PRESERVING FUNCTIONALITY: KEEPING ARTIFACTS 'ALIVE' IN MUSEUMS

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Abstract:

According to a recent article, 'Instrument museums are mausoleums, places for the display of the musically dead, with organologists acting as morticians, preparing dead instrument bodies for preservation and display'. This view, often repeated since the 1960s, reflects the frustration experienced by most museum visitors facing objects stripped of their function and presented as aestheticized icons.

Curatorial debate has led to the development of several alternative proposals to deliver a culturally engaging presentation of musical objects. However, none has managed to efficiently replace the expectation of museums visitors to appreciate the object in its functional state. Moreover, debate over the role of museums in preserving intangible – as well as tangible – heritage stimulated further consideration of the importance of preserving/presenting functionality of music-related objects.

While some authors have developed specific music-related perspectives (e.g. Barclay 2005), little or no cross-fertilisation has happened with the much broader world of functional objects in museums, which includes at least scientific, technologic and mechanical objects and those pertaining to daily lives.

The article will offer an overview of current debate, approaches and policies for the preservation and display of functionality in a variety of non-music related museums, with a parallel perspective on the current approach to musical instruments.

Musical instruments occupy a special place among the many functional objects that are represented in museum collections. As musical tools, they underwent a process of transformation and adaptation through time to expand human capabilities of producing sound: they connect with the body to generate noises, eventually organised into music, beyond what would be possible through singing or clapping. As part of human culture for over 40,000 years, they became pervasive in a variety of social contexts – from public to private, sacred to leisure – reflecting aesthetic, symbolic and economic influences. Their shapes, materials and decorations combine the technical requirements of durability, performance and economic sustainability with the representation of wealth and power – or lack thereof – of those who commissioned and used them. They are part of human history in a depth that is equalled by few other types of objects, apart possibly from clothes: since pre-history they are in fact used by both men and women, children and adults, across countries, societies, social strata and groups whose behaviours and assumptions can often be inferred through their choices in the manufacture, size, and outlook of the musical instruments they use.

Musical instruments also remain relevant in the observation of contemporary culture: recent surveys estimate that one in two American households currently includes a musical instrument, and that 85% of British children have played a musical instrument in their life ('Gallup' 2003) ('ABRSM' 2014). This provides a direct connection with an incredibly vast and diverse museum audience who can relate with these objects through personal, tactile and aural memories, and through these be enticed into the exploration of potentially any context in history and space of which human beings have been a part.

Surprisingly, many of the primary associations between people and musical instruments relate to the object, rather than to the sound it produces: a Stradivari violin is perceived as a precious object because of its attribution and economic value, which triggers – rather than reflects – an assumption about its sound (Fritz et al. 2014); a richly decorated clarinet made out of ivory attracts more attention than a plain wooden one, irrespective of the fact that their sound and method of use might be identical. Sometimes aesthetic and symbolic considerations take priority over the quality of sound and ergonomic efficiency of an instrument, arguably making it a better object, but a worse tool. An extreme example is provided by the historical use of materials – such as gold and hardstones – in the production of objects that reproduce all elements of musical instruments, but are unsuitable for musical performance (Rossi Rognoni 2011). Moving closer to visitors' direct experiences: how many of the pianos and guitars in their houses have been silent for most of their lives? Still, they trigger feelings of homeliness and nostalgia that rely on the assumption of their potential functionality rather than on its actuation. Like the white grand-pianos that interior designers loved to include in apartments in the 1980s, they convey the sense of harmony that theoretically derives from music making, even if they remain silent for their entire life.

This nuanced relationship between the aesthetic and functional nature of musical instruments becomes extraordinarily simplified and polarised when these objects become part of a museum collection. Based on the observation of the majority of music museums and personal experience, it is clear that curatorial attention tends to focus on the cultural and intellectual information that the instrument conveys, while visitors' curiosity relates instinctively to its sound.

A few months ago a well-known museum in London organised a public consultation to explore ways of increasing the engagement with its musical instrument collection. The exercise involved a test group of about 40 people, all professionally engaged in a variety of music-related activities. After a short introduction, the Head Curator presented a position paper which highlighted how the museum 'does not have a blanket-ban on playing the instruments in its collections', a double-negative proposition meant to balance the caution required for the long-term preservation of the objects, with an open attitude towards musicians. However, this admirably careful formulation was met by an outburst of rage from an audience member – very well behaved until then – who was outraged to the point of swearing at the very idea that instruments could be silenced for any reason (reportedly 'they bloody shouldn't'). Another, more composed, member of the audience who was quite familiar with the display, immediately joined in expressing dismay and sense of betrayal at finding out that some of the instruments that she had admired for years in the showcases might not, in fact, be able to play. What is notable in the latter is the fact that the sense of frustration had not ensued so much from the mostly silent visits to the display, but by the idea that these instruments might not have had the potential of producing sound (either because of their physical conditions or curatorial decision): it was the lack of potential, more than that of action, to be found offensive. Even stronger was the former's position that implied that the paramount obligation of the museum rested in the preservation of functionality, rather than eventually that of the objects themselves or of the traces that might shed light on their making or playing history (and which might be erased by the practices required to keep the instrument functional).

As with any cultural assumption, the expectations surrounding the functionality of musical instruments in museums have changed through time. While it is difficult to analyse the changes in visitors' expectations because of paucity of historical records, the attitude of museum professionals can be followed more consistently from the late 19th century, at the beginning of the history of public collections. Apart from some generic comments on the potential of early and extra-European instruments to inspire contemporary musicians and composers (Engel 1874, 5-6), there are few traces in the late 19th and early 20th century museum literature, of the desire to play instruments in collections. Throughout the century, museum aspirations seem to remain consistent with the late 18th century programme to collect 'instruments antiques ou étrangers et […] ceux à nos usages qui peuvent par leur perfection servir de modèles' (cit. in Chouquet 1875, vi). These had the primary purpose to build and present a comprehensive history of music based on the combined evidence offered by 'primitive' societies and early instruments, then celebrating the success of contemporary makers, who represented the apex of a long and successful evolutionary path. Early and extra-European musical instruments began to be collected and presented before their repertoire was explored, and a limited concern about their relationship with performance remained confined to a small niche of scholars, collectors and passionate amateurs.

Evidence of early restoration and conservation programmes, for example of the collection of the Conservatoire in Paris, highlights how decorative rather than functional instruments were prioritised, and even when functional restoration was delivered it did not usually lead to the instrument being actually played (Gétreau 1996, 405–22). This seems still to have been the case in American collections between the two World Wars when Curt Sachs complained about the 'lifelessness of the collection [where] visitors linger about the room without knowing how to approach this dead world of muted instruments' (Sachs 1939 cit. in Pollens 1989, 590). His strong persuasion that 'un instrument inaudible est un non-sens, presque au même titre que le serait un tableau invisible' resulted in a series of functional restorations purportedly inspired by the practice adopted by museums in Leipzig, Munich and Berlin to play their instruments 'at least once a day'. While this statement might have been slightly overstated, it certainly reflected a new interest towards engaging with museum instruments, related to the new impetus in the performance and popularisation of early music through concerts and recordings, a programme that Sachs himself had stimulated through the production of the two earliest anthologies of early music in recordings (Behrens, Elste, and Fitzner 2017).

Since then, and particularly after the Second World War, the increasing demand by musicians and the growth of an awareness among museum professionals of the risks – and sometimes heavy-duty restorations – that use entails, have resulted in an increased distance between the reasons to maintain vs. discontinue the functionality of instruments in museums. This has exploded sometimes in open conflicts and passionate – if not always thoroughly informed – debates: introducing a concert in 2007 at the Metropolitan Museum of Art, the famous violinist and conductor Lorin Maazel declared that 'violins kept in vitrines dry out and die, [while] it is the use and the humidity emanated by the player that keeps them alive' (cit. in Rossi Rognoni 2015, 13) and for decades the curator of one of the most important collections of Italian classical violins played all the instruments in the museum on a daily basis to keep them in good shape (Fisher 2007). The assumption that instruments of the violin family need daily practice to be kept 'alive', confuted by science and common practice, has become part of popular mythology among a large number of people with only a passing interest in musical instruments who, nonetheless, are the key potential visitors for our museums. On the opposite side museum professionals have sometimes overreacted to contingent situations, resulting in statements such as 'The musician's role in performance [is to] play to the instrument's limits with full force and be more concerned with musical presentation than with the instrument's

welfare. They are musicians whose task is to consume instruments. The curator's task is to preserve' ('CIMCIM Bulletin' 2002, 3).

Several publications have been issued since the late 1960s, aimed at addressing the ethics of maintaining functionality of museum instruments and providing guidelines to inform the activity of the many curators and conservators that are often in charge of musical instruments amongst many other types of objects. These also reflect, sometimes unconsciously, changing trends in the wider world of cultural heritage conservation: the earliest set of guidelines published in 1967 by the Musical Instrument Committee of the International Council of Museums (ICOM-CIMCIM) was driven by the clear statement that instruments 'were built to sound' (Berner, van der Meer, and Thibault 1967, [iii]). Suggestions were based on the perspective that functionality was an integral part of the identity of a musical instrument, and should be relinquished only when it required the replacement of 'parts essential to the resonance' (p. 12). Special emphasis was given to the idea that '[the instrument] must sound as nearly as possible as it did during the period when it was regularly played or, to be more precise, as we believe it did, according to results obtained by historical research' (p. 9).

Almost two decades later, a new set of guidelines shifted the attention primarily on the role of museum instruments as a source to serve as model towards the making of replicas, then with the possibility to sample their sound for scientific purposes and only in a final paragraph, almost as an afterthought, on the possibility of the original being played in public performances ('Recommendations' 1985). This shift must have gradually progressed in the daily practice of museums and curatorial discussion, judging by the boldness of the new message issued in a new set of recommendations published in 1993 ('Recommendations' 1993):

> The practice of restoring museum instruments for the purposes of playing in concert deflects emphasis from two of the central museum functions: preservation and study. […] Museums should be encouraged to examine their motives carefully so not to lose sight of their central purpose. While musicians are concerned with satisfying current demands for performances of early music on 'authentic' instruments, museums can ill afford to duplicate this effort at the expense of the collections which they hold in trust.
> A satisfying solution museologically is for musical instrument makers (whose resources and expertise are often misused in the restoration of original instruments) to make reproductions which can be used in museum concerts. This fulfils two of the central museum functions of preservation and education.

The opposition between the priorities of curators and those of musicians had been formally established, and with it the separation between the preservation of the original object and that of its functionality.

However, while many museums officially embraced a 'hands-off' policy, several continued more or less regular musical activity on instruments in their collections, but in most cases the lack of written policies and a certain shyness in sharing the experiences within the museum community led to little progress in the discussion over the past 25 years.

An exception was represented by the work coordinated and personally undertaken by Robert Barclay since the 1990s which resulted in two further publications, the first of which aimed at providing practical suggestions to 'manage the retirement of historic musical instruments from active service, whether they are in the hands of individuals, private collectors, or museums' (R. Barclay 1997, [i]) and the second addressing more broadly the theoretical framework and some case studies related to the preservation and use of historical musical instruments (R. Barclay 2005).

Over this long debate, which is only cursorily presented here, the dominant voices are those of the curators, conservators and musicians, each sharing their concerns and priorities in regard to the objects. Little, or no space is given in literature to the discussion of the expectation and reaction of listeners and visitors. In fact, the position often shared in conferences and papers is that the visitors' expectation of hearing the sound of the instrument is based on an intellectual misassumption, and

therefore it is the responsibility of the curator not to oblige, but to better inform and readdress their request. The main arguments for this position questions how representative the sound of a specific museum instrument is, whether its sound was relevant in the choice of including it in the collection/display, and the risks connected to the use of any functional object.

In fact, most instruments have undergone profound transformations throughout their history to adapt them to changing musical and aesthetic requirements, their materials have transformed through time with potentially major effects on their sound (whether negative or, as some maintain, positive) and they were often collected for reasons that spanned from the exceptionality of their materials, decorations, age, provenance or associations, but arguably never – or very rarely – for motives specifically related to their sound. In other words, sound is often the primary quality of an instrument in the outside world, but very rarely the reason for its acquisition in a museum. Why should the attention of the visitor, then, focus primarily on an element that was secondary in the choice of the objects on display? Is functionality of such importance to justify the obscuration of other cultural roles of musical instruments in their presentation in a museum?

A hint towards a positive answer to this question comes from the definition of musical instrument given by the Oxford English Dictionary: 'a contrivance for producing musical sounds'. In other terms, the object is identified primarily by its function. Any object can become a musical instrument irrespective of its shape, construction, or eventual other purposes, since the action of being used to produce musical sounds automatically transforms an anvil (Richard Wagner, *Rheingold*, 1869), a typewriter (Erik Satie, *Parade*, 1917; Leroy Anderson, *The Typewriter*, 1950) or a cactus (John Cage, *Child of Tree*, 1975) into a musical instrument. Consequently, one can also logically infer from this definition that a 'contrivance' that does *not* produce musical sounds is not a musical instrument, a conclusion that is easy to accept for anvils, typewriters and cacti, but not as obvious for a piano without strings or a violin displayed in a showcase never to be played again (as, for example, was Nicolò Paganini's expectation when bequeathing his violin to the City of Genoa). The ontological transformation that happens in a musical instrument when it becomes unable to make sound, and its symbolic implications, have been extensively explored by 20th century contemporary artists, with works such as *Breathless* by Cornelia Parker (on permanent display at the V&A in London), where – as the museum label reads – '54 defunct brass band instruments […] have been squashed flat and hung from wires' in 'an attempt […] to explore such ideas of duality as silence/noise, upper class/lower class, and death/resurrection'. Although many visitors might never have experienced the specific sound of a brass band, the theoretical and permanent inability of these instruments to produce sound is immediately suggestive of death, or the cessation of their existence as musical instruments, while their presentation as a visually striking work of art corresponds to their resurrection in a new type of object that is not a musical instrument anymore, as much as the work in its entirety is not immediately recognisable as a brass band.

The intensity of the expectation to hear the sound of a musical instrument in a museum display, and the level of frustration when this is not possible, is not equal for each of the instruments in a display, just as the expectation towards the preservation of functionality is not the same across all types of museum collections. It has been pointed out that few museum visitors expect to be allowed to shoot with an 18th century pistol, sleep in a Renaissance bed or eat in a Napoleonic plate, just as any musical instrument curator knows that requests to play (and often hear) musical objects usually focus on a very small number of instruments in the collection, with little or no interest in others. Once more, this is not usually related to a deep knowledge of the sound-qualities of each instrument in the collection, but to completely extra-musical considerations, such as the association with a famous maker, player or owner, which justifies sometimes the struggle of the musician to deal with instruments that are far from musically ideal, or with regulations that make access, rehearsal and performance much

more demanding than it would be with other technically similar, sometimes musically superior, certainly easier to access exemplars.

Rather than dismissing the legitimacy of this expectation, I suggest that it relates to a cultural phenomenon known as 'singularisation'. This concept was elaborated by Igor Kropytoff in the mid-1980s expanding a concept formulated by Durkheim in 1912 and outlines the interruption of the normal life-cycle of commodities, which normally comprises their creation, acquisition, consumption through use and disposal (Kropytoff 1986, 73-77). The process of singularisation reflects the need of societies to 'set apart a certain portion of their environment, marking it as "sacred"' (p. 73). Robert Barclay suggested the application of this idea to the specific case of musical instruments (Barclay 2005, 4-5), but in fact it can be extended, to different degrees, to what happens to any object that enters a museum collection. The very fact of being singled-out from the other representatives of its category, confers a degree of individuality to any object that – more or less fortuitously – becomes part of a museum collection. This does not necessarily relate to the rarity of the object itself: surviving Stradivari instruments are immensely more numerous than those by any of his excellent contemporaries, but they are nevertheless more special – more singular – to a larger number of people because they recognise the name of the maker as a marker of excellence. It rather depends on the specific level of recognisability that the object has for each individual visitor. Recognition can derive from any sort of association – real or imaginary – with people, places or events, but also from the connection with direct or indirect experiences of the visitor (having used the same, or a relatable object, or knowing someone who did) and the intensity of this recognition depends on the strength of the association.

The process of singularisation can apply to a single object, or to a group in its entirety: a specific object can be perceived as more or less 'special' in a display because of the personal knowledge of the visitor, or by the way it is presented, but the totality of the pieces that belong to a museum collection enjoy an aggregated level of singularisation because they are associated with an institution recognised as a repository of cultural heritage.

Singularisation also heightens the sense of personal connection perceived by the visitor towards the object, beyond rational considerations. It creates a bond which leads to the emotional desire to explore and connect further. In the case of visual and plastic works of art this can justify the irrational behaviour of queuing for hours to spend few seconds in front of the *Mona Lisa*, or of Michelangelo's *David*, often without possessing any rational information or competence that might allow one to assess the importance of the object. In the case of functional objects it can lead to the desire to connect with an object in its entirety, 'experiencing' rather than just observing that the object is 'alive'.

The intensity of this expectation is also influenced by how enjoyable the relationship is expected to be. An object in action normally stimulates more senses that just vision: it makes noises, sometimes smells and therefore provides a more 'immersive' experience which triggers personal memories (Falk and Dierking 2000, 15–36). The desirability of this experience has strong implications for the relationship between visitors and functional objects in museums.

The importance of positive/negative associations, for example, explains why the expectation towards maintaining the functionality of surgical tools and in general medical collections seems to be generally low as well as that of armour or weapons (an exception, here, is provided by gamification – usually obtained through the use of replicas, props or multimedia – which moves the idea of conflict to a playful level). This is at least what seems to emerge from the educational offer of most museums in these categories. The functionality of these objects relates to disagreeable experiences for most people and the preservation of their functionality is not expected even in the case of highly recognisable items.

The opposite is true, for example, in the case of furniture, vehicles, clocks & watches and objects of science and technology in general: sitting, travelling, handling a personal object such as a watch are all – generally – positive experiences that relate to the daily life of most museum visitors. Even without a direct connection to a specific model of bus or train – i.e. with a moderate level of singularisation – it is easy for the visitor to relate to the category to which that object belongs, and to compare the experience that it provides with a personal one. In this case, for a visitor who does not recognise a specific model, any locomotive is representative of a known and experienced object, and the possibility of connecting with it on a 'real life', multi-sensory level leads to an emotional connection to the object which goes beyond any information that can be read on the label. The musealised object is brought to life in the modern world through the engagement of the same multiplicity of senses on which real life relies and the experience moves from an entirely artificial level towards an approximation of a natural one. The greater the familiarity of the visitor with locomotives, and even more with that specific model, the higher the level of singularisation, the stronger the connection, and the more intense the desire to transcend the strictly visual and intellectual museum experience.

While the opportunity to climb on the driver's seat and explore the handles and pulleys used to activate the engine (offered by an increasing number of transport museums, such as for example the new London Transport Museum, the National Railway Museum in York or the Museum of Science and Technology in Milan) relies principally (not exclusively) on the sense of touch, clocks and watches offer an unexpected example of the power of hearing to achieve a similar result: in this case the main element that qualifies the performance of the object outside the museum environment – the punctuality of the clock – is not perceivable in the time of a visit, and the movement of many mechanisms remains hidden inside a case, while the movement of the hands is too slow to be perceivable. However, according to the web-site of the British Museum clock galleries 'many of the hundreds of exhibits on display are working, [and] can be heard ticking, striking and chiming the hours' ('Room 38-39: Clocks and Watches' n.d.). The added value of preserving the functionality of the objects results in the noise produced by the exhibits that enriches the sensory – not the intellectual – experience of visiting the gallery.

Most musical instruments in museums belong to this same category of objects and share with them a similar potential and analogous constrictions. From the visitors' point of view, most of the objects in a musical instrument display have a low individual level of singularisation (few visitors recognise the specific maker or model of any instrument in a display), but a higher one as representatives of some broader group. Depending on the background of the visitor, this could be as broad as 'flutes', or 'woodwinds', or 'this entire collection of musical instruments' and this defines the level of expectation towards the number of instruments that will be required to be functional in order to represent that category. Depending on the target users for a display, the required level of functionality might greatly differ and some collections have been able to advertise for years that their displays are functional based on only a minimal minority of objects. Nevertheless, a certain level of functionality in a display acts as a bridge to reconnect the objects with the idea of living music, and through this idea with the complexity of emotional – rather than historical or informative – values that musical objects represent in the real world. Conversely, removing this connection risks to reinforce the claim that music museums are 'places for the display of the musically dead' (Bates 2012, 365) or – as the famous cellist Mstislav Rostropovich once said – 'for the incarceration of musical instruments' ('Touchy Questions' n.d.).

The various technologies that music museums have explored to include sound in their displays, particularly over the past thirty years, should therefore be reassessed based on how effectively they approximate the multi-sensoriality of a natural, extra-museological experience: listening to a piece of music recorded on an instrument while looking at it displayed in a showcase provides undoubtedly a valuable piece of information for the understanding of the object. However, it fails to

reproduce the real-life connection between the generation of sound and the visual perception of movement (of the instruments, its parts and the musician's body) which are inseparable elements in the synesthetic experience of live music. In this way, the sound recording results more in a sensory expansion of the information provided by the label (an external provider of information), than of the emotional experience provided by the instrument itself. Conversely, in this case the use of replicas – or of other instruments that represent the same category – could provide a legitimate and fulfilling alternative to the use of the originals, when concerns about their preservation might justify the decision to discontinue their functionality.

However, there are some musical instruments where use of copies cannot be considered a satisfactory alternative to the use of the original. These are the comparatively few instruments for which the process of singularisation concerns a specific individual instrument, rather than its category. For historical reasons, this happened prevalently – but not exclusively – to instruments of the violin family. Particularly during the 19th century some of these instruments began to be identified by personal names, their parts – head, neck, shoulders, ribs – to be named after parts of the human body, their sound qualities to be compared with that of the human voice to the point that the violin became the most humanised, and therefore individualised, musical instrument in the western tradition. However, a similar process of individual singularisation might happen in the case of other types of instruments due to their associations, or exceptional physical characteristics: the flute played by Frederick the Great of Prussia – at least for historically minded visitors – or one recognisable for being made out of a particularly precious material, might both qualify for this same category. In these cases, the 'aura' of the original object outweighs their substance (Benjamin 1936), and the emotional connection of the audience is not with their physical nature (a violin, a flute), but with them as individual objects, or as proxies of a person or an event that go beyond what they are physically. The attempt to represent them through a reproduction is therefore as moderately effective as the reproduction of a beloved person through a photograph and may or may not be worth the expense required by the endeavour for the purposes of a museum.

In conclusion, music museums are clearly far from alone in facing the challenges, expectations and opportunities posed by the combination of preserving, interpreting and documenting functional objects. The policies and practices that ensue are a result of a cultural choice that reflects the balance between the focus on the material and many intangible values of the object (including its musical value, and that of source to understand historical making or performing practices). Museums, in general, have only recently begun to deal more consistently with the preservation of intangible heritage and it is less than twenty years since UNESCO began to focus its attention on intangible, as well as material, human culture outside of museums (Alivizatou 2012). Meanwhile, the development of the curatorial approaches labelled as new museology have increased the attention towards the analysis and understanding of the expectations of visitors and ways to connect with them, legitimising their contribution towards a more democratic and inclusive approach that shifts the attention of curators from their collections to their social purpose. Both these trends are still dawning in the field of music museums and a more thorough discussion will be required to share the experiences accumulated by decades of separate experiences in different museological fields.

Due to the complexity and relevance of music materials, the field of musical instruments appears to have accumulated a technical and philosophical literature over the years that is particularly rich and covers a longer period than that produced by most other types of functional collections. Nevertheless, other areas which can often rely on larger workforces have produced substantial work that would greatly simplify and enrich the production of new and updated guidelines in our field, such as the revised set of *Guidelines for the Care of Larger and Working Historic Objects* recently issued by the Association of British Transport & Engineering Museum (A.B.T.E.M. 2018). At the same time, the strong opposition in principle to the

preservation of functionality of historical musical instruments, particularly stated in literature since the 1980s and '90s has curbed the development of an open discussion to compare the reality of current practices and update the approach to the continuously changing ethics of museums.

Although no set of guidelines will be able to replace the individual judgement of curators in a matter that is and remains fundamentally cultural, and for which it must be accepted that no definitive right decision can be made, these considerations have been the starting point for a research project that is being launched by the International Committee of Collections of Instrument and Music of ICOM in collaboration with the ICOM International Committee for Museums of Science and Technology (CIMUSET) and that will result in an extensive consultation among museum professionals in different fields, with the aim of producing revised guidelines that address this complex issue.

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