regular bongs of Big Ben before it was closed for repairs in 2017. Image by author.

Figure 57. Instagram post of MOPS Conservation Lab handling recent acquisitions of the MOPS Physical Objects Collection. Image by author.

5.2.4 History of sound

What I have come to refer to as the history of sound includes information about the science, art, and culture surrounding topics like acoustics, sound recording, radio broadcasting, sound effects for radio or film, the sale of recorded sound, and portable home audio technologies like the transistor radio, walkie-talkies, the Walkman, the iPod, and contemporary streaming music services like Spotify. The social media posts I have made relating to these topics are brief versions of essays that could potentially be included in future editions of the MOPS *Gallery Guide* as Listening Close-Up sidebar texts that appear throughout the book (Figure 34). These posts have continued to develop the institutional voice of MOPS as well as its curatorial direction. Posts of this nature have included material like a neolithic woman's skull with an attached ear carved from a seashell, the unveiling of the original iPod, and an ancient Egyptian 'singing statue' at Thebes.[1]

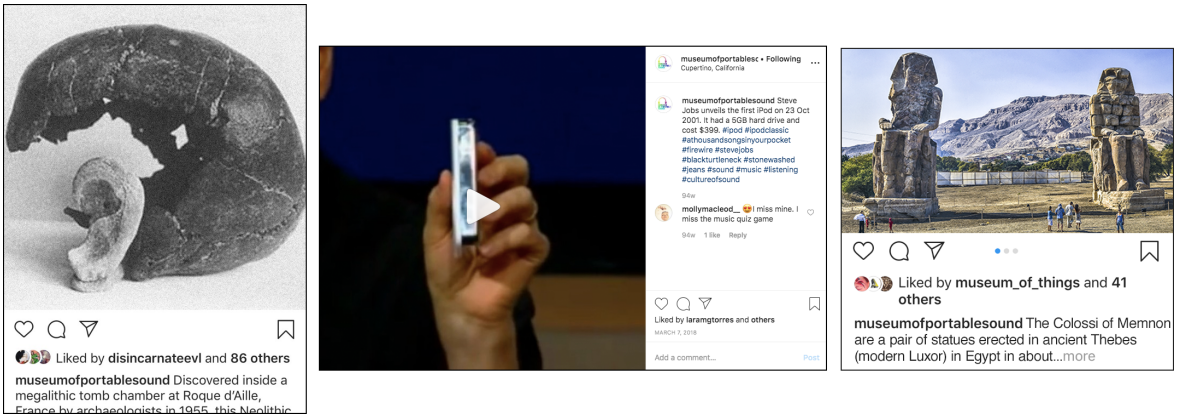


Figure 58. Posts on MOPS Instagram account about historical events related to sound.

5.2.5s Polls

During 2018, the MOPS Twitter account conducted a weekly poll, marked by the hashtag #PortableSoundPoll (Appendix 7). Each week, I posted a new question related to sound and/or museums; they ranged from the serious ('What is your portable sound reproduction apparatus of choice?') to the humorous ('Which part of the human ear really does it for you?', or 'Which audio frequency range [in Herz] is really banging?'). Participation numbers varied, with the highest number of responses, 74, collected for the

[1]Following an earthquake in 27 BCE Thebes, one of a pair of statues of the pharaoh Amenhotep III (1390-1352 BCE) collapsed, leaving only its legs still standing; afterwards, an acoustic phenomenon began causing the damaged statue to 'sing' in the morning, which turned the statue into a tourist attraction (Shaw et al., 2008: p.78). The sound stopped being heard after a repair to the statue which took place at an unknown date. Scientists now believe the sound was been caused by rising morning temperatures and evaporation of humidity inside fissures in the rock (Karakhanyan, et al., 2014: p.79).

seventeenth poll, which took place in the second week of June 2018 (Figure 59). This poll asked what types of sounds (if any) the respondent would like to listen to in a museum context, with oral histories beating out both post-industrial sounds and nature sounds, with 'none' taking last place. While these polls are highly unscientific, they did provide a forum for MOPS followers to make their opinions known about topics relevant to the museum's mission, and became an opportunity for public conversations and idea-sharing that occasionally took place in the polls' comments.

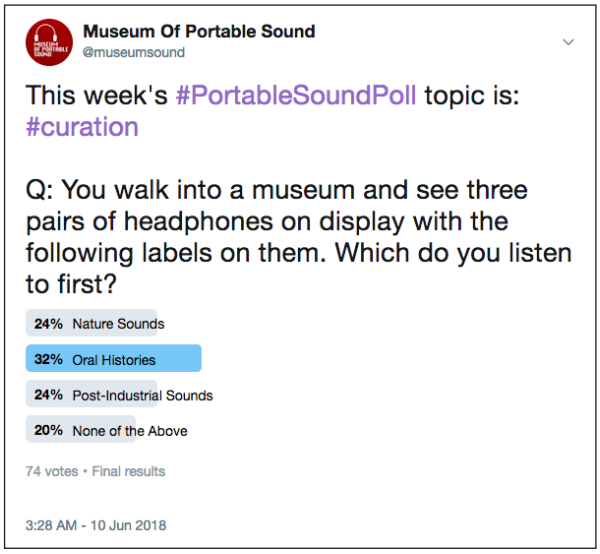


Figure 59. #PortableSoundPoll number 17 on the MOPS Twitter account <https://twitter.com/museumsound/status/1005758646054244352>.

5.2.6 Live acquisition event

On 14 December 2018, MOPS conducted its first live online acquisition event, broadcasting the recording of a new sound object for the Permanent Collection Galleries on the internet via Facebook Live, a service that streams live video and audio. I announced the event two weeks before it occurred, and promoted it without revealing what sound would be recorded. Having recently added a Food gallery to the latest version of MOPS, I used the broadcast to livestream recording myself preparing and eating a bowl of Rice Krispies breakfast cereal, a food product marketed primarily because of the sound made by the food's contact with milk. The broadcast, attended by ten people, lasted about forty-five minutes and included a brief online chat/Q&A session, during which my use of rice milk was called into question by two of the broadcast's attendees who were concerned it may have decreased the sound's authenticity. This recording will be added to the Food gallery when the next expansion of the Permanent Collection Galleries is completed. A video documenting highlights of the event is available on the MOPS YouTube channel at <https://www.youtube.com/watch?v=aBEpCJq4MJY >.

5.3. Temporary Exhibitions: The MOPS Exposition Space

During the decade and a half that I spent running Stasisfield.com (0.5.1.), I produced several themed online exhibitions for the Stasisfield website. This involved creating a theme for an exhibition, posting an open call for works, selecting the work to be included, and designing an online interface for its access. While I found these projects exciting, they also became logistically complex to produce due to delays in receiving materials from the artists involved. This repeated experience of delayed projects was a direct influence upon my decision to handle as much of the work for MOPS alone as I could; however, I did not want to close MOPS off from other contributors, so I added the Exposition Space – a separate 'wing' of MOPS dedicated to temporary exhibitions to be organised by guest curators.

Much like the name 'Museum of Portable Sound', 'Exposition Space' was chosen deliberately for its peculiarity, potential ambiguity, and ultimately because of personal preference for the sound of this particular combination of words. As an American, my experience of the word 'exposition' had almost entirely consisted of its truncated form – expo – which, in the United States, refers primarily to showcases of industrial products, i.e. an automobile expo. I first encountered the art-related use of the word exposition during my curatorial internship at the ZKM Medienmuseum in Karlsruhe, Germany in 2012, while collaborating with staff of the Centre Pompidou in Paris. The word 'exposition' was used by the French staff interchangeably with 'exhibition' when writing or speaking in English, and several of my German colleagues at ZKM used the term as well when speaking in English. I have since learned that, after a lengthy period of multiple meanings, the French 'exposition' and English 'exhibition' are considered virtually interchangeable (Desvallées and Mairesse, 2010: p.35). When it came time to name the temporary exhibition space for MOPS, I chose Exposition Space to present MOPS as an international institution that might be as comfortable in countries within continental Europe as it would be in the United Kingdom – the logic being that, since I was now based in the UK and was establishing a portable museum, I might be able to tour MOPS throughout a number of European countries. The intentional peculiarity and ambiguity of the chosen naming conventions of MOPS and its temporary gallery space allow for the institution to grow into itself, to let the project evolve organically rather than through my own predetermination.

5.3.1 *The Ghost in the MP3* – Ryan Maguire; 11 November 2015 – 17 June 2016

I curated the Exposition Space's first temporary exhibition, which opened with the first version of MOPS at its Grand Opening Gala on 11 November 2015. Consisting of three audio pieces by American sound artist Ryan Maguire, *The Ghost in the MP3* presented three examples of Maguire's work exploring the effects of MP3 compression on recorded sound.

In order to decrease the size of audio files, MP3 compression filters out certain frequencies of recorded sound that are either not able to be heard by the human ear or may not significantly affect the quality of the recorded sound (Sterne, 2012: p.1–2). Engineer Karlheinz Brandenburg of the Frauenhofer Institute helped develop and refine the compression algorithms for the MP3 digital audio file format; one of the songs he used to test his work compressing audio was *Tom's Diner* (a cappella version) by musician Suzanne Vega – which has become something of an urban legend about the development of the MP3 format according to Jonathan Sterne (Sterne, 2012: p.174–175). This story has also been recounted in the MOPS *Gallery Guide* in the object label that accompanies Gallery 6, Object 5, The First MP3 (p.41), which was included in the first version of the MOPS Permanent Collection Galleries.

Maguire's first piece, entitled *moDernisT*, contains all of the audio frequencies that are filtered out of *Tom's Diner* when compressed into an MP3 file, making audible the sounds that are lost during the compression process. As Maguire states in his Object Notes for the exhibition, 'Here we find the form of the song intact, but the details are just remnants of the original, scrambled artefacts hinting at once was' (*Gallery Guide* p.148). The other two pieces in the show are variations on this process. I chose Maguire's work to be the first exhibition due to its preoccupation with the technology behind the MP3, which was in the midst of being replaced by streaming audio in late 2015 when MOPS was opened.

5.3.2 *Heave and Flow* – Jessica Akerman; 18 June 2016 – 4 November 2017

Guest-curated by Dr Irene Noy, then an art historian based at the Courtauld Institute in London, this was the first MOPS project curated by someone other than me. Noy attended the Grand Opening Gala and while she found the project of interest, she

expressed concern that MOPS was simply the viewpoint of an individual white American man. She volunteered to curate a temporary exhibition in order to help offset what she believed to be the potential for MOPS to be viewed as a non-inclusive space. As this has also been an ongoing concern of my own, I was eager to include her in the project.

Dr Noy curated an exhibition of work by London artist Jessica Akerman consisting of audio pieces she had created collaboratively during three artist residencies that took place in Whitstable, London, and Cardiff. All three pieces were audio recordings of traditional songs performed by groups of people, and were thematically connected to concepts of labour and play. Akerman provided visual images to accompany the sound works, which were incorporated into the MOPS *Gallery Guide* alongside her own object notes about the work.

A private view event was held for Akerman's exhibition on 17 June 2016 at the London College of Communication. Noy gave an introductory talk, then the room's lights were dimmed, and I played the entirety of Akerman's exhibition (about 12 minutes in duration) for the audience to listen to, directly from the MOPS mobile plugged into a PA system. This was followed by an artist's talk by Akerman and a Q&A with Noy, Akerman, and me. The event had an audience of twelve people, and one of the attendees reviewed it for the Sackler Research Forum's blog (Suoyrjö, 2016).

While the work in the show was exciting, its musical subject matter – much like Ryan Maguire's work that preceded it – looks to be somewhat at odds with my curatorial vision for the MOPS Permanent Collection Galleries, yet at this point in MOPS's development I was not yet capable of properly articulating the reasoning behind my aversion to curating purely musical material.

5.3.3 *Transitivity of Implication* – Daniel Toca; 5 November 2017 – 20 March 2018

This exhibition was guest-curated by Cristina Sousa Martínez, who wrote an introductory text for the exhibition's catalogue. Martínez selected five pieces created by Mexican sound artist Daniel Toca, who had collaborated with musician Carlos Edelmiro, who in turn deconstructed a text written by Toca and helped him create soundtracks to accompany Toca's vocalisations of the text. Each of the five pieces tells a distinct story

about a decisive moment, either in Toca's own life, or the life of a historical artist or thinker. The five pieces were part of a larger previous work, but Toca took the opportunity to compose a new piece specifically for the exhibition of these five previous pieces: a text score to be performed at the corresponding private view for the exhibition (5.4.3). This action of linking the exhibition to its private view via performance was fascinating to me, and was something I do not believe I ever would have thought to do myself.

A printed, stand-alone mini-catalogue was produced for Toca's exhibition; I decided that, if possible, all future temporary exhibitions should be accompanied by a printed catalogue in order to help draw more attention to them, as they were often overlooked by one-to-one MOPS visitors; they would also become another free keepsake for MOPS visitors along with the MOPS map, and would help to maintain an archival record of the temporary exhibitions. After three exhibitions of musical pieces, I was hoping the next temporary exhibition would be something more in line with the cultural approach to sound I had been developing, and which was now much clearer for me.

5.3.4 *Portable Sound in Cinema 1979–2000*; 20 March 2018 – Present

In an attempt to help steer the temporary exhibitions towards the curatorial direction I had finally decided upon, I developed a few ideas for potential exhibitions that could be worked on by other people I knew who were experts in the concepts covered by the ideas. Although I found multiple potential guest curators, none of their projects were ready in time for the launch of the fourth iteration of MOPS. Once the previous temporary exhibition had been on display for more than a full year, I realised it was in danger of becoming a permanent exhibition if it was not replaced soon. Near the end of 2017, I had begun experimenting on social media, posting video clips from Hollywood films that featured portable sound devices such as the boombox, the Sony Walkman, LP records, compact cassette tapes, and iPods as plot devices. It was upon learning that the 1979 US film *The Warriors* by director Walter Hill – the story of a New York gang unjustly accused of a gangland murder – contained the first known cinematic appearance of the portable radio and compact cassette player known as the boombox that I began creating a brief edit of film clips in chronological order from 1979 onwards, in the hopes that I might be able to tell the story of how portable sound technology has been depicted within popular cinema

over the past few decades. The year 2000 was chosen as the ending point of this survey, since the following year would see the release of the iPod and the beginning of digital media's entry into the mainstream, which changed portable listening habits due to its ability to play music constantly; without the need to stop and insert more physical media once an album has finished playing, the iPod led to a new type of always-on listening that Michael Bull named 'audiotopia' (2011: pp.528–531). While working on this exhibition, I realised this topic was potential new ground for MOPS in that it was examining technology rather than sounds as cultural objects, and became concerned that it might lead to a lack of focus for the thesis research. However, I also viewed this as an opportunity to rethink the Exposition Space as a component of MOPS that was not overtly related to music, since the previous three temporary exhibitions presented purely musical pieces as their content. By the time I began working on *Portable Sound in Cinema*, I had come to the conclusion that MOPS should focus on non-musical sonic culture as much as possible. While many of the uses of portable sound technology within the film clips I was assembling involved music, it was the way the technology itself was handled thematically within the film clips – regardless of whether it was playing music or not – that I found of interest.

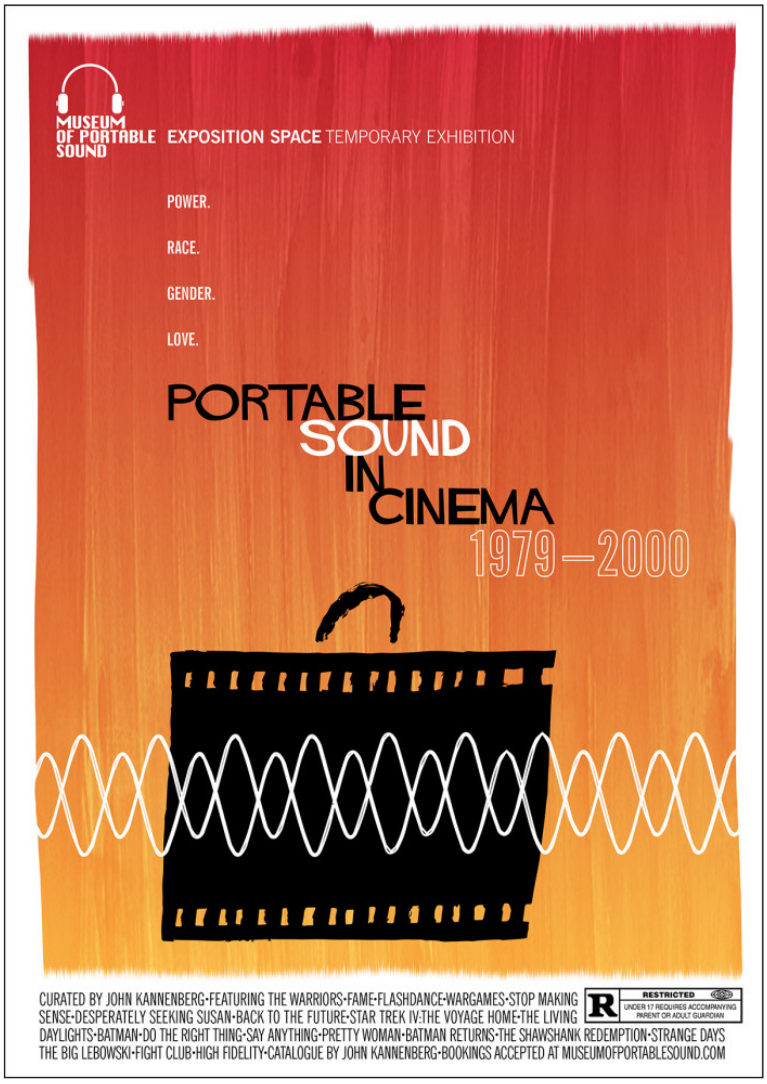


Figure 60. ***Portable Sound in Cinema 1979-2000*** **exhibition catalogue cover art. Designed by author.**

The resulting 16-minute video contains clips from nineteen films (see online

catalogue for complete list, viewable at <https://museumofportablesound.files.wordpress.com/2018/03/psiccat-web.pdf>). The exhibition's video file was, like the sounds in the Permanent Collection Galleries, not uploaded to the internet, but was available only on the MOPS mobile, with visitors watching the video on the mobile's screen. The printed mini-catalogue for the exhibition contains didactic informationfor each film in the compilation (title, director, date) as well as a brief commentary on the clip's significance within the exhibition. Several overall themes are represented by the use of technology in the included scenes, including power dynamics (e.g. *The Warriors* [1979], *WarGames* [1983], *The Shawshank Redemption* [1994], *Fight Club* [1999]); race/ethnicity (e.g. *Fame* [1980], *Flashdance* [1983], *Do The Right Thing* [1989]); gender (e.g. *Desperately Seeking Susan* [1985], *Pretty Woman* [1990]); and romantic love (e.g. *Say Anything* [1989], *High Fidelity* [2000]).

There was no private view for this exhibition, although it has been presented during a series of workshops I conducted for undergraduate students at Bournemouth Film School. Students were shown the exhibition video, then asked to discuss the themes they noticed in the film clips. Issues related to gender and race/ethnicity were not discussed until prompted by me, with students preferring easier themes like romantic love. Eventually, students acknowledged the complexities surrounding cinematic depictions of portable sound technologies, and how they have been used metaphorically to explore difficulties in human communication in mainstream cinema. The exhibition also generated discussions regarding nostalgia for old technologies and the difficulties in the cinematic depiction of streaming music technologies. It remains the current temporary exhibition at the time of writing.

5.4 Public live events

Beyond in-person visits and internet-based activities, there has also been a series of MOPS live events in public venues. Two events that have already been discussed above – the Grand Opening Gala (0.4.1) and the private view for Jessica Akerman's Exposition Space show (5.3.2) – took place at the London College of Communication (LCC), where I was enrolled for my PhD studies. In order to present MOPS to audiences beyond LCC, I participated in several group events at other London venues: Art Arcana, Islington; Museums Showoff London; and Res|Fest at the Courtauld Institute. Additionally, the

MOPS Grand Re-Opening event in 2016 that launched the first professionally printed *Gallery Guide* and Daniel Toca's Exposition Space show took place at the Chalton Gallery in King's Cross, London.

5.4.1 Art Arcana, Islington; 25 July 2016

Figure 61. Left: MOPS in its presentation space during Art Arcana, 25 July 2016. Right: A pair of visitors during the Art Arcana event. Photos by author.

The first of these public events, Art Arcana at the Dead Dolls House in Islington, London, was the first to see MOPS set up in what I refer to as 'speed-dating' style: I sat at a table with the mobile phone and the *Gallery Guide*, in one room of a multi-room event filled with other artists' work (Figure 61). The audience was encouraged to roam the venue and engage with the works on display for however long they wished. At this point, I had never conducted a group visit, nor was the *Gallery Guide* a printed artifact – it still only existed as a PDF file. In an attempt to make the *Guide* more accessible to small groups of people simultaneously, I printed a copy of it on a home inkjet printer and stapled it together, and also brought my iPad containing a PDF of the *Gallery Guide*. On my way to the event, I purchased a headphone splitter that could handle up to five simultaneous listeners, and brought along extra pairs of headphones. A total of 14 visitors interacted with the museum over the course of the night, primarily in groups of two or three. Feedback was overwhelmingly positive, though it became apparent that no one was comfortable using the iPad to access the *Gallery Guide* – all visitors chose the printed version. This event also took place before the museum had a map to show an overview of the collection; this meant that more explanation was required to communicate how the collection was organised

and what main themes it covered. Most visitors suggested the museum needed to have more objects – at this point the collection held 24 total. Visits lasted approximately 15–20 minutes at a time; since there were so few objects in the museum at this point, it was easy to suggest places for the visitors to begin listening, but it was obvious that if the museum were to significantly expand its collection, a streamlined visitor orientation method would be needed.

5.4.3 Museums Showoff, London; 19 October 2016

Museums Showoff, at the Phoenix Pub in Kings Cross, offered me the opportunity to describe the museum to a large number of people – over two hundred were in attendance – the vast majority of whom were London-based museum staff. This monthly event, organised by London-based museums consultant Dr Rachel Souhami, programmes a handful of presentations for each instalment, allowing a maximum of eight minutes per speaker. The short format forced me to focus on only the most important aspects of a complex project, which proved to be highly influential upon how I have presented MOPS at public talks and conference presentations ever since: as concise as possible, with equal parts serious theory and absurdist humour. While the event is intended as an information-sharing and networking opportunity for professionals, its atmosphere is more like an open microphone night in a comedy club, with a local comedian providing audience warm-up and introductions for each speaker, encouraging the audience to laugh and have fun. The audience were extremely supportive of each speaker, loudly cheering them on. MOPS was a good fit for the event, and many in attendance approached me at the reception afterwards to offer feedback.

Figure 62. Presenting an eight-minute monologue about MOPS at Museums Showoff London, 19 October 2016. Photo by Rachel Souhami.

5.4.3 Grand Re-Opening/Daniel Toca Private View, 4 November 2016

The Grand Re-Opening Event, at Chalton Gallery in King's Cross, London, introduced both a new version of the MOPS Permanent Collection Galleries and a new

temporary exhibition in the Exposition Space. There were 16 people in attendance. It was at this event that the first printed version of the *Gallery Guide* was unveiled. I gave an introductory talk about MOPS and its mission, then dimmed the lights and played a 30-minute selection of new sound objects that had been added to the Permanent Collection Galleries.

Figure 63. Viv Corringham performs Daniel Toca's *Catalogue d'Oiseaux* from amongst the audience in the Chalton Gallery. Still from video shot by author. Video available on MOPS YouTube channel: <https://www.youtube.com/watch?v=koGojEGJl-c>

Cristina Sousa Martínez then gave a brief talk about curating Daniel Toca's work, and the entire exhibition was played for the audience to listen to, also with the lights dimmed. Toca also composed a text-based score for voice to be performed at the private view. Following the listening session, Martínez read the score aloud which was performed by sound artist Viv Corringham while standing in the audience (Figure 63). I made an audio recording of her performance and immediately afterwards transferred it onto the MOPS mobile, where it became the final piece of Toca's exhibition.

The newly-printed version of the MOPS *Gallery Guide* now included an archive of the catalogue texts for the two previous temporary exhibitions by Ryan Maguire and Jessica Akerman, plus the new catalogue text for Daniel Toca's show. Both Maguire's and Akerman's pieces had been removed from the MOPS mobile, leaving the catalogue texts the only accessible memory of these exhibitions; this was done intentionally to mimic the way physical exhibitions disappear after a predetermined duration with only a catalogue as evidence – unnecessary for digital files which could easily still fit on the MOPS mobile, but consistent with MOPS' refusal to post its sound objects online – it is another absurdist approach to emulating physical museum practices, and an experiment to see how it would be responded to by the audience. It has primarily caused irritation.

5.4.4 Res|Fest, Courtauld Institute, London; 15 March 2017

Res|Fest (15 March 2017) was the first in a series of now annual events by the

Figure 64. Left: The author speaking in the Courtauld Gallery during Res|Fest, 15 March 2017. Right: Cristina Sousa Martínez hosts pair of MOPS visitors during Res|Fest. Photos by Courtauld Institute staff.

Sackler Research Forum at the Courtauld Institute of Art in London intended to raise awareness about the importance of contemporary art historical research, a response to then-recent proposals to eliminate art history courses in several UK universities. MOPS was invited to participate in two ways: first, by once again presenting the museum 'speed-dating' style at a table alongside other projects; second, I gave a gallery talk in the Courtauld Gallery about listening and museums. Over the course of the evening ten people visited MOPS, primarily as individuals but including two pairs of visitors; although Res|Fest as a whole was very well attended, MOPS' placement in a room away from the main activity areas accounts for the low visitor count. As this event took place once MOPS had been expanded to 117 objects, had a formally printed *Gallery Guide* as well as a printed map, visitor orientation took no more than two minutes per visitor. About twenty people attended my gallery talk in the Courtauld Gallery; as there was no time for Q&A, there was no substantal feedback. During the talk, MOPS curatorial intern Cristina Sousa Martínez staffed the MOPS table and hosted one pair of visitors. While Res|Fest overall may not have proven as influential on the development of MOPS as the other events, it served as a proof of concept – both Cristina and I saw that MOPS was ready to function in multiple visit scenarios, and was now established enough that I could begin refining the taxonomies of sounds that had already been implemented, as well as think about new topics the museum might be able to explore within its Permanent Collection Galleries. There were also some other methods for engaging with the public that I was compelled to explore.

Figure 65. *Listening to Museums* class session, Natural History Museum, 17 March 2018. Photo by author.

5.5 Education Department: *Listening to Museums*

Beginning in January 2017, I began teaching a continuing education course entitled *Listening to Museums* through the Museum of Portable Sound Education Department. I have taught the course twice so far, once in 2017 and again in 2018. Each of the two classes met three times, once per month over a three-month period, at museums in London. In 2017, we visited the British Museum, Tate Modern, the Science Museum, and the V&A (the final two museums were both visited for the final session, as they are across the street from each other). In 2018, the class met at the Natural History Museum, Tate Modern, and the British Museum. Ten students attended the 2017 sessions, and seven attended the 2018 session. Students were from diverse backgrounds, including several museum staff, postgraduate students in various disciplines, acousticians, and artists. Most of the students had never participated in sound-related activities such as soundwalks.

I wanted the class to blend concepts from sound studies and museum studies, introducing the students to three concepts each month that we would explore during our time together in each museum. I assigned a few basic readings before each session, which we used as the basis for discussions and 'hands-on' activities. Each monthly session lasted three hours. The topics and readings remained consistent between the two years, although they were approached differently due to the changes in which museums were visited.

I chose the topics of each class session intending for the mix of ideas allowing each student to bring their own experiences to the exercises, fashioned in part after the constructivist learning model as discussed in 3.6. The three sessions each year were organised as follows:

5.5.1 Session 1: Sound, space, and experience

Figure 66. Students listening and note-taking in the Parthenon Marbles gallery at the British Museum during *Listening to Museums*, 21 January 2017. Photos by author.

Assigned readings included a brief introduction to the sounds of architecture (Blesser & Salter, 2013: pp.87–90). Next, an introduction to the idea of flâneurism – the concept of meandering around a city as a reaction to urban development entwined with capitalism first coined by Charles Baudelaire and later expanded upon by both Walter Benjamin and Guy Debord (Gros, 2014: pp.175–181). Finally, a short piece of writing by American modernist painter Agnes Martin discussed the importance of stillness and attention (Martin and Schwarz, 1991: pp.89-90). Readings were used when discussing the students' experiences during the corresponding museum listening session, which included multiple soundwalks, an invitation for the students to make sounds of their own in response to a gallery space, and several sessions of 'blind listening' – sitting in a space, closing the eyes, and listening for a predetermined duration. At the British Museum, one activity asked students to listen to the sounds inside the Parthenon Marbles gallery while thinking about the history of the objects on display (Figure 66). In the Natural History Museum, the final exercise involved students exploring an aquatic life gallery which contained decades-old displays relating to whalesong and dolphin echolocation, followed by a discussion of how the displays could be modernised to make them more effective (Figure 67).

Figure 67. A sound-related interactive display at the Natural History Museum, London discussed during *Listening to Museums*, 17 March 2018. Photo by author.

5.5.2. Session 2: Resonance, wonder, and phonomnesis

Figure 68. The author with a group of students during the phonomnesis exercise at Tate Modern during *Listening to Museums*, 19 February 2017. Photo by Cristina Sousa Martínez.

Readings for this session included Greenblatt's essay on 'Resonance and Wonder' discussed in 2.2.1, and the definition of the term phonomnesis: 'a mental activity that involves internal listening: examples include recalling to memory sounds linked to a situation' (Augoyard & Torgue, 2005: p.85). The reading on phonomnesis became the basis for an in-class activity using paintings displayed in Tate Modern to conjure up memories of sounds (Figure 68). To investigate the concepts of resonance and wonder, we critiqued the installations of two artworks: Marcel Duchamp's *Fountain* (1917, replica 1964) and the Guerrilla Girls' *Do Women Have To Be Naked To Get Into The Met. Museum?* (1989). We discussed issues surrounding the works' aura, originality, and reproduction, as well as the relevant historical contexts each work acted within. Expanding upon Greenblatt's resonance via the notion of the mix tape, we looked at the artworks in relation to other works in the same galleries and discussed how these juxtapositions might influence an audience's interpretation of the work (Figure 69).

Figure 69. Left: Students listening to Duchamp's *Fountain* at Tate Modern during *Listening to Museums*, 19 February 2017. Right: The author with Listening to Museums students discussing the work of the Guerilla Girls at Tate Modern. Photos by Cristina Sousa Martínez.

5.5.3 Session 3: Sharawadji, authenticity, and curiosity

The final session of the course encouraged students to think of the often chaotic sounds within museum spaces as opportunities for embracing the unpredictable within a learning environment. To this end, a reading was provided which introduces the concept of sharawadji: finding beauty within sounds that display a lack of organisation (Augoyard & Torgue, 2005: p.117). In order to illustrate this concept, students were asked to listen to the Maths Gallery at the Science Museum (Figure 70) or the Great Court in the British Museum (Figure 71). This concept was then tied into ideas surrounding the necessity (or lack thereof) for authenticity within museum objects (Beier-de Haan, 2010: pp.1–5), with a listening exercise and discussion of the Cast Courts at the V&A (2017) or the touchable reproduction of the Rosetta Stone on display in the Enlightenment Galleries at the British Museum (2018). Finally, the course concluded with a discussion of the importance of curiosity within museums (Thomas, 2016: pp.8–18) and within the act of listening.

Figure 70. The author explaining a sound-mapping exercise to students at the Science Museum, London during *Listening to Museums*, 18 March 2017.

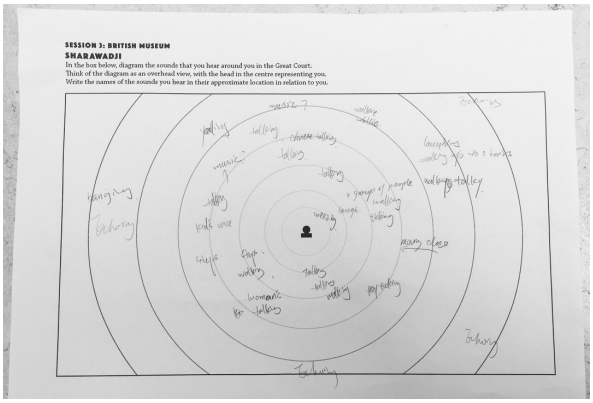


Figure 71. Student soundmapping exercise completed in the Great Court of the British Museum during *Listening to Museums*, 19 May 2019.

Feedback received from both years' students was generally positive, though several students in both years expressed concern that the readings were too lengthy and/or challenging. In-class discussions were of varying quality depending on topic and the mix of students. The first discussion of each year (reflecting upon the class's first soundwalk through a museum) was significantly different: the 2017 discussion was lively and engaged, possibly due to more members of the group having familiarity with listening to their environment (one student in the 2017 group was an audio engineer, and another was an artist who made field recordings); the 2018 discussion was filled with confusion,

as the students mainly struggled to find any relevant connections between the museum's acoustic environment and their experience of the Natural History Museum's content. By the end of that session, however, the discussion of the exhibition design of the aquatic life gallery was very lively and filled with meaningful critique. Students also mentioned feeling overwhelmed by the number of topics being discussed at each session. Although the sessions were three hours long, it was difficult to properly cover each topic in only one hour. A solution to this might involve either holding more than three sessions per class section, or covering fewer topics as a whole, perhaps only two per month.

5.6 Gift Shop and publishing

> 'I think the joke is on... I don't know who the joke's on - really. I don't even know if there is a joke.' – Steve Lazarides, former agent of Banksy, quoted in Banksy documentary *Exit Through the Gift Shop* (2010).

As the title of Banksy's documentary helped to popularise, the 'exit through the gift shop' has achieved cliché status within the museum world. It seems almost unthinkable for a museum to exist without offering branded souvenirs; after receiving multiple inquiries about MOPS souvenirs, I opened a MOPS Gift Shop using a free online service to create print-on-demand souvenirs including t-shirts, tote bags, mugs, and umbrellas (Appendix 9). The MOPS Gift Shop was intended to mimic large museum gift shops, while hopefully providing MOPS with a source of income to reinvest in printing fees, train tickets, and other expenses necessary to continue the practice of running my own museum. Unfortunately, the fundraising aspect of the Gift Shop has yet to significantly materialise; I remain my own Gift Shop's best customer, using the items as props while giving talks at conferences and other venues to which the museum has been invited.

In tandem with the Gift Shop, Museum of Portable Sound Press has also been established to produce printed products related to MOPS's overall theme of sound and museums. As of this writing, the publishing projects have been limited to books such as the various editions of the MOPS *Gallery Guide*. Two books have also been produced so far documenting related projects from my own art practice separate from MOPS, but related to the theme of sound and museums:

Audio Tour: The 4'33" Museum is a 74-page book and 50-track digital album collecting field recordings I have made within 50 museums around the world. Each

recording lasts four minutes and thirty-three seconds as a nod to John Cage's *4'33"*, his famous silent piece that sought to 'put a frame around' sounds by not playing music. Similarly, my practice of making these recordings has sought to highlight the sounds of looking at art and museum objects. I began this practice in the year 2000, and continue to do so – as such, this ongoing project is also an early forerunner to MOPS, as it helped to focus my attention on what museums sound like, as well as how they do or do not make use of sound within their own exhibition spaces.

Hearing Enlightenment: A Sound Map of the Enlightenment Galleries at the British Museum documents the performance and recording piece described in 1.7. It includes the hand-annotated museum map I used to plan out the performance, and is accompanied by digital audio files of the final sound piece made from the field recordings.

Finally, the MOPS Press has also published a non-book item directly related to the MOPS permanent collection: *A Deck of Portable Sound Cards* (Figure 72) is a deck of cards containing waveform images and edited object label descriptions of fifty objects from the MOPS Permanent Collection Galleries. Three other cards are included: one containing a brief introduction and two cards containing the object list. A 'certificate of authenticity' accompanies each deck. The cards do not allow for a way to listen to the sounds, they merely represent them visually and textually, much like postcards of paintings sold in the gift shops of art museums. My original intention in producing them was as a reference to museum postcards and the *Oblique Strategies* deck created by musician Brian Eno and painter Peter Schmidt in 1975 (Dayal, 2009: p.12). Eno and Schmidt's cards contain aphorisms intended to assist creative people when faced with a block in their process: if unsure of what to do next, a card is drawn from the deck and the instructions are followed. Some of the aphorisms included on the cards are 'Honour thy error as a hidden intention', 'Overtly resist change', 'Make a sudden, destructive, unpredictable action; incorporate', and 'Don't break the silence'. There is nothing so cryptic about *A Deck of Portable Sound Cards* other than perhaps the mystery of what the sounds represented by the waveforms sound like.

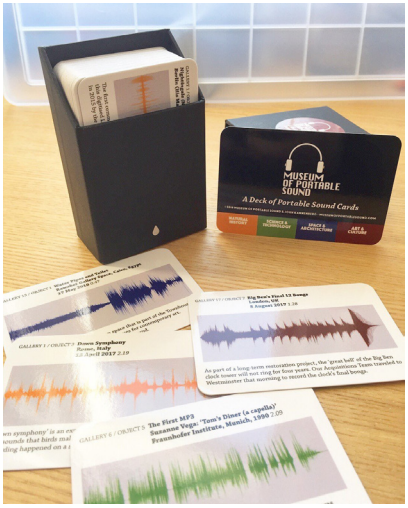


Figure 72. *A Deck of Portable Sound Cards*. Photo by author.

5.7 Conclusion: who is MOPS's 'public'?

Keeping the MOPS Permanent Collection Galleries' digital sound files on a single off-line mobile contributes to the project's ability to approximate an experience of listening to recorded sounds that is analogous to that of viewing physical objects in a traditional museum. However, due to the exclusivity of access to the MOPS mobile, its effectiveness as a public museum would be severely limited if not for its multiple presences across the online world of social media. As of this writing, in-person visits to MOPS have reached 990 people, but its online audience is significantly larger: the MOPS Facebook page has reached 4,450 followers; its Twitter account has 2,905; its Instagram has 2,098; and its YouTube channel is followed by 177 subscribers. Even allowing for a number of people likely follow the museum on more than one platform, the current total number of MOPS social media followers – 9,630 – is nearly ten times larger than the MOPS in-person audience to date. This disparity increases the difficulty of determining who the MOPS public actually is: is it the in-person visitors? Is MOPS actually more of an online experience, even without its collections accessible to the online audience?

I believe the MOPS public to be a combination of these two seemingly separate publics. However, it is the in-person visitors – those who actually listen to the sound objects in the MOPS Permanent Collection Galleries – who are its primary audience. MOPS is not only an art piece about the importance of listening, not just a research project exploring ways that museums are performed together by the institution and its visitors – it also interrogates what it means to be a public museum in the twenty-first century. As museum participation in social media has become considered compulsory for connecting with their audiences (Giannini and Bowen, 2019: p.565), MOPS has made similar explorations of these platforms. While there may be a significant difference between the types of experiences MOPS offers in person versus those via social media, the core principles of the institution (to encourage close listening to recorded sounds as objects of culture rather than as source material for musical compositions) are communicated to the audiences present in person and online, albeit in different ways and at different levels of engagement with the institution. In-person MOPS visitors and I may engage in lengthy conversations; online MOPS visitors may comment on a post I have made, share it with their own followers, or message me to seek answers to a question. These interactions have a shorter duration,

but are no less valid as public engagement. Via social media, I have assisted strangers on multiple occasions: I have helped a visitor digitise an old family recording that (to them) was on an unplayable media format; I have posted obscure videos that went on to be included as reference material in university courses. The online public that engages with MOPS brings its own set of priorities to its interactions with the institution. MOPS may not yet be an accredited institution holding its digital sound objects 'in trust' for the public, but as a twenty-first century public museum, MOPS has demonstrated its obligation to engage in adaptable ways with in-person and online publics as part of its mission to bring the culture of sound to the world one listener at a time – and, the MOPS sound objects are archived in multiple copies.

Participating in social media has allowed MOPS to develop its institutional voice. As Nina Simon suggests (2007), museums participating in social media should choose a voice and an approach most relevant to their institution when using social media. I have attempted to use a slightly formalised version of the Personal Voice, what Simon claims is the 'gold standard for personal blogs, [but] it's incredibly unusual for institutional blogs'. Online posts issued via the MOPS social media accounts include opinions and humour, which has been acknowledged by museum practitioners such as Russell Dornan (2017) as being appropriate for a museum's online activities, and also desirable in the same way that it is desirable for a museum's objects to be authentic: 'being genuine is important for the audience and giving your own personality space to breathe makes it so much easier to be real'.

Due to the widespread adoption of digital files, specifically the mp3, as a 'meta-standard' format for the storage and playback of audio in the early twenty-first century (Sterne, 2012a: p.23), I decided that MOPS could be entirely housed on a mobile phone. However, mp3s are considered to be a contributing factor to the disintegration of sound's (or, more precisely, music's) 'thingness,' as it was the illegal distribution of mp3 files that caused radical changes within the economic model of the traditional music industry (Sterne, 2012a: p.184–226). This concept that sound was no longer a 'thing' to be owned has made it difficult to consider digital recordings as worthy of museum display, since museums thrive on the collection and display of authentic objects – even though, as Peter Weibel and Bruno Latour state:

> A museum exhibition is deeply unrealistic; it is a highly artificial assemblage of objects, installations, people and arguments, which could not reasonably be gathered anywhere else. In an exhibition the usual constraints of time, space, and realism are suspended. (2007: p.94)

This contradictory notion of museum exhibitions as unrealistic yet filled with so-called 'real' objects held in museum collections is something I have tried to explore with MOPS. Ownership is central to the notion of collecting, as Walter Benjamin famously stated: 'ownership is the most intimate relationship that one can have to objects' (Benjamin, W., 2007: p.67). Although it would have been logical for MOPS to be a website or downloadable app with online access, I decided upon the absurdist notion that its digital files would not be distributed online, and would only exist on my mobile. As the artist who created many of the MOPS audio recordings, this patina of 'ownership' I hold over them has allowed me the comfort to dictate how the sound objects should be used within the museum. As the Chief Curator of MOPS, I feel an obligation to care for their preservation, and hold them in trust for use by the general public; while this has not been legally formalised as of yet, I intend to pursue registering MOPS as a UK nonprofit organisation in order to begin the process of applying for UK museum accreditation.

The form of my museum has been determined by the fact that the objects it displays are sounds rather than tangible objects. According to Michelle Henning (2007: p.25), 'The art museum adapts its display practices to the requirements of different media. At some point, simple adaptations become major, and the museum becomes a noticeably different institution.' As there was a lack of precedent for an entirely listening-based museum, it was possible to rethink the form of what museums traditionally are when designing MOPS. While its form may be non-traditional, its interactions with its online public is fairly traditional; it is amongst the interactions with in-person visitors that MOPS behaves most radically, focusing on performative meetings with each listener.

Chapter 6
Conclusions and further research

6.1 Sound objects as social objects: can sounds act as objects analogous to physical objects within museum practice?

Figure 73. Mix tape from Jean Smith to Slim Moon, owner of Kill Rock Stars Label, from page 58 of *Mix tape: the art of cassette culture* by Thurston Moore (2004)

The two disciplines in whose overlap this project has been based, sound studies and museum practice, both include areas of activity where the accumulation of artifacts is a primary focus. Within sound studies, field recording acts as an area of natural and urban acoustic environment research, and provides source material for experimental and electroacoustic musicians. In museum practice, curators acquire and select objects to tell specific stories via gallery-based exhibitions. Within my creative practice, these two activities of selection and re-presentation have been demonstrated (3.3) to find common ground within the act of mix tape creation – an activity in which the combination of carefully selected items of sonic source material lead to a whole which is greater than the sum of its parts, generating new meanings or new pathways for learning. Mix taping did not merely involve collating and reordering of songs onto a single piece of media, however – another component of the practice of mix taping involved hand crafting a visual package for the tape, a piece of physical, designed visual art that added its own layer of meaning and interpretation to the experience (Figure 73), much as the visual design of the

MOPS *Gallery Guide*, map, and digital album art on the mobile phone work together to communicate the taxonomical systems I have applied to organise these sounds in order to communicate my perspective on their interpretation. The packaged sounds on mix tapes, as Jansen discusses in 3.3, were often gifts from one person to another, an artifact that shared knowledge, strengthened friendships, or declared love – in their time, they were perhaps the ultimate sonic social object. My mobile, map, *Gallery Guide*, and sounds work together as sonic social objects within an experimental museum practice – a kind of gift from a museum's curator to a museum visitor.

Within professional museum practice, Nina Simon discusses case studies of museum curators using objects in collections as social objects, a term originally coined by sociologist Jyri Engeström in a blog post (2005) about social networking that declares '"social networking" makes little sense if we leave out the objects that mediate the ties between people' and suggests that 'social networks consist of people who are connected by a shared object'. Engeström describes a wide variety of things and concepts as objects, such as jobs or social dates. Simon equates the term with objects on display within museums that cause strangers to begin interacting with each other – essentially, catalysts for conversation. She describes social museum objects as falling under four primary categories: personal, active, provocative, and relational (Simon, 2010: p.129), and suggests that it is difficult to create a social object, but demonstrates that it is relatively easy to create museological contexts around objects that are known conversation starters.

In its implementation of themes, categories, and taxonomies inspired by museum-born knowledge systems (3.2), MOPS demonstrates one possible method for how sounds can be exhibited as objects within a museum context to tell stories and investigate aspects of human culture in much the same ways that physical objects do. My experience of carrying on personal conversations with MOPS visitors has also demonstrated that these sounds have the ability to act as instances of Simon's museum-based social objects. The unconventional form of MOPS, coupled with its visitors' performance during the visit encounter with me creates an experience that I believe begins to offer ideas for how museums may continue to evolve beyond their historically visual-centric paradigm.

As the world's cultures continue to shift many of their activities to the digital realm, museums are being confronted with a new reality to operate within: one where digital data

and physical objects need to coexist. As anthropologist and museologist Haidy Geismar states regarding the digitisation of museum objects and practices:

> The border zone of translation, or remediation, between our understandings of old and new collections draws our attention to the interdependence of object lessons (creating knowledge from the real world) and reality effects (the use of objects to mimetically create an understanding of the real). The moment when one kind of technological mediation gives way to another is also the moment in which we learn about what we consider to be 'natural' (or real) and what we perceive to be 'socially' constructed. As collections themselves shift across platforms, what counts as a real object, worthy of preservation and care, subject to property regimes and the call of sovereignty, is also drawn into question. Moments of remediation are more than just processes of translation – they are moments in which knowledge and meaning itself are produced. (Geismar 2018: pp.xxi–xxii).

While Geismar is speaking here of digitisation practices related to physical objects, this same sensation – the presentation of mediated content translated from the physical world into a 'born-digital' object such as a digital audio recording – is itself a kind of meaning making, particularly when objects, like the sound objects on display in MOPS, are presented within the contextual and conceptual framework of a museum institution; digital sounds become objects of culture, which in turn act as catalysts for meaning making. Whether compiled on a compact cassette or an outdated iPhone, when they are treated as objects of curatorial care, sounds – even non-musical ones – can function as social objects; and for MOPS specifically, these social objects function within a performative contact zone where meaning is made for visitor and institution alike.

6.2 Towards a new personal definition of 'museum': what is at stake in creating a sound museum?

As this thesis has come to a close, the social aspect of museum practice has become equal in importance to the objects on display for me. In discussing the particularities of micromuseums, Candlin suggests that a blurring of the subjective and the objective – or, as I would suggest, an allowance for interpersonal communication between an institution and its public – leads to learning experiences unavailable at larger institutions:

> Curators tell me and other visitors about the objects on display, but they also banter, reminisce, gossip, tell jokes, recount stories, proffer opinions, and engage in conversation … In these spaces there are no clear boundaries between subjective and objective information and there is little distinction between personal and professional exchange, or

> between staff and visitors. The net result is that learning and pleasure emerge in the interactions between staff, visitors, and objects, often with surprising or moving or amusing or fascinating results (2016: p.183).

As an artist operating my own museum, I felt I had two options in terms of relating to the public: I could become a fictional character who believes impossible things, never admits to the inherent absurdist notion of the form of my own museum, and pretends to be perpetually objective while interacting with visitors, much like David Wilson of the Museum of Jurassic Technology; or I could turn myself into what I wish more curators at large institutions would be – a congenial version of themselves designing their exhibitions and interacting with their audience while unafraid to make jokes, express opinions, or admit to the inherent humanity and fallibility behind museum practice.

My research journey began by listening to the sounds of museums during visiting hours, because I felt museums are most authentically museums when an audience interacts with them. Similarly, it has been the interactions between myself and MOPS visitors who have been inspired by its social/sound objects that have convinced me that MOPS, despite its absurdist form, is truly a museum. Indeed, the performative aspect of the MOPS experience brings me back to Tereza Scheiner's notion of the museum as phenomenon and intangible space referred to in 0.3.1. Now at the end of this phase of my research journey, I see MOPS as part micromuseum, part intangible space, and part interactive performance – with the interactivity the actuator that brings the museum into existence.

In my repeated encounters with visitors, MOPS has demonstrated to me that 'Museums are about people, and collections are merely manifestations of human desires' (Knell, MacLeod, and Watson, 2007: p.xix). Having created a museum of sound objects – a type of museum that challenges many conventional aspects of traditionally object-based museums – I have found myself struggling with the question of what is at stake in creating an institution that focuses on listening to sounds rather than looking at objects.

In some ways, a museum of sounds might seem antithetical to what museums are (or have been) at their essence: places where we go to look at things. However, I have observed these sounds on a mobile make an impact on hundreds of people so far. Just as we can watch other people have joyful experiences while standing in front of great art or historical objects in traditional museums, I have watched a three year-old child stop playing

with their toys, sit patiently, eat a sandwich, and listen to sound after sound, enjoying the experience so much they asked to keep the MOPS mobile (Figure 74); and I have watched a nearly century-old woman, introduced to me by a friend who volunteered as her caretaker, light up with joy as we wandered the MOPS galleries together, the sounds triggering memories she was only too happy to chat about (Figure 75). For all the theoretical writings I have read along my research journey that helped me build this case for the possibility of displaying sound objects in a museum context, none have come close to convincing me as much as the many MOPS visitors have.

Figure 74. A three year-old child nibbles a sandwich and listens to MOPS, London, 21 November 2017. Photo by author.

Figure 75. A ninety eight year-old woman smiles while wandering the galleries of MOPS, with the author. London, 25 September 2017. Photo by Verity Flute.

Through MOPS, I have followed an art practice that has revealed to me a defining characteristic of what a museums are – or at least what I now believe they should strive to be – is a place where people listen to each other.

6.3 The evolution of the MOPS 'Curator'

The MOPS Director is the public face of the museum, the person who gives public talks and conference papers, and works behind the scenes to network amongst museum professionals and spread awareness about the MOPS project. The MOPS Chief Curator is the person who designed the museum, organised the sound taxonomies, acquires new objects for the collections, cares for those objects, determines what stories will be told in the MOPS galleries, and meets with one-to-one visitors. They are both me, but their duties are compartmentalised within their job titles. The MOPS Curator has evolved the most since the beginning of the project; as MOPS has grown as an institution, the Curator has had to change tactics and behaviours to match.

As with many other aspects of MOPS, the initial role of its Curator was loosely defined. At first he was merely tasked with setting up a museum of sound – while this museum would hopefully make connections between individual sounds and aspects of human culture, he was more concerned with creating taxonomies for sounds that visitors could recognise as museum-like. He was also more concerned with selecting individual sounds from my previously amassed archive of field recordings than with acquiring any new sound objects. As MOPS has continued to develop, the Curator's vision for the exhibition of sounds in the MOPS galleries has grown more refined over time: the conscious decision to stop referring to 'sound' in lieu of 'sounds' in my writings about MOPS was a crucial turning point (indeed, the subtitle of this thesis was originally 'Sound as an object of curatorial care'). This linguistic change was instinctive at first; the MOPS Curator did not know why exactly he had to switch to the plural, but just knew it was crucial (though he decided it was too late – and too confusing – to change the name of the museum itself). Eventually, he realised this was connected to his preoccupation with a distinction between musical and non-musical sounds – an admittedly precarious theoretical position which, if he is honest, he will admit in a hushed whisper is still in the process of being fully thought through. He does know for certain, however, that clinging to the notion that all sounds have the possibility to become music, as a result of how other artists interpreted John Cage's 'silent piece' *4′33″* (Gann, 2010: p.197), has become a conceptual dead-end for him in relation to the notion of displaying sounds as museum objects. He has also committed to a duty of care for the ongoing preservation of the sound objects in the MOPS collections, overseeing multiple backup copies of the digital sound objects on display. In my mind, the MOPS Director is replaceable; its Chief Curator is now indispensable.

6.4 Areas for further research

I believe that MOPS's potential to explore further areas of research within museum studies and sound studies is far-reaching. While creating the museum, presenting it to visitors, and writing this thesis, numerous areas for further exploration have presented themselves either within my own thinking or as suggestions from others. Below are some of the possible topics for which MOPS might serve as a useful research tool.

6.4.1 Sounds and ‘universal museums’

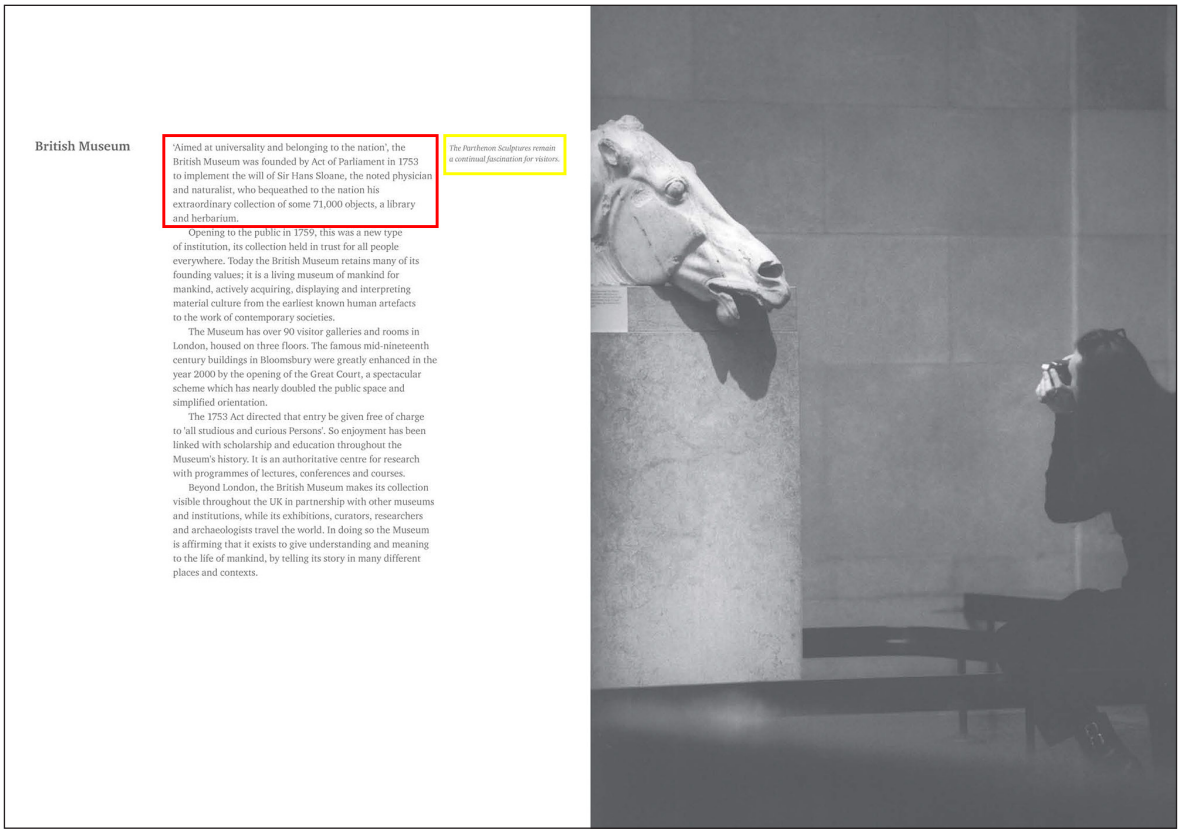
While creating the taxonomies used to organise the sound objects on display in MOPS, I began researching the development of the modern museum. The four primary categories that create the structure of MOPS – Natural History, Science & Technology, Space & Architecture, and Art & Culture – were inspired by the broad topics covered by large museums like London’s British Museum, the Natural History Museum, and the Science Museum; in the history of the development of the modern museum, these broad topics emerged as starting points from which museum collections could be built, a rough framework that referred to the methods of categorising knowledge that guided the earliest curators of modern museums. These early, large museums are known either as ‘encyclopaedic museums’ or ‘universal museums’. Some of the titles of MOPS themes and galleries were influenced by my experiences of visiting universal museums, as the four main themes of MOPS were inspired by subject-specific museums such as those dedicated to natural history and science. Universal museums like the British Museum and the Louvre are some of the most popular museums in the world (Rubin, 2019: p.18), so I chose them as a partial inspiration due to their ubiquity: since I was trying to convince the MOPS audience that they were visiting a museum, I believed my museum should incorporate references to types of museums that they would likely already be familiar with.

Definitions of ‘universal museum’ are contested, but as Katherine Burlingame (2014) has suggested, they are usually large public museums displaying objects from cultures around the world, from the beginnings of human civilisation to the present; the physical size of their own architecture reflects the scope of their collections, with universal museums tending to be vast buildings or building complexes containing a multitude of themed galleries with thousands of objects on display. Their collections also usually contain large numbers of objects acquired as a result of colonialist conquests of other nations, resulting in a great number of ethical issues surrounding these museums’ origins and continued existence (Burlingame, 2014: pp.387–388). Yet museologists have difficulty not only defining what universal museums are, but also agreeing upon when the concept itself came about. It has been tied to the historical period of the Enlightenment by the British Museum in its own publication compiled to celebrate the opening of its

Enlightenment Galleries in 2002 (Sloan and Burnett, 2004); however, the book attempts to equate the British Museum's establishment with an idea of 'universality' whose provenance is actually a quote from Alexander Pope about the life's work of Sir Isaac Newton: 'aimed at universality and belonging to the nation' is used as the title of the British Museum book's introduction (Sloan, 2004: p.12), yet the original quote has been taken out of context and presented so as to conflate Pope's statement with the establishment of the British Museum. This conflation is made even more explicit in the introduction to the British Museum's *Review 2002/2004*, published almost simultaneously with Sloan and Burnett's book, whose first paragraph – located just opposite a full-page photo of the British Museum's Parthenon Marbles gallery – reads:

> 'Aimed at universality and belonging to the nation,' the British Museum was founded by Act of Parliament in 1753 to implement the will of Sir Hans Sloane, the noted physician and naturalist, who bequeathed to the nation his extraordinary collection of some 71,000 objects, a library and herbarium (Gibbs, 2004: p.2)

Alexander Pope's quote appears in the report exactly as it does in the above transcription, surrounded by single quotes without a footnote or any other attribution.


British Museum

'Aimed at universality and belonging to the nation', the British Museum was founded by Act of Parliament in 1753 to implement the will of Sir Hans Sloane, the noted physician and naturalist, who bequeathed to the nation his extraordinary collection of some 71,000 objects, a library and herbarium.

Opening to the public in 1759, this was a new type of institution, its collection held in trust for all people everywhere. Today the British Museum retains many of its founding values; it is a living museum of mankind for mankind, actively acquiring, displaying and interpreting material culture from the earliest known human artefacts to the work of contemporary societies.

The Museum has over 90 visitor galleries and rooms in London, housed on three floors. The famous mid-nineteenth century buildings in Bloomsbury were greatly enhanced in the year 2000 by the opening of the Great Court, a spectacular scheme which has nearly doubled the public space and simplified orientation.

The 1753 Act directed that entry be given free of charge to 'all studious and curious Persons'. So enjoyment has been linked with scholarship and education throughout the Museum's history. It is an authoritative centre for research with programmes of lectures, conferences and courses.

Beyond London, the British Museum makes its collection visible throughout the UK in partnership with other museums and institutions, while its exhibitions, curators, researchers and archaeologists travel the world. In doing so the Museum is affirming that it exists to give understanding and meaning to the life of mankind, by telling its story in many different places and contexts.

The Parthenon Sculptures remain a continual fascination for visitors.

Figure 76. Two-page spread of *The Memory of Mankind: British Museum Report 2002/2004*. The paragraph that begins with Pope's quotation is marked in red by author. The photo caption, marked in yellow by author, reads 'The Parthenon Sculptures remain a continual fascination for visitors.'

Dan Hicks, Professor of Archaeology and Curator of the Pitt Rivers Museum at Oxford, has suggested the term 'universal museum' may not have been contemporaneous to the Enlightenment at all, but rather a twenty-first century construction in a brief essay, *The 'universal museum' is a 21st century myth* (2018). The term, Hicks suggests, is now connected to a viewpoint centred upon universal museums as globalist, country-less institutions meant to be accessed by citizens of the entire world; it most likely only acquired this globalist slant in the late twentieth century, Hicks states, as institutions such as the British Museum began to defend themselves against increasing calls for the repatriation of objects that had been removed from other countries as a by-product of colonialism. *The Declaration on the Importance and Value of Universal Museum*, published in 2002, was signed onto by a consortium of directors from museums across Europe and the United States. It argues against the repatriation of objects by claiming:

> Although each case has to be judged individually, we should acknowledge that museums serve not just the citizens of one nation but the people of every nation (ICOM, 2004).

Hicks' essay states that, according to his own research, pre-twentieth century uses of the 'universal museum' term actually referred to their 'inclusion of either multiple disciplines or multiple forms of art', with claims of universality as tied to globalism not entering the conversation until the post-colonial period; as an example, Hicks mentions a 1983 House of Lords debate containing the globalist use of the term presented as evidence to argue against repatriating the Parthenon Marbles to Greece. Hicks' essay concludes:

> Today, as the rhetoric of universal values becomes a time-geography of every place and era, from Bloomsbury to the Museumsinsel, we witness mythography in the making. Behind the façade of Enlightenment values lie the contested legacies of European imperialism. Our national museums need an anthropological understanding of universality as a parochial Western concern now more than ever (2018).

How could this concept be explored via a collection of sounds? With further research, I believe MOPS could potentially explore some of the ethical issues entangled within the universal museum model as well as within the practice of creative field recording. How does my own unannounced recording of sounds within urban environments compare with the historical acquisition methods used in the past by universal museums? Currently there is little reason to compare my urban sound recordings

with such overtly anthropological recording as the sensory ethnography work carried out in Papua New Guinea by ethnomusicologist Steven Feld (2012). However, as more sounds are potentially added to MOPS from global locations, questions of provenance, 'ownership', and cultural sensitivity could all be explored in ways that more directly relate to contemporary ideas of the 'universal museum'.

6.4.2 Sounds and digital materiality

Within philosophical studies of materialism, the past decade has seen a body of research emerge related to digital materialism – the idea that digital objects, once thought to be entirely non-physical, actually do have physical form, even if that form is only an extension of the hardware within which digital code and software operate (Reichert and Richterich, 2015). This movement towards a digital materialism has begun to impact museum practices, which are seeing significant growth in object digitisation and digital-born objects. These practices have brought new forms of media into a growing number of museums, enough that it has become necessary to reevaluate their use within, and impact upon, museum practice; Michelle Henning even categorises museums themselves as media (2006: pp.70–98). Anthropologist Haidy Geismar (2017: p.xvii) believes that a material view of digital objects within museum practice is necessary 'in terms of a trajectory of materiality that links our commonplace understandings of the digital to the analogue, information to material, systems to structures, knowledge to form'.

Not only is MOPS uniquely equipped to contribute to the burgeoning conversation around digital materialism within museum practice, its focus on born-digital sound recordings – coupled with its focus on sounds as objects – could, with further research, be used as a tool for exploring the materiality of digital sound within contemporary museum practice.

6.4.3 Sounds as intangible heritage

The concept of heritage within museum practice has gradually evolved to incorporate 'all material evidence of man and his environment' (Desvallées and Mairesse, 2010: p.40). Critically, 'heritage is not a "thing" or a historical or political movement, but refers to a set of attitudes to, and relationships with, the past' (Harrison, 2013: p.14). As

attitudes towards globalism and indigenous cultures have become more inclusive within cultural practice, the General Conference of the United Nations Educational, Scientific, and Cultural Organisation (UNESCO) adopted the Convention for the Safeguarding of Intangible Cultural Heritage in October 2003 (Alivizatou, 2012: p.15). This formally established policies that had begun development within UNESCO dating back to 1952 (Kirshenblatt-Gimblett, 2004: p.53). UNESCO has continued to update its own definition of intangible cultural heritage since the 2003 convention; the current definition, as posted on the UNESCO website, states that intangible cultural heritage

> includes traditions or living expressions inherited from our ancestors and passed on to our descendants, such as oral traditions, performing arts, social practices, rituals, festive events, knowledge and practices concerning nature and the universe or the knowledge and skills to produce traditional crafts. (UNESCO, 2017)

UNESCO considers the traditions themselves (and the knowledge required to perpetuate them) to be the content of what is covered by the term intangible cultural heritage. Although this definition references several traditions that are manifested in sound, the sounds themselves (i.e. chants spoken, sounds generated by objects and devices used within certain rituals, songs sung, etc.) are not considered to be examples of intangible cultural heritage. Therefore, UNESCO is primarily concerned with preserving and protecting the knowledge behind the traditions: 'The task, then, is to sustain the whole system as a living entity and not just to collect "intangible artifacts"' (Kirshenblatt-Gimblett, 2004: p.53). However, in light of the recent multisensory turn within museum practice perhaps the definition is due for a reassessment – an area of research to which MOPS and its methods for categorising sounds as objects could contribute.

Could there exist a sort of 'expanded field' of intangible cultural heritage within museum practice, one that includes the collection and preservation of sounds in its remit? While a similar strategy has been previously attempted by the World Soundscape Project (co-founded by R. Murray Schafer), their anthropological and ethnomusicological work has primarily remained an influence upon the worlds of musical composition and musicology rather than museology, and its public exhibition has mostly been relegated to limited run album releases (Järviluoma et al, 2010). Similarly, cultural anthropologist Steven Feld's seminal work in this area (2012) has likewise been embraced by the anthropology, sensory

ethnography, musicology, and sound studies worlds but has rarely dovetailed with museum practice; more recent work by the Sensory Ethnography Lab at Harvard University <https://sel.fas.harvard.edu> has been focused upon creative outputs such as art installations and documentary films (Leimbacher, 2014). I believe MOPS could be used as further evidence of the need to collect and preserve sounds as cultural objects. Perhaps the taxonomies established by MOPS could be used as starting points for other institutions with significantly larger collections of sounds than MOPS to experiment with the exhibition of sounds as objects as part of a proposal for re-examining the definition of intangible cultural heritage.

6.4.4 Post-internet art

As a project that actively engages with the internet yet refuses to distribute its primary asset, its sounds, online, I believe MOPS has an intriguing relationship with what has come to be known as 'Post-Internet Art'. There has been much confusion regarding the definition of this term, with some critics and practising artists claiming it infers that work labelled 'Post-Internet' somehow exists in a time after the internet, which has yet to happen. Rather than settling on a temporal-based definition of the term, critics have shifted their interpretation of the term to indicate art that displays an awareness of the internet and its impact upon contemporary culture, whether it is displayed online or in the physical world. A more precise definition of the post-internet appeared in the opening essay of the catalogue to the 2014 exhibition *Art Post-Internet*, curated by Karen Archey and Robin Peckham at the Ullens Center for Contemporary Art in Beijing, China:

> … this exhibition presents a broad survey of art that is controversially defined as "post-internet," which is to say, consciously created in a milieu that assumes the centrality of the network, and that often takes everything from the physical bits to the social ramifications of the internet as fodder. From the changing nature of the image to the circulation of cultural objects, from the politics of participation to new understandings of materiality, the interventions presented under this rubric attempt nothing short of the redefinition of art for the age of the internet. This understanding of the post-internet refers not to a time "after" the internet, but rather to an internet state of mind – to think in the fashion of the network (Archey and Peckham, 2014: p.8).

I feel the experimental curatorial practice within this research project shares some affinity with this revised definition of the Post-Internet; yet my strict stance against online

distribution of the MOPS sounds creates a tension with Post-Internet Art, since online circulation and archiving have become central topics covered within this rapidly expanding genre, and within contemporary art as a whole (Gronlund, 2017: pp.188–194). Perhaps further research could help elucidate whether MOPS could be considered an example of this genre, as well as contribute to research surrounding digital audio's relationship to Post-Internet Art.

6.4.5. Why did museums become silent?

Susan Bennett (2013: p.16) claims that as museums began opening to the public in the nineteenth century, the notion that museum visitors should remain quiet began to spread; museums became shrines to knowledge, which required 'quiet and passive spectators to complete [their] purpose'. Whether this was an intentional result of policies implemented by staff of newly-public museums or some other factor led to this social convention, whatever caused the general perception that museums, and museum visitors, should be silent would be fertile territory for MOPS to explore; as a museum of listening, it could be used as a tool to explore this question via a temporary exhibition or other form of research within the MOPS project. Indeed, the perception of museums as silent spaces may be related to why museums have not made the collection and display of sounds a priority (Candlin, personal communication, February 2019).

6.5 Conclusion: the future of listening in museums

MOPS demonstrates the ability of sounds, particularly non-musical sounds, to act as museum objects. It does this by applying techniques borrowed from the culture of home audio taping, the making of mix tapes – a musical practice applied to non-musical sounds. MOPS creates the experience of visiting a museum building with a book, a map, and a mobile. It has proven that a museum based around the listening experience can work when listening is prioritised over looking in the museum's design. This is also reflected in the insistence upon a visit encounter rather than online distribution of the sounds; the absurdist policy of meeting me and listening to my mobile leaves visitors no choice but to make an appointment to listen – to stay in one place, listen to the sounds, read about them in the *Gallery Guide*, and devote their attention to the act of attentive listening. It

is a policy that appears ridiculous in theory, but in practice it is precisely what makes MOPS work. Contemporary life is filled with distractions, and digital sound streamed online is consumed as a distraction from something else people would rather not be doing: exercising, commuting, completing a household chore. An app version of MOPS would not encourage close listening, or extended contemplation of the role sounds play in the lives of visitors, the way the in-person visits do. The absurdist form of MOPS fulfills its function.

If museums are to ever fully move beyond the realm of the visual into the multisensory, the language of objects – at least for museum practitioners – will likely need to adjust or expand to accommodate these new perspectives. I believe that my re-definition of the 'sound object' within the context of my own curatorial practice that has tested it, could serve as one potential starting point for this process of multisensory inclusion. It is my hope that someday, museological sound objects of many types – not only music, and not only pieces of sound art, but sound objects related to sound's place within everyday, non-musical human experience – may begin to find a more prominent place within museums of material culture.

Although working on MOPS has provided me with a number of paths towards further research on the topic of sounds as museum objects, I believe research could also be undertaken by other museum practitioners – by those working within traditional, physical, object-based museums – not only to explore further methods for the display of sounds as museum objects, but also to continue to discover further areas where sounds and listening have played a significant role in human culture. Although MOPS visitors have responded positively to the format of listening to sounds with a guidebook, I believe further advancements could be made by displaying sounds alongside tangible objects, creating new relationships between physical objects and sound objects. Some possibilities for further exploration of different combinations of tangible and ephemeral objects within the same physical spaces could include: a gallery filled with different audio-based street crossing signals for the visually impaired (emitted from actual street crossing lights) displayed in a science museum; an industrial design museum display of the sounds of microwave ovens, mobile phones, hand or hairdryers, espresso machines, automobile or jet engines, washing machines, or any of a seemingly endless number of post-industrial devices used on a daily basis; or a display of the sounds of a factory producing objects at a design or industrial

heritage museum, such as the display of textile production machines at the MIAT museum of industry in Ghent, Belgium <https://www.industriemuseum.be/en>.

While my current sensory preoccupation is sound, I believe a more multisensory approach to museum display could become a natural progression in the evolution of museum practice – at the same time a look backwards to the multisensory experiences that were once provided by cabinets of curiosity, and a search for new ways to exhibit the multisensorial culture of our world and its people. As technology continues to invent new ways to digitally mimic or reproduce the world, perhaps one day I might even find myself visiting another researcher's Museum of Portable Scent.

However, the primary impact this project has had upon my own notion of what museums are has to be their potential as places that encourage conversations and listening. Orhan Pamuk, creator of Istanbul's Museum of Innocence, stated in a manifesto for museums he presented at the 2016 ICOM annual meeting:

> The future of museums begins at home. The situation is very simple: we are used to having epics but what we need is novels. In museums we are used to representation, but what we need is expression. We are used to having monuments, but what we need is houses.
>
> In museums we have History, but what we need is stories. In museums we have nations, but what we need is people. We had groups and factions in museums, but what we need is individuals (2016).

Museums and museum history are filled with human flaws and mistakes: colonialism, racism, misogyny, homophobia, theft, misrepresentation, counterfeiting; these are the things that make museums human institutions for me, places that are always striving to be better, rather than the cold, objective, 'expert' entities they often present themselves to be. I have operated, and will continue to operate, my own museum as an example of what I believe major museums could achieve if they became more willing to embrace their own humanity: a non-neutral space where opinions, conversation, debate, and curiosity can all be equally encouraged and explored in an open manner.

If they are to continue to thrive in the twenty-first century, I believe major museums might find it valuable to observe the ways smaller institutions interact on a more intimate level with their visitors. Rather than seeking to connect with visitors via virtual reality, augmented reality, apps, or other fashionable technologies of the moment, through this project I have come to believe that it is via the acknowledgement of the shared humanity

of institutions and their visitors that museums can develop the deepest, most meaningful connections with their audiences; within my project, this has been accomplished via the simple act of having conversations.

The experience of directing the Museum of Portable Sound has allowed me to engage in numerous discussions about sounds and culture with people whom I may never have met otherwise. I am in agreement with Pamuk's notion that museum institutions need to move beyond rigid organisational barriers to focus on their audiences as individuals – to engage in real conversations with them, and to truly listen.

References

Abt, J. (2006) Origins of the Public Museum, In *A Companion to Museum Studies*, *Blackwell companions in cultural studies,* Macdonald, S. (ed.), London, Blackwell, pp. 115–134.

Adorno, T. W. and Levin, T. Y. (1990a) The Curves of the Needle, *October*, 55, p. 48.

Adorno, T. W. and Levin, T. Y. (1990b) The Form of the Phonograph Record, *October*, 55, pp. 56–61.

Alivizatou, M. (2016) *Intangible Heritage and the Museum: New Perspectives on Cultural Preservation*, Routledge.

Ambrose, T. and Paine, C. (2006) *Museum basics, Heritage: care-preservation-management*, Second edition, Abingdon, Oxford, Routledge.

Anderson, I. (n.d.) Field Recording as a Performative Act, [online] Available from: https://www.academia.edu/15809365/Field_Recording_as_a_Performative_Act (Accessed 26 July 2018).

Archey, K. and Peckham, R. (2014) *Art Post-Internet*, Beijing, Ullens Center for Contemporary Art.

Arisohn, J. and Murphy, R. (2017) The Pop-Up Gallery Checklist, *Artsy*, [online] Available from: https://www.artsy.net/article/gallery-insights-the-pop-up-gallery-checklist (Accessed 16 January 2018).

Augoyard, J. F., McCartney, A., Paquette, D. and Torgue, H. (eds.) (2005) *Sonic experience: a guide to everyday sounds*, Montréal ; London, McGill-Queen's University Press.

Bal, M. (1994) *On Meaning-making: Essays in Semiotics*, Polebridge Press.

Banksy, Fairey, S., Ifans, R. (2010) *Exit through the gift shop*, [United States], Oscilloscope Laboratories.

Barnes, R. (2004) Cloistered Bookworms in the Chicken-Coop of the Muses: The Ancient Library of Alexandria, In *The library of Alexandria: Centre of learning in the ancient world*, London, I.B. Taurus, pp. 61–78.

Basu, P. and Macdonald, S. (2007) Introduction: Experiments in Exhibition, Ethnography, Art, and Science, In *Exhibition experiments, New interventions in art history*, Basu, P. and Macdonald, S. (eds.), Malden, Mass, Blackwell Pub.

Baudrillard, J. (2005) *The system of objects, Radical thinkers*, London, Verso.

Beier-de Haan, R. (2010) You can always get what you want: History, the original, and the endless opportunities of the copy, In *22nd ICOM General Conference*, Shanghai, China, ICOM, pp. 1–5, [online] Available from: https://icom.museum/wp-content/uploads/2018/07/Actes-Shanghai-complet2.pdf (Accessed 20 January 2020).

Beil, R., Cage, J., Kraut, P., Ausstellungshallen Mathildenhöhe Darmstadt and Institut Mathildenhöhe (Stadtmuseum Darmstadt) (eds.) (2012) *A house full of music: strategies in music and art, Art to hear*, Trade edition, Ostfildern : Darmstadt, Hatje Cantz ; Institut Mathildenhöhe.

Benjamin, J. (2014) The Industrial Sonifact and the Soundscape of the Anthropocene, *Journal of Contemporary Archaeology*, **1**(1), pp. 119–123.

Benjamin, W. (2007a) The work of art in the age of mechanical reproduction, In *Illuminations*, Arendt, H. (ed.), New York, Schocken Books, pp. 217–252.

Benjamin, W. (2007b) Unpacking My Library, In *Illuminations*, Arendt, H. (ed.), New York, Schocken Books, pp. 59–67.

Bennett, S. (2013) *Theatre & museums*, New York, New York, Palgrave Macmillan.

Berwick, C. (2011) Fantastic Voyage, *ARTnews*, [online] Available from: http://www.artnews.com/2011/05/01/fantastic-voyage/ (Accessed 2 March 2018).

Bijsterveld, K. and Dijck, J. van (2014) Introduction, In S*ound Souvenirs: Audio Technologies, Memory and Cultural Practices*, 01 edition, Bijsterveld, K. and Dijck, J. van (eds.), Amsterdam, Amsterdam University Press.

Bitgood, S. (2000) The Role of Attention in Designing Effective Interpretive Labels, *Journal of Interpretation Research*, **5**(2), pp. 31–45.

Bitner, J. (ed.) (2009) *Cassette From My Ex: Stories and Soundtracks of Lost Loves*, 1 edition, New York, St. Martin's Griffin.

Blesser, B. and Salter, L.-R. (2007) *Spaces speak, are you listening?: experiencing aural architecture*, Cambridge, Mass. ; London, MIT Press.

Blesser, B. and Salter, L.-R. (2013) Hearing events in space, In *On listening*, Carlyle, A. and Lane, C. (eds.), Axminster, Uniformbooks, pp. 87–90.

Bonk, E. and Duchamp, M. (1989) *Marcel Duchamp the portable museum: the making of the Boîte-en-valise de ou par Marcel Duchamp ou Rrose Selavy*, London, Thames & Hudson.

Boon, T., Jamieson, A., Kannenberg, J., Kolkowski, A. and Mansell, J. (2017) Organising Sound, *Science Museum Group Journal*, **8**(08), [online] Available from: http://journal.sciencemuseum.ac.uk/browse/issue-08/organising-sound/ (Accessed 17 November 2017).

Borgdorff, H. (2012) The Production of Knowledge in Artistic Research, In *The Routledge companion to research in the arts, Routledge companions*, Biggs, M., Karlsson, H., and Stiftelsen Riksbankens jubileumsfond (eds.), London, Routledge, pp. 44–63.

Brown, K. and Mairesse, F. (2018) The definition of the museum through its social role, *Curator: The Museum Journal*, **61**(4), pp. 525–539.

Bruce, C. (2006) Spectacle and Democracy: Experience Music Project as Post-Museum, In *New museum theory and practice: an introduction*, Marstine, J. (ed.), Oxford, Blackwell, pp. 129–151.

Bryant, L. R. (2011) *The Democracy of Objects*, Ann Arbor, MPublishing, University of Michigan Library.

Bull, M. (2011) iPod Culture: The Toxic Pleasures of Audiotopia, *The Oxford Handbook of Sound Studies*, [online] Available from: https://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780195388947.001.0001/oxfordhb-9780195388947-e-022 (Accessed 3 February 2020).

Cage, J. (1967) *Silence: lectures and writings*, Second edition, Cambridge [Mass.], Massachusetts Institute of Technology.

Cage, J. (1993) *Rolywholyover: a circus*, New York, Rizzoli.

Caldas, J. (2017) Interview with João Caldas.

Cameron, D. (1971) The Museum, a Temple or the Forum, *Curator: The Museum Journal*, **14**(1), pp. 11–24.

Candlin, F. (2015) *Micromuseology: An Analysis of Small Independent Museums*, First edition, London, Bloomsbury Publishing.

Cangueiro, L. (2017) Interview with museum director and curator Luís Cangueiro, Setúbal, Portugal.

Casey, V. (2005) Staging Meaning: Performance in the Modern Museum, *TDR* (1988-), **49**(3), pp. 78–95.

Celant, G. and Fondazione Prada (Milan, Italy) (eds.) (2014) *Art or sound*, Milan, Fondazione Prada.

Charr, M. (2019) Museums and Employee Diversity, *MuseumNext*, [online] Available from: https://www.museumnext.com/article/museums-and-employee-diversity/ (Accessed 28 December 2019).

Chester, D. A. (2019) Sound Mapping as a Tool for Sharing Sonic Cultures, *International Association of Sound and Audiovisual Archives (IASA) Journal*, (50), pp. 20–24–20–24.

Chion, M. (2016) *Sound: An acoulogical treatise*, Durham, Duke University Press Books.

Clifford, J. (1997) Museums as contact zones, In *Routes: travel and translation in the late twentieth century*, James Clifford (ed.), Cambridge, Mass., Harvard University Press, pp. 188–219.

Conn, S. (2010) *Do museums still need objects?, The arts and intellectual life in modern America*, Philadelphia, University of Pennsylvania Press.

Cornell, J. (2015) *Joseph Cornell: wanderlust*, London, England, Royal Academy of Arts.

Corrin, L. G. (2012) Mining the museum: artists look at museums, museums look at themselves, In *Museum studies : an anthology of contexts*, Second Edition., Carbonell, B. M. (ed.), Malden, MA :, Wiley-Blackwell, pp. 329–346.

Cox, C. (2011) Beyond Representation and Signification: Toward a Sonic Materialism, *Journal of Visual Culture*, **10**(2), pp. 145–161.

Cox, Christoph (2015) Sonic Thought, In *Realism Materialism Art*, Cox, Christoph, Jaskey, Jenny, and Malik, Suhail (eds.), Annandale-on- Hudson, New York / Berlin, Center for Curatorial Studies, Bard College / Sternberg Press, pp. 123–129.

Crane, S. A. (2006) The Conundrum of Ephemerality: Time, Memory, and Museums, In *A Companion to Museum Studies*, Blackwell companions in cultural studies, Macdonald, S. (ed.), London, Blackwell, pp. 98–109.

Cullum, J. (2009) *Mixtape*. Decca, Univeral Music Operations Limited.

Currall, Luke and Rodríguez Muñoz, Bárbara (2016) This Is A Voice, Dana Research Centre and Library, Science Museum, London.

Dayal, G. (2009) *Brian Eno's Another green world, 33 1/3*, New York ; London, Continuum.

DeLaurenti, C. (2015) Making Activist Sound, *Leonardo Music Journal*, (25), pp. 93–94.

Derrida, J. (1996) *Archive fever: a Freudian impression, Religion and postmodernism*, Chicago, Ill. ; London, University of Chicago Press.

Derrida, Jacques (1981) *Dissemination*, London, The Athlone Press.

Desvallées, A., Mairesse, F. and ICOM (2010) *Key concepts of museology*, Paris, Armand Collin, [online] Available from: http://unesdoc.unesco.org/Ulis/cgi-bin/ulis.pl?catno=260521&set=005B268CB5_2_406&gp=0&lin=1&ll=1 (Accessed 13 August 2018).

Dornan, R. (2017) Should museums have a personality?, *Medium*, [online] Available from: https://medium.com/@RussellDornan/museumpersonality-87ab2112ee9e (Accessed 9 January 2020).

Drever, J. L. (2002) Soundscape composition: the convergence of ethnography and acousmatic music, *Organised Sound*, **7**(1), pp. 21–27.

Drever, J. (2009) Soundwalking: Aural Excursions into the Everyday, In *The Ashgate Research Companion to Experimental Music*, Saunders, J. (ed.), Aldershot, Ashgate, pp. 163–192.

Dudden, A. P. (1987) *American Humor.*, Cary, Oxford University Press, [online] Available from: https://public.ebookcentral.proquest.com/choice/publicfullrecord.aspx?p=4701224 (Accessed 2 February 2020).

Dudley, S. H. (ed.) (2012) *Museum objects: experiencing the properties of things, Leicester readers in museum studies*, London ; New York, NY, Routledge.

Duncan, C. (1995) *Civilizing rituals: inside public art museums, Re visions*, London, Routledge.

Dziekan, V. (2012) *Virtuality and the art of exhibition: curatorial design for the multimedial museum*, Bristol, Intellect.

Edwards, E., Gosden, C. and Phillips, R. B. (eds.) (2006) *Sensible objects: colonialism, museums, and material culture, Wenner-Gren international symposium series*, English edition, Oxford, Berg.

Eisenberg, A. J. (2015) Space, In *Keywords in Sound*, Novak, D. and Sakakeeny, M. (eds.), Durham ; London, Duke University Press Books, pp. 193–207.

Eisner, E. W. and Dobbs, S. M. (1988) Silent Pedagogy: How Museums Help Visitors Experience Exhibitions, *Art Education*, **41**(4), pp. 6–15.

Engeström, J. (2005) Why some social network services work and others don't — Or: the case for object-centered sociality, *Zengestrom*, [online] Available from: http://www.zengestrom.com/blog/2005/04/why-some-social-network-services-work-and-others-dont-or-the-case-for-object-centered-sociality.html (Accessed 12 July 2018).

Eno, B. (1996) *A year with swollen appendices*, London, Faber and Faber.

Evengård, B., Schacterle, R. S. and Komaroff, A. L. (1999) Chronic fatigue syndrome: new insights and old ignorance, *Journal of Internal Medicine*, **246**(5), pp. 455–469.

Falk, J. H. (2010) An Identity-Centered Approach to Understanding Museum Learning, *Curator: The Museum Journal*, **49**(2), pp. 151–166.

Falk, J. H., Dierking, L. D. and Adams, M. (2006) Living in a Learning Society: Museums and Free-choice Learning, In *A Companion to Museum Studies*, Macdonald, S. (ed.), Oxford, Blackwell, pp. 323–339.

Feaster, P. (2012) *Pictures of sound: one thousand years of educed audio: 980-1980*, Atlanta, GA, Dust-to-Digital.

Feaster, P. (2015) Phonography, In *Keywords in Sound*, Novak, D. and Sakakeeny, M. (eds.), Durham ; London, Duke University Press Books, pp. 139–150.

Feld, S. (2012) *Sound and Sentiment: Birds, Weeping, Poetics, and Song in Kaluli Expression, 3rd edition with a new introduction by the author*, Third edition, Durham N.C., Duke University Press Books.

Fenby-Hulse, K. (2016) Rethinking the Digital Playlist: Mixtapes, Nostalgia and

Emotionally Durable Design, In *Networked Music Cultures, Pop Music, Culture and Identity*, Palgrave Macmillan, London, pp. 171–188, [online] Available from: https://link.springer.com/chapter/10.1057/978-1-137-58290-4_11 (Accessed 12 October 2017).

Franzen, R. (2016) Europeana Sounds: an interface into European sound archives, *Sound Studies*, **2**(1), pp. 103–106.

Fraser, A. (1991) Museum Highlights: A Gallery Talk, *October*, (57), pp. 103–122.

French, J. R. (2013) Audible Silence: Tate Modern, Sleeping and Waking, Tate, [online] Available from: http://www.tate.org.uk/download/file/fid/29481 (Accessed 15 January 2015).

Fried, M. (2009) Art and Objecthood, In *The object reader, In-sight*, Candlin, F. and Guins, R. (eds.), London, Routledge, pp. 307–325.

Gaillard, P., Coler, M., Tardieu, J. and Magnen, C. (2015) Hybrid sound classification, In *Science and technology for a quiet Europe, Euronoise 2015*, Maastricht, Netherlands, [online] Available from: https://hal.archives-ouvertes.fr/hal-01572472 (Accessed 3 March 2018).

Galuszka, P. (2012) The Rise of the Nonprofit Popular Music Sector – The Case of Netlabels, In *Music, Business and Law. Essays on Contemporary Trends in the Music Industry.*, Karja, A.-V., Marshall, L., and Brusila, J. (eds.), Helsinki, IASPM Norden & Turku: International Institute for Popular Culture, pp. 65–90, [online] Available from: https://papers.ssrn.com/abstract=2194086 (Accessed 13 May 2019).

Gann, K. (2010) *No such thing as silence: John Cage's 4'33", Icons of America*, New Haven, Conn. ; London, Yale University Press.

Geismar, H. (2018) *Museum Object Lessons for the Digital Age*, UCL Press.

Gérin, A. (2013) A second look at laughter: Humor in the visual arts, In [online] Available from: https://www.semanticscholar.org/paper/A-second-look-at-laughter%3A-Humor-in-the-visual-arts-Ge%CC%81rin/5a173bb65df2683f3470c07f2baf3ca2d0295a80 (Accessed 20 January 2020).

Giannini, T., Bowen, J. P., Giannini, T., Bowen, J. P. and service), S. (Online (2019) The Digital Future for Museums, In *Museums and Digital Culture New Perspectives and Research*, Cham, Springer International Publishing : Imprint: Springer, pp. 551–574.

Gibbs, D. (ed.) (2004) *The Memory Of Mankind - British Museum Review 2002 / 2004*, 1st edition, British Museum.

Grant, N. (2015) Pop Up Museums: Participant-Created Ephemeral Exhibitions, *Exhibition: A journal of exhibition theory & practice for museum professionals*, pp. 14–18.

Greenblatt, S. (1991) Resonance and Wonder, In *Exhibiting Cultures: The poetics and politics of museum display*, Karp, I. and Lavine, S. (eds.), Washington, D.C, Smithsonian Institution Press, pp. 42–57.

Gronlund, M. (2016) *Contemporary Art and Digital Culture*, Routledge.

Gros, F. (2014) *A philosophy of walking*, London, Verso.

Gruber, H. and Wildner, A. (2016) *Explore the Soundmuseum: An amazing musical adventure*, Vienna, Haus der Musik.

Gurian, E. H. (2005a) Choosing Among the Options: An Opinion About Museum Definitions, In *Civilizing the Museum: The Collected Writings of Elaine Heumann Gurian*, New Ed edition, London ; New York, Routledge, pp. 48–56.

Gurian, E. H. (2005b) What is the object of this exercise? A meandering exploration of the

many meanings of objects in museums, In *Civilizing the Museum: The Collected Writings of Elaine Heumann Gurian*, New Ed edition, London ; New York, Routledge, pp. 33–47.

Harrison, R. (2013) *Heritage: critical approaches*, London, Routledge.

Hedstrom, M. and King, J. L. (2003) On the LAM: Library, archive, and museum collections in the creation and maintenance of knowledge communities., In Paris, France, Organisation for Economic Co-operation and Development, [online] Available from: http://www.oecd.org/education/innovation-education/32126054.pdf (Accessed 23 January 2020).

Heidegger, M. (2009) The Thing, In *The object reader, In-sight*, Candlin, F. and Guins, R. (eds.), London, Routledge, pp. 113–123.

Hein, G. E. (1998) *Learning in the museum, Museum meanings*, London, Routledge.

Hein, G. E. (2006) Museum Education, In *A Companion to Museum Studies*, Blackwell companions in cultural studies, Macdonald, S. (ed.), Oxford, Blackwell, pp. 340–352.

Hein, H. S. (2000) *The museum in transition: a philosophical perspective*, Washington ; London, Smithsonian Institution Press.

Henning, M. (2006) *Museums, media and cultural theory, Issues in cultural and media studies*, Maidenhead, Open University Press.

Henning, M. (2007) Legibility and Affect: Museums as New Media, In *Exhibition experiments, New interventions in art history*, Basu, P. and Macdonald, S. (eds.), Malden, Mass, Blackwell Pub, pp. 25–46.

Hicks, D. (2018) The ‘universal museum’ is a 21st-century myth, *Art Newspaper*, [online] Available from: https://www.academia.edu/36700506/The_universal_museum_is_a_21st-century_myth (Accessed 9 July 2018).

Hillier, B. and Tzortzi, K. (2006) Space Syntax: The Language of Museum Space, In *A Companion to Museum Studies, Blackwell companions in cultural studies*, Macdonald, S. (ed.), London, Blackwell, pp. 282–301.

Hooper-Greenhill, E. (1992) *Museums and the shaping of knowledge, The heritage : care-preservation-management*, London, Routledge.

Hooper-Greenhill, E. (2006) Studying Visitors, In *A Companion to Museum Studies, Blackwell companions in cultural studies*, Macdonald, S. (ed.), London, Blackwell, pp. 362–376.

Hornby, N. (1995) *High Fidelity*, Second Impression edition, New York, Putnam Pub Group.

Hosokawa, S. (1984) The walkman effect, *Popular Music*, **4**, pp. 165–180.

Huhtamo, E. (2002) On the Origins of the Virtual Museum, Nobel Symposium (NS 120), [online] Available from: https://www.nobelprize.org/nobel_organizations/nobelfoundation/publications/symposia/ns120-lectures/huhtamo.pdf (Accessed 18 January 2018).

Huxley, R. (2003) Challenging the dogma: classifying and describing the natural world, In *Enlightenment: discovering the world in the eighteenth century*, Burnett, A. and Sloan, K. (eds.), London, British Museum, pp. 70–79.

ICOM (2004) Declaration on the Importance and Value of Universal Museums, *ICOM News*, (No. 1), p. 4.

ICOM (International Committee On Museums) (n.d.) ICOM Museum Definition, [online] Available from: http://icom.museum/the-vision/museum-definition/ (Accessed 27 August 2017).

J. Paul Getty Trust (2011) *Complete Guide to Adult Audience Interpretive Materials: Gallery Texts and Graphics, Complete Guides*, Los Angeles, Calif., J. Paul Getty Trust, [online] Available from: https://www.getty.edu/education/museum_educators/downloads/aaim_completeguide.pdf (Accessed 26 February 2018).

Jansen, B. (2009) Tape Cassettes and Former Selves: How Mix Tapes Mediate Memories, In *Sound Souveniers: Audio Technologies, Memory and Cultural Practices, Transformations in Art and Culture*, Bijsterveld, K. and Dijck, J. van (eds.), Amsterdam, Amsterdam university Press, pp. 43–54.

Jones, C. (2015) Enhancing our understanding of museum audiences: visitor studies in the twenty-first century, *Museum & Society*, **13**(4), pp. 539–544.

Joy, J., Sinclair, P. and Roquigny, A. (n.d.) Locus Sonus :: Soundmap, [online] Available from: http://locusonus.org/soundmap/051/ (Accessed 12 August 2018).

Kane, B. (2014) *Sound unseen: acousmatic sound in theory and practice*, Oxford, Oxford University Press.

Kirshenblatt-Gimblett, B. (1998) *Destination culture: tourism, museums, and heritage*, Berkeley, University of California Press.

Kirschenblatt-Gimblett, B. (2004) Intangible Heritage as Metacultural Production, *Museum International*, **56**(1–2), pp. 52–65.

Knell, S. J. (2012) The intangibility of things, In *Museum objects: experiencing the properties of things, Leicester readers in museum studies*, Dudley, S. H. (ed.), London ; New York, NY, Routledge, pp. 324–335.

Knell, S. J., Macleod, S. and Watson, S. E. R. (eds.) (2007) *Museum revolutions: how museums change and are changed*, London, Routledge.

Kolkowski, A. (2015) Interview with Aleks Kolkowski.

Kopsa, M. (2010) 'The Museum is History' Museum of American Art in the Van Abbemuseum - Features - *Metropolis M*, [online] Available from: http://www.metropolism.com/en/features/22417_the_museum_is_history (Accessed 18 January 2018).

Krauss, R. (1979) Sculpture in the Expanded Field, *October*, 8, pp. 30–44.

Kytö, M. and Hytönen-Ng, E. (2016) Busking and Negotiations of Urban Acoustic Space in South Bank, London, In *The Auditory Culture Reader 2nd Edition, Sensory Formations Series*, 2nd ed, Bull, M. and Back, L. (eds.), London, Bloomsbury, pp. 229–242.

Lander, D. (1990) Introduction, In *Sound by Artists*, Facsimile edition 2013, Toronto, Blackwood Gallery, pp. 10–14.

Leimbacher, I. (2014) The Sensory Ethnography Lab: An innovative Harvard University program's dynamic audiovisual experiments from Sweetgrass to Manakamana, *Film comment*., **50**(2), pp. 36–39.

Licht, A. and O'Rourke, J. (2007) *Sound art: beyond music, between categories*, New York, N.Y, Rizzoli International Publications.

Lobley, N. (2015) Curating Sound for Future Communities, In *The Palgrave Handbook of Contemporary Heritage Research*, Hampshire, Palgrave Macmillan, pp. 234–247.

London, B. J., Neset, A. H. and Museum of Modern Art (New York, N.Y.) (eds.) (2013) *Soundings: a contemporary score*, New York, Museum Of Modern Art.

Lovatt, A. (2010) Ideas in Transmission: LeWitt's Wall Drawings and the Question of Medium – Tate Papers, *Tate*, [online] Available from: https://www.tate.org.uk/research/publications/tate-papers/14/ideas-in-transmission-lewitt-wall-drawings-and-the-question-of-

medium (Accessed 2 February 2020).

Malraux, A., Gilbert, S. and Price, F. (1967) *Museum without walls*, London, Secker & Warburg.

Mansell, J. (2017) *The age of noise in Britain: hearing modernity / James G. Mansell., Studies in sensory history*, Urbana, University of Illinois Press, 2017.

Martin, A. and Schwarz, D. (1991) *Writings: Schriften*, Ostfildern, Cantz.

McCall, V. and Gray, C. (2014) Museums and the 'new museology': theory, practice and organisational change, *Museum Management and Curatorship*, **29**(1), pp. 19–35.

McKinney, K. (2018) Museum of Portable Sound visitor review e-mail.

McLeod, K. (2005) Confessions of an Intellectual (Property): Danger Mouse, Mickey Mouse, Sonny Bono, and My Long and Winding Path as a Copyright Activist-Academic, *Popular Music and Society*, **28**(1), pp. 79–93.

McSweeney, K. and Kavanagh, J. (eds.) (2016) *Museum Participation: New Directions for Audience Collaboration*, Edinburgh Boston, MuseumsEtc.

Merewether, C. (ed.) (2006) *The archive, Documents of contemporary art*, London : Cambridge, Mass, Whitechapel Gallery ; MIT Press.

Miller, K. (2008) Thing and Object, *Acta Analytica*, **23**(1), pp. 69–89.

Mir, R. (2016) Extending the Museum Experience with Virtual Reality, *Guggenheim*, [online] Available from: https://www.guggenheim.org/blogs/checklist/extending-the-museum-experience-with-virtual-reality (Accessed 8 January 2018).

Mitchell, J. P. (2006) Performance, In *Handbook of material culture*, Tilley, C. Y. (ed.), London, SAGE, pp. 384–401.

Moore Ede, Minna and Noy, Irene (2015) What Sense is there in Art? The making of Soundscapes at the National Gallery, The Courtauld Institute of Art, London.

Moore, T. (ed.) (2004) *Mix tape: the art of cassette culture*, First edition, New York, NY, Universe Pub.

Morris, C. (2016) Vinyl Record Sales Are At A 28-Year High, *Fortune*, [online] Available from: http://fortune.com/2016/04/16/vinyl-sales-record-store-day/ (Accessed 10 March 2018).

Morris, R. (2014) Imaginary museums: What mainstream museums can learn from them?, *MIDAS. Museus e estudos interdisciplinares*, (4), [online] Available from: http://journals.openedition.org/midas/643 (Accessed 2 December 2019).

Nagel, A. (2004) The Copy and its Evil Twin, *Cabinet*, (14), [online] Available from: http://cabinetmagazine.org/issues/14/nagel.php (Accessed 20 March 2017).

Nancy, J.-L. and Mandell, C. (2007) *Listening*, New York, Fordham University Press.

Niemeyer, K. (ed.) (2014) *Media and nostalgia: yearning for the past, present and future, Palgrave Macmillan memory studies*, Basingstoke, Hampshire, Palgrave Macmillan.

Nordine, K., Levy, H., Vaughan, K., Hochberg, E., Wertico, P., Hines, J., Nordine, K. voc, Levy, H. itr, Vaughan, K. itr, Hochberg, E. itr, Wertico, P. itr and Hines, J. itr (2001) *Ken Nordine word jazz : a transparent mask*, San Francisco, CA :, Asphodel : K Arts Inc.

North, F. J. (1957) *Museum Labels*, London, Museums Association, [online] Available from: https://www.cmog.org/library/museum-labels-fj-north (Accessed 13 August 2018).

O'Callaghan, Casey (2007) *Sounds: a philosophical theory*, Oxford, Oxford University Press.

O'Hanlon, M. (2014) *The Pitt Rivers Museum: A World Within*, London, Scala Arts & Heritage Publishers Ltd.

O'Neill, P. (2012) *The culture of curating and the curating of culture(s)*, Cambridge, Massachusetts ; London, England, The MIT Press.

Ono, Y. and Lennon, J. (2000) *Grapefruit: a book of instructions + drawings*, New York, Simon & Schuster.

O'Rourke, K. (2013) *Walking and mapping: artists as cartographers*, Leonardo book series, Cambridge, Massachusetts, The MIT Press.

Pamuk, O. (2012) *The innocence of objects*, New York, Abrams.

Pamuk, O. (2016) Orhan Pamuk's manifesto for museums, *The Art Newspaper* [online] Available from: http://www.theartnewspaper.com/comment/orhan-pamuk-s-manifesto-for-museums (Accessed 5 December 2019).

Parker, M. (n.d.) The Imitation Archive, *Earth Kept Warm*, Artist portfolio, [online] Available from: http://www.earthkeptwarm.com/tag/bletchley-park/ (Accessed 15 January 2016).

Patraka, V. (1996) Spectacles of suffering: Performing presence, absence, and historical memory at U.S. Holocaust museums., In *Performance and cultural politics*, Diamond, E. (ed.), London, Routledge, pp. 89–107.

Pearce, S. M. (1993) *Museums, Objects and Collections: A Cultural Study*, Washington, D.C, Smithsonian Books.

Pink, S. (2009) *Doing Sensory Ethnography*, SAGE Publications, [online] Available from: http://gen.lib.rus.ec/book/index.php?md5=3BFC58F689F4CCACF70D9B08901FFA2D (Accessed 26 July 2018).

Plaza, B. (2007) The Bilbao effect (Guggenheim Museum Bilbao), Munich Personal RePEc Archive, [online] Available from: https://mpra.ub.uni-muenchen.de/12681/1/Bilbao_Effect.pdf (Accessed 3 February 2018).

Polycarpou, C. (2018) The ViMM Definition of a Virtual Museum | ViMM, [online] Available from: https://www.vi-mm.eu/2018/01/10/the-vimm-definition-of-a-virtual-museum/ (Accessed 30 July 2018).

Preston, C. (2012) Lost Libraries, *The Public Domain Review*, [online] Available from: http://publicdomainreview.org/2012/02/20/lost-libraries/ (Accessed 2 March 2018).

Putnam, J. (2009) *Art and artifact: the museum as medium*, Revised edition, London, Thames and Hudson.

Quiccheberg, S., Meadow, M. A. and Robertson, B. (2013) *The first treatise on museums: Samuel Quiccheberg's Inscriptiones, 1565, Texts & documents / Getty Research Institute*, Los Angeles, Getty Research Institute.

Rawes, I. (n.d.) Soundmaps of London: ambient recordings during daytime | The London Sound Survey, [online] Available from: http://www.soundsurvey.org.uk/index.php/survey/soundmaps/ (Accessed 12 August 2018).

Reichert, R. and Richterich, A. (2015) Introduction: Digital Materialism, *Digital Culture & Society*, **1**(1), pp. 5–20.

Rice, T. (2015) Listening, In *Keywords in sound*, Durham ; London, Duke University Press Books, pp. 99–111.

Richter, G. (2007) *Thought-images: Frankfurt School writers' reflections from damaged life, Cultural memory in the present*, Stanford, Calif, Stanford University Press.

Ridener, J. and Ridener, J. (2009) *From Polders to postmodernism : a concise history of archival theory*, Duluth, Minn., Litwin Books.

Rodgers, T. (2010) *Pink noises: women on electronic music and sound*, Durham, N.C. ; London, Duke University Press.

Rubin, J. (2019) *TEA/AECOM 2018 Theme Index and Museum Index Report*, Themed Entertainment Association (TEA), p. 90.

Saiber, A. (2007) The Polyvalent Discourse of Electronic Music, *PMLA*, **122**(5), pp. 1613–1625.

Salamon, J., Jacoby, C. and Bello, J. P. (2014) A Dataset and Taxonomy for Urban Sound Research, In *Proceedings of the 22Nd ACM International Conference on Multimedia, MM '14*, New York, NY, USA, ACM, pp. 1041–1044, [online] Available from: http://doi.acm.org/10.1145/2647868.2655045 (Accessed 3 March 2018).

Sandell, R. (2011) On ethics, activism and human rights, In *Routledge companion to museum ethics: redefining ethics for the twenty-first century museum*, Marstine, J. (ed.), London, Routledge, pp. 129–145.

Schaeffer, P. (2005) Acousmatics, In *Audio culture: readings in modern music*, Cox, C. and Warner, D. (eds.), New York, N.Y. ; London, Continuum, pp. 76–81.

Schafer, R. M. (1969) *The new soundscape: a handbook for the modern music teacher*, BMI Canada.

Schafer, R. M. (ed.) (1977) *European sound diary*, Vancouver; Burnaby, B.C., A.R.C.

Publications : A.R.C. the Aesthetic Research Centre ; World Soundscape Project.

Schafer, R. M. (1994) *The soundscape: our sonic environment and the tuning of the world*, Rochester, Vt, Destiny Books.

Schaffner, I. (2006) Wall Text, In *What makes a great exhibition?*, Marincola, P. and Philadelphia Exhibitions Initiative (eds.), Philadelphia, Pa, Philadelphia Exhibitions Initiative, pp. 154–167.

Seay, T. (2019) A letter from IASA's President, *IASA Journal*, (50), pp. 5–6.

Serrell, B. (1996) *Exhibit Labels: An Interpretive Approach*, Rowman & Littlefield.

Sheffield, R. (2007) *Love Is a Mix Tape: Life and Loss, One Song at a Time*, Reprint edition, New York, Three Rivers Press.

Simon, N. (2007) Institutional Blogs: Different Voices, Different Value, *Museum 2.0*, [online] Available from: http://museumtwo.blogspot.com/2007/03/institutional-blogs-different-voices.html (Accessed 9 January 2020).

Simon, N. (2010) *The participatory museum*, Santa Cruz, Calif, Museum 2.0.

Skurvida, S. (2015) John Cage, '"Rolywholyover A Circus" for Museum by John Cage,' 1993 - *The Artist As Curator #1, Mousse Magazine*, [online] Available from: http://moussemagazine.it/taac1-b1/ (Accessed 10 February 2020).

Sloan, K. and Burnett, A. (2004) *Enlightenment: Discovering the World in the Eighteenth Century*, 01 edition, London, British Museum Press.

Smith, S. (2007) The process of 'collective creation' in the composition of UK hip-hop turntable team routines, *Organised Sound*, **12**(01), pp. 79–87.

Snauwaert, D. (2017) Marcel Broodthaers, Musée d'Art Moderne, Département des Aigles, Section des Figures, 1972, In *The artist as curator: an anthology*, Filipovic, E. (ed.), London, Koenig Books, pp. 123–138.

Staff, W. (2000) Guggenheim Going Virtual, *WIRED*, [online] Available from: https://www.wired.com/2000/06/guggenheim-going-virtual/ (Accessed 8 January 2018).

Sterne, J. (2012a) *MP3: The Meaning of a Format, Sign, storage, transmission*, Durham, North Carolina ; London, Duke University Press.

Sterne, J. (ed.) (2012b) *The sound studies reader*, London, Routledge.

Sterne, J. (2013) Soundscape, landscape, escape, In *Soundscapes of the urban past: staged sound as mediated cultural heritage, Sound studies series*, Bijsterveld, K. and Humboldt-Universität zu Berlin (eds.), Bielefeld, Germany, Transcript, pp. 181–194.

Suoyrjö, E. (2016) Heave and Flow: Jessica Akerman records soundscapes of labour and play, *Views and Reviews*, [online] Available from: http://blog.courtauld.ac.uk/researchforum/heave-and-flow-jessica-akerman-records-soundscapes-of-labour-and-play/ (Accessed 17 July 2018).

Sutton, B. (2019) The Boom in Pop-Up Galleries Is Only Just Getting Started, *Artsy*, [online] Available from: https://www.artsy.net/article/artsy-editorial-boom-pop-up-galleries-started (Accessed 25 January 2020).

Thomas, N. (2016) *The Return of Curiosity: What Museums are Good for in the Twenty-First Century*, Reaktion Books.

Toop, D. and Hayward Gallery (eds.) (2000) *Sonic boom: the art of sound*, London, Hayward Gallery.

Truax, B. (2008) Soundscape Composition as Global Music: Electroacoustic music as soundscape, *Organised Sound*, **13**(2), pp. 103–109.

UNESCO (n.d.) What is Intangible Cultural Heritage? - intangible heritage - Culture Sector - UNESCO, [online] Available from: http://www.unesco.org/culture/ich/en/what-is-intangible-heritage-00003 (Accessed 20 April 2017).

Vandsø, Anette (2016) Listening to the Dark Side of Nature, In *Dark Nature: Anti-Pastoral Essays in American Literature and Culture*, Schneider, R. (ed.), Lexington Books, pp. 199–214.

de Visscher, E. (2017) Conversation during visit to The Museum of Portable Sound.

Voegelin, S. (2014a) A new generation of field recordists is challenging the myth of the invisible figure with a microphone in work that celebrates presence rather than absence, *The Wire: New Adventures in Modern Music*, (362).

Voegelin, S. (2014b) Soundwalking the Museum: A Sonic Journey Through the Visual Display, In *The Multisensory Museum: Cross-Disciplinary Perspectives on Touch, Sound, Smell, Memory, and Space*, Levent, N. and Pascual-Leone, A. (eds.), Lanham, Maryland, Rowman and Littlefield, pp. 119–130.

Waldock, J. (2011) Soundmapping: Critiques And Reflections On This New Publicly Engaging Medium, *Journal of Sonic Studies*, **1**(1), [online] Available from: http://journal.sonicstudies.org/vol01/nr01/a08 (Accessed 25 November 2015).

Weibel, P. (2019) *Sound art : sound as a medium of art*, Karlsruhe, Germany : Cambridge, MA ; London, England, ZKM/Center for Art and Media ; The MIT Press.

Weibel, P. and Latour, B. (2007) Experimenting with Representation: Iconoclash! and Making Things Public., In *Exhibition experiments, New interventions in art history*, Basu,

P. and Macdonald, S. (eds.), Malden, Mass, Blackwell Pub, pp. 94–108.

Weschler, L. (1996) *Mr. Wilson's cabinet of wonder*, New York, N.Y, Vintage Books.

Westerkamp, H. (2007) Soundwalking, In *Autumn leaves: sound and the environment in artistic practice*, Carlyle, A. (ed.), Paris, Double Entendre, pp. 49–54.

Windsor, W. L. (1995) A perceptual approach to the description and analysis of acousmatic music, doctoral, City University London, [online] Available from: http://openaccess.city.ac.uk/7775/ (Accessed 26 July 2018).

Zinn, K. (2018) Pop up or pop down to beat oblivion? – Reinvigorating dormant Egyptian collections outside and within non-Egyptian regional museums, In *The Egypt Centre – Swansea*, [online] Available from: https://www.academia.edu/38218965/2018._Pop_up_or_pop_down_to_beat_oblivion_Reinvigorating_dormant_Egyptian_collections_outside_and_within_non-Egyptian_regional_museums (Accessed 25 January 2020).

Appendix 1
Enclosures

Included on the attached thumb drive:

MUSEUM OF PORTABLE SOUND

1. *Gallery Guide (2nd Edition)* (PDF)
2. MOPS Map (PDF)
3. Previous editions of the Gallery Guide (PDF)
4. Permanent Collection Audio archive
5. Temporary Exhibition Audio/Video/Catalogue archive

SOUND MAPS

1. *A Sound Map of Tate Modern* (Audio)
2. *A Sound Map of Tate Modern* (Video Excerpt)
3. *A Sound Map of the Enlightenment Galleries at the British Museum* (Audio)
4. *A Sound Map of the Enlightenment Galleries at the British Museum* (Video Excerpt)
5. *Hearing Enlightenment* – Book (PDF)
6. *Sound or Art* exhibition field recordings

Appendix 2
MOPS object list

NATURAL HISTORY

Gallery 1. **Animals**

Actual Bird Record made by a Captive Nightingale, 1910

- Rooster: Lisbon, Portugal, 22 May 2016
- Dawn Symphony: Rome, Italy, 13 Apr 2017
- Horses: Setúbal, Portugal, 23 Sept 2017
- Falling off of a Camel: Great Pyramid, Giza, Egypt, 1 May 2010
- Pardais birds: Lagos, Portugal, 17 Sept 2017
- Chickens: Luke's Barn, Michigan, 20 Feb 2010

Birds, Crickets, Cows, and Cow Bells at Dusk: Alandroal, Évora, Portugal, 30 Apr 2016

Gallery 2. **Insects**

Crickets (day): Wetlands, West Park, Ann Arbor, Michigan, US, 14 Sept 2009

Crickets (night): Train Station, Graben Neudorf Nord, Germany, 18 Aug 2012

- Bee: Catford, London, UK, 20 Aug 2017

Cicadas: Corfu, Greece, 2 Oct 2011

Gallery 3. **Weather & Water**

Autumn Leaves Falling: North Park Village Nature Center, Chicago, 18 Oct 2008

Rain and tornado warning siren: Albany Park, Chicago, US, 5 Aug 2008

- Rain and tornado warning siren: Ann Arbor, MI, US, 6 June 2010

Thunderstorm: Corfu, Greece, 7 Oct 2011

Psithurism: Albufeira, Algarve, Portugal, 8 Sept 2016

- Creek: Park of the Senses, Germany, 14 Sept 2014
- Lake Erie waves: Pelee Island, Canada, 2 July 2010
- Waterfall: Offenburg, Germany, 14 Sept 2014

SCIENCE & TECHNOLOGY

- ***Gallery 4.*** **Laboratories & Medicine**
- Radiology Lab: Lisbon, Portugal, 10 Apr 2015
- IV: Evanston, IL, US, 13 Apr 2014

Gallery 5. **Acoustics**

Reverberation Chamber: Columbia College, Chicago, US, 9 July 2010

Anechoic Chamber: London South Bank University, 23 July 2015

Gallery 6. **Recording History**

The First Recording of a Human Voice, Paris, 9 Apr 1860

The First Recording of a Museum: The Crystal Palace, London, 1888

The First Binaural Pop Album, Track 3 (excerpt): Lou Reed's *Street Hassle*: 'Waltzing Matilda,' Arista, 1978

The First CD, Track 6: *Claudio Arrau performs Chopin*, Philips Classics, Japan, 1980

The First MP3: Suzanne Vega - *Tom's Diner (a capella)*, 1987

Gallery 7. **Audio Interfaces**

Public Telephone in Telephone Booth: Zagreb, Croatia, 25 Sept 2015

- Utility Telephone: Francisco Brown Line Station, Albany Park, Chicago, US, 2 May 2009

ATM: San Francisco, US, 5 July 2008

- Elevator: Hancock Tower, Chicago, US, 2 May 2009

Alarm Test, UC-Berkeley campus, Berkeley, California, 2 July 2008

- Apartment Security System: Warsaw, Poland, 8 May 2017

Automated Track Announcements: Union Station, Chicago, 21 Mar 2009

Street Crossing Signals for Visually Impaired:

- IIT Campus, Chicago, US, 11 Oct 2004

Port of San Francisco, US, 5 Jul 2008

Ann Arbor, Michigan, US, 14 June 2009

Munich, Germany, 20 Oct 2012

Toronto, Ontario, Canada, 31 July 2009

- Antwerp, Belgium, 3 Aug 2017

Zagreb, Croatia 26 Sept 2015

Aarhus, Denmark, 5 June 2016

Gallery 8. **Glitches**

Malfunctioning iPod: Michigan Ave. Apple Store, Chicago, US, 5 Aug 2008

Malfunctioning MacBook: Michigan Ave. Apple Store, Chicago, US, 8 Sept 2008

Broken P.A. Speaker: Mitchell Hall, University of Wisconsin – Milwaukee, US, 1 Mar 2008

- Broken Fire Alarm: Pierpont Commons, University of Michigan, Ann Arbor, 19 June 2009

Gallery 9. **20th Century Audio Equipment**

Dansette Hi-Fi model phonograph (portable LP record player, 1960s): London, 17 Sept 2016

Panasonic RQ-L317 Cassette Recorder (1980s): London, 17 Sept 2016

Gallery 10. **21st Century Audio Equipment**

Arcam Solo CD Player: London, 17 Sept 2016

iPod Classic magnetic field, London, 2015

iPhone 4S magnetic field, London, 2015

Zoom H2 magnetic field, London, 2015

Olympus LS-10 magnetic field, London, 2015

SPACE & ARCHITECTURE

Gallery 11. **Construction, Exteriors & Tours**

- Crane Operators: Porto, Portugal, 11 Sept 2017

Construction site for Apple retail store: Michigan Avenue, Chicago, 22 Apr 2009

- Welding: Newbury Library, Chicago, 14 June 2009
- Construction destruction: Baku Law Centre, Baku, Azerbaijan, 5 Oct 2017
- Bridge rising: Wisconsin Avenue, Milwaukee, WI, US, 4 Sept 2005
- Bridge rising: Merchandise Mart, Chicago, 29 May 2009

Architecture Boat Tour, Chicago River, Chicago, 5 July 2008

Gallery 12. **Doors, Windows & Fixtures**

Doorbell, Private Residence: Milwaukee, Wisconsin, US, 1 Mar 2008

- Door: Rubens house, Ghent, Belgium, 21 July 2017

Door, DeBalie Café: Amsterdam, NL, 28 Feb 2010

- Door: Neue Staatsgalerie, Stuttgart, 17 Oct 2012

Window, Private Residence: Bay View, Milwaukee, WI, US, 27 Apr 2007

Gallery 13. **Plumbing, Heating & Cooling**

Water pipes, toilet: Rawabet, Cairo, Egypt, 17 May 2010

- Water drainage system after shower: Catford, London, UK, 8 Aug 2017
- Drain pipe (outdoor): Baku, Azerbaijan, 3 Oct 2017

Steam heat radiator, apartment: Chicago, 1 Oct 2008

- Central heating system vent: Ann Arbor, MI, US, 20 Feb 2010

Ventilation Duct: Venice, Italy, 3 Nov 2014

Air vent: Windsor, Ontario, Canada, 12 Apr 2010

Ventilation Fan, Coffeeshop: Amsterdam, NL, 5 Mar 2010

Air vent behind Yoshi's: Ann Arbor, MI, US, 23 Aug 2009

- Air vent: Toledo Mud Hens Baseball Stadium, Toledo, OH, US, 1 July 2009
- Air vent: National Stadium, Warsaw, Poland, 6 May 2017

Gallery 14. **Interiors**

Huettenbar: Lincoln Square, Chicago, 10 July 2008

Café: York, UK, 2002

- Elevator ride, entering flat, and locking flat door: Warsaw, Poland, 8 May 2017
- Deserted house walkthrough after tornado: Dundee, Michigan, US, 8 June 2010

Swimming Pool, Hotel Intercontinental: Chicago, 27 Aug 2007

Sacre Coeur: Paris, 24 Sept 2012

The Great Hall, Union Station: Chicago, 21 Mar 2009

ART & CULTURE

Gallery 15. **Art Processes**

Drawing on board (artist: Bettina Fung), London, UK, 26 Sept 2016

- Street engraving (artist: unknown): Cairo, Egypt, 17 May 2010

Sculpting an amphora in wet clay and fabric (artist: Reem Gibriel), Ann Arbor, Michigan, US, 31 Mar 2010

- Constructing a performance-based installation (artists: Christina Raab and Jasmin Schaitl): Warsaw, Poland, 6 May 2017

Alley Weave: Loom (artist: unknown), Varanasi, India, 31 July 2009, by Mike Hallenbeck

Weaving, Loom (artist: Rachel Esslinger), Ann Arbor, Michigan, US, 10 Oct 2009

Tree trimming (artist unknown), Mahmoud Mukhtar Museum park, Cairo, Egypt, 6 May 2010

- Exhibition under construction (gallery workers: unknown): Transfashional exhibition, Warsaw, Poland, 6 May 2017

Gallery 16. **Archaeology**

King Tutankhamun's trumpets played after 3000 years, BBC Radio broadcast, Cairo, 16 Apr 1939

Archaeologists clearing Roman theatre: Lisbon, Portugal, 9 Apr 2015

- Ancient Roman Well: San Clemente, Rome, Italy, 13 Apr 2017

Catacombs of Kom El Shaqoufa: Alexandria, Egypt, 11 May 2010

North Temple Interior: Karanis, Egypt, 19 May 2010

Gallery 17. **Bells**

Munich Dom: Munich, Germany, 21 Oct 2012

Heiliggeistkirche bells: Heidelberg, Germany, 15 Sept 2012

Maulbronn Monastery Cloisters: Maulbronn, Germany, 31 Aug 2012

- Ghent Belfry: Ghent, Belgium, 23 July 2017

Popsicle cart: Albany Park, Chicago, US, 10 May 2008

Westminster Abbey: London, Christmas Day, 2014

- Big Ben's final 12 Bongs: London, 8 August 2017

Gallery 18. **Transport**

Alexandria, Egypt: Train To Cairo, 2010

Amsterdam, NL: Tram To Rijksmuseum, 2010

Ann Arbor, US: Number 9 Bus, 2009

- Ann Arbor, US: Paddle boat, Gallup Park, 2010

Athens, Greece: Metro train, 2011

- Baku, Azerbaijan: Flight to London takeoff, 2017

Cairo, Egypt: Boat Ride To Nilometer, 2010

- Cairo, Egypt: Cab ride, 2010

Chicago, US: Amtrak Hiawatha Train, Quiet Car, 2010

Chicago, US: Moaning Bus, 2008

Chicago, US: Squeaking Metra Train, 2008

Detroit, Michigan, US: People Mover tram, 2009

Karlsruhe, Germany: Steam train, Schloss grounds, 2012

Lisbon, Portugal: Night tram, 2015

- Milwaukee, WI, US: Harley-Davidson Motorcycles, 2007

Minneapolis, Minnesota, US: Tram Approaching, 2008

Paris: Escalator at St Lazare train station, 2012

Paris: Metro Train to Montmarte, 2012

- Pelee Island, Ontario, Canada: Ferry boat, 2010

San Francisco, US: BART train to 24th street, 2008

San Francisco, US: Cable car underground cable, 2008

- San Francisco, US: Cable car, 2008

Speyer, Germany: Train to Karlsruhe, 2012

Strasbourg, France: Tram, 2012

Toronto, Canada: Subway, Museum Station, 2009

- Venice, Italy: Boat in a canal, 2014
- Warsaw, Poland: Horse-drawn carriages, 2017
- Zagreb, Croatia: Funicular, 2015

- ***Gallery 19.*** **Food**
- Espresso: Rome, Italy, 22 Apr 2017
- Saganaki: Greek Town, Detroit, 3 Nov 2009
- Lunch: Tandir Kebab, Baku, Azerbaijan, 3 Oct 2017
- Pop Rocks: London, 6 June 2017

Gallery 20. **Rituals & Events**

Call to Prayer: Talaat Harb Street, Cairo, Egypt, 26 May 2010

Madhavi: Gurgaon, India, 9 Sept 2016, by Cristina Sousa Martínez

Chanting, Al-Azhar Mosque: Cairo, Egypt, 21 May 2010

Sunday services: Munich Dom church, Munich, Germany, 21 Oct 2012

- Public water fountain: Corfu, Greece, 7 Oct 2011
- Pub worker sweeping street: Chez Paul II, Appenweier, Germany, 8 Sept 2012

Hofbrauhaus: Munich, Germany, 21 Oct 2012

- Penny Arcade: Brighton Pier, Brighton, UK, 1 Dec 2013
- Carousel: Santa Cruz Boardwalk, California, 5 July 2008
- Roller coaster: Centreville Island, Toronto, Canada, 1 Aug 2009
- World's oldest bookshop: Bertrand, Lisbon, Portugal, 8 June 2016

Street market: downtown Cairo, Egypt, 8 May 2010

Feira Da Ladra Flea Market: Lisbon, Portugal, 11 Apr 2015

- Shop Owners Banter: Stratford Centre, London, UK, 26 Nov 2013
- Amolador trumpet: Lisbon, Portugal, 22 Aug 2017 by João Caldas
- Bird whistle salesman: Brighton, UK, 1 Dec 2013

Wedding musicians practicing: Maulbronn Monastery church, Germany, 31 Aug 2012

Pride Parade: San Francisco, US, 6 July 2008

- Mira (Street music, Crete): Athens, Greece, 1 Oct 2011
- Busking band: Underground District Line train, London, UK, 18 Mar 2017
- Duelling Buskers: South Bank, London, 3 Oct 2014
- Chicago White Sox stadium ambience: Chicago, IL, US, 15 Feb 2007
- Running bases on a softball diamond: West Park, Ann Arbor, MI, US, 25 Sept 2009
- Zamboni, Red Arrow Park, Milwaukee, WI, US, 5 Feb 2000
- PETA protest: Chicago, US, 3 Jan 2007

Xalapa Protest: Xalapa, Mexico, 16 Jan 2014 by Cristina Sousa Martínez

Anti-Austerity Protest: Corfu, Greece, 5 Oct 2011

Friday Of Departure: Egyptian Revolution Protest, Alexandria, Egypt, 11 Feb 2011, by Khaled Kaddal

4th of July fireworks: Albany Park, Chicago, US, 2008

- Flagpoles: Duderstadt Center, University of Michigan campus, Ann Arbor, MI, US, 15 Feb 2010
- Pere Lachaise cemetery: Paris, 30 Sept 2012

Gallery 21. **Libraries & Archives**

Bibliotheca Alexandrina, Alexandria, Egypt, 10 May 2010

Harold Washington Library Reference Room, Chicago, US, 14 June 2009

New York Public Library Reading Room, New York, US, 30 Mar 2008

Kelsey Museum of Archaeology Archives, Compact Shelving, Ann Arbor, MI, US, 2012

Melodic CD-R Printer, British Library Sound Archive, London, 2014

Internet Archive Backup Server, Bibliotheca Alexandrina, Alexandria, 10 May 2010

- Science Museum Sound archives, Blythe House, London, 23 Apr 2015

Gallery 22. **Museums**

Acropolis Museum, Athens, Greece, 2010

Ashmolean Museum, Oxford, UK, 2015

- Museum of Mechanical Musical Machines, Setúbal, Portugal, 10 Sept 2017
- Old Grand Rapids Public Museum: Miracle of Life display, Grand Rapids, MI, US, 20 Mar 2010

Museum of Broken Relationships, Zagreb, Croatia, 2015

Guildhall Museum, London, UK, 2014

- Sistine Chapel: Rome, Italy, 10 April 2017
- ModeMuseum: Martin Margiela, The Hermes Years exhibition, Antwerp, Belgium, 21 July 2017
- Museu de Cera dos Descobrimentos: Lagos, Portugal, 5 Sept 2017
- Pollocks Toy Museum: London, UK, 26 July 2017

Mold-A-Rama® Machine, Field Museum, Chicago, US, 1 Jan 2012

- Souvenier coin pressing machine: Pelee Island, Ontario, Canada, 2 July 2010

Hayward Gallery, Ana Mendieta exhibition, London, 2013

- Florence Nightingale Museum: London, 8 Aug 2017

Las Vegas Pinball Hall of Fame and Players Museum, Las Vegas, US, 2011

- Musei Vaticani: Raphael, *School of Athens*, Rome, Italy, 10 Apr 2017
- Barbican: *Gravity Xylophone*, Charles & Rae Eames, London, UK, 7 Nov 2015

Tinguely Museum, Basel, Switzerland, 2012

Sir John Soane's Museum, London, UK, 2013

Art Institute of Chicago, Chicago, US, 2009

Dachau concentration camp, Munich, Germany, 2012

- Royal Observatory: Prime Meridian, Greenwich, UK, 2017

Motown Museum, Detroit, US, 2012

Gallery 23. **Exhibitions of Sound**

Sound Art: Sound as a Medium of Art exhibition, ZKM, Karlsruhe, 2012

Art or Sound, Fondazione Prada, Venice, 2014

Appendix 3
How to visit MOPS

<https://museumofportablesound.com/plan-your-visit/how-to-visit/>

MUSEUM OF PORTABLE SOUND

About · What's On · Plan Your Visit · Collections · Education · Get Involved · Contact Us · Gift Shop

Home › Plan Your Visit › How to Visit

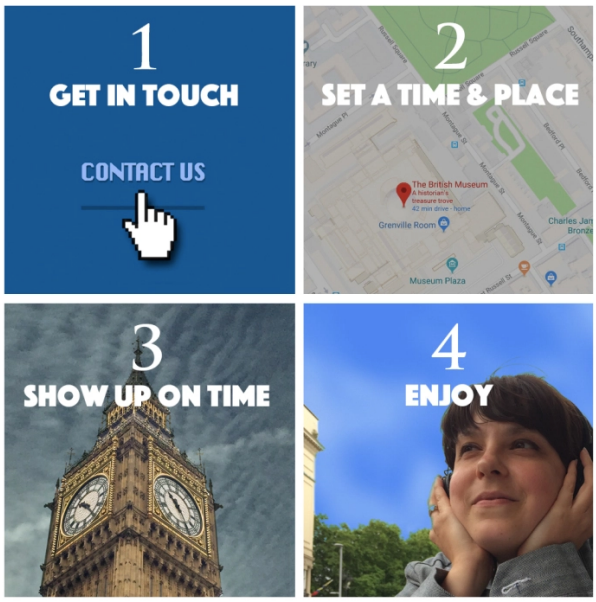
How to Visit

The Museum of Portable Sound is a portable, nomadic museum of sounds that exist solely as digital files that have been curated into galleries installed on our Museum Director's mobile phone.

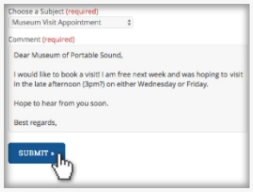
Museum hours are **by appointment**, or by bumping into the **Museum Director** on the street.

Admission is FREE. Donations are accepted.

Confused? Here's a simple 4-step guide to visiting us!



1. Get in Touch



Let us know you're interested!

Want to visit our museum? First, fill out our **Contact Form** and introduce yourself, letting us know that you'd like to visit.

We've made it easy to find our contact form – there's one at the bottom of just about every page on this website!

If you want to see anything from our **Physical Object Collection**, just let us know and we'll bring it along!

2. Set A Time & Place

All of London is at your disposal!

Once you contact us, our Director will email you back to arrange a time and place to meet.

Our visits take place all over London (unless the Museum is on tour elsewhere – keep up with our travel schedule on **Facebook**, **Twitter**, or **Instagram**!).

We make every effort to meet you at a time and public location that is convenient for you.

We've booked visits at **cafés**, **libraries**, **parks**, **pubs**, **restaurants**, **universities**, **gardens**, **bookshops**, and **even inside other museums**! Feel free to be as creative as you'd like when arranging your visit location.

3. Show Up On Time (With Headphones!)

We'll be waiting for you!

On the date of your visit, we will arrive at the agreed meeting place early and set the stage for your visit.

All you have to do is show up – **Admission is FREE!** – and don't forget to bring your headphones (for health & safety purposes).

A Note on Headphones: The Museum is compatible with headphones that use a **conventional 3.5mm stereo minijack ONLY** – wireless Bluetooth or Apple Lightning headphones *will not* work.

If you forget your headphones or are unable to bring a compatible pair, ask our Director about our FREE* **Headphones Checkout Service**!

****Headphones Checkout Service requires temporary surrender of a valid form of identification for the duration of visit. We apologise for any inconvenience caused.***

4. Enjoy! (Visit As Long As You Like)

Sit back, relax, and enjoy!

Our **Museum Director** will be on hand to give you a brief orientation for how to move around the Museum.

He will provide you with the mobile phone containing our exhibition galleries, a **Map of the Museum** (which is yours to keep!), and the **Gallery Guide book** containing all the object labels, photos, and other information you would usually find on the walls of any other museum.

You may stay as long as you like – though keep in mind our **Permanent Collection Galleries** contain 5 hours of material to listen to, so you might want to come back for a second (or even third!) visit if you want to hear everything. You can wander around anywhere in the museum on your own, or start off on one of our specially curated thematic Guided Tours – it's up to you.

Once you've finished visiting the Museum, feel free to stay and chat with the Director, who is always interested in hearing and discussing what our visitors think of their experience!

Appendix 4
MOPS Events & Milestones

1. Grand Opening Gala & Private View
11 November 2015
London College of Communication, Points of Listening

2. First One-On-One Visit (with C.J. Mitchell)
21 November 2015
Foyle's Charing Cross, London

3. Donation to Physical Object Collection (Karel Doing)
16 December 2015
London College of Communication, Surprise and Serendipity PhD student event

4. Aarhus Presentation
1 June 2016
University of Aarhus

5. Private View: Jessica Akerman (2nd temporary exhibition)
17 June 2016
London College of Communication

6. Presentation for Museum Studies Programme Research Week
22 June 2016
University of Leicester

6. Performance at Art Arcana
25 July 2016
Dead Doll's House, London

7. First Group Visit
24 August 2016
Lisbon, Portugal

8. Performance at Museums Showoff
18 October 2016
The Phoenix Pub, London

9. Grand Re-Opening, first printed *Gallery Guide*, 3rd temporary exhibition
4 November 2016
Chalton Gallery, London

10. Donation to Physical Object Collection (Matthew Sansom)
25 December 2016
Home, Catford, London

11. Listening to Museums class session no. 1
21 January 2017
British Museum

12. Art Crawl
28 January 2017
Fitzrovia, London

13. First print review
February 2017
Museums Journal

14. Conference Presentation
Sonic Events Native within the Museum Soundscape, *Sound in Museums* panel
16 February 2017
College Art Association, New York

15. Listening to Museums class session no. 2
17 February 2017
Tate Modern

16. 500th Visitor (Bettina Fung)
27 February 2017
Curzon SoHo, London

17. Guest Lecture on MOPS
9 March 2017
The Shipley Gallery, Tyneside

18. Residency, Tyne & Wear Museums
10 March 2017
Tyneside

19. ResFest: Gallery talk/MOPS visiting station
15 March 2017
Courtauld Institute of Art, London

20. Listening to Museums class session no. 3
17 March 2017
Science Museum and The V&A, London

21. Londonist Review
4 April 2017
Londonist.com

22. Guest Lecture
10 April 2017
John Cabot University, Rome, Italy

23. Artist & Friends Podcast
18 April 2017
The V&A café, London

24. Filming a videoblog inside anechoic chamber
24 May 2017
London South Bank University

25. Launch of Online Magazine
6 June 2017
< https://medium.com/museum-of-portable-sound>

25. Guest Lecture
8 June 2017
MA sound students, Royal College of Art

26. #MuseumsWeek
18-25 June 2017
Twitter Event

27. Publication of MOPS online magazine/Tara Rodgers interview
11 July 2017
Medium.com

28. Oldest Visitor (94 year-old, Mary, from London)
5 September 2017
London

29. Book Launch for *Gallery Guide*
15 September 2017
STET Books & Photographs, Lisbon, Portugal

30. Conference Presentation
29 September 2017
ZKM, Karlsruhe, Germany

31. Conference Presentation
5 October 2017
Baku, Azerbaijan

32. Guest Lecture
31 October 2017
MA Museum Studies seminar, University College London

33. Gallery Expansion 2
21 November 2017

34. Science Museum Research Week conference
24 November 2017
Science & Media Museum, Bradford, UK

35. Donation to Physical Object Collection (Eric Powell)
1 February 2018
British Museum

36. Guest Lecture
2 February 2018
Pathways to the Past, MA History seminar, Royal Holloway, University of London

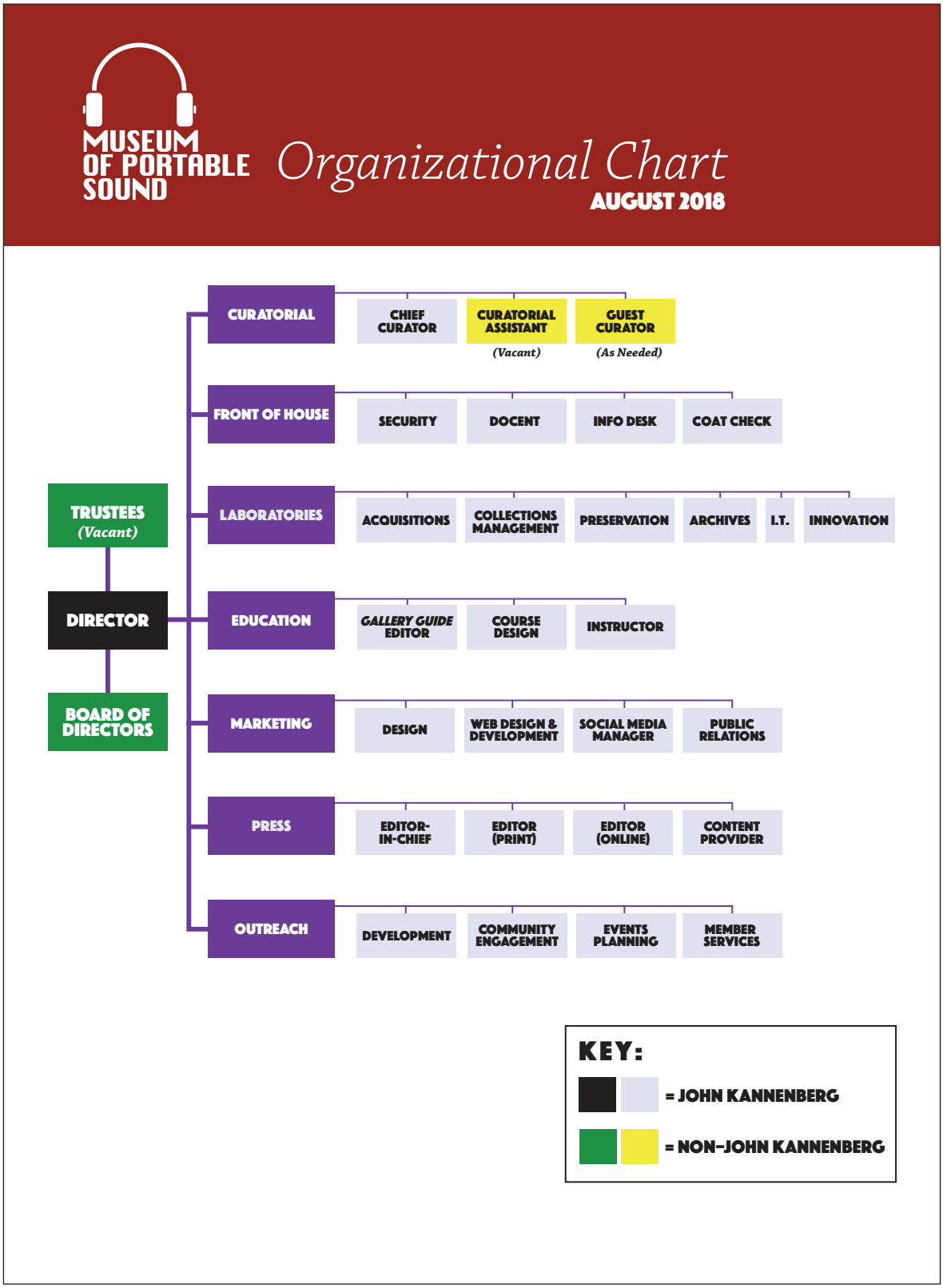
37. Conference - Panel Discussion on Sound in Museums
16 February 2018
The V&A, London

38. Guest Lecture
8 May 2018
Science Museum Research Seminar Series, London

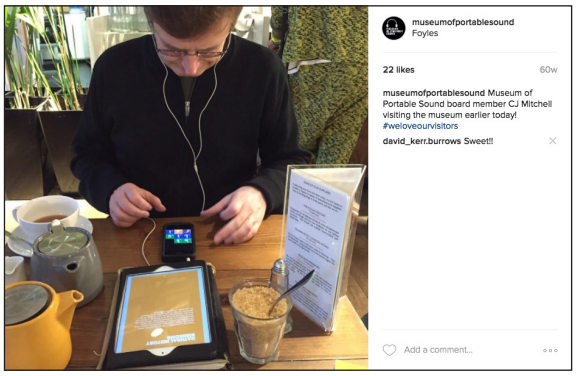
39. Conference Presentation
13 June 2018
Finnish Labour Museum WERSTAS, Tampere, Finland

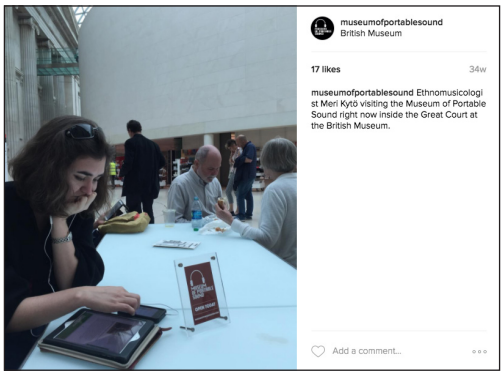
40. Conference Presentation
20 June 2018
Sackler Research Forum
Courtauld Institute of Art, London

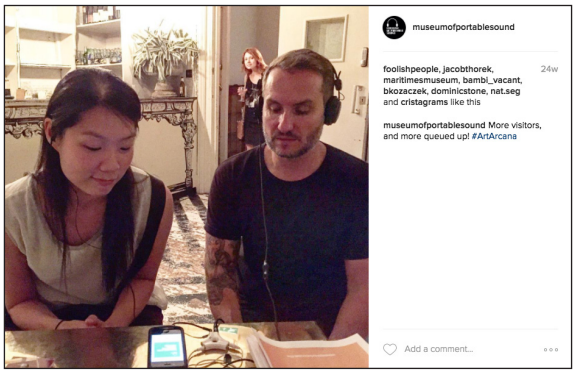
Appendix 5
MOPS organisational chart

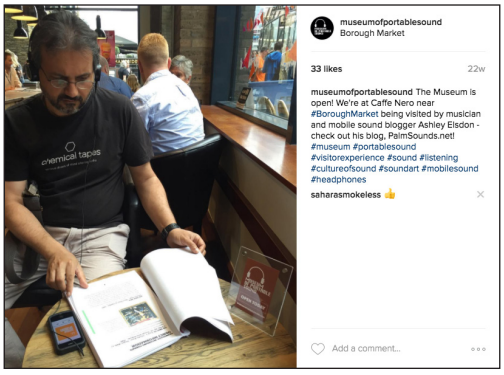


Appendix 6
Visitor documentation: Instagram.com/museumofportablesound










museumofportablesound
Clara Clara
24 likes
20w
museumofportablesound The Museum is open! We currently have a group of five visitors listening to the Museum's galleries in Lisbon, Portugal. We're in Lisbon for the rest of the week and will return on 3 September - use the Contact form on our website to make your appointment to visit today! #Lisbon #lisboa #sound #soundart #listening
Add a comment...


museumofportablesound
Hej Coffee
25 likes
11w
museumofportablesound The Museum is open! We're at Hej Coffee in Bermondsey - come on down! #museum #sound #soundart #listening
Add a comment...


museumofportablesound
Somerset House
23 likes
11w
museumofportablesound The Museum is open! We're at Somerset House in London for another one on one visit to our newly expanded galleries. Come on down and say hello! #museum #sound #portablesound #cultureofsound #soundart #listening
Add a comment...


museumofportablesound
look mum no hands!
23 likes
8w
museumofportablesound The Museum is open! Our esteemed visitor Gilles Aubry is currently visiting our temporary exhibition, Transitivity of Implication, by Mexican sound artist Daniel Toca. Book your own visit now at museumofportablesound.com! #museum #sound #soundart #cultureofsound #listening #earbuds #DanielToca
invisibleobjects
Add a comment...


museumofportablesound
University of Westminster
49 likes
6w
museumofportablesound The Museum is open! We're currently in the lobby of the building where the members of #pinkfloyd originally met, bringing the culture of sound to another visitor! Make your own visiting appointment at museumofportablesound.com! #museum #london #sound #listening #universityofwestminster
superfitkit
publicspacejam
Add a comment...


museumofportablesound
Gower Street Waterstones
26 likes
6w
museumofportablesound The Museum is open! We're at the UCL Waterstones with a pair of visitors who are taking one of our Guided Tours! We have four themed tours available, based on topic area: Learning, Music, Relaxation, or Technology, each around 35 minutes long. Schedule your own visit now at museumofportablesound.com! #museum #listening #sound #guidedtour
Add a comment...


museumofportablesound
The Anchor And Hope
33 likes
4w
museumofportablesound The Museum is open! Esteemed music and art writer Geeta Dayal is checking out the sound of the Las Vegas Pinball Hall of Fame and Museum! #listening #sound #pinball #lasvegas #museum
Add a comment...


museumofportablesound
23 likes
3w
museumofportablesound Unlike all those other museums, we're open on Christmas Day! Our distinguished holiday visitor was excited to discover our Glitches gallery of broken electronic equipment sounds - not exactly jingle bells! #museum #sound #merrylistening #listening #glitch #christmas2016
Add a comment...


museumofportablesound
The British Library
23 likes
4d
museumofportablesound The Museum is open! We're at The British Library giving a tour to one of the staff here. #museum #listening #noisecancelingheadphones #cafe #notes #notestagram #notebook #britishlibrary
buythisrecord
Add a comment...


museumofportablesound • Followi
Leon
museumofportablesound The Museum is open! We're at London's healthy swift-serve stalwart LEON (the one just around the corner from #tatemodern) with a visitor who not only booked her visit three months ago, she also flew all the way from South Korea to spend time wandering through our galleries! Book your own visit today, just use the Contact form at museumofportablesound.com! #museum #sound #listening #visitor #visitors #soundart #audioculture #soundobject #exhibition #sennheiser #headphones #cultureofsound
facethesound Impressive!!
34 likes
JANUARY 23, 2017
Add a comment...


museumofportablesound • Followi
Tate Britain
museumofportablesound The Museum is open! We're at the Djanogly Café in Tate Britain with visitor and internationally renowned artist David Chung, who is utilising our FREE* Headphones Checkout Service! Book your own visit today at museumofportablesound.com! #listen #listening #sound #museum #tatebritain #cafe #djanoglycafe #headphonescheckoutservice *Temporary surrender of valid ID required. We apologise for any inconvenience caused.
itisartime I love it !!
27 likes
JANUARY 31, 2017
Add a comment...


museumofportablesound • Followi
The British Library
museumofportablesound The Museum is open! We're at the @britishlibrary entrance cafe hosting another visitor for a tour of our collections. Book your own visit at our website today! #listening #sound #museum #soundart #iphone #britishlibrary #london
jyayomusic
kkngart
29 likes
FEBRUARY 7, 2017
Add a comment...


museumofportablesound • Followi
Albion Bankside
museumofportablesound The Museum is open! We're at @albion_london at #bankside near @tate Modern! We have a pair of visitors spending time in our current temporary exhibition, and are now checking out our examples of glitches, and will move on next to our gallery dedicated to the history of recording technology. Book your own visit today at our website - museumofportablesound.com! #cultureofsound #museum #listening
17 likes
FEBRUARY 18, 2017
Add a comment...


museumofportablesound • Followi
Somerset House
museumofportablesound The Museum is open! We're at Somerset House conducting a visit to our excellent temporary exhibition by Mexican sound artist Daniel Toca, curated by @cristagrams. Book your own visit today at museumofportablesound.com! #courtauld #courtauldinstitute #courtauldgallery #cultureofsound #museum #listening #sound #headphones #earbuds
27 likes
FEBRUARY 19, 2017
Add a comment...


museumofportablesound • Followi
Curzon Soho
museumofportablesound Artist Bettina Fung has achieved the distinction of being The 500th visitor* to The Museum of Portable Sound!
#museum #visitors #statistics #sound #listening #cultureofsound #artist #London #savecurzonsoho
*Statistics include attendees of public talks about the Museum and private views as well as one-on-one visits
19 likes
FEBRUARY 27, 2017
Add a comment...


museumofportablesound • Followi
Kingsland Road
museumofportablesound The Museum is open! A surprise visit tonight by visiting US sound artist Seth Cluett. Book your own visit today by using the Contact form at museumofportablesound.com! #listening #museum #sound #soundart #headphones #Hoxton
superblast
hodlondon
36 likes
MARCH 1, 2017
Add a comment...


museumofportablesound • Followi
The White Swan Islington - J D Wether...
museumofportablesound The Museum is open! We're at the White Swan with a return visitor! Book your own visit at museumofportablesound.com! #cultureofsound #listening #museum #sound
julesagissler Beautiful
emer.ahern.art Love it
30 likes
MARCH 8, 2017
Add a comment...


museumofportablesound • Followi
We Are Hoi Polloi
museumofportablesound The Museum is open! We're at Hoi Polloi in Shoreditch admiring the woodwork and hosting another visitor! Book your own visit today at museumofportablesound.com! #sound #listening #museum #cultureofsound #headphones #freeheadphonescheckoutservice
morrittkey
davidaaronarts Lovely!
29 likes
MARCH 7, 2017
Add a comment...


museumofportablesound • Followi
Great North Museum: Hancock
museumofportablesound The Museum is open! And it's being professionally documented! Book your own visit today at museumofportablesound.com! #museumcafe #museum #cafe #listening #photography
marcusvandenberg_art Nice
18 likes
MARCH 10, 2017
Add a comment...


museumofportablesound • Followi
Great North Museum: Hancock
museumofportablesound Intense scrutinisation may be required when visiting London's number one Portable museum! #listening #museum #sound #headphones
16 likes
MARCH 10, 2017
Add a comment...


museumofportablesound • Followi
George Street Social
museumofportablesound The Museum is open! We're on a break at the excellent @georgestreetsocialncl café and presenting the Museum to the manager (right) and a patron (left). Book your own visit today at museumofportablesound.com! #sound #museum #listening #headphones #cafe
silvestro.design Totally rocks!
20 likes
MARCH 10, 2017
Add a comment...


museumofportablesound • Followi
Tyne and Wear Archives
museumofportablesound The Museum is open! We're currently hosting a group tour of staff from the Tyne and Wear Archives. Book your own tour today at museumofportablesound.com! #museum #sound #listening #headphones #archive #archives #collection #objects #resonance #wonder
16 likes
MARCH 10, 2017
Add a comment...


museumofportablesound • Followi
Discovery Museum
museumofportablesound The Museum is open! We're at the Outreach Office of the @discovery_mus presenting the Museum in a wonderful tea nook/stage/sitting area in this repurposed historical co-op building. Book your own appointment today at museumofportablesound.com! #sound #objects #museum #outreach #office #tea #nook
19 likes
MARCH 10, 2017
Add a comment...


museumofportablesound • Followi
Somerset House
museumofportablesound The Museum is open! We're at #resfest at the @courtauld this evening til 9pm in Seminar Room 3! #museum #sound #listen #listening #cultureofsound
16 likes
MARCH 15, 2017
Add a comment...


museumofportablesound • Followi
Somerset House
museumofportablesound The Museum is open! #resfest
12 likes
MARCH 15, 2017
Add a comment...


museumofportablesound • Followi
Somerset House
museumofportablesound The Museum is open! #resfest #seminarroom3
21 likes
MARCH 15, 2017
Add a comment...


museumofportablesound • Followi
Somerset House
museumofportablesound The Museum is open! #resfest #seminarroom3
15 likes
MARCH 15, 2017
Add a comment...


museumofportablesound • Followi
Somerset House
museumofportablesound The Museum is open! #resfest #seminarroom3
17 likes
MARCH 15, 2017
Add a comment...


museumofportablesound • Followi
Somerset House
museumofportablesound The Museum is open! #resfest #seminarroom3
laramgtorres, gallerypeople, emilydodgson, mello_w_tron, dominodomingo, umiaut.foto, courtauldres, gracefullyweird, courtauld and thediepmusic like this
MARCH 15, 2017
Add a comment...


museumofportablesound • Followi
Somerset House
museumofportablesound Our intrepid Curatorial Assistant @cristagrams assisting visitors with finding their way through our 21 galleries and temporary exhibition! #resfest #seminarroom3 #cultureofsound #listen #sound #museum
19 likes
MARCH 15, 2017
Add a comment...


museumofportablesound • Followi
Somerset House
museumofportablesound The Museum is open! #resfest #seminarroom3
16 likes
MARCH 15, 2017
Add a comment...


museumofportablesound • Followi
Victoria and Albert Museum
museumofportablesound The Museum is open! We're at the café at the @vamuseum with Eric de Visscher, former director of the Musée de la Musique in Paris, now of the V&A! Book your own appointment at museumofportablesound.com! #cultureofsound #museum #listen #listening #cafe #sound #soundart #music #musique
28 likes
MARCH 21, 2017
Add a comment...


museumofportablesound • Followi
Birkbeck School of Arts
museumofportablesound The Museum is open! We're at the office of professor and museologist Fiona Candlin, where she and her research assistant James are listening to our gallery of museum sounds! Book your own visit today at museumofportablesound.com! #listening #sound #cultureofsound #museum #museologist
18 likes
MARCH 24, 2017
Add a comment...


museumofportablesound • Followi
The Brown Derby
museumofportablesound The Museum is open! We're at The Brown Derby crashing a going-away party with some sounds of plumbing and heating systems! Book your own visit at museumofportablesound.com! #thebrownderby #sound #listening #museum #cultureofsound #cheers #saude
alba_por_ai that's me having fun!
studioseries 👍👍👍
manoafonsorodrigues 💛💛💛
29 likes
MARCH 24, 2017
Add a comment...


museumofportablesound • Followi
John Cabot University
museumofportablesound The Museum is open! We're out on the terrace at @johncabotuniversity hosting a pair of visitors who are taking one of our curated Guided Tours! Book your own visit this week in Rome at museumofportablesound.com! -
-
#museum #sound #listening #cultureofsound #Rome #Roma #Italy #Italia
original.bgoss Nice!
30 likes
APRIL 11, 2017
Add a comment...


museumofportablesound • Followi
Victoria and Albert Museum
museumofportablesound The Museum is open! We're currently being visited by Sid and Jim of the Artists and Friends podcast! They're listening to our current temporary exhibition by artist Daniel Toca. Book your own visit today at museumofportablesound.com! -
-
#museum #mobile #artistsandfriends #podcast #danieltoca #sound #soundart #listening #cultureofsound
25 likes
APRIL 18, 2017
Add a comment...


museumofportablesound • Followi
Barbican Centre
museumofportablesound The Museum is open! We're at the @barbicancentre with a pair of new visitors! Book your own visit today at museumofportablesound.com! -
-
#cultureofsound #listening #soundart #sound #museum #museumselfie #museumlife #museumvisit
balanceldn
26 likes
APRIL 18, 2017
Add a comment...


museumofportablesound • Followi
The British Library
museumofportablesound The Museum is open! We're at the British Library with a visitor who is also interviewing our Director for a new podcast for London's Emerging Museum Professionals organisation! Miranda, the podcast reporter, is recording her own reactions to our Museum, which is quite exciting! We'll let you know when the episode goes live...stay tuned! .
.
.
#museumofportablesound #cultureofsound #museum #museumvisit #sound #listening #podcast #recording #broadcasting #interview #journalism #headphones #emergingmuseumprofessionals #london
28 likes
APRIL 26, 2017
Add a comment...


museumofportablesound • Followi
Centrum Sztuki Współczesnej Zamek U...
museumofportablesound The Museum is open! We're at the opening reception for Trasnfashional, an international exhibition of artists and designers working at the borders of art and fashion, in Warszawa, Poland! Book your own visit today at museumofportablesound.com! #museum #visiting #warszawa #warsaw #poland #transfashional #fashion #art
31 likes
MAY 19, 2017
Add a comment...


museumofportablesound • Followi
Tate Modern
museumofportablesound The Museum is open! We're at @tate Modern with a pair of international visitors who flew all the way from Texas for their visit! Book your own visit today at museumofportablesound.com! .
.
#listening #museum #sound #tatemodern #tatemodernmuseum #blavatnikbuilding #switchhouse #temporaryexhibition #cultureofsound #texas #dontmesswithtexas
35 likes
JUNE 5, 2017
Add a comment...

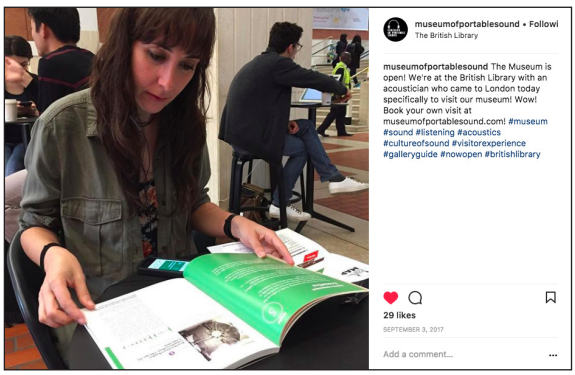

museumofportablesound • Followi
Royal College of Art
museumofportablesound The Museum is open! We're at the @royalcollegeofart with Dr. Emily Candela's students for a talk and listening session. Of course our most popular gallery got a listen: Plumbing, Heating, and Cooling! We also presented our temporary exhibition of work by Daniel Toca. Book your own visit today! #rca #lecture #cultureofsound #museum #sound #listening #grouptour #curation #exhibitionstudies #mediastudies
25 likes
JUNE 8, 2017
Add a comment...


museumofportablesound • Followi
Brown & Rosie
museumofportablesound The Museum is open! We're at Brown & Rosie on Exhibition Road just a short walk from the other London museums, with a visitor who is taking our Relaxation-themed guided tour! Book your own visit today at museumofportablesound.com! #MuseumWeek #TravelsMW #WomenMW #london #exhibitionroad #museum #museums #headphones #listening #cultureofsound
22 likes
JUNE 24, 2017
Add a comment...


museumofportablesound • Followi
The British Library
museumofportablesound The Museum is open! We're at the @britishlibrary hosting a visit by Filipina sound artist Teresa Barrozo, who came to London all the way from Manila to visit us! Book your own visit today at museumofportablesound.com! #cultureofsound #sound #listening #soundart #soundartist #visitus
leahbarclay Great to hear! @teresabarrozo is doing excellent work! 😊
museumofportablesound @leahbarclay Cool! Wish I could have seen her piece in Hull.
27 likes
JULY 4, 2017
Add a comment...


museumofportablesound • Followi
Victoria and Albert Museum
museumofportablesound "The highlight of my trip to London!" - The Museum is open! We're at the new café at the @vamuseum's Exhibition Road Quarter with a visitor from the faculty of Skidmore College in the United States! He's listening to our galleries of the sounds made by audio equipment. You can too! Book your visit today at museumofportablesound.com! #cultureofsound #museum #vamuseum #cafe #sound #listening #audiogear #objects #skidmore #skidmorecollege
the_realmeemster For a second I thought that was Harrison Ford.
bismuth_records :-)
62 likes
JULY 11, 2017
Add a comment...


museumofportablesound • Followi
UCL Institute of Archaeology
museumofportablesound The Museum is open! We're being visited today by Dr Alice Stevenson, Curator of the Petrie Museum of Egyptian Archaeology and Senior Lecturer in Museum Studies at the UCL Institute of Archaeology. Dr Stevenson is enjoying our Archaeology gallery at the moment, listening to the sound of King Tut's trumpets being played on an archival BBC Radio broadcast from 1939. Book your own visit today at museumofportablesound.com! #museum #listening #sound #trumpet #kingtut #tutankhamun #archaeology #egyptology #listening #cultureofsound #ucl #london
56 likes
JULY 26, 2017
Add a comment...


museumofportablesound • Followi
The British Library
museumofportablesound The Museum is open! We're at the British Library with an acoustician who came to London today specifically to visit our museum! Wow! Book your own visit at museumofportablesound.com! #museum #sound #listening #acoustics #cultureofsound #visitorexperience #galleryguide #nowopen #britishlibrary
29 likes
SEPTEMBER 3, 2017
Add a comment...


museumofportablesound • Followi
museumofportablesound The Museum is open! Earlier tonight we hosted Julie, a 97 year-old guitar player! Her visit was a definite highlight! Book your own visit now at museumofportablesound.com! #museum #sound #listening #headphones #panache #london #guitar #unique #awesome
dixiedevilsport
46 likes
SEPTEMBER 5, 2017
Add a comment...


museumofportablesound • Followi
Upper Fleet Bakery
museumofportablesound The Museum is open! We're at @ucl talking sonic heritage with a PhD candidate who is currently listening to some Portuguese psithurism. Book your own visit today at museumofportablesound.com! #sound #listening #museum #heritage #psithurism #portugal #cafe #fleetkitchen #universitycollegelondon
18 likes
SEPTEMBER 8, 2017
Add a comment...


museumofportablesound • Followi
Gordon's Cafe
museumofportablesound The Museum is open - again! Our second visitor of the day is an audio engineer who seems particularly interested in our gallery on the history of audio recording - let's hope he doesn't find too many errors! Book your own visit at museumofportablesound.com! #museum #sound #listening #recording #audio #engineer #gordonscafe #ucl #london #cultureofsound
21 likes
SEPTEMBER 8, 2017
Add a comment...


museumofportablesound • Followi
STET Livros & Fotografias
museumofportablesound First visitors of the evening! #booklaunch #livros #stet #lisboa #lisbon #museu #museum #sound #listening #cultureofsound
20 likes
SEPTEMBER 15, 2017
Add a comment...


museumofportablesound • Followi
Fundação Calouste Gulbenkian
museumofportablesound The Museum is open! We're in the amphitheater at the Gulbenkian Foundation in Lisbon, with a visitor who is taking our Learning guided tour! Book your own visit now at museumofportablesound.com! #lisbon #lisboa #portugal #gulbenkian #amphitheatre #amphitheater #listening #headphones #museum #sound #cultureofsound #portablesound #mailecostacolbert
23 likes
SEPTEMBER 22, 2017
Add a comment...


museumofportablesound • Followi
La Mer Karlsruhe
museumofportablesound The Museum is open! We're at La Mer in Karlsruhe and are being visited by a composer! Book your own visit at museumofportablesound.com! #sound #listening #cultureofsound #museum #ISACS17
officialcarrielane This is awesome :)
rami_tyla Oh, so sad, I didn't manage to visit your portable museum! Such a great presentation at ISACS17!
museumofportablesound @rami_tyla Thank you so much Ins!! It was great meeting you, and no worries - you can visit us any time, we'd be honoured!
26 likes
SEPTEMBER 29, 2017
Add a comment...


museumofportablesound • Followi
La Mer Karlsruhe
museumofportablesound We had a second visitor last night at La Mer - an artist and radio producer! Book your own visit today at museumofportablesound.com! #radio #radioart #listening #museum #sound #cultureofsound
26 likes
SEPTEMBER 30, 2017
Add a comment...


museumofportablesound • Followi
Sky Gardens
museumofportablesound The Museum is open! We're at @SG_SkyGarden with a pair of visitors enjoying our Relaxation-themed Guided Tour! Book your own visit in the exotic London locale of your choice right now at museumofportablesound.com! #museum #visit #couple #group #listening #sound #skygarden #london #cultureofsound #intangibleculturalheritage #happyhour
dayklectic Sick
museumofportablesound @dayklectic We didn't notice if they were running a fever or not but will check back with them to make sure they're well! The health & safety of our visitors is extremely important to us.
25 likes
NOVEMBER 8, 2017
Add a comment...


museumofportablesound • Followi
University of Westminster
museumofportablesound We're at the birthplace of Pink Floyd hosting the director of @rembrandtpeale and @museweb and a friend - our first visitors to the new expanded collection! #museum #visit #headphones #listening #guidedtour #cultureofsound #sound #museumstudies #soundstudies
a_b_fitness_ Great IG profile
thediegoprado Cool post!
27 likes
NOVEMBER 21, 2017
Add a comment...


museumofportablesound • Followi
University of Westminster
museumofportablesound There's nothing better than an unexpected visitor, and we had one yesterday after our afternoon group visit! We have *three* visits scheduled for today, so who knows what will happen! Book your own visit now at museumofportablesound.com! #latergram #museum #visitor #headphones #musician #violin #sequin #sequinjacket #sequins #sound #listening #cultureofsound
shajaanienglish 🖤🖤🖤
ihopfestival Have you ever wanted to travel to Thailand?
36 likes
NOVEMBER 22, 2017
Add a comment...


museumofportablesound • Followi
The British Library
museumofportablesound First visit of the day done and dusted! A pair of academics from the state of New York have worked their way through a significant amount of our big new Permanent Collection Galleries, and you can too - just book your visit at museumofportablesound.com! #museum #sound #listening #cultureofsound #soundstudies #museumstudies #history #heritage #intangibleculturalheritage
20 likes
NOVEMBER 22, 2017
Add a comment...


museumofportablesound • Followi
The British Library
museumofportablesound Our second visit today features a London composer and sound artist - she's been enjoying our newly expanded gallery of animal sounds, and you can too when you book your visit now at museumofportablesound.com! #museum #visit #musician #composer #soundartist #london #britishlibrary #birdsong #permanentcollection #cultureofsound #soundstudies #museumstudies #intangibleculturalheritage
nhell_monsterz Nice!
30 likes
NOVEMBER 22, 2017
Add a comment...


museumofportablesound • Followi
Camden Town
museumofportablesound The Museum is still open! Our third and final visit for the day is going on right now in a @costacoffee on Camden High Street - you can book your own visit in a similarly exotic London location by visiting museumofportablesound.com! #costa #christmasmusic #saltedcaramel #saltedcaramelcappuccino #museum #sound #listening #cultureofsound #museumstudies #soundstudies
dawnbradleyein
17 likes
NOVEMBER 22, 2017
Add a comment...


museumofportablesound • Followi
National Science and Media Museum
museumofportablesound We've had so many great visitors during our time here at @mediamuseum! We could easily do this all day - we'll miss it when it's over! #SMGconf17 #research #conference #headphones #listening #museum #science #cultureofsound #museumstudies #soundstudies #intangibleculturalheritage
terrylemac Looking very happy @row_hamilton :)
24 likes
NOVEMBER 24, 2017
Add a comment...


museumofportablesound • Followi
London College of Communication
museumofportablesound The Museum is open! We're at @lcclondon where three professors (1 intentionally out of shot upon request) are beginning their first visit with the sound of the sunrise over Rome. Book your own visit now at museumofportablesound.com! #museum #listening #headphones #sound #cultureofsound
photo_sadie_mc Sorry I missed this. I could have joined in. I was there today.
museumofportablesound @photo_sadie_mc No problem! It was actually a tutorial anyway.
27 likes
NOVEMBER 29, 2017
Add a comment...


museumofportablesound • Followi
Komische Künste Wien
museumofportablesound And now it's expanded into a group visit! #sound #listening #museuminamuseum
13 likes
DECEMBER 7, 2017
Add a comment...


museumofportablesound • Followi
The British Library
museumofportablesound Not back in London even 24 hours, and we already have a visitor - the Museum is open! We're at the British Library with our latest visitor, an artist who is currently listening to our temporary exhibition - book your visit today at museumofportablesound.com! #museum #library #london #soundart #artist #britishlibrary #headphones #cultureofsound
museum_mutterings This is very much on my list of things to do this year!
museumofportablesound @museum_mutterings We'd love to have you visit!
markshakedown Cool
22 likes
JANUARY 13
Add a comment...


museumofportableso... • Following
The British Museum
museumofportablesound The Museum is open - in another museum! We're at the @britishmuseum being visited by an artist and sound scholar who came all the way from Montreal! Book your own visit today at museumofportablesound.com! #sound #listening #headphones #museum #museuminamuseum #metamuseum #london #greatcourt #totempole #cultureofsound
thaisaragao Remediation
33 likes
FEBRUARY 1
Add a comment...


museumofportableso... • Following
Victoria and Albert Museum
museumofportablesound The museum is open! We're in the Research Department at the @vamuseum being visited by attendees of the Listening To The Museum workshop! Book your own visit at museumofportablesound.com! #vandamuseum #sound #listening #museum #londonmuseum #research #symposium #workshop #headphones #cultureofsound
32 likes
FEBRUARY 16
Add a comment...


museumofportableso... • Following
Curzon Cinema Soho
museumofportablesound The Museum is open! We're hosting a visit by a sound studies professor from @northwesternu in America - book your own visit at museumofportablesound.com! #visit #museum #listen #listening #sound #soundstudies #media #soundart #cultureofsound
21 likes
MARCH 26
Add a comment...


museumofportableso... • Following
St. Paul's Cathedral
museumofportablesound The Museum is open! We're outside St Paul's cathedral with our latest visitor - book your own visit online at museumofportablesound.com! #stpauls #stpaulscathedral #church #cathedral #museum #listening #listen #heritage #cultureofsound
25 likes
MARCH 27
Add a comment...


museumofportableso... • Following
The New Cross House
museumofportablesound The Museum is open! Today we're at @thenewcrosshouse debuting our new complimentary Coat Check service (the Museum is not responsible for any lost or stolen items - we apologise for any inconvenience caused). Book your own visit at museumofportablesound.com! #newcrosshouse #newcross #goldsmiths #london #londonmuseum #listening #sound #mobilelistening #portablesound #coatcheck #notresponsibleforlostorstolenitems #weapologiseforanyinconvenicecaused #cultureofsound #portablemuseum #museumpractice #customerservice #visitorexperience
21 likes
MARCH 29
Add a comment...


museumofportableso... • Following
V&A Museum of Childhood
museumofportablesound The Museum is open! We're at the @museumchildhood being visited by American afrofuturist @maisonlafleur, who is currently enjoying our gallery of glitches! Book your own visit now at museumofportablesound.com! #glitch #glitches #sound #technology #headphones #afrofuturism #earbuds #museum #culture #cultureofsound
maisonlafleur Best museum visit ever! Thank you! ♥
museumofportablesound @maisonlafleur Aw shucks, you're more than welcome!! And thanks for the amazing conversation - so much to think about!
26 likes
APRIL 24
Add a comment...


museumofportableso... • Following
Shoreditch Grind
museumofportablesound The Museum is open! We're at #shoreditchgrind with American artist @ruppelshot, who is currently visiting our temporary exhibition, Portable Sound In Cinema 1979 - 2000! Book your own visit today at museumofportablesound.com! #shoreditch #coffee #grind #cafe #coffee #film #cinema #sound #portablesound #portablesoundincinema #culture #cultureofsound
ruppelshot A wonderful experience!!!
32 likes
APRIL 27
Add a comment...


museumofportableso... • Following
National Theatre
museumofportablesound The Museum is open! We're at the @nationaltheatre with a Composition class from @unicreativearts, who are watching our temporary exhibition, Portable Sound in Cinema 1979 - 2000! Book your own visit at museumofportablesound.com! #museum #visit #cinema #portablesound #theatre #southbank #nationaltheatre #cultureofsound
16 likes
MAY 3
Add a comment...


museumofportableso... • Following
Blackheath, London
museumofportablesound The Museum is open! We're at a private residence in Blackheath with a couple who are visiting the museum after graciously providing our Director with a hearty lunch! Book your own private tour today at museumofportablesound.com! #blackheath #london #londonmuseum #spittingdistancefromGreenwich #lunch #soup #tofu #lentils #salad #bread #privatetour #guidedtour #hospitality #grateful #sound #cultureofsound #museum
22 likes
MAY 16
Add a comment...


museumofportableso... • Following
Via Garibaldi - Venezia
museumofportablesound The Museum is open! We're at the opening of this year's Architecture Biennale visiting the @design.ve project, and we're now being visited by one of the exhibiting artists! Book your own visit today at museumofportablesound.com! #sound #listening #venice #Venezia #venicebiennale #venicearchitecturebiennale #venicearchitecturebiennale2018 #garibaldi #cultureofsound
17 likes
MAY 24
Add a comment...


museumofportableso... • Following
Barbican Centre
museumofportablesound The Museum is open! We're at the @barbicancentre having an impromptu visit in the Barbican Kitchen - book your own visit today at museumofportablesound.com! #barbican #brutalistarchitecture #brutalistlondon #coldfish #salad #freeheadphonescheckoutservice #sound #headphones #cultureofsound
susana.mendes.silva wow!!! beijinhos
christinaraab13 Oh it's Daniel!
kannenbergj @christinaraab13 Who?
christinaraab13 @christinaraab13 ups
or maybe not...
laramgtorres @christinaraab13 it is. Ahahahahahahah
christinaraab13 @laramgtorres
22 likes
JUNE 4
Add a comment...


museumofportableso... • Following
The British Museum
museumofportablesound The Museum is open! We're in the Great Court of the @britishmuseum with a pair of visitors. Book your own visit today at museumofportablesound.com! #londonmuseum #museuminamuseum #listening #visit #museum #sound #opentoday #cultureofsound
29 likes
JUNE 6
Add a comment...


museumofportableso... • Following
Graduate Fashion Week
museumofportablesound The Museum is open! We're in Brick Lane at @officialgfw with the denizens of the @uopfashtext booth! Book your own visit at museumofportablesound.com! #portsmouthuni #graduatefashionweek #london #fashion #textiles #design #lookforthrstripes #vr #londonmuseum #cultureofsound #bricklane #bricklanelondon
bazevent
23 likes
JUNE 6
Add a comment...


museumofportableso... • Following
Graduate Fashion Week
museumofportablesound More @uopfashtext visitors at @officialgfw! So many people seem to love the sound of Pop Rocks! Book your own visit at museumofportablesound.com! #londonmuseum #graduatefashionweek #fashion #textiles #london #bricklane #oldtrumanbrewery #cultureofsound #headphones #listening
museumofportablesound 'This is the longest I've ever been in a museum' – Josh
18 likes
JUNE 6
Add a comment...


museumofportableso... • Following
Muumimuseo - Moomin Museum
museumofportablesound The Museum is open! We're in the café at the wonderful @moominmuseum in Tampere, Finland with a visitor taking our Learning guided tour! Book your own visit now at museumofportablesound.com! #tampere #finland #moomin #moomins #moominstagram #moominmuseum #wonder #tovejansson #listening #earbuds #oldfriends #sound #cultureofsound
24 likes
JUNE 14
Add a comment...


museumofportableso... • Following
Tampere, Finland
museumofportablesound The Museum was open! Our wonderful hosts in Tampere visited our temporary exhibition this morning - our first visual exhibition and our first visitors to go headphone-less and use our built-in speaker! You can visit Portable Sound in Cinema: 1979-2000 by booking your visit today at museumofportablesound.com! #portablesound #portablesoundincinema #breakfast #coffee #porridge #tampere #finland #watching #listening #cinema #boombox #brixtonbriefcase #cultureofsound
17 likes
JUNE 14
Add a comment...


museumofportableso... • Following
Fernandez & Wells - Strand
museumofportablesound The Museum is open! We're at @courtauld with another visitor to our temporary exhibition, Portable Sound in Cinema 1979-2000...book your own visit at museumofportablesound.com! #portablesoundincinema #headphones #listening #watching #video #cinema #sound #portablesound #cultureofsound
14 likes
JUNE 19
Add a comment...

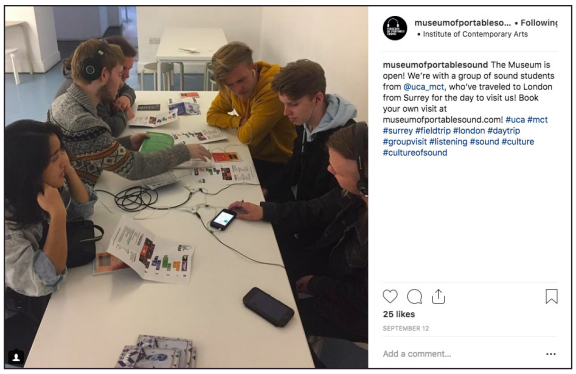

museumofportableso... • Following
Victoria and Albert Museum
museumofportablesound The Museum is open! We're at the @vamuseum café being visited by a museum registrar - book your own visit at museumofportablesound.com! #londonmuseum #museumcafe #cafe #listening #headphones #cultureofsound
32 likes
JULY 14
Add a comment...


museumofportableso... • Following
Hyde Park
museumofportablesound The Museum is open! We're on the grass near @serpentineuk with a pair of sound artists! Book your own visit at museumofportablesound.com! #londonmuseum #listening #museumofportablesound #cultureofsound #serpentinegallery #hydepark #hydeparklondon #sound
20 likes
JULY 14
Add a comment...


Welcome
museumofportableso... • Following
Wellcome Trust
museumofportablesound The Museum is open! We're in the café at the @wellcomecollection with a visitor who is currently in our Exposition Space, viewing 'Portable Sound in Cinema 1979-2000', our current temporary exhibition. Book your own visit now at museumofportablesound.com! #video #cinema #exhibition #portablesound #portablesoundincinema #london #museum #londonmuseum #culture #sound #cultureofsound
15 likes
6 DAYS AGO
Add a comment...

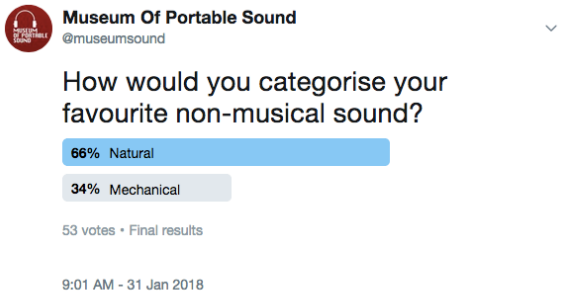

museumofportableso... • Following
• Queen's Lane Coffee House
museumofportablesound The Museum is open! We're inside the oldest continuously operational coffee house in Europe (est. 1654) in Oxford being visited by MOPS Board Member Dan Curley! Book your own visit today at museumofportablesound.com! #oxford #theshire #coffee #coffeeshops #coffeehouse #uk #england #listening #sound #museum #boardmember #culture #cultureofsound
11 likes
AUGUST 26
Add a comment...

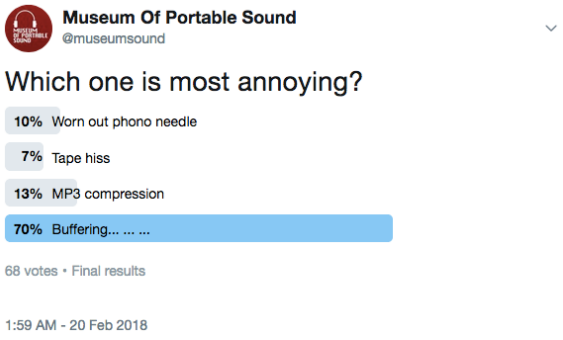

museumofportableso... • Following
• Queen's Lane Coffee House
museumofportablesound "We're listening and learning like coffee shops used to be, doing something creative in them - we're having a proper Oxford experience!" The Museum is still open with a new pair of visitors! #oxford #coffeeshopsoftheworld #coffeehouse #coffeeshops #experience #culture #listening #cultureofsound
18 likes
AUGUST 26
Add a comment...

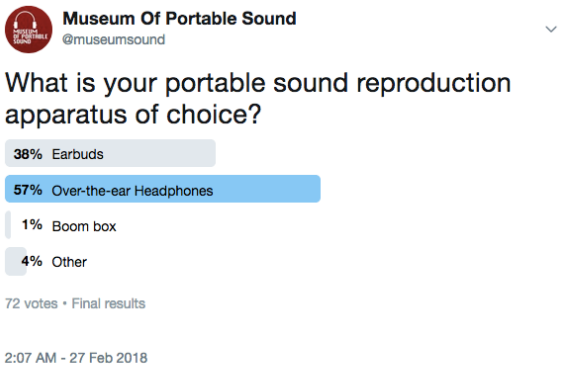

museumofportableso... • Following
• Institute of Contemporary Arts
museumofportablesound The Museum is open! We're with a group of sound students from @uca_mct, who've traveled to London from Surrey for the day to visit us! Book your own visit at museumofportablesound.com! #uca #mct #surrey #fieldtrip #london #daytrip #grouvisit #listening #sound #culture #cultureofsound
25 likes
SEPTEMBER 12
Add a comment...

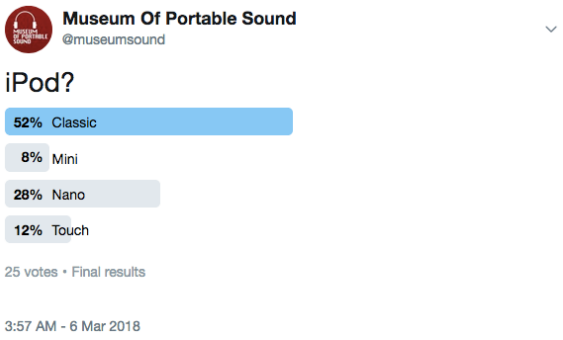

museumofportableso... • Following
• Victoria and Albert Museum
museumofportablesound The Museum is open! We're back at the @vamuseum café with a very special visitor - our former Curatorial Assistant! She's currently enjoying our temporary exhibition, Portable Sound in Cinema 1979-2000, our first ever video exhibition! Book your own visit today at museumofportablesound.com! #curatorialassistant #video #cinema #portablesoundincinema #portablesound #culture #listening #cultureofsound #museum
13 likes
SEPTEMBER 12
Add a comment...

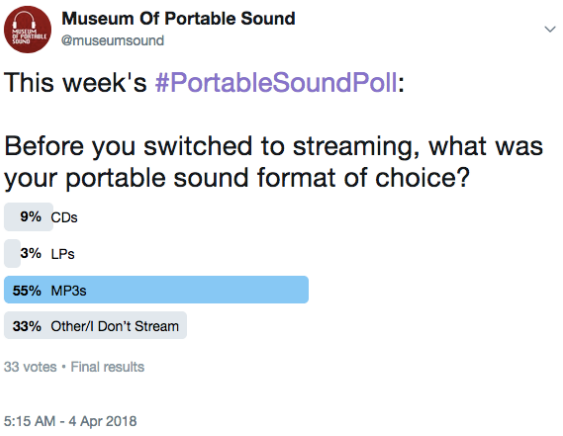
Appendix 7
Twitter #PortableSoundPoll results











Museum Of Portable Sound
@museumsound

This week's new #PortableSoundPoll is about: #audiotape!

The best form of audio tape is:

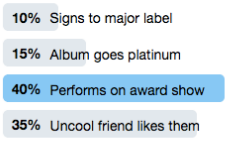
31 votes • Final results

2:40 AM - 12 Apr 2018

Museum Of Portable Sound
@museumsound

This week's #PortableSoundPoll topic is: #connoisseurship

At which career milestone do you stop listening to a band?



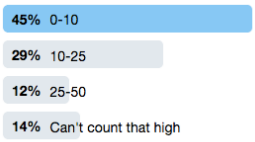
20 votes • Final results

3:04 AM - 19 Apr 2018

Museum Of Portable Sound
@museumsound

This week's #PortableSoundPoll topic is: #fetish

How many portable sound devices (ie transistor radio, Walkman, CD player, iPod, mobile, etc) have you owned in your lifetime?



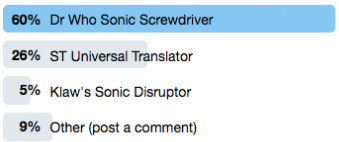
42 votes • Final results

4:12 AM - 27 Apr 2018

Museum Of Portable Sound
@museumsound

This week's #PortableSoundPoll category is: #scifi

Which science-fictional portable sound device is your favourite? (ST = #StarTrek / #damncharacterlimits)



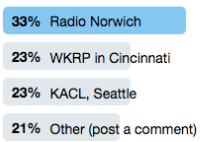
43 votes • Final results

6:55 AM - 4 May 2018

Museum Of Portable Sound
@museumsound

This week's #PortableSoundPoll topic is: #Radio

What is your favourite fictional radio station?



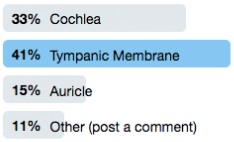
30 votes • Final results

8:37 AM - 11 May 2018

Museum Of Portable Sound
@museumsound

This week's #PortableSoundPoll topic is: #Anatomy

Which part of the human ear really does it for you?



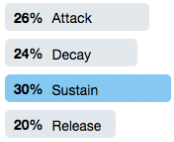
27 votes • Final results

9:05 AM - 18 May 2018

Museum Of Portable Sound
@museumsound

This week's #PortableSoundPoll topic is: #electronicmusic

What's the best synth envelope dial to twiddle?



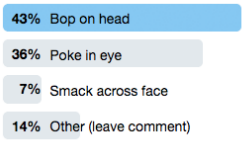
46 votes • Final results

4:34 AM - 26 May 2018

Museum Of Portable Sound
@museumsound

The new #PortableSoundPoll topic is: #SoundDesign for #Film

Q: Which is your favourite Three Stooges sound effect?
(reference: youtube.com/watch?v=xxg716…)



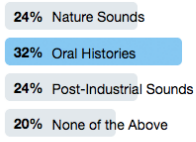
14 votes • Final results

5:54 AM - 2 Jun 2018

Museum Of Portable Sound
@museumsound

This week's #PortableSoundPoll topic is: #curation

Q: You walk into a museum and see three pairs of headphones on display with the following labels on them. Which do you listen to first?



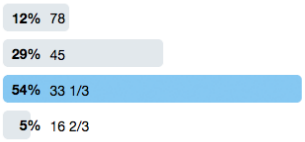
74 votes • Final results

3:28 AM - 10 Jun 2018

Museum Of Portable Sound
@museumsound

This week's #PortableSoundPoll topic is: #technology

Of the following, which is your favourite phonograph record RPM?



41 votes • Final results

3:39 AM - 17 Jun 2018

Museum Of Portable Sound
@museumsound

This week's #PortableSoundPoll topic is: #Anthropology

Q: Do you have the 'shutter click' sound effect turned OFF on your mobile or digital camera?

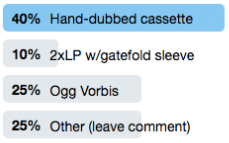
38 votes • Final results

4:14 AM - 24 Jun 2018

Museum Of Portable Sound
@museumsound

This week's #PortableSoundPoll topic is: #RecordingFormats

Q: Which format for an experimental harsh noise compilation album release is the hardest core?



20 votes • Final results

5:56 AM - 1 Jul 2018

Museum Of Portable Sound
@museumsound

This week's #PortableSoundPoll topics are: #Electromagnetism and #Radio

Q: Which radio broadcast modulation is more awesome? (leave your reasons why as a comment!)

38% Amplitude (AM)
62% Frequency (FM)

24 votes • Final results

7:58 AM - 8 Jul 2018

Museum Of Portable Sound
@museumsound

This week's #PortableSoundPoll topic is: #noise

Q: What's your favourite party noisemaker?

43% Kazoo
32% Air Horn
25% Other (leave a comment)

28 votes • Final results

2:16 AM - 16 Jul 2018

Museum Of Portable Sound
@museumsound

This Week's #PortableSoundPoll Topic Is: #PortableSoundInCinema

Q: Which is your favourite fictional record shop?

8% Championship Vinyl
42% Empire Records
25% Chelsea Drugstore
25% Other (leave a comment)

12 votes • Final results

3:55 AM - 23 Jul 2018

Museum Of Portable Sound
@museumsound

This Week's #PortableSoundPoll Topic is: #Science

Q: Which audio frequency range (in Herz) is the most banging?

72% 15 - 5,000
7% 5,000 - 10,000
14% 10,000 - 20,000
7% Other (leave a comment)

29 votes • Final results

4:32 AM - 30 Jul 2018

Museum Of Portable Sound
@museumsound

This Week's #PortableSoundPoll topic is: #ConsumerConfidence

Q: The recent rise in popularity of the compact #audio #cassette can be seen as the result of which of its primary features?

14% Lack of track indexing
24% Ease of melting in sun
31% Inferior sound quality
31% Other (leave a reply)

29 votes • Final results

4:47 AM - 6 Aug 2018

Museum Of Portable Sound
@museumsound

This Week's #PortableSoundPoll Topic Is: #Gear

Q: Which is the ultimate sound geek microphone?

43% Ribbon mic
21% Contact mic
29% Hydrophone
7% Other (leave a comment)

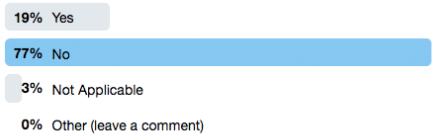
14 votes • Final results

10:27 AM - 15 Aug 2018

Museum Of Portable Sound
@museumsound

This week's #PortableSoundPoll topic is: #identity

Q: Are you currently embarrassed by the first piece of recorded sound you ever purchased?



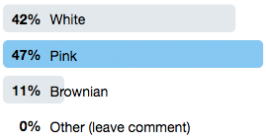
31 votes • Final results

12:48 AM - 25 Aug 2018

Museum Of Portable Sound
@museumsound

This week's #PortableSoundPoll topics are: #physics and #noise

Q: Which is your favourite kind of noise?



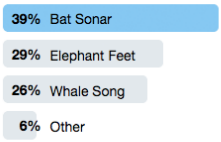
19 votes • Final results

6:22 AM - 2 Sep 2018

Museum Of Portable Sound
@museumsound

This week's #PortableSoundPoll topic is: #NaturalHistory

Q: Which form of non-human listening is most awesome?



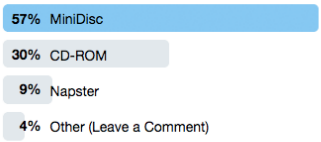
31 votes • Final results

4:26 AM - 10 Sep 2018

Museum Of Portable Sound
@museumsound

This week's #PortableSoundPoll topic is: the #Nineties

Q: Which '90s audio format are you most nostalgic for?



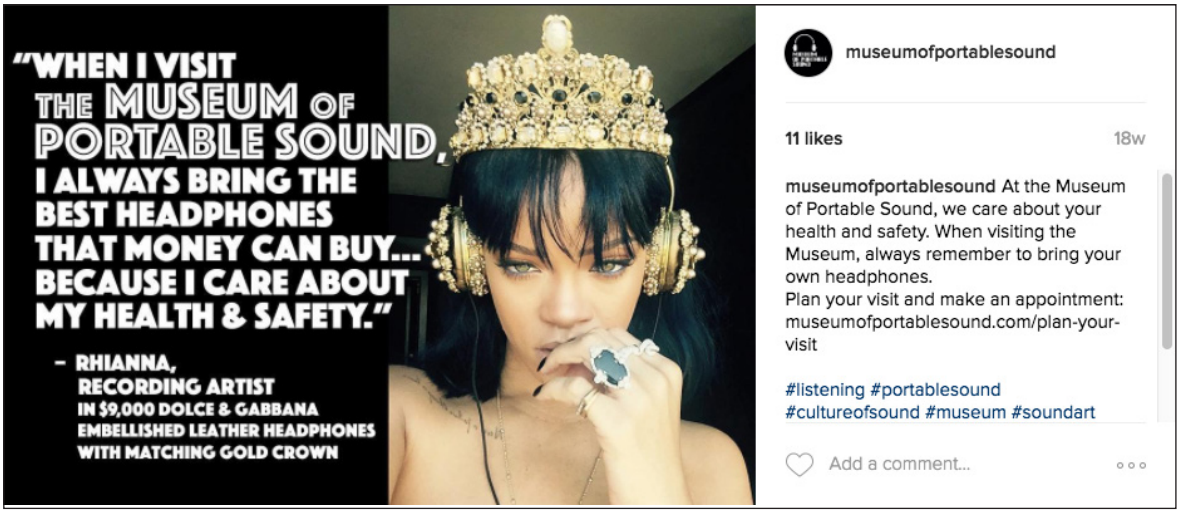
74 votes • Final results

5:33 AM - 18 Sep 2018

Appendix 8

Selected social media adverts:

Instagram.com/museumofportablesound



museumofportablesound

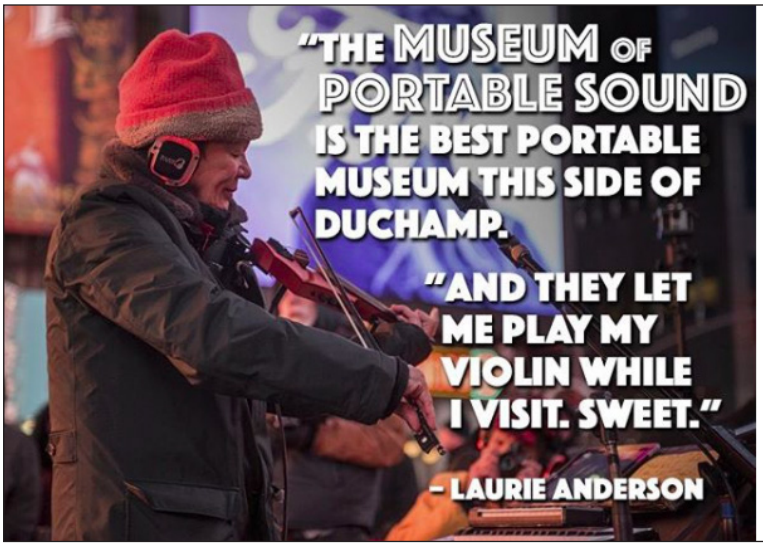
26 likes 18w

museumofportablesound We bring the culture of sound to the world, one listener at a time. You won't believe your ears. #isitliveorisitmemorex #isitlive #ellafitzgerald #nelsonriddle #breakingglass #memorex #parody #museum #sound #listening #portablesound #cultureofsound #newspaperad #advert #advertisement #advertising

carolinegeys Very nice! 😃

museumofportablesound Thanks, @carolinegeys !

Add a comment...



museumofportablesound
London, United Kingdom

25 likes 22w

museumofportablesound Book your visit now at museumofportablesound.com! #laurieanderson #violin #listening #concertfordogs #museum #sound #soundart #osuperman #duchamp #sweet

boutiquespa 😀😀👍

Add a comment...

museumofportablesound • Followi
The Museum of Portable Sound

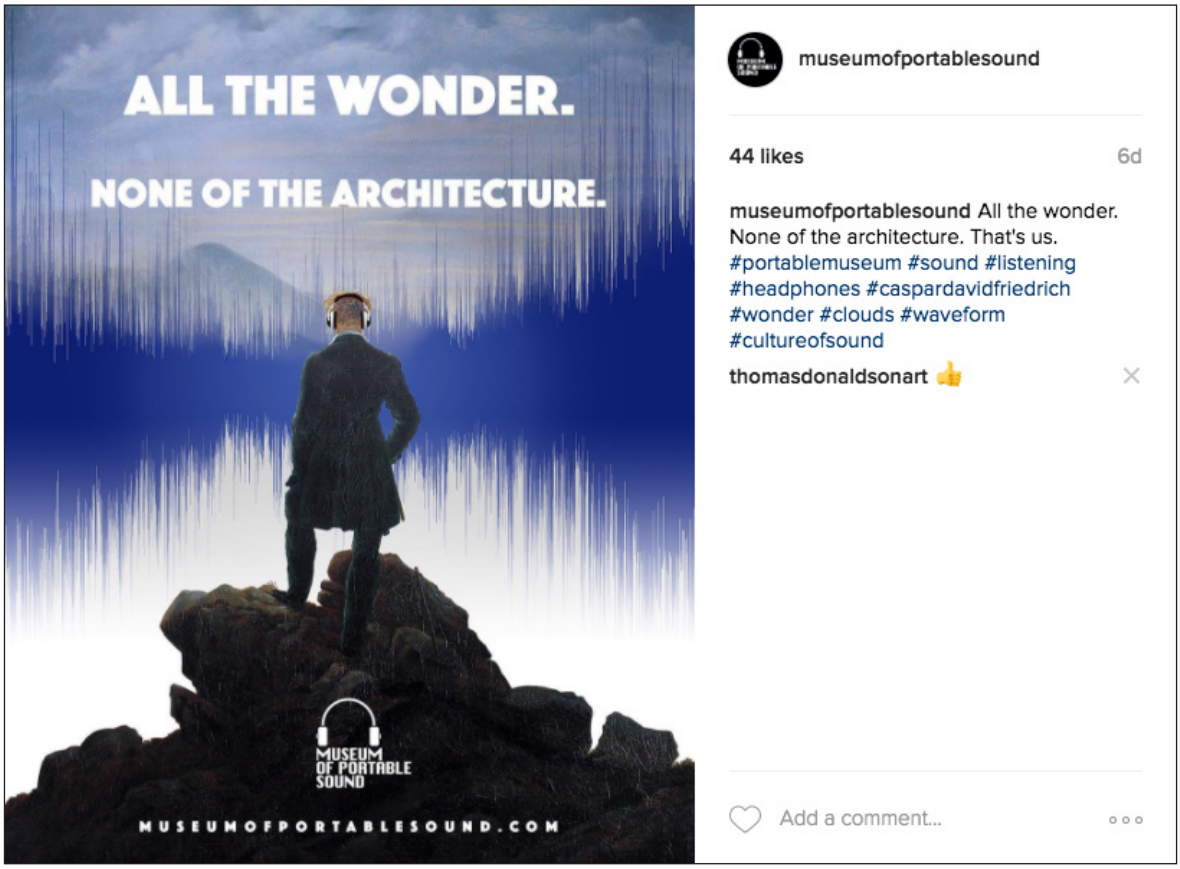
museumofportablesound It's not an app. It's an experience. #sound #museum #iphone #thisisnotapipe #magritte #thisisnotapainting

laramgtorres ❤️❤️❤️❤️❤️

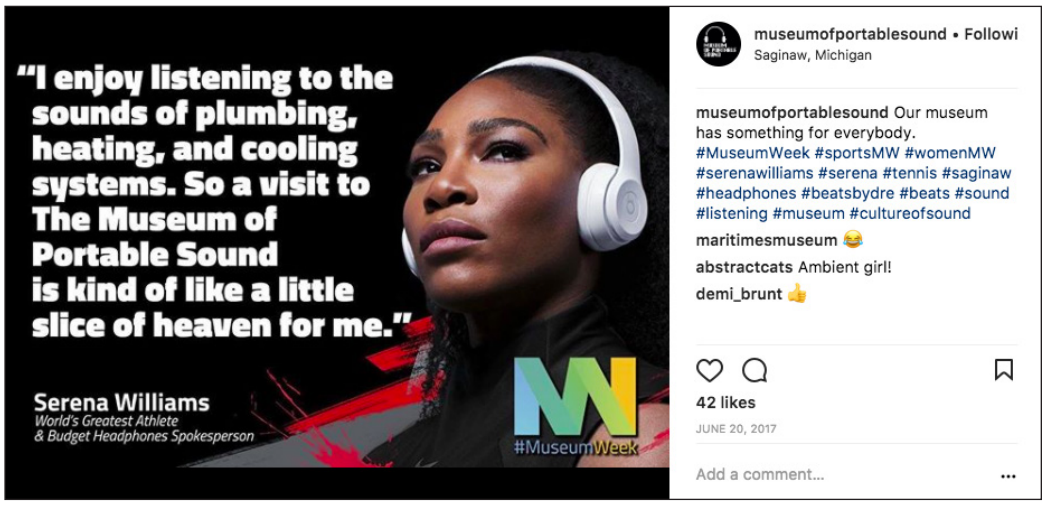
27 likes

MARCH 15, 2017

Add a comment...


ALL THE WONDER.
NONE OF THE ARCHITECTURE.
MUSEUM OF PORTABLE SOUND
MUSEUMOFPORTABLESOUND.COM
museumofportablesound
44 likes
6d
museumofportablesound All the wonder. None of the architecture. That's us. #portablemuseum #sound #listening #headphones #caspardavidfriedrich #wonder #clouds #waveform #cultureofsound
thomasdonaldsonart
Add a comment...


MUSEUM OF PORTABLE SOUND
museumofportablesound • Followi
The Museum of Portable Sound
museumofportablesound It's not an app - it's an experience. You too can experience The Persistence of MOPS! Book your own visit today at museumofportablesound.com! .
.
#dali #surrealism #surreal #thepersistenceofmemory #museum #melting #phone #mobile #cultureofsound
jesusmartingonzalez77
33 likes
JUNE 2, 2017
Add a comment...


"I enjoy listening to the sounds of plumbing, heating, and cooling systems. So a visit to The Museum of Portable Sound is kind of like a little slice of heaven for me."
Serena Williams
World's Greatest Athlete
& Budget Headphones Spokesperson
#MuseumWeek
museumofportablesound • Followi
Saginaw, Michigan
museumofportablesound Our museum has something for everybody. #MuseumWeek #sportsMW #womenMW #serenawilliams #serena #tennis #saginaw #headphones #beatsbydre #beats #sound #listening #museum #cultureofsound
maritimesmuseum
abstractcats Ambient girl!
demi_brunt
42 likes
JUNE 20, 2017
Add a comment...

museumofportablesound

18 likes 22w

museumofportablesound Prince George knows what London's number one portable museum is! #portablesound #sound #museum #soundart #royalty #princegeorge #headphones

Add a comment...

museumofportableso... • Following
London, United Kingdom

museumofportablesound We're about to embark on a day of multiple visits in London! Where will we meet our visitors? Watch out for our updates later today! #museum #visit #visitus #listening #sound #london #londonmuseum #londonmuseums #whereintheworldisthemuseumofportablesound #cultureofsound #resonance #conversations

17 likes

JULY 14

Add a comment...

museumofportablesound

13 likes 1h

museumofportablesound We ask that our visitors please refrain from using our Museum to make political statements - we can't afford to keep buying new mobiles. We thank you and apologise for any inconvenience caused. #sorry #autodestruction #warranty #applecare #aiweiwei #brokenscreen

Add a comment...

museumofportablesound • Followi
Rome, Italy

museumofportablesound We're coming to Rome! No doubt about it, you'll want to book a group tour of our Museum if you're in Rome 9-15 April. Book your group experience now at museumofportablesound.com!
#cultureofsound #Rome #Italy #Roma #Italia #caravaggio #thomas #doubtingthomas #iphone #headphonesplitter #grouptour #jesus #christ #listen #listening #soundart

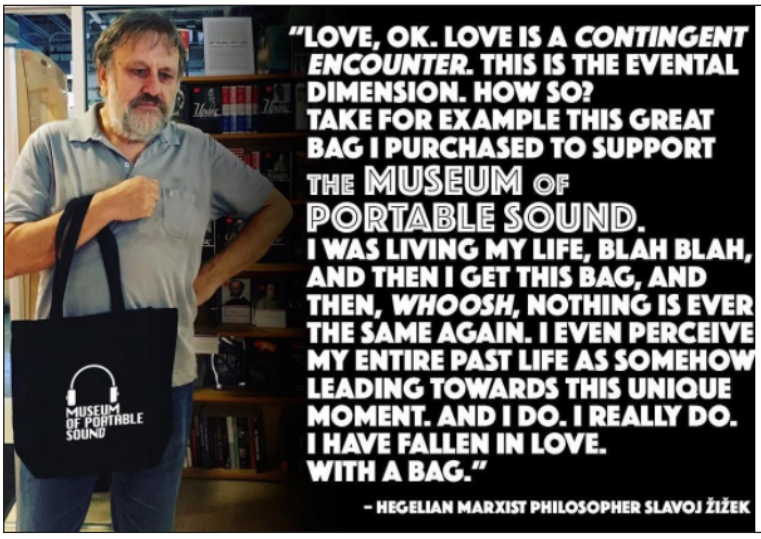
robertoderosa 👍👍👍
museum.ephemera 💫
anonstudiosla Niiiice 🔥

67 likes
MARCH 31, 2017
Add a comment...

museumofportablesound • Followi
The Museum of Portable Sound

museumofportablesound It's not an app. It's an experience. Book your own experience with us today at museumofportablesound.com. -
-
#hometapingiskillingmusic #cultureofsound #appstore #download #skullandcrossbones #experience #appropriation #remix #remixculture #photoshop #mryuck #sound #soundart

29 likes
APRIL 20, 2017
Add a comment...



museumofportablesound
The Seminary Co-op Bookstores

14 likes 19w

museumofportablesound We love all the products available in our Museum's gift shop (almost as much as we love #zizek and the #seminarycoop bookstore). Please consider supporting The Museum of Portable Sound by making a purchase at our online Gift Shop - a portion of all proceeds go towards keeping our museum in operation: shop.spreadshirt.co.uk/museumofportablesound

Add a comment...

museumofportablesound • Followi
The Museum of Portable Sound

museumofportablesound 'That sound belongs in a museum!' Book your own sonic adventure today at museumofportablesound.com! .
.
#cultureofsound #indianajones #sonicarcheology #sonicarchaeology #nagra #nagrataperecorder #reeltoreel #taperecorder #fieldrecording #phonography #museum #shotgunmic #templeofdoom #whip #fire #temple #fedora #themanwiththehat #parody

sonotecabahiablanca 💓

40 likes

JUNE 14, 2017

Add a comment...

museumofportablesound

24 likes 23w

museumofportablesound We are searching for Krapp's last tape in order to add it to our permanent collection. We're sure to find it in a dusty old box on a shelf somewhere. We'll start looking for it soon, we just have a banana to finish eating first. #samuelbeckett #johnhurt #audiotape #reeltoreel #portablesound #listening #soundart #sound #theatre #museum #museumlife #thuglife

whittifordshire Saw John Hurt in this a few years ago. #banana

Add a comment...

museumofportablesound

jammie_4_life, **84536586b6438acad85.32021132**, **7amdog** and **kannenbergj** like this 2h

museumofportablesound At The Museum of Portable Sound, drawing while in our galleries is not only permitted, it is encouraged. So bring along your sketchbook! #drawing #drawings #lifedrawing #lifedrawings #drawingstudio #charcoal #conte #contecrayon #newsprint #sketchbook #model #museum #sound #listening #looking #sketching #sketch #sketchoftheday #sketches #artist

Add a comment...


EXPERIENCE THE IMMERSIVE POWER OF 2-CHANNEL STEREO SOUND.
MUSEUM OF PORTABLE SOUND
BOOK YOUR EXPERIENCE NOW.
MUSEUMOFPORTABLESOUND.COM
museumofportableso... • Following
Museum of Portable Sound
museumofportablesound Experience the immersive power of 2-channel stereo sound. Book your visit today at museumofportablesound.com. #immersive #sound #immersed #immersion #immersiveexperience #immersivesound #headphones #listening #drowning #help #cultureofsound
8 likes
19 HOURS AGO
Add a comment...


GROUP TOURS AVAILABLE.
MUSEUM OF PORTABLE SOUND
MUSEUMOFPORTABLESOUND.COM
museumofportablesound • Followi
The Museum of Portable Sound
museumofportablesound Group tours available. Book your summer tour now at museumofportablesound.com! #museum #art #painting #matisse #groupvisit #grouptour #dancing #naked #nakeddancing #malegaze #summer #listening #earbuds #headphones #cultureofsound #soundart
laramgtorres #Nakedvisits
23 likes
JUNE 16, 2017
Add a comment...

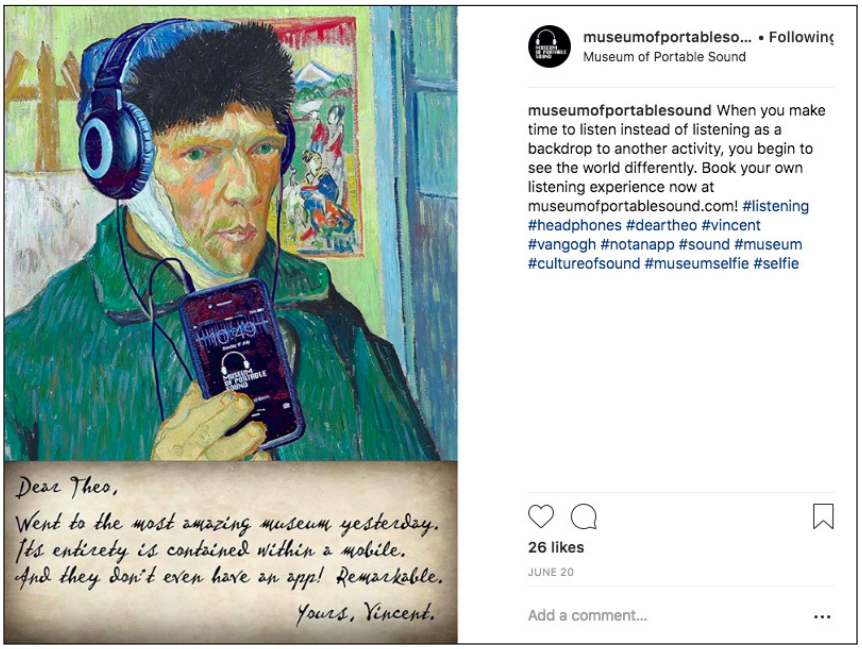

MUSEUM OF PORTABLE SOUND
HAPPY RECORD STORE DAY
MUSEUMOFPORTABLESOUND.COM
museumofportablesound • Followi
The Museum of Portable Sound
museumofportablesound Wishing you and yours a Happy Record Store Day. #recordstoreday #recordstoreday2017 #cultureofsound #digitaldistribution #lp #gatefold #gatefoldsleeve #recordplayer #phonograph #collectorsedition #sound #soundart
30 likes
APRIL 22, 2017
Add a comment...


museumofportableso... • Following
Museum of Portable Sound
museumofportablesound New from @zoomsoundlab: the Zoom H2S digital audio recorder slippers with built-in custom @rycoteuk windscreens. Never miss capturing those precious morning sounds again! Featuring DualSync technology, allowing you to capture 8-channel surround recordings using both feet simultaneously! Classic Zoom technology and timeless home luxury together in one groundbreaking new product! #fieldrecording #microphones #zoomh2 #zoomh2s #slippers #fuzzyslippers #dualsync #bluetooth #windscreen #rycote #phonography #sound #soundrecording #cultureofsound #checkthedate
lacosapreziosa_ and a happy April fools' day to you too!
44 likes
APRIL 1
Add a comment...

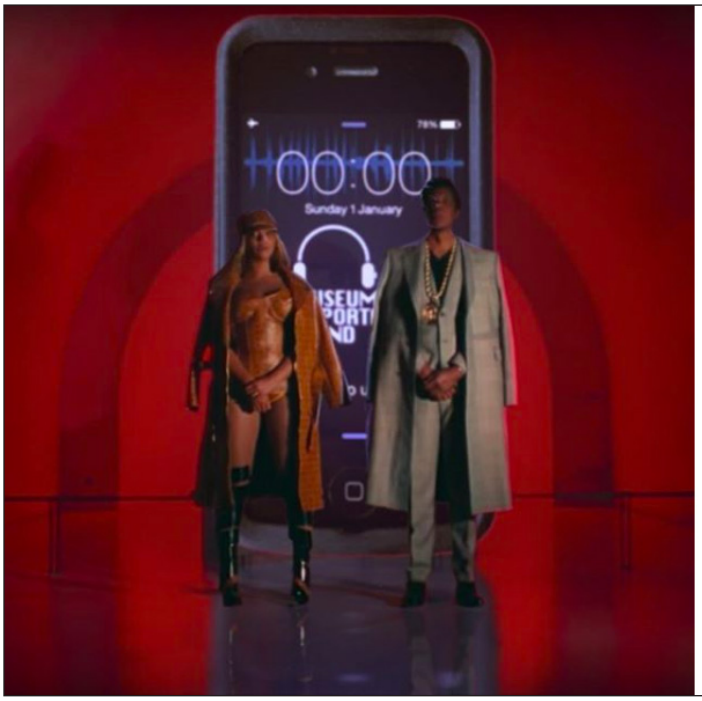

MUSEUM OF PORTABLE SOUND
museumofportableso... • Following
Museum of Portable Sound
museumofportablesound Travel through time and space via the magic of recorded sound! Book your visit today at museumofportablesound.com! #doctorwho #sonicscrewdriver #timetunnel #tombaker #classicwho #scifi #slitscan #deliaderbyshire #rongrainer #openingtitles #logo #openingtitlesequence #radiophonicworkshop #timeandspace #timetravel #listening #culture #cultureofsound #museum
22 likes
MAY 1
Add a comment...


EXPERIENCE THE
SHEER BEAUTY
THAT IS
THE CULTURE
OF SOUND.
MUSEUM OF PORTABLE SOUND
BOOK YOUR ONE-ON-ONE VISIT TODAY
& GET TREATED LIKE ROYALTY.
MUSEUMOFPORTABLESOUND.COM
museumofportableso... • Following
Museum of Portable Sound
museumofportablesound Book your own personal sonic cultural experience today. museumofportablesound.com/plan-your-visi... #Nefertiti #cultureofsound #Beats #queen #queennefertiti #beauty #Royalty #Sound #museum #headphones #listening #intangibleculturalheritage
dean_copa
30 likes
FEBRUARY 9
Add a comment...


"Visiting the Museum of Portable Sound makes me do strange things with my hands."
Cristiano Ronaldo
Football Superstar and
Controversial Statue Model
#MuseumWeek
museumofportablesound • Followi
Lisbon, Portugal
museumofportablesound Yeah, we seem to have that effect on people. #MuseumWeek #sportsMW #cultureofsound #museum #headphones #hands #portugal #football #ronaldo #listening #sound #soundart
hadahada13 Dope!!
acoustic_mirror
susi_mendes_silva hahaha!
25 likes
JUNE 20, 2017
Add a comment...


Dear Theo,
Went to the most amazing museum yesterday. Its entirety is contained within a mobile. And they don't even have an app! Remarkable.
Yours, Vincent.
museumofportableso... • Following
Museum of Portable Sound
museumofportablesound When you make time to listen instead of listening as a backdrop to another activity, you begin to see the world differently. Book your own listening experience now at museumofportablesound.com! #listening #headphones #deartheo #vincent #vangogh #notanapp #sound #museum #cultureofsound #museumselfie #selfie
26 likes
JUNE 20
Add a comment...


"So, what I told you about sounds being objects was true... from a certain point of view."
www.MUSEUM OF PORTABLE SOUND.com
MAY THE 4TH BE WITH YOU.
museumofportableso... • Following
Dagobah System
museumofportablesound Happy Star Wars Day from the Museum of Portable Sound! #happystarwarsday #starwars #starwarsday #maythe4thbewithyou #obiwankenobi #benburtt #pierreschaeffer #musiqueconcrete #sounddesign #sounddesigner #curator #curation #culture #cultureofsound #dagobah #forceghost #apology #nonapology #newsgothic #markhamill #alecguinness #timeforaguinness #objectorientedontology
38 likes
MAY 4
Add a comment...



museumofportableso... • Following
Louvre

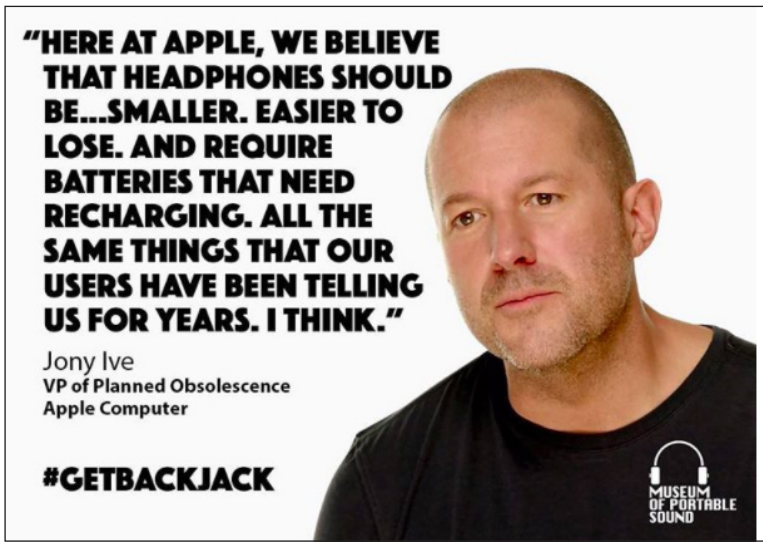
museumofportablesound Did you spot our cameo in the 'Apesh*t' video by @jay_and_bey_ ? #decolonize #decolonizethemuseum #louvre #beyonce #jayz #jayzandbeyonce #beyonceandjayz #bey #jay #museum #apeshit #museumofportablesound #culture #cultureofsound

posteral aMEIzing!

24 likes

JUNE 24

Add a comment...



museumofportablesound

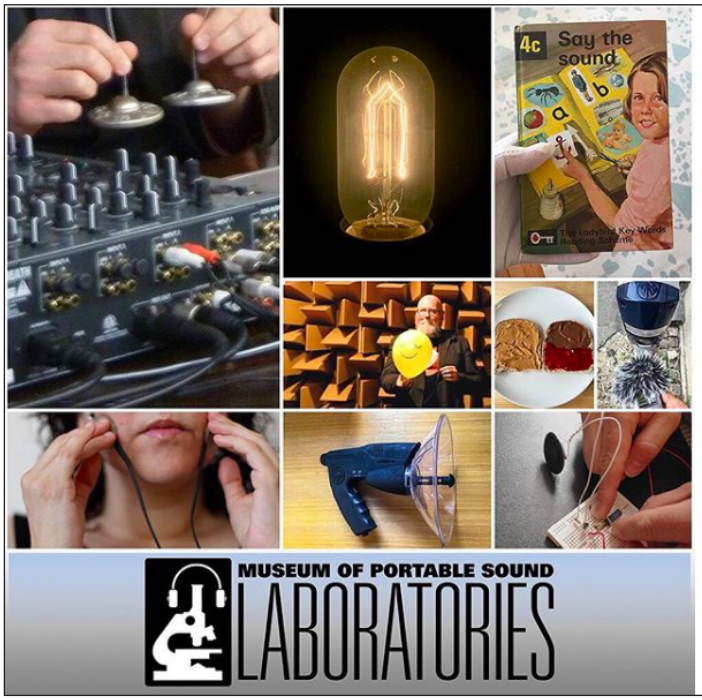
24 likes 16w

museumofportablesound Apple thinks headphones aren't for listening, they're for losing and replacing. #getbackjack #plannedobsolescence #headphones #airpods #airpod #listening #wirelessheadphones #wirelessfuture #donglelife

robinjudge lol

dongledangler This is awesome :)

Add a comment...



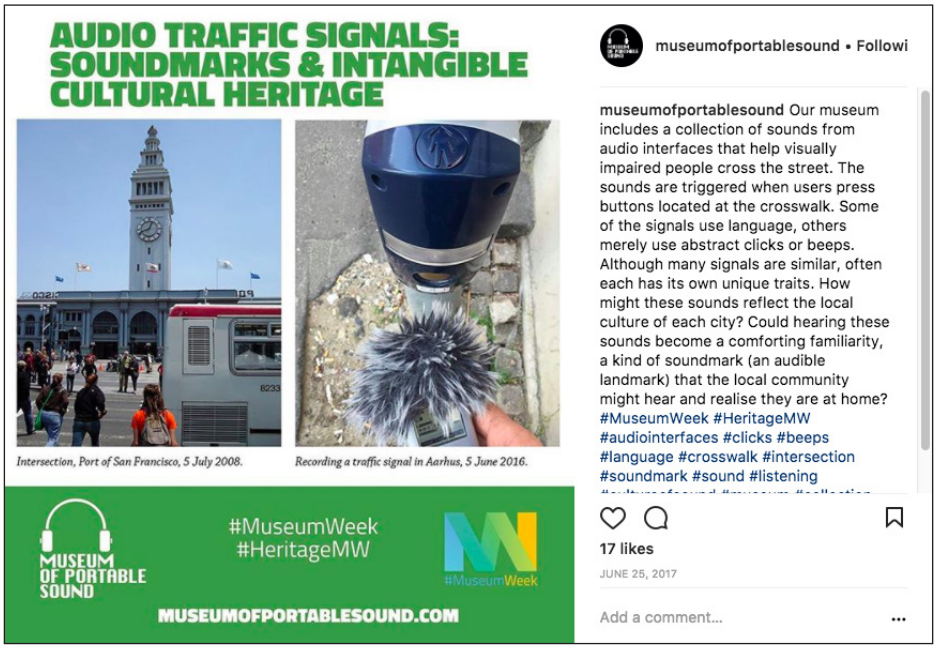
museumofportableso... • Following
Museum of Portable Sound

museumofportablesound Operating behind the scenes, Museum of Portable Sound Laboratories combine state-of-the-art research, the latest in historical technology on a budget, and seat-of-the-pants versions of best practices to keep our collections presentable, produce online educational and advertorial materials for our YouTube channel, and occasionally delve into avant-garde sandwich making. We hope you'll join us in celebrating the unsung heroes of Museum of Portable Sound Laboratories! #laboratories #laboratory #laboratorywork #labwork #science #conservation #whitegloves #microphones #contactmic #research #researchmethods #researchlife #book #digitalrecording #audiorecording #sound #audio #arduino #pbj

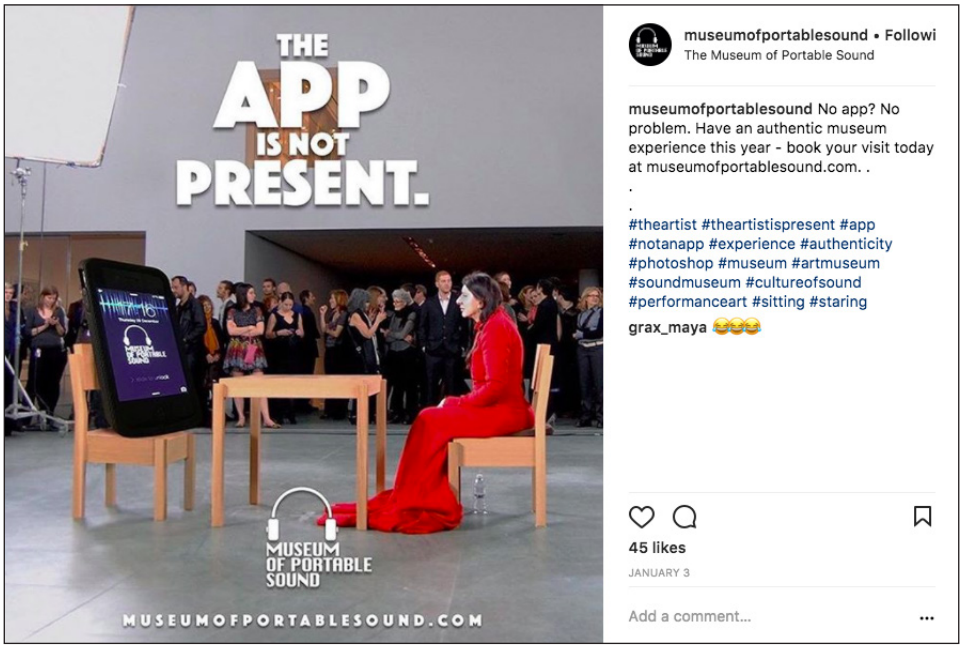
31 likes

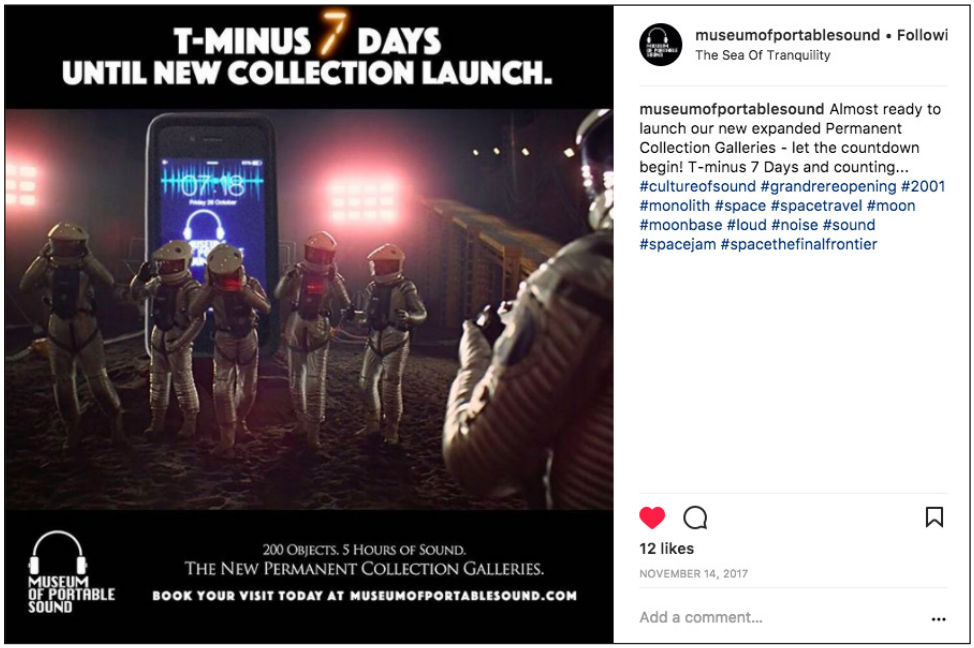
FEBRUARY 7

Add a comment...


AUDIO TRAFFIC SIGNALS: SOUNDMARKS & INTANGIBLE CULTURAL HERITAGE
Intersection, Port of San Francisco, 5 July 2008.
Recording a traffic signal in Aarhus, 5 June 2016.
MUSEUM OF PORTABLE SOUND
#MuseumWeek
#HeritageMW
#MuseumWeek
MUSEUMOFPORTABLESOUND.COM
museumofportablesound • Followi
museumofportablesound Our museum includes a collection of sounds from audio interfaces that help visually impaired people cross the street. The sounds are triggered when users press buttons located at the crosswalk. Some of the signals use language, others merely use abstract clicks or beeps. Although many signals are similar, often each has its own unique traits. How might these sounds reflect the local culture of each city? Could hearing these sounds become a comforting familiarity, a kind of soundmark (an audible landmark) that the local community might hear and realise they are at home? #MuseumWeek #HeritageMW #audiointerfaces #clicks #beeps #language #crosswalk #intersection #soundmark #sound #listening
17 likes
JUNE 25, 2017
Add a comment...


EVERYTHING MAKES A SOUND
NIGHT AT THE MUSEUM OF PORTABLE SOUND
museumofportablesound • Followi
The Museum of Portable Sound
museumofportablesound Buy a copy of our Director @kannenbergj's new book and album #the433museum so that he can afford to quit working the night shift! It's a beautiful 74-page full-colour book plus 50 tracks of museum sounds - nearly 4 hours of listening! Find it at museumofportablesound.com (link in bio!) - and make sure to grab the COLLECTOR'S EDITION! #collector #collecting #museum #sound #listening #book #record #recording #boxset #soundart #museology #museumstudies #getitnow #fundraiser
52 likes
AUGUST 29, 2017
Add a comment...


THE APP IS NOT PRESENT.
MUSEUM OF PORTABLE SOUND
MUSEUMOFPORTABLESOUND.COM
museumofportablesound • Followi
The Museum of Portable Sound
museumofportablesound No app? No problem. Have an authentic museum experience this year - book your visit today at museumofportablesound.com. .
.
.
#theartist #theartistispresent #app #notanapp #experience #authenticity #photoshop #museum #artmuseum #soundmuseum #cultureofsound #performanceart #sitting #staring
grax_maya
45 likes
JANUARY 3
Add a comment...


T-MINUS 7 DAYS
UNTIL NEW COLLECTION LAUNCH.
200 OBJECTS. 5 HOURS OF SOUND.
THE NEW PERMANENT COLLECTION GALLERIES.
BOOK YOUR VISIT TODAY AT MUSEUMOFPORTABLESOUND.COM
MUSEUM OF PORTABLE SOUND
museumofportablesound • Followi
The Sea Of Tranquility
museumofportablesound Almost ready to launch our new expanded Permanent Collection Galleries - let the countdown begin! T-minus 7 Days and counting... #cultureofsound #grandrereopening #2001 #monolith #space #spacetravel #moon #moonbase #loud #noise #sound #spacejam #spacethefinalfrontier
12 likes
NOVEMBER 14, 2017
Add a comment...


T-MINUS 1 DAY
UNTIL NEW COLLECTION LAUNCH.
OUR WHOLE CREW HAS BEEN WORKING AROUND THE CLOCK ON THIS.
200 OBJECTS. 5 HOURS OF SOUND.
THE NEW PERMANENT COLLECTION GALLERIES.
BOOK YOUR VISIT TODAY AT MUSEUMOFPORTABLESOUND.COM
MUSEUM OF PORTABLE SOUND
museumofportablesound • Followi
museumofportablesound Our whole crew has worked around the clock on this! T-minus ONE DAY to New Collection Launch! Book your visit NOW at museumofportablesound.com! #missioncontrol #museum #launch #attackoftheclones #space #nasa #hubris #photoshop #alternativehistory #skinnyblacktie #sound #listening #cultureofsound #museumstudies #science #soundstudies
misza344 This pic is so professional.
26 likes
NOVEMBER 20, 2017
Add a comment...

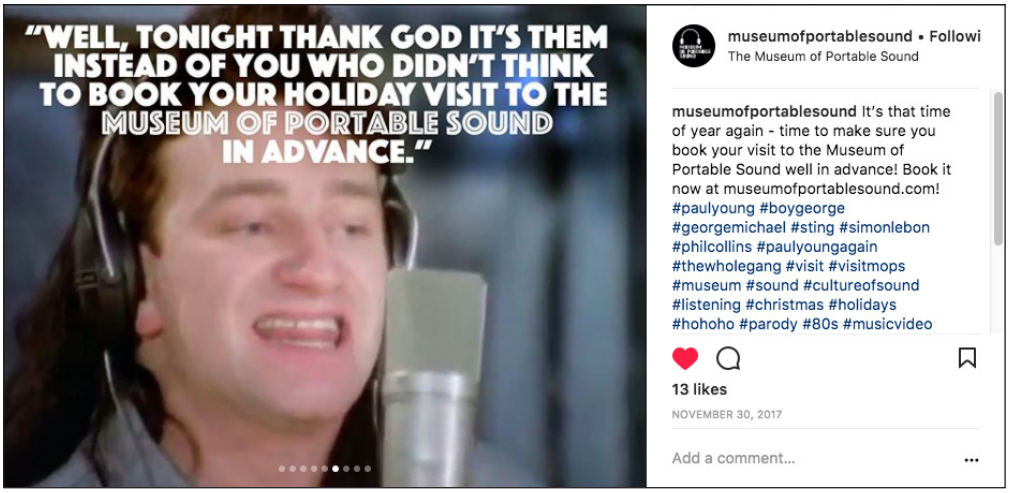

WE HAVE LIFT OFF
WE'VE LAUNCHED OUR BIGGEST PERMANENT EXHIBITION EVER!
200 OBJECTS. FIVE HOURS OF LISTENING.
THE NEW PERMANENT COLLECTION GALLERIES
AT THE MUSEUM OF PORTABLE SOUND.
NOW OPEN
museumofportablesound • Followi
Anthropological Museum, Port Blair
museumofportablesound We have lift-off! Our new Permanent Collection Galleries are officially open as of this morning - and we'll soon be heading out to meet up with our first group of visitors since the re-install! Book your own visit today at museumofportablesound.com! #liftoff #launch #rocket #spaceshuttle #spaceship #space #spacethefinalfrontier #wherenoonehasgonebefore #nasa #jpl #museum #sound #listening #culture #cultureofsound #intangibleculturalheritage #soundobject #soundobjects #museumstudies #soundstudies #soundart
laramgtorres Wooohooooooaaaaaa!!!!!
33 likes
NOVEMBER 21, 2017
Add a comment...

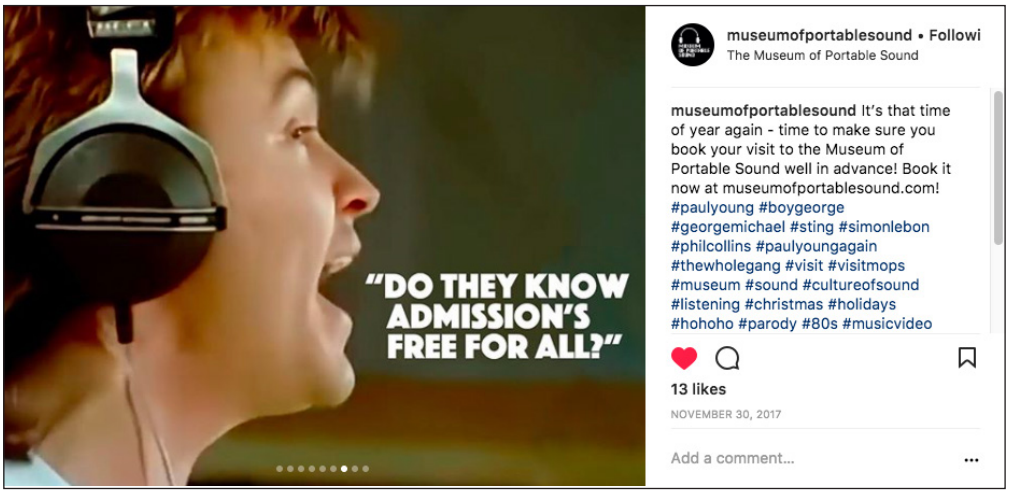

VISIT
MOPS
museumofportablesound • Followi
The Museum of Portable Sound
museumofportablesound It's that time of year again - time to make sure you book your visit to the Museum of Portable Sound well in advance! Book it now at museumofportablesound.com! #paulyoung #boygeorge #georgemichael #sting #simonlebon #philcollins #paulyoungagain #thewholegang #visit #visitmops #museum #sound #cultureofsound #listening #christmas #holidays #hohoho #parody #80s #musicvideo
13 likes
NOVEMBER 30, 2017
Add a comment...

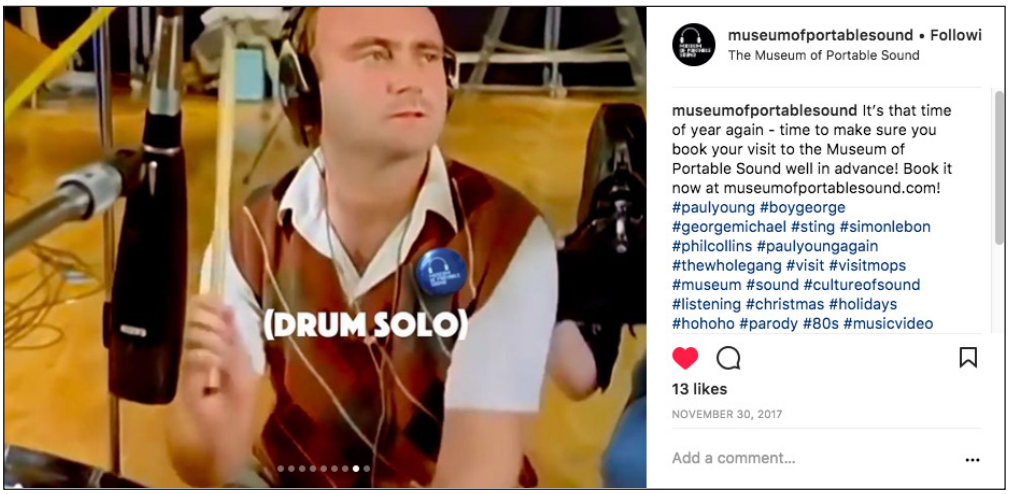

"IT'S CHRISTMAS TIME. THERE'S NO NEED TO BE AFRAID, AS LONG AS YOU'VE BOOKED YOUR VISIT TO THE MUSEUM OF PORTABLE SOUND FAR ENOUGH IN ADVANCE."
Museum Of Portable SOUND 2015-Present
museumofportablesound • Followi
The Museum of Portable Sound
museumofportablesound It's that time of year again - time to make sure you book your visit to the Museum of Portable Sound well in advance! Book it now at museumofportablesound.com! #paulyoung #boygeorge #georgemichael #sting #simonlebon #philcollins #paulyoungagain #thewholegang #visit #visitmops #museum #sound #cultureofsound #listening #christmas #holidays #hohoho #parody #80s #musicvideo
13 likes
NOVEMBER 30, 2017
Add a comment...


"AND IN OUR WORLD OF PLENTY, WE CAN SPREAD A SMILE OF JOY – COS WE'LL VISIT THE MUSEUM OF PORTABLE SOUND AT CHRISTMAS TIME."
museumofportablesound • Followi
The Museum of Portable Sound
museumofportablesound It's that time of year again - time to make sure you book your visit to the Museum of Portable Sound well in advance! Book it now at museumofportablesound.com! #paulyoung #boygeorge #georgemichael #sting #simonlebon #philcollins #paulyoungagain #thewholegang #visit #visitmops #museum #sound #cultureofsound #listening #christmas #holidays #hohoho #parody #80s #musicvideo
13 likes
NOVEMBER 30, 2017
Add a comment...


"BUT SAY A PRAYER. PRAY FOR THE OTHER ONES, WHO DIDN'T THINK TO BOOK THEIR VISIT IN TIME FOR THE HOLIDAYS."
museumofportablesound • Followi
The Museum of Portable Sound
museumofportablesound It's that time of year again - time to make sure you book your visit to the Museum of Portable Sound well in advance! Book it now at museumofportablesound.com! #paulyoung #boygeorge #georgemichael #sting #simonlebon #philcollins #paulyoungagain #thewholegang #visit #visitmops #museum #sound #cultureofsound #listening #christmas #holidays #hohoho #parody #80s #musicvideo
13 likes
NOVEMBER 30, 2017
Add a comment...


"WELL, TONIGHT THANK GOD IT'S THEM INSTEAD OF YOU WHO DIDN'T THINK TO BOOK YOUR HOLIDAY VISIT TO THE MUSEUM OF PORTABLE SOUND IN ADVANCE."
museumofportablesound • Followi
The Museum of Portable Sound
museumofportablesound It's that time of year again - time to make sure you book your visit to the Museum of Portable Sound well in advance! Book it now at museumofportablesound.com! #paulyoung #boygeorge #georgemichael #sting #simonlebon #philcollins #paulyoungagain #thewholegang #visit #visitmops #museum #sound #cultureofsound #listening #christmas #holidays #hohoho #parody #80s #musicvideo
13 likes
NOVEMBER 30, 2017
Add a comment...


"DO THEY KNOW ADMISSION'S FREE FOR ALL?"
museumofportablesound • Followi
The Museum of Portable Sound
museumofportablesound It's that time of year again - time to make sure you book your visit to the Museum of Portable Sound well in advance! Book it now at museumofportablesound.com! #paulyoung #boygeorge #georgemichael #sting #simonlebon #philcollins #paulyoungagain #thewholegang #visit #visitmops #museum #sound #cultureofsound #listening #christmas #holidays #hohoho #parody #80s #musicvideo
13 likes
NOVEMBER 30, 2017
Add a comment...


(DRUM SOLO)
museumofportablesound • Followi
The Museum of Portable Sound
museumofportablesound It's that time of year again - time to make sure you book your visit to the Museum of Portable Sound well in advance! Book it now at museumofportablesound.com! #paulyoung #boygeorge #georgemichael #sting #simonlebon #philcollins #paulyoungagain #thewholegang #visit #visitmops #museum #sound #cultureofsound #listening #christmas #holidays #hohoho #parody #80s #musicvideo
13 likes
NOVEMBER 30, 2017
Add a comment...


"VISIT THE MUSEUM OF PORTABLE SOUND!"
"LET US KNOW WHAT WE CAN DO TO IMPROVE YOUR VISITOR EXPERIENCE!"
MUSEUM OF PORTABLE SOUND
HAPPY HOLIDAYS
MUSEUMOFPORTABLESOUND.COM
museumofportablesound • Followi
The Museum of Portable Sound
museumofportablesound It's that time of year again - time to make sure you book your visit to the Museum of Portable Sound well in advance! Book it now at museumofportablesound.com! #paulyoung #boygeorge #georgemichael #sting #simonlebon #philcollins #paulyoungagain #thewholegang #visit #visitmops #museum #sound #cultureofsound #listening #christmas #holidays #hohoho #parody #80s #musicvideo
13 likes
NOVEMBER 30, 2017
Add a comment...

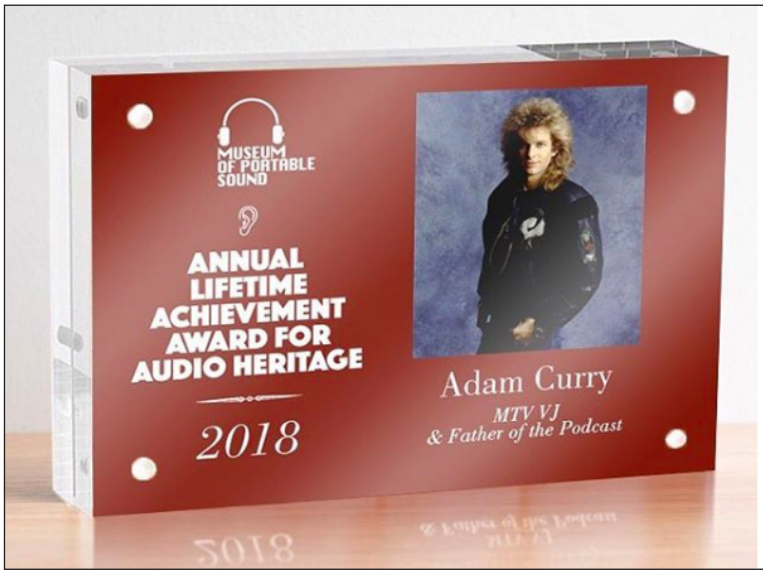
museumofportableso... • Following
London, United Kingdom

museumofportablesound You don't have to design your own headphones in order to visit us - but we do ask you bring your own for health and safety purposes! Book your visit today at museumofportablesound.com! #headphones #earbuds #design #designer #heartbeats #listening #sound #cultureofsound #gaga #intangibleheritage

21 likes

JANUARY 19

Add a comment...



museumofportableso... • Following
Museum of Portable Sound

museumofportablesound On this World Heritage Day, the Museum of Portable Sound is pleased to announce the recipient of our first Annual Lifetime Achievement Award for Audio Heritage ("The ALAAAH"): Adam Curry, former MTV VJ and Father of the Podcast. Mr. Curry, we'd love to present this award in person the next time you are in London! #TheALAAAH #award #heritage #audioheritage #lifetimeachievement #museum #podcast #podcasting

25 likes

APRIL 18

Add a comment...

museumofportableso... • Following

museumofportablesound Let's face it. Collecting cultural sound objects can be tough work. Sometimes we could use a little help.
Support the Museum of Portable Sound today. Make a donation at: museumofportablesound.com/get-involved/donate/ .
.
.
#fundraiser #donate #supportus #museum #sound #cultureofsound #indianajones #parody #film #filmsound #sword #swordsman #donation #paypal #archaeology #library #microphone #nagra #tape #taperecorder #youcallthisarchaeology #itsnottheyearsitsthemileage #recording #audio #culture

museum.ephemera Btw The best

34 likes

JULY 21

Add a comment...

museumofportableso... • Following
• Museum of Portable Sound

museumofportablesound Our Noble & Learned Dyrectore @kannenbergj is available to Speake or Lectvre 'pon all manner of topicf related to Mvsevmf, Wayvefourmes, Categorisationf, and Sovndf of all kyndes.
Hire him for a Talke at your own Inftitution posthaste Here:

museumofportablesound.com/contact-us/ .
.
.
#sirhanssloane #portrait #painting #stephenslaughter #hireme #lecture #presentation #guestspeaker #wig #waveform #museum #sound #culture #heritage #ineedwork #cultureofsound

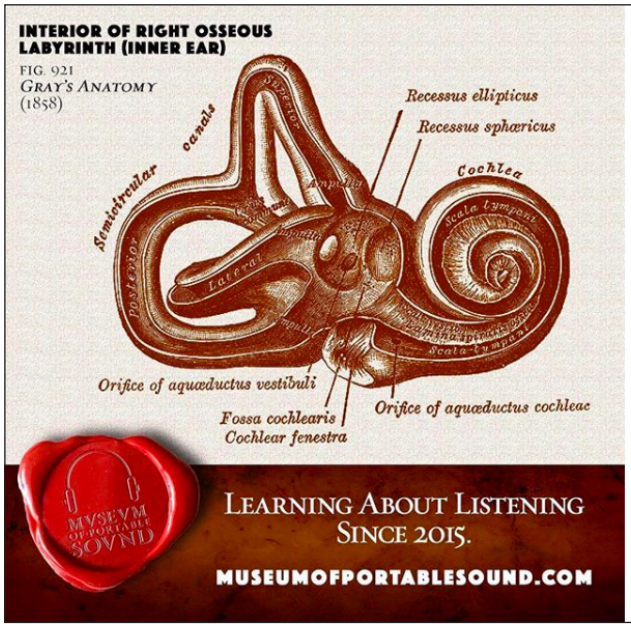
amormunozm 😃

lacosapreziosa_ 😂

26 likes

SEPTEMBER 7

Add a comment...



museumofportableso... • Following
• Museum of Portable Sound

museumofportablesound We've been learning about listening since 2015. Join us! Book your FREE visit now at: museumofportablesound.com!

#Learning #Listening #innerear #ear #cochlea #sound #anatomy #anatomydrawing #anatomyart #graysanatomy #culture #science #waxsealstamp #waxseal #museum #cultureofsound

jacquettebydesign Great Post!!!

andreajoosart ❤️👌

32 likes

SEPTEMBER 11

Add a comment...

museumofportableso... • Following
• Museum of Portable Sound

museumofportablesound DID YOU KNOW?: Aside from his duties as Chief Curator, our Director @kannenbergj also creates the graphic designs that help to spread the word about our mission of bringing the culture of sound to the world, one listener at a time. #artist #artiste #artsy #artistsoninstagram #artislife #painting #painter #magritte #bobross #bobrossfan #easel #palatte #brush #canvas #coiffure #perm #permedhairdontcare #culture #advertising #design #promotion #influencerstyle #influencer

genekjr A+++

anguscarlyle Your work is done here ❤

67 likes

SEPTEMBER 15

Add a comment...

museumofportableso... • Following

museumofportablesound If you enjoy avocado toast, you might want to think about switching back to wired headphones - and boycotting audio products that don't include a minijack. Here's what one hipster had to say recently on the subject. #avocadotoast #londonfashionweek #hipster #beard #coffee #beanie #deadeyes #hipsterrevolution #headphones #minijack #hipstersonheadphones #bluetooth #bluetoothheadphones #applelightning #applelightningcable #beatsbydre #wirelessheadphones #streaming #streamingmusic #buffering #donglelife #dongle #audiostandards #industrystandard #sound #music #cultureofsound

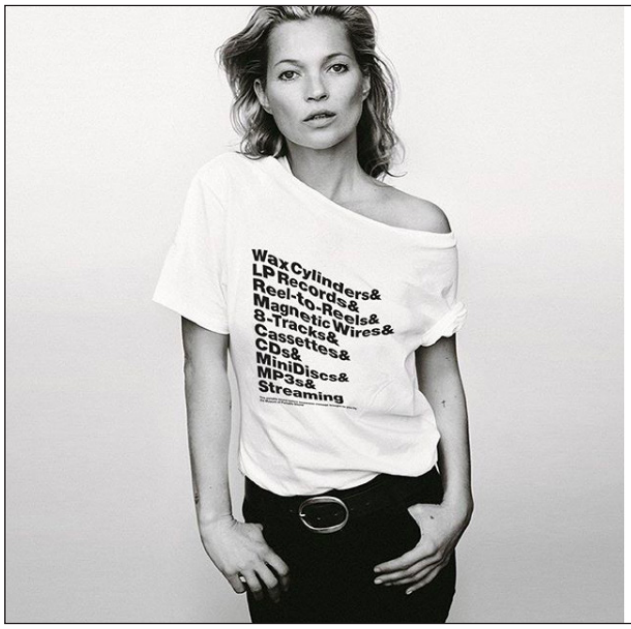
holliejwithers Ha 😂😂

kalpaesh77 Where is this from ??

34 likes

6 DAYS AGO

Add a comment...



museumofportableso... • Following

museumofportablesound The Portable Sound History Tee.
Available in women's and men's sizes + all colours.

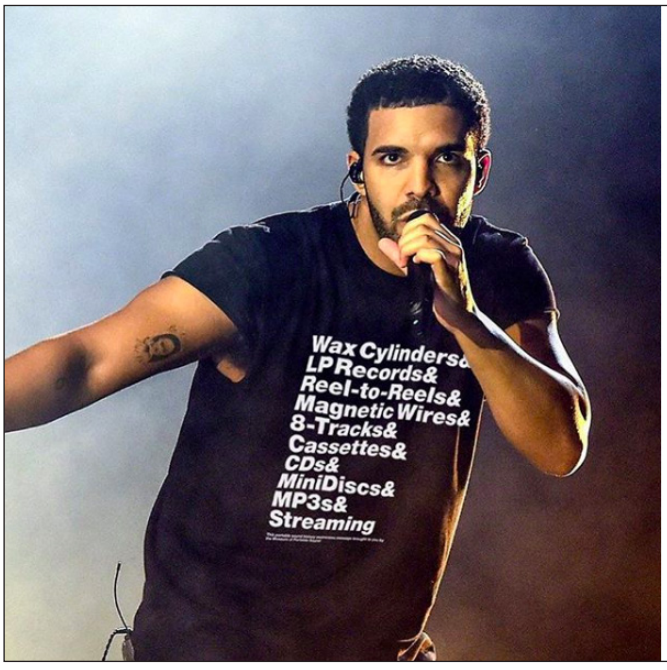
Only in the Museum of Portable Sound Gift Shop at museumofportablesound.com.

#LondonFashionWeek #fashion #london #week #tshirt #tshirtdesign #apparel #model #fashionmodel #londonfashion #fashionable #fashionistas #photoshoot #strikeapose #offtheshoulder #audiorecording #recordingtechnology #fieldrecording #recording #portablesound #waxcylinder #cassette #tapes #mp3 #streamingmusic #cultureofsound #katemoss #katemossstyle

36 likes

5 DAYS AGO

Add a comment...



museumofportableso... • Following

museumofportablesound Wow. This photo of pop superstar @champagnepapi sporting one of our new Portable Sound History T-Shirts at a recent concert has really got us in our feelings.

Get your own Portable Sound History tee in our Gift Shop at museumofportablesound.com!

#kikichallenge #kikidoyouloveme #autumnlook #tshirt #tshirtdesign #londonfashionweek #portablesound #dropthemic #dropthebeat #hiphop #waxcylinder #lprecords #reeltoreel #cassette #cassettetapes #8tracks #cds #minidisc #mp3 #streaming #spotify #drake #music #listening #cultureofsound #inmyfeelings

18 likes

5 DAYS AGO

Add a comment...

museumofportableso... • Following

museumofportablesound We had absolutely no idea that the UK's most popular chef & connoisseur Mary Berry was a devotee of portable sound history!

Want to rock a Portable Sound History t-shirt just like Mary's? Head on over to the Museum of Portable Sound Gift Shop at museumofportablesound.com!

#tshirt #londonfashion #londonfashionweek #autumnlook #kitchen #fashion #maryberry #portablesound #history #british #britishbakeoff #baking #britishhero #britishculture #culture #cultureofsound

29 likes

5 DAYS AGO

Add a comment...

museumofportableso... • Following
• Great Barrier Reef

museumofportablesound 'Even here, on the Great Barrier Reef, portable sound is at a premium. From the song of endangered whales to the iPod Classic 120GB model, portable sound continues to be under constant threat. We can, and we must, do all we can to support the collection, preservation, and exhibition of sounds as cultural objects. That's why I bought this Culture of Sound t-shirt from the Gift Shop at museumofportablesound.com. And you can too.' ————————————

#greatbarrierreef #australia #davidattenborough #tshirt #portablesound #cultureofsound #blueplaque #blueplanet #nature #nature_perfection #naturelovers

laramgtorres 😍

24 likes

5 DAYS AGO

Add a comment...

museumofportableso... • Following
• Pompeii

museumofportablesound 'No matter how boring an academic you might be, or how cynical you are, the thought that Ancient Rome might have used audio cassettes stirs the imagination. I'm proud to wear my Ionic Cassette t-shirt from the Museum of Portable Sound. Get yours today at museumofportablesound.com.'

#ancientrome #sound #recording #cassette #cassettetapes #cassetteculture #cassettes #architecture #columns #ioniccolumns #ioniccassette #cultureofsound #tshirt #fundraising #archaeology #marybeard

iranmuseums 👍👍🌸🌸

mollymacleod__ ?! Please elaborate!

museumofportablesound @mollymacleod__ It's a joke. The t-shirt, however, is real

25 likes

4 DAYS AGO

Add a comment...

museumofportableso... • Following
• Musei Vaticani

museumofportablesound 'Here in the Vatican Museums, we find echoes of sound's great impact upon world culture...from the rippling, tortured, fruity cries of Laocoön's pose to the very Culture of Sound t-shirt on my back, available now from the Museum of Portable Sound.' Head to the Gift Shop at museumofportablesound.com to grab your own iconic Culture of Sound tee while supporting our museum!

———————————

#vaticanmuseums #laocoon #sculpture #art #arthistory #tshirt #arthistorian #historian #adjectives #fruity #simonschama #culture #cultureofsound #fundraising #support #supportus #weneedhelp #wemeanit #popularhistory #museumofportablesound

19 likes

3 DAYS AGO

Add a comment...

museumofportableso... • Following
• Devils Tower, Wyoming

museumofportablesound You are not alone.

Visitor Experiences of the Social Kind. At the Museum of Portable Sound. Book your experience today at museumofportablesound.com.

———————————

#visitorexperience #social #socialmuseums #socialobjects #devilstower #aliens #ufos #ufo #closeencounters #closeencountersofthethirdkind #stevenspielberg #communication #museums #museum #sound #soniccommunication #cultureofsound

13 likes

19 HOURS AGO

Add a comment...

museumofportableso... • Following
• Museum of Portable Sound

museumofportablesound A Suprematist Visitor Experience.
Book your own experience now at museumofportablesound.com.

———————————

#suprematism #malevich #kazimirmalevich #abstractart #abstractpainting #abstract #rectangle #rectangles #painting #modernism #arthistory #blacksquare #visitorexperience #museum #culture #cultureofsound

provocativecreations Nice!😊🙌

32 likes

1 DAY AGO

Add a comment...

Appendix 9.
Gift Shop

<https://museumofportablesound.com/giftshop>