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RESEARCH ARTICLE



Touch Decisions: For Heritage Objects

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ABSTRACT

Conservators have a complex relationship with touching things. As the conservation profession looks to the future, conservators need to be, and be seen to be, co-creators of considered access rather than gatekeepers to collections. The benefits of touch can be physical and tangible, but touch can also inform our emotions, support empathy, or provide a connection. Touch can be used to understand how something moves or to learn how to manipulate things. This paper reviews conservation's engagement with touch, attempting to extract a more nuanced understanding of the values that can be achieved through touching defined by context. By examining issues surrounding who conservation is for, the nature of touch and how conservators discuss it, this paper invites the profession to be more systematic about enabling touch experiences whilst managing these effectively with our conservation responsibilities.

RÉSUMÉ

Les conservateurs-restaurateurs ont une relation complexe avec le fait de toucher les objets. À l'heure où la profession de la conservation-restauration se tourne vers l'avenir, les conservateurs-restaurateurs ont besoin d'être, et d'être perçus, comme étant des co-créateurs d'un accès réfléchi plutôt que des gardiens des collections. Les bienfaits du toucher peuvent être physiques et tangibles, mais le toucher peut également façonner nos émotions, favoriser l'empathie, ou créer un lien. Le toucher peut être utilisé pour comprendre comment quelque chose bouge ou pour apprendre à manipuler les choses. Cet article étudie l'implication de la conservation-restauration dans le toucher, en essayant d'extraire une compréhension plus nuancée des valeurs qui peut être atteinte par le toucher dans un contexte donné. En examinant les enjeux suivants : la question de savoir à qui s'adresse la conservation, la nature du toucher et la façon dont les conservateurs-restaurateurs le traite, cet article invite la profession à permettre des expériences tactiles de manière plus systématique tout en menant efficacement ces dernières dans le cadre de nos responsabilités en matière de conservation. *Traduit par Anne-Stéphanie Etienne.*

RESUMO

Os conservadores/restauradores têm uma relação complexa com tocar coisas. À medida que a profissão de conservação/restauração olha para o futuro, os conservadores/restauradores precisam ser, e ser vistos como, co-criadores de acesso considerado, em vez de guardiões das coleções. Os benefícios do toque podem ser físicos e tangíveis, mas o toque também pode informar nossas emoções, apoiar a empatia ou fornecer uma conexão. O toque pode ser usado para entender como algo se move ou para aprender a manipular as coisas. Este artigo analisa o envolvimento da conservação/restauração com o toque, tentando extrair uma compreensão mais sutil dos valores que podem ser alcançados por meio do toque definido pelo contexto. Ao examinar questões sobre para quem é a conservação/restauração, a natureza do toque e como os conservadores o discutem, este artigo convida a profissão a ser mais sistemática sobre a possibilidade de experiências de toque enquanto as gerencia de maneira eficaz com nossas responsabilidades de conservação/restauração. *Traduzido por Beatriz Haspo.*

RESUMEN



Los conservadores tienen una relación compleja con tocar cosas. A medida que la profesión de la conservación mira hacia el futuro, los conservadores deben ser, y ser vistos como, co-creadores de una estrategia de acceso, en lugar de guardianes de las colecciones. Los beneficios del tacto pueden ser físicos y tangibles, pero el tacto también puede informar nuestras emociones, apoyar la empatía o proporcionar una conexión. El tacto se puede usar para comprender cómo se mueve algo o para aprender a manipular cosas. Este documento revisa el compromiso de la

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conservación con el tacto, intentando extraer una comprensión más matizada de los valores que se pueden lograr a través del tacto definido por el contexto. Al examinar los problemas relacionados con, para quién es la conservación, la naturaleza del contacto y cómo los conservadores lo debaten, este documento invita a la profesión a ser más sistemática para permitir experiencias táctiles mientras las maneja de manera efectiva con nuestras responsabilidades de conservación. *Traducción: Amparo Rueda; revisión: Amparo Rueda e Irene Delaveris.*

Introduction

Conservation is a tactile profession; we like to touch things. Conservators are, in many ways, professional touchers of things; it is part of our professional privilege. Conservation is built around touch and the learning of tactile skills. From manipulating an adhesive repair, through carefully packing things in boxes to feeling the temperature of a wall, the sensations we gain from touch guide our everyday practice. Despite our own touch requirements, the familiar narrative that preservation and access are in conflict can be identified in the conservation literature. This apparent conflict materializes through the ever present “do not touch” signs, in conversations between colleagues engaged in managing collections, and in complex institutional decision-making frameworks.

This article began as a discussion between the authors of what more inclusive access policies might look like and how touch could be reconsidered from a conservation perspective. The discussion moved to how the profession could acknowledge inequalities in institutional settings and recontextualize touch in a way to allow us to say “yes” without contradicting all that went before.

Through reviewing conservation’s engagement with touch and attempting to extract a more nuanced understanding of the values that can be achieved, a productive relationship between thoughtful conservation activities and meaningful physical experience with cultural heritage is attainable. There is power and value of knowledge gained through utilizing multiple senses to engage with heritage. As we think about how to be inclusive of diverse learners and community groups, incorporating these senses can deliver important benefits.

Permissive or restrictive?

The debate of preservation versus access is long-standing (Narkiss and Tomlin 2008; Chatterjee 2020). Conservation has tended to approach the issue of touch in one of two ways. When it comes to the idea of safeguarding cultural heritage, “do not touch” is a straightforward argument to make; however, it does not reflect the complexity of social engagement with cultural heritage in formal heritage institutions. By contrast, “please

touch” is equally problematic because of the inherent associated risks to heritage materials. The net result is that the simple, obvious, and low professional risk of the “do not touch” approach contrasts with the permissive driven-by-engagement willingness to allow the public to touch because there is an awareness that it has value. Neither approach fully accommodates both paths in a single and consistent framework; as a result, there remains an apparent dichotomy within the profession (Taylor 2014).

In recent years, some broader social issues have moved into greater prominence in the contribution to discussions in the conservation sphere. First is the opportunity for improvements in access through post-colonial institutional practice, in which touch has a pivotal role in counteracting past exclusion and fostering inclusive engagement. The second is access in the wake of the COVID-19 pandemic, where touching anything became problematic due to health concerns resulting in the wide-scale prohibition of touch. However, just as COVID-19 enforced a lack of touch, people reported experiencing a sense of loss from the denial of access to “the real thing” (Sofaer et al. 2021). Although digital access was significantly enhanced during the pandemic and virtual access created a gateway to the world, it has been apparent to many that virtual access does not always meet user needs (Ginzarly and Jordan Srouf 2022).

Several influential publications within the conservation canon explain the benefits of touch (Classen 2005; Chatterjee 2020), but it is also true that most conservators have, in their time, tackled the removal of contaminants or corrosion products arising from handling. In order to manage these two issues, we need guidance on navigating between the potential benefits and the known risks.

Why conservators can feel uneasy about giving permission to touch

The power of touch and its value are generally understood within the profession (Pye 2016), yet there is still trepidation in the sector when it comes to increasing access. Three significant psychological challenges to becoming the enablers that many of us aspire to be are:

1. The level and ownership of risk that enabling generates.
2. The time between action and consequence.
3. The confusion between the content of advice given by conservators with assumptions made about their character.

It is necessary to consider the ownership and level of risk from acting to enable touch. Although the risk and consequences of action and inaction theoretically should be legally and morally equivalent, that is not how they are experienced. There is an old adage that *no one gets fired for buying IBM computers*, a phrase that represents the fear, uncertainty, and doubt associated with alternative options (Fields 2011). An appeal-to-fear influence tactic works because the normal passive (or default option) is painted as safe, whereas another solution (even if it is superior) appears riskier. If something goes wrong, there is a prediction in the passive situation that negative consequences will be assessed as unfortunate or externally generated, reducing blame. Whereas when an active decision is made, any resulting negative consequences will carry more blame for the decision-maker (Kahneman and Tversky 1982; N'gbala and Branscombe 1997). This results in pressure not to make changes in situations where most other people avoid that change – even when the change may be optimal. In addition, the distribution of risk and reward is uneven. Where a conservator enables touch and users have a positive experience, the benefits can be attributed to the education, learning, or exhibition department. In contrast, if permission is given to touch and negative occurrences arise, then the conservator who enabled it could be seen as having had an active responsibility for damage, which conflicts with their core work-based responsibilities. The conservator feels the pressure to do no harm and so the conservator carries all the risk with potentially none of the gain.

The time between action and consequence is important in many cases where conservators must review touch permissions. There are situations where it is entirely appropriate to advise against touching. An example which may arise quite frequently would be where a condition survey identifies that a piece of taxidermy has been treated with arsenic – the conservation team would be wise to add a “do not touch” instruction to the catalogue entry or packaging. However, their colleagues may touch such a contaminated item with no immediate perception of harm, generating the false sense that these warnings do not relate to real consequences. When someone handles a silver nitrate photograph and places their fingerprints on the surface of the image, the negative consequences will not materialize for months, if not years. This gap

between action and consequence serves to undermine even well-considered (do not) touch recommendations. Unless the downstream consequences are made real, then even careful messaging can be misinterpreted as unnecessary scaremongering.

The confusion between the content of advice given and the character of the person giving it is described by a psychological theory known as fundamental attribution error. Fundamental attribution error describes how easy it is to infer someone's personality from their words or deeds and the possibility of getting this very wrong (Roy n.d.). A child who takes food without permission from another child's lunch box might be judged greedy or untrustworthy by others, yet perhaps that child lacks family support and is undernourished. It is possible to misattribute behavior to personality rather than context. Knowing more about context and establishing good communication between parties can reduce such misunderstandings. This reinforces the value of taking time to investigate other people's situations and explanations. Whereas distance or physical separation, poor communication and dissimilarity can make such a misunderstanding more possible. Thus, examples of people being othered because of their dissimilarity in race, class, geographic or educational makes miss attribution of the cause an issue of systemic discrimination. If a conservator has asked for something not to be touched, colleagues can interpret this as them being the sort of person who is against touching and, more importantly, as someone who opposes access. Such a fundamental attribution error is well documented and tenacious and may even explain why some conservators identify this as a personal trait rather than professional practice (Henderson 2022).

Conservators who recognize these three dangers of risk, consequence, and attribution will have diverse ways of managing and responding. Undertaking complete and balanced risk and benefit assessments will help them to consider active and passive actions and consequences more equitably (Henderson, Waller, and Hopes 2020). Communications about, and perceptions of, risk are well researched (Henderson and Waller 2016), which could influence messaging (Henderson and Rumsey 2015). The perception of conservators as naysayers is persistent (Frost 1994). In shifting such perceptions, it is valuable to ensure that most communications are positive and delineate occasions where preventing activity is necessary.

Co-creation: building inclusive practice

In discussions on touching collections, conservators sometimes describe themselves as being in favor or

against touching. This personality-based approach is understandable if you consider the audiences and collections that conservators have worked with, but it is not conducive to a consistent and coherent unified (but not uniform) professional practice. The management of touch need not, and should not, be seen as a dichotomy of permissive versus restrictive. As such, an alternative mechanism of devising touch management is required, including an acknowledgement of distinct cultural views toward touch (Fritz 1993; Morgan 2010). Responsive solutions should be sought to ensure there are frameworks for appropriate successful resolutions to access. Such an assessment would balance a detailed understanding of conservation needs as well as that of user needs (Sully 2015; Henderson and Nakamoto 2016). All too often, cost–benefit analysis shows a detailed understanding of potential damage (informed by condition audit, understanding of materials, examination of the materials, research, etc.) balanced against a poorly defined definition of the “value” of touch. While it is unarguable that there is a value in connecting emotionally and physically with heritage, that value is not equivalent in every touch opportunity. Likewise, it is inappropriate to transfer the assumption of benefits from a single case to the general.

Benefits people derive from touch

To manage touch in an informed way, it is necessary to identify the variety and types of benefits that the touch will generate.

Individuals who experience something in a tactile way gain benefits which can be physical and tangible, such as learning the flexibility of an object. Touch can

inform other senses, such as empathy, by physically carrying a heavy pail of water. A person carrying buckets of water can then, through the experience, translate the knowledge of the movement of the rope and the effort of carrying the pails into a more efficient carrying technique (Figure 1).

For those directly engaged in touch activities, we categorize touch into two distinct but related types with their associated benefits:

1. The physical connection to objects produces tangible and intangible effects.
2. Physical manipulation of material builds manual dexterity skills and informs future touch.

The physical connection to objects that produce tangible and intangible effects

A range of haptic experiences is captured in Figure 2 (Sekuler and Blake 2006). This provides a vocabulary of touch that connects how the person touches something and the benefits gained. For conservators, clarity on the form of touch as set out in the figure will help precisely locate conservation measures that could be used to mitigate unnecessary loss without loss in benefit. Conservators will recognize different experiences of motion that could be valuable in a heritage context. Feeling the surface of a roman mortarium will be picked up by lateral movement, sensations are stimulated by the cool response of marble and feeling how heavy a rifle is to hold in a firing position helps understand the task of a rifleman. Users can have more complex interactions, perhaps investigating a candle snuffer



Figure 1. Two children learning about carrying water: weight, movement, balance, etc. at Dyffryn Gardens, NT Wales.

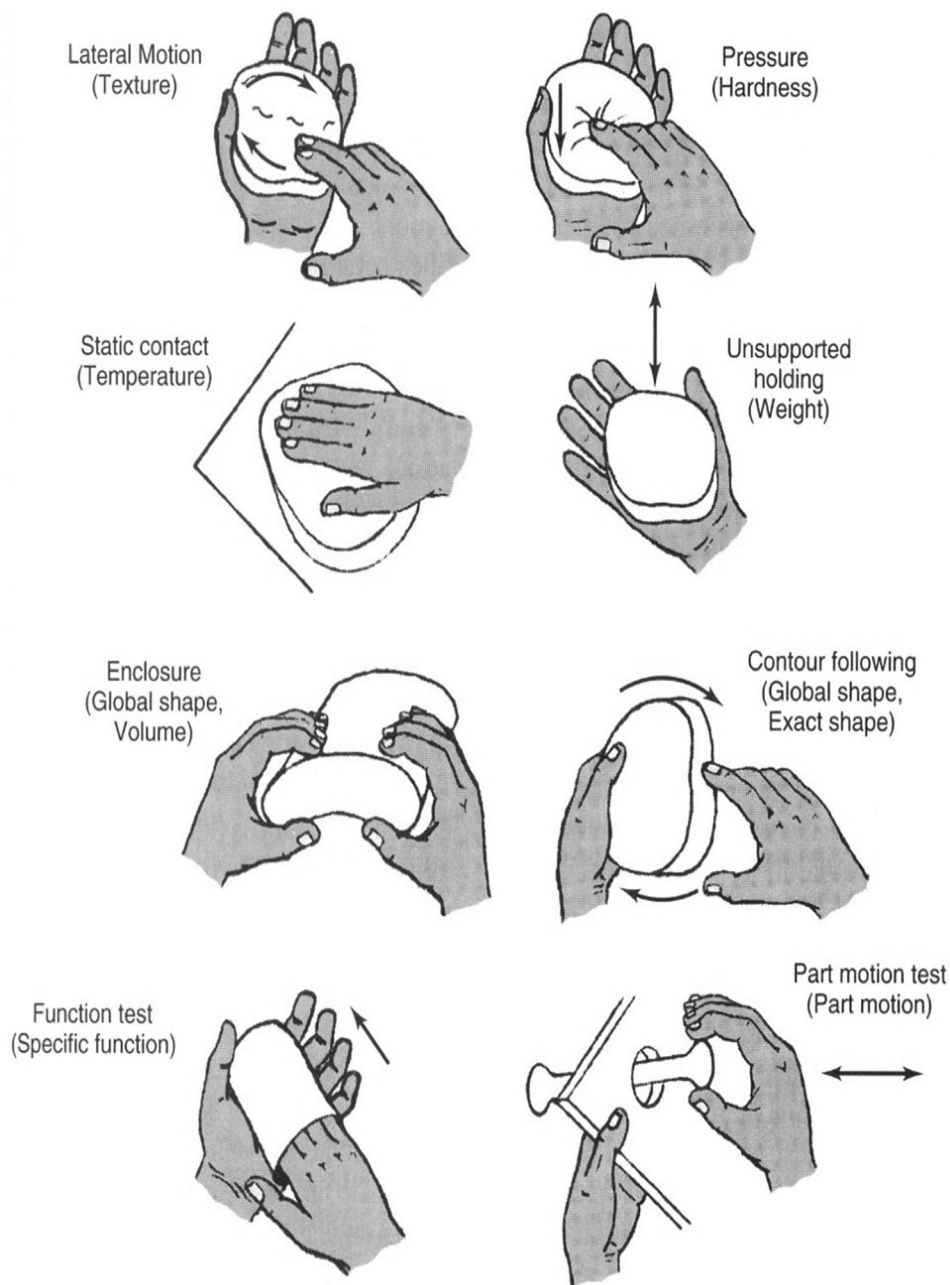


Figure 2. Forms of Haptic Exploration from Sekuler and Blake (2006).

to guess its function or turning a handle on a mangle to imagine a grandmother's washday. Researchers have shown that people deploy each of these exploratory procedures tactically depending on the information being sought (Sekuler and Blake 2006, 483). For example, enclosing an object with your hands is a good, quick and simple identification method, whereas texture may help identify composition. Each of these different explorations offers valuable learning through physical engagement, learning that can spark more intangible considerations about other lives and experiences – the very stuff of heritage engagement.

Physical manipulation of material builds manual dexterity skills and informs future touch

Building manual dexterity skills transforms “perceptual habits into motor habits” (Joy and Sherry 2003, 263). Conservators must, as much as anyone, understand that you do not just have fine motor skills; you build them. Whether handling wet tissue for a repair or moving a scalpel over a surface to reveal a layer of corrosion chosen to represent the essence of a thing best, these skills are learnt through feedback and reflection (Muñoz Viñas 2022). Suppose we need conservators of the future to be able to handle delicate books or

manipulate an historic clock. In that case, they must, at some point, engage with similar examples with similar tactile properties and, in time, build their confidence to manipulate cultural heritage. If conservators implement a default no-touch position, we risk becoming gatekeepers to learning opportunities that can be understood best by tangible experience.

Whether learning to handle a traditional tool, making connections with the past tool maker, or judging the weight of that tool, these intellectual, emotional, and physical connections offer different benefits which can be satisfied through other touch solutions. Developing a vocabulary of touch does not generate an algorithm that can be dropped into a collections management plan. It does provide an ability to articulate the benefits that are being sought. This will allow those in conservation to target conservation advice at activities that will deliver a constructive engagement with the possible outcomes whilst still acting to manage change efficiently and equitably. Exploring a range of

touch experiences helps define the possibilities and vulnerabilities of each form of touch (Figure 3).

Another aspect of this discussion that has often gone quietly overlooked is the benefit of increased access for people with disabilities (Pye 2008; Hooper-Greenhill 2013). Tactile interactions to accommodate people with visual impairment may sometimes be based around reproductions and especially built interactives (Hetherington 2000). Still, it is only by examining the barriers that people have to access that it is possible to identify the access measures that should be put in place (Findlay 2022). Discussions with users (and most importantly, currently excluded nonusers) should be used to define the access needed. However, considering the types of touch and the aims of touch will help develop those discussions productively.

Empathetic touch benefits

Interestingly those not directly involved in touching can also gain benefits from their proximity to a touch



Figure 3. A child exploring the tactile experience of carding wool.

experience. Imagine a child trying on a maille standard, their physical response to the weight of the metal rings and the impact it has on their movement can be described verbally and observed by their peers. One member of a group touching a museum object and passing on information that it is sharp or cold or fragile can transmit knowledge and empathy especially where the source is a peer such as a classmate.

Institutional benefits of touch

Our challenge is for conservators to be co-creators of access rather than gatekeepers. Changes to attitudes in access need to come from the conservation community. We need to be as informed about the benefits of touch as we are about the threats. Let's look beyond the narrow terrain of our work roles and responsibilities. We can see how touch can contribute to the mission of the institution where we work and, more generally, to the broader mission of museums to be “open to the public, accessible and inclusive, with the participation of communities, offering varied experiences” (ICOM 2022). Both funders who have delivered financial support and a broader category of supporters, who may give time, prestige, objects or opportunities, will require evidence of inclusion and participation, and hands-on events may be part of that offer. We can see above how people can learn from tactile exploration when considering museums and learning. Of course, the museum will also learn from the expertise of those in their communities who may have necessary skills and knowledge to help interpret things in our collections. Museums can benefit from intergenerational transmission of knowledge with objects acting to facilitate an authentic shared experience. The varied expertise of museums will include familiar storage and display but can also incorporate craft workshops, reminiscence groups, and therapeutic and creative experiences. These will often involve tactile experiences. Opening collections as a resource for the communities we serve is a powerful message. Both moral and sometimes legal frameworks inform touch decisions, and Table 1 captures some of those potential benefits.

Table 1. Potential institutional benefits of touch.

-
- Satisfy funder needs
 - Satisfy supporter needs
 - Transmission of knowledge
 - Experiential authenticity
 - Enjoyment/entertainment
 - Diversification of the use of space within the institution
 - Increased involvement
 - Share meaning and significance with a community
 - Supports fundraising
 - Legal and moral duty to include
-

Total risk aversion makes no sense within any conservation paradigm. There is no place safe from entropy, whether fading in a gallery, being worn away on display or eaten by pests in storage – change is occurring. However, the sense of *saving* is attractive to conservators – it speaks to what many of us feel is our core purpose. It, therefore, requires us, if we find ourselves tending to risk aversion – to create a balance sheet – asking what the risks of various courses of action are and what the benefits are (Henderson, Waller, and Hopes 2020). Accepting that in use, a small percentage of the accessed collection will lose one form of value is not a breach of conservation ethics for the following reasons.

1. Change in the state of heritage is inevitable.
2. There are significant possibilities to enhance the meaning of an object through access, thus decreasing one agent of deterioration, dissociation, even as another increases. Thus maximizing heritage value can coexist with physical change.
3. Conservation is about intelligent change management, not an abstract belief in a possibility of stasis.

Impacts of touch for an object or site

In some cases, touch patterns or other interactions may be considered a significant feature of an object or site. Therefore, ensuring provision of a way to maintain this social use and consequent physical change may need to be included in the site management plan (Lynch and Proverbs 2019). In these situations, touch enhances the object or site's enduring value. Although physical change will occur, this change could be understood as an enhancement of value. Conservators faced with such contexts should consider starting with a statement of significance to help to define what it is that they are preserving and to support strategies to deliver valuable benefits (Australia ICOMOS 2013; Häyhä, Jantunen, and Paaskoski 2018; Historic England 2019).

In defining the benefits of change as a feature of a site or object, there is the inevitable weighing of different forms of value, considering the relative merits of an intact physical form to a potentially changing materiality that delivers some societal benefits. This is not a simple relationship; touch permissiveness can lead to excessive consumption of the heritage resource by a small group for relatively minimal access and learning gains. Walking on Nazca lines may make for a pleasant walk or opportunity to protest, but that would be set against extraordinary damage to the fabric and meaning of the landscape. A statue may suddenly start to be patted “for luck” and become permanently transformed

despite the contact being a very recent phenomenon (Figure 4). The question of who benefits and at what cost becomes apparent in such situations and this serves as a reminder that conservation decisions contain a socio-cultural element. A statue that has served to unite a religious community with a long-established relationship of touch may be made of the same materials as Greyfriars Bobby (Figure 4) but the appropriateness of touch in each context is weighted by issues far beyond a change in patina.

Identifying which form of touch is being recommended or requested in an access situation will aid conservators to assess it and devise appropriate conservation strategies. Making balanced informed decisions that acknowledge power, inequality, benefits, and plural values requires a strategic approach. Giving permission to touch a stone hand axe when the museum has 100s of similar things is not a slippery slope to allowing visitors

to dress up in an historic silk dress. The concept of a slippery slope is unhelpful in such discussions as it serves only to slam the door, making the conservators appear exclusionary.

Touch decision-making criteria

By better understanding the multiple forms and values of touch, conservators would be better able to deliver a more targeted and careful touch experience. A checklist of factors to be considered in touch decisions will support the development of complex, informed, evidence-based decisions with both emotional and objective factors being identified and considered. Table 2 provides a summary of what a more nuanced criteria for gauging touch decisions could look like.



Figure 4. Greyfriars Bobby in Edinburgh has only recently attracted patting of the nose.

Table 2. Factors to be taken into consideration when planning touch arrangements, each point is discussed in more detail in the text below.

Decision-making criteria for touching cultural heritage:	Example
Benefits to individuals	Touching grandmother's birth certificate
Benefits to institutions	Good reviews on social media
Specific user needs	Tactile access for partially sighted art historian
Stakeholder priority	Restriction on access to sacred places
Understanding of materials and decay functions	Measuring extent and rate of the erosion of surfaces
Rigorous scientific experimentation	Fold testing paper
Vulnerabilities	An old-fashioned typewriter with a return lever
Health and Safety	A sword blade on open display
Known safe	Defaulting to a system that is known to remove the hazard such as removing all illumination
Tolerance limits	Allowing humidity fluctuations of 10% based on historical records of even larger changes
Combined properties	Implications of the form of binding of a book
Whole collection needs and opportunities	Existence of multiple similar quilts in collection allowing one to be handled
Technological possibilities	Production of 3D printer
Explicit Risk	The organization's approach to risks which may feel different in an open-air folk museum or an art gallery
Risk Appetite	
explicit risk	How much damage the organization expects to tolerate from the handling. Are you prepared to have this impressionist painting / roman roof tile slightly chipped after the school visit?
Risk tolerance	
Risk Consequence	If this object gets broken, will it be considered the result of a conservator's error in judgement?
Sustainability	A complex in situ barrier that cannot be maintained by the managers of the heritage space.
Lifetimes	Keeping things for unknown future users at the expense of current users (perhaps ignoring issues of past exclusion)
Authentic practice	Respecting embodied wisdom for example by seeking and following traditional modes of care for collections such as pest management by smoking

Discussion

This paper has already described the multiple personal and institutional benefits of touch. The benefits of touch have been expanded and illuminated to support more careful touch decisions. Users' needs in some decisions, such as lighting, are commonly factored into access. Still, sometimes the specific needs of users, such as providing additional illumination for older users or resources for support animals inside heritage sites, are less consistently considered. Stakeholders do not always prioritize access; on some occasions, they may seek traditional patterns of selective access and seek to exclude groups of people from specific forms of access (Thorn 2008). The most familiar decision criteria for conservators is probably an understanding of materials and decay functions. Such core knowledge offers an essential and underpinning foundation based on understanding the materials on which we work. Therefore, understanding the interactions between physical manipulation and chemical change induced by handling should be a feature in handling decision-making.

Rigorous scientific experimentation is essential to innovation and offers evidence-based practice. Where the implications of touching are not fully understood, further research can help identify the degree to which handling may be problematic. The relationship between people and things exaggerates some vulnerabilities: faces, hands, genitalia on statues, carved lettering or possibly cool surfaces encourage people to

subconsciously reach out and touch. This is also a factor if the item has an attractive looking texture, is sharp, or is positioned within easy reach. For many heritage aspects, the health and safety factors associated with contaminated, sharp, heavy, or toxic objects must also feature when planning in touch decisions. Nothing that is so heavy it could break your toes would be an ideal object for school children to pass around, for example. Whether understanding the chemical stability of paper, the speed with which clean fingers generate moisture, salts and oils or monitoring the number of requests of a document from within an archive, each piece of research could help inform a sensible handling policy.

The transition from managing by *known safe* conditions for materials to managing *tolerance limits* in many ways describes the evolution of preventive conservation. Early standards were built on an understanding of conditions where damage was minimized, such as those observed by Garry Thompson in the Manod caves, which inspired *The Museum Environment* (Thomson 1978; Boersma, Dardes, and Druzik 2014). Such safe limits are useful for risk-averse situations with abundant resources. Tolerance limits, on the other hand, define the boundaries of known safe and adverse changes for specific classes of materials. This can be more energy efficient and pragmatic but takes conservation decision-making to the edge of risk because much of cultural heritage is formed by composites, whether composite materials, ensemble collections

or complex sites, necessitating the consideration of the interactions and vulnerabilities of the combined properties of materials. The relationship between components and spaces can generate different handling patterns and risks. For many people, the uniqueness of an item may be a valid factor in assessing its suitability for handling and understanding the opportunities for substitute replacements and a holistic overview of the whole collection needs and opportunities.

The technological possibilities for protecting objects change over time. Improvements in protection could be the discovery of new materials, advances in reproduction, through to the refinement of psychological barriers.

Different organizations and different individuals carry a sense of tolerable risk; this is described as the risk tolerance and appetite. Risk appetite will normally be set in the values and management approach of the organization. Caretakers can gauge their practice or tolerance to risk based on this institutional risk appetite framework. How an individual manages their risk tolerance can be personal and may be heightened within certain institutional roles. This will also be impacted by the status and significance of the cultural heritage in question and heightened by the employment status of those making decisions. Whilst it is relatively easy to understand a decay mechanism such as the humidity at which metal will corrode, it is more complex to understand how such corrosion will be perceived. Once an organization has expressed their risk appetite and staff have operationalized the risk appetite there remains the nuanced issue of how the consequence of a negative occurrence will be evaluated. To what extent might the loss of a cultural heritage item be considered gross negligence or understandable will be shaped by many factors beyond the control of the conservators. Interestingly this is an issue high on the agenda of more senior figures who are more likely to be held accountable in the public sphere.

Any decision that fails to consider community environmental and economic sustainability will surely be vulnerable to failure. In this context, the apparent need to keep things for longer should be questioned. Are we really serving future generations by simply retaining materials? As Norton (1999) points out, the problem of what we owe the future is not a monolithic, single problem but rather an inter-related cluster of the issues, and Taylor (2014) contends that heritage preservation is part of that inter-related cluster. Implementing any collection management strategy from a different social or cultural context should be carefully considered. The history of care that a community has offered to an object should be a significant factor in the decision-

making on both a practical and ethical level. Authentic practice has a great deal to teach the profession and prevent the careless imposition of inappropriate out-of-context instructions. Whether maintaining moisture transmission through walls in historic European homes or smoke fumigation of collections as a pest management strategy in Cameroon (Ntieche 2021), being ignorant of how things have been transmitted to the present is a monumental oversight that will lead to negative outcomes. In contrast Bakhri (2020) explains that respecting traditional ecological knowledge traditions of practice and respecting the people who carry that knowledge, can be identified as a model for best sustainable conservation practice.

Table 2 offers a checklist of factors to be taken into consideration when identifying appropriate touch strategies. A full account of alternative solutions is beyond the scope of this paper. Readers who wish to take advantage of the ideas can look for examples of practice in other institutions (Balachandran 2017; Williams et al. 2017; Katifori et al. 2018). Solutions would include and be not limited to:

- identifying objects which are suitable for different levels of physical engagement, considering supervision and safety arrangements, condition monitoring and defining the benefits to the users,
- producing reproductions, copies and replicas which offer easier visual interrogation or enable a more detailed examination of content or construction technique,
- the production of facsimile items which have been made to recreate an experience while learning not only how the object may have looked but also to understand their manufacture such as the work by Phil Parkes on manufacturing maille (www.philparkesmaille.com).

Equality and inclusion

Touch and access have been considered damaging because “if everyone touched this, it would be worn away” – this can be vividly observed at many sites and monuments. Greyfriars Bobby in Edinburgh, for example, has only recently become associated with good luck from touching the nose (Figure 4). In this context, the recent fad to pet the nose will deprive future visitors of the detail and patina considered by the composer. Thus, today’s users are actively denying tomorrow’s users an opportunity to understand the statue in a specific form. The distribution of rights between present and future generations is discussed well elsewhere

(Taylor 2014). Ideas of equal access and fairness over time cannot simply be considered as a temporal distribution because access to cultural heritage in an institution is rarely equitable. Where exclusion has been systematic, then redress must also be systematic if the concept of fairness is to have validity. If a museum commits to instigating procedures toward “chang(ing) the prevailing culture, is one of open and assertive rejection of racist language and behaviour” (Welsh Government 2022), then racism in collecting or collections management may require an active rebalancing of who gets to touch. In this situation, an assertion to touch may form part of a process of restitution. For those working within an institution with aspirations to increase participation there must be a consequent willingness to expose and challenge bias and to be prepared to challenge and change familiar perspectives and of an “openness of letting go of long-accepted certainties, revising procedures” (Fekrsanati and Marçal 2022). Starting from neither a “no touch” nor a “please touch” position avoids a simplified binary perspective with consequent sense of correct and incorrect sides (Wickens and Gupta 2022) and creates the space to open the discussion for co-created access plans.

Conclusion

We are sensory beings – places of heritage can create a full experience by satisfying a greater range of senses. The authors invite the profession to be more open to the benefits of the wide variety of touch experiences in a contextually appropriate manner. By rejecting a binary approach and instead offering a considered but accountable decision-making framework we can contribute to becoming more accountable organizations. While there is some positive messaging from within the conservation community on enabling touch, there remains many experiences of conservation acting as gatekeepers to public access. By developing frameworks designed to conceive a creative and flexible future relationship between enacting thoughtful conservation activities and enabling meaningful physical experience with cultural heritage, we can broaden the factors being considered in touch decisions. Is it likely we will get it wrong along the way, but mistakes are opportunities for learning, growth, and reflection, and are the impetus for active dialogue for improvement. Conservators should feel more confident in embracing the gray areas and having tough conversations. If we have the tools and vocabulary to proceed, we are capable of making context-rich decision in a consistent, accountable, and ethical framework. Understanding and conserving

skills and habits of touch and manipulation will be essential to the meaningful survival of many things.

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