

Virtual Museums, New Media Arts and Sound Archives¹

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Virtual museums are new ways of promoting cultural experiences and are also important repositories for safeguarding new examples of artistic, cultural and social heritage, with the added advantage of being potentially global. They have been adapted to collect digital artefacts and new forms of intangible art, which are, generally speaking, media arts. In this sense, virtual museums are also a challenging place for the collection of sound contents. Considering the Portuguese example, where there is a legal vacuum in terms of archive policies for sound, this text examines the opportunity that platforms of this kind may represent for the preservation of sonic-based memories. Prepared under the scope of the research project *Audire: Saving Sonic-Based Memories*, which is currently being developed at the Communication and Society Research Centre, University of Minho, this text also discusses the role that governments should play in defining parameters for the creation of sound libraries.

Introduction

Sound as a physical phenomenon is a vibration that propagates through the air. Michel Chion explains that 'on the level of physics, what we call sound is a vibration [...], a "verberation"'. The author explains that 'this is a wave that, following the shaking movement of one or more sources that are sometimes called "sounding bodies", propagates in accordance with very particular laws and, *en route*, touches that which we call the ear' (Chion, 2010/2016, p. 16). By its very nature, sound is therefore analogue. Perceived in the form of acoustic waves, it has been considered over time as a vital source of information, in both animal and human life.

Sound is also a language – a natural, communicative or artistic language. In the form of spoken words or as acoustic impulses of objects or nature, it has also, since the very beginning of humankind, served the purpose of facilitating expression and the interactions between the individuals of a community.

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Sound is meaningful by itself; it can be interpreted as signs and plays a narrative role in audio-visual productions. It is a fundamental and intrinsic component of any culture, although there have always been factors 'inhibiting the formation of a cultural space called "a sound culture"' (Potts, 1997, p. 13). The development of mass media in modern times has had a strong impact on the way societies relate to images, deepening the western cultural bias towards the visual. However, 'the escalation of digital multimedia forms offers an opportunity to create a heightened awareness of sound and its many potentials' (Potts, 1997, p. 13). As a language and a form of cultural expression, sound benefits today from new technological possibilities, invigorated by digital innovation.

Since the introduction of digital technologies, sound production has undergone a significant improvement. Digital sound overcomes the limitations of analogue editing. It is a new challenge for artists and has opened the door for new exercises in creativity. On the other hand, by being more easily recorded and edited, digital sound is also much more adaptable to the archiving rationality of contemporary societies, corresponding at the same time to a renewal of museological practices. At the beginning of the second decade of the twenty-first century, Portugal is still taking the first steps in relation to sound libraries, but some inspiring projects may change the cultural framework that, for many centuries, has kept sound separate from the aesthetic experience.

Museums and Sound

Museums used to be defined as institutions that collect and preserve artefacts or other kinds of objects with artistic, cultural, historical or scientific value. Therefore, they were related to an idea of material art and culture and originally associated with the human habit of collecting and attributing affective value to things. Museums are, in this sense, repositories of memory, known since pre-Christian times. They are 'legitimate and legitimising institutions for different discourses on the way memory is built, and they can play an important role in political transformations' (Martins et al., 2020, p. 7).

Before the development of recording technologies, if museums represented a space for any kind of sound production, it was mainly in association with poetry, music or other forms of oratory. Because of its apparently intangible nature, sound was not considered a particular category of traditional museum archives. It could be suggested by musical instruments and other objects that

produce sound, but it did not come to be regarded or experienced as a specific cultural practice in museums before the twentieth century.

Sound is, indeed, more of an event than an object (Celedón Bórquez, 2016). It exists while it happens. Apart from music, which can be written (and written by hand in a stave), sound is unlikely to have a visible, tangible or physically supported appearance unless it is actually happening and, as it is not to be seen, it does not entirely correspond to a key and predominantly visual feature of museums: the exhibition. Literally, sound is not to be shown and the expression "sound exhibition" immediately sounds like a contradiction. Here is the reason why sound has a belatedly developed relationship with museology. Nevertheless, with the rise of mixed media and the new media arts, some artists are specifically interested in using digital media for the visualisation of sound-based phenomena or visual interaction with sound.

According to Jonathan Bowen, 'museums are traditionally information providers, drawing on and interpreting their collections for their visitors' (Bowen, 2000, p. 4). However, the public role of museums in contemporary society goes far beyond conserving, documenting and communicating collections (Stephen, 2001, p. 297). Besides providing information and the opportunity for aesthetic contemplation, museums are also concerned with leisure, freedom and imagination. In this context, museums have become places for experiencing new sensations not exclusively described by viewing. Thus, sound came into some museums in the form of an experience and was not necessarily associated with objects. Commonly known as sound installations, these experiences are linked to 'the concept of the museum as a "contact zone"' (Cox, 2015, p. 227). Offering an immersive experience, sound installations are usually interactive and invite visitors to intervene in the artistic or cultural production itself.

As Nikos Bubaris observes, 'there is a pervasive and long-standing belief that museums are places of silence' and, therefore, 'the silent visitor standing still in front of an exhibition and gazing intently has been a representative image of the museum experience' (Bubaris, 2014, p. 391). Today, however, 'sound is increasingly recognised as an important aspect of museum design' (Everrett, 2019, p. 313). If not an object of exhibition itself, at least a way of producing special effects, such as creating 'a transition between two different exhibition spaces' (Bijsterveld, 2015, p. 79). In fact, 'not only can sound influence the overall atmosphere of an exhibition by creating a sense of immersion or mood, it can also deliver unique interpretive content and provide the opportunity for

dynamic, multisensory engagement with artefact displays' (Everrett, 2019, p. 313). Furthermore, 'museum sound installations may encourage us to listen more attentively and appreciatively in the rest of the museum' (Cox, 2015, p. 230).

Virtual Museums and Intangible Art

Virtual museums are, in part, a reproduction, or replica, of traditional organisations on the Internet. Also known as cybermuseums, online museums or electronic museums, they can be part of physically existing museums, functioning as a sort of extension on the World Wide Web. But they can also exist in the virtual mode only, being adapted to house collections of digital artefacts, new forms of intangible art or new media art. In 1998, Werner Schweibenz defined the "virtual museum" as follows:

The "virtual museum" is a logically related collection of digital objects composed in a variety of media, and, because of its capacity to provide connectedness and various points of access, it lends itself to transcending traditional methods of communicating and interacting with the visitors, being flexible toward their needs and interests; it has no real place or space, its objects and the related information can be disseminated all over the world. (Schweibenz, 1998, p. 190)

According to Erkki Huhtamo, 'virtual museums received a powerful impetus from the emergence of the World Wide Web and particularly from its transformation into a multimedia environment' (Huhtamo, 2010, p. 121). However, even before the concept of the virtual museum was developed, digital technologies had 'changed the physical character of the museum, frequently creating striking juxtapositions between nineteenth-century monumental architecture and the electronic glow of the twenty-first century computer screen' (Griffiths, 2003, p. 375). Although some 'might more conveniently be classified as libraries or archives' (Huhtamo, 2010, p. 121), virtual museums are, in Rute Muchaco's concept, museums 'without borders, able to create a virtual dialogue with the visitors, by giving [them] a dynamic vision, a multidisciplinary and interactive contact with a collection and the exhibition space' (Muchaco, 2004, p. 582).

Digital images, as well as digital sounds, can still be experienced in built environments and, in some cases, the space where they are presented is part of the experience, particularly in site-specific installations. Physical museums can also provide visitors with virtual exhibitions and virtual experiences. Nonetheless,

what makes a virtual museum somewhat disruptive is its reconceptualisation in order to promote a cultural and aesthetic experience through the Internet – in other words, with no specific geography and mediated only by a digital device.

Virtual museums are supposedly global, in much the same way as everything else that is “located” on the Internet. They can be accessed from everywhere, thus delocalising the cultural experience. At the same time, they dematerialise the aesthetic practice. For those who are less enthusiastic about the different uses that can be made of cyberspace, these actions – delocalisation and dematerialisation – might be open to criticism. The concept of art itself is very often questioned when considered in the context of digital technologies, and thus the idea of authenticity is expanded by virtual museology.

Nevertheless, by transporting art collections away from the physical space of their exhibition, virtual museums open the door for the display of works that otherwise would continue to be forgotten or disregarded by conventional museums. Although some art centres and galleries are now offering new experiences of the arts, the process of collecting and archiving web-based artworks still seems to be beyond the reach of more conservative institutions.

Sound Archives and Memory

Art repositories and libraries are mostly silent places. Technological difficulties are not the only reason why there is still a shortage of sonic artefacts in contemporary archives. If the technical conditions for recording may partly explain why the memory of the past is almost deaf, the truth is that there may be other reasons why our society still neglects its sonic heritage, despite all the recording possibilities that now exist. In fact, sound has frequently been overlooked in scientific production. Sonic studies is a relatively recent area of research, which began to be developed in the 1980s, mainly thanks to the work of anthropologists such as Steven Feld, or environmentalists such as R. Murray Schafer.

Since the mid-twentieth century, the image has dominated the scientific paradigms of aesthetic communication, as it has always been considered hegemonic when compared to sound communication. For some reason, the idea of visual culture has always been stronger than any idea of acoustic culture.

Sound also has a fragile status. Unlike the image, sound is a matter of time rather than space. It is therefore much more about feeling than about any sense of physical property. On the other hand, since people are not taught either to listen to or acknowledge sound as an essential informative input, with the exception of music, there is a weak sensitivity to what comes into our ears and, therefore, an undervaluation of sound collections.

Beyond the natural relationship that we have with sound-based productions, there is, at least in some countries like Portugal, a legal vacuum regarding the regulation of sound archives. A real preservation policy is lacking, since the obligation to archive sound content is almost completely omitted from the main legal instruments. The Portuguese Mandatory Legal Deposit, created in 1931, establishes that, among other graphic materials, the publishers of printed music works and phonograms are obliged to deposit them in the National Library (Law No. 73/1982). There is, however, nothing that provides a concrete definition of what should be considered a phonogram or even of the type of audio resource that should be saved. According to the Portuguese Law of Radio Broadcasting (Law No. 54/2010), the public radio broadcaster, as well as other national and regional operators, are expected 'to keep and update sound archives' (Article 49) and 'should organise sound and music archives with the aim of preserving recordings of public interest' (Article 83). As far as the cultural heritage is concerned, the mission of the Direção-Geral do Património Cultural [Directorate-General for Cultural Heritage] includes 'the safeguarding of intangible heritage by supporting programmes aimed at protecting expressions of culture transmitted by oral tradition, traditional techniques and know-how and also graphic, sound and audiovisual materials with non-physical support' (DGPC, n.d.). Nevertheless, nothing in particular is said about what a sound recording should be, what formats should be used, how long they should be preserved, or even how to facilitate access to them.

According to Jane Johnson Otto, much of the audio heritage 'is already lost, endangered, or inaccessible' (Otto, 2010, p. 403). Jonathan Sterne issues a similar warning, noting that 'most of the recordings ever made must be lost before any of them can be found and made into historical documents' (Sterne, 2009, p. 59). Besides the deterioration of sound files and the obsolescence of analogue recordings, the collecting process only started in the late twentieth century and is still irregular.

Archiving is expensive. On the other hand, in digital cultures, archiving is a process that demands some procedural stability and may be strongly affected by the velocity of technological progress. Jonathan Sterne explains that 'the added expenses come not from storage, since digital storage continues to become cheaper, but rather all the things that come with digital storage' (Sterne, 2009, p. 63). In this regard, the author mentions the 'duplication and backup, the need to maintain proper equipment and expertise for "reading" the digital files in whatever format they exist, and all other aspects of infrastructure and maintenance' (Sterne, 2009, p. 63). The Catalan researcher Armand Balsebre also identifies two main problems associated with sound archives: firstly, the fleeting nature of the sound message and, secondly, 'the scarce awareness of the heritage and historic value of sound documents' (Balsebre, 2002, p. 47). For one reason or another, there is a huge production of audio content (journalistic content, sound art, research recordings...) that risks being erased from the memory of future generations.

In 2019, the Portuguese Government created a structure to launch the National Sound Archive but, generally speaking, the legal framework is still insufficient, not only for ensuring the legal protection of our sound heritage and sound-based cultural objects, but also for promoting a sound-sensitive artistic culture. With such narrow regulations, sound is left in the hands of private, and more often than not irregular, projects promoted by cultural associations and scientific groups.

Collections of Sounds

Despite being more visual-oriented than sound-oriented, the Internet has facilitated the creation of databases specifically dedicated to sound content. Over the last decade, many repositories have been created online with a special focus on audio recordings. Presented as sound galleries, audio archives or sound cartographies, many of these virtual audio libraries are related to places and soundscapes, natural or urban acoustic environments, as is the case with the Montréal Sound Map, the Nature Soundmap or Fragments of Extinction.² Other projects and online platforms focus on experiences – e.g., Sounds from

2 See: <https://www.montrealsoundmap.com/>, <https://www.naturesoundmap.com/> and <https://www.fragmentsofextinction.org/>

the global Covid-19 lockdown³ – or objects – e.g., the Museum of Endangered Sounds.⁴

With diverse visual displays, these repositories are also diverse in terms of the information that they make available for the user. Some provide information about the place, time and techniques used in the recording process; some have images associated with the sound files, while others do not. Some are organised by categories and others by locations; some serve scientific purposes, while others are inspired by cultural factors. Whether directly or indirectly, all of them contribute towards assigning cultural value to sound. The Museum of Portable Sound,⁵ for example, is announced as 'a portable museum bringing the culture of sound to the world'. Its mission statement states that this museum 'is dedicated to the collection, preservation, and exhibition of sounds as objects of culture' (Museum of Portable Sound, n.d.). In theoretical terms, this assumption of relating sound to a cultural experience may probably be the most significant difference between a sound museum and any other sound repository.

Without any institutional framework, some of these projects, such as the aforementioned Museum of Endangered Sounds, play a remarkable role in preserving sounds that may become inaccessible in the short term. Considering that official archives are still rare, these sound galleries constitute important guardians of memory. Moreover, they may help to promote an alternative curatorship for sound art, which tends to be more ephemeral than other forms of art. Historically, the tendency has been that a painting or a sculpture that is already renowned as an artwork will be preserved for centuries or allegedly forever. However, contemporary digital arts are more unstable in nature, and it remains uncertain whether they will be preserved in the same way as the classical arts have been conserved until today.

Collecting sound and saving sound-based memories for future generations is a multidisciplinary challenge for contemporary art centres. It is a technological challenge, because digital formats evolve and they may not have the constancy and durability of other media, such as canvas or stone. Like many other authors, Jonathan Sterne stresses that 'estimates for the durability of digital media are relatively low' (Sterne, 2009, p. 64). Collecting sound represents a cataloguing

3 See: <https://citiesandmemory.com/covid19-sounds/>

4 See: <http://savethesounds.info/>

5 See: <https://museumofportablesound.com/>

challenge, as well, because technical metadata for audio materials (the same goes for digital images) can be extremely complex and 'no one is entirely sure what metadata is critical' (Otto, 2010, p. 404). Moreover, it is an anthropological, artistic and sociological challenge, because there are still many doubts about the criteria for defining how to choose what should be preserved as an exceptional cultural production of a given society or time period.

Conclusion

The debate about what art is, as well as about its genres and techniques or even about artistic styles, has always been controversial. How to accommodate new media arts, and sound in particular, within this dynamic and contentious field is not an easy question to answer. Today's artistic production is more diverse than ever. In many cases, it is disseminated via the Internet, without an institutional framework, in other words without any formal curatorship. It is accessible, but not necessarily organised, identified and catalogued. Consequently, it would not be surprising if a significant part of these open access collections did not survive for very long.

Many sociologists and contemporary philosophers, such as Gilles Lipovetsky (1989), have suggested that the ephemeral is engraved in contemporary culture and that experiences are fleeting or transient. The intangibility that is usually associated with sound is today widely experienced in virtual environments, and is no longer exclusive to acoustic perception, as all aspects of contemporary life seem to be transitory and temporary.

The role that virtual museums and other digital repositories may play in these new unstable circumstances is also not very clear. Nevertheless, if they are not functioning as institutions that can guarantee a long-term storage of digital culture, they are at least operating as players in a system that follows the vanguard of creativity and affords visibility to symbolic activities. And fortunately so. Otherwise, contemporary societies and the cultural shift that media technologies represent will not be accurately known in the future.

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