Abstract

A critical epistemology of object conservation within the UK heritage sector.

Rebeca Suarez Ferreira

The thesis aims to establish a new understanding of how the sources of knowledge and forms of knowing by which conservators approach heritage objects affects their conservation practice and recording. Using Actor-Network Theory within a multi-sited ethnographic approach, the project studied the treatment and the representation of objects by those practicing object conservation and within conservation documentation. Taking inspiration from work that has examined approaches to heritage management and conservation, the project observed if and how these approaches unfolded within conservation practice. It sought to identify evidence of how objects are experienced and recorded before, during, and after the conservation process. In conclusion, the thesis exemplifies how conservators, through their sensorial experiences of objects, create a variety of knowledge and forms of knowing. Uncertain ethical codes and standards of practice disallow for the potential of values- or peoples-based theory to manifest completely in practice and a materials-based approach is still enacted and most visible within conservation records. The thesis ends with a call towards the potential of autoethnographic conservation records, where patterns of individual practice can aid in diversifying the museum.

A critical epistemology of object conservation within the UK heritage sector

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Glossary

Acronym / Term	Definition
Accreditation	A professional qualification, administered by the UK Institute of Conservation. It demonstrates to clients, employers and peers that an individual has an in-depth knowledge of conservation, a high degree of competence, sound judgement and a deep understanding of the principles which underpin their practice, by showing that they are proficient across Icon's professional standards in conservation (ICON 2021).
AIC	American Institute for Conservation
AiL	Acceptance in lieu
ANT	Actor-Network Theory
Authenticity	In the context of heritage conservation, authenticity is considered as a condition that should be met in order to validate a statement of cultural value or significance. If the essential nature of a heritage object, expressed both through its material or intangible attributes, is truly what it is purported to be, thus substantiating its alleged cultural significance, then the object is authentic (Boccardi 2018).
Autoethnography	Autoethnography is a self-reflexive qualitative research method from the social sciences which foregrounds the ethnographer's subjectivity (Stigter 2016). The aim of autoethnography is to relay the distinctions between how and why one views the world through their lens and what makes that different from others (Boylorn and Orbe 2016).
BM	British Museum
Collection	Group of objects/items having shared or combined significance. Note: The term "collection" is mainly used within "movable cultural heritage". In the context of immovable cultural heritage other terms are used, e.g., 'historic ensemble', 'historic site', 'conservation area', 'historic garden' (ICON 2021).
Condition	Physical state of an object/item at a particular time (ICON 2021).
Condition Record	Record of the physical condition of an object/item for a specific purpose, dated and authored (ICON 2021).

Conservation	An approach to objects/items, which aims to preserve and enhance those objects/items for the purposes of public access and understanding. Conservation encompasses many different actions including investigation, documentation, cleaning, stabilisation, and long-term preservation to manage change over time. Conservation is concerned with the layers of significance objects/items have acquired over time rather than with repair to a projected former or 'as new state' (ICON 2021).
Conservation Action	The term 'conservation action' is used rather than 'treatment' to include all the activities that a conservator may carry out in relation to objects/items, from interventive treatment to preventive measures, documentation, training, research, and advice for future care (ICON 2021).
Conservation Documentation	Conservation records which can include condition reports, scientific investigation, substantiated treatment reports, and preventive conservation measures. The conservation record explains the actions undertaken by describing the procedures, techniques and materials used both with written and graphic forms of documentation.
Conservation Internship	A structured work- based placement offering emerging professionals an invaluable opportunity to develop their careers, engage with professional networks and develop practical knowledge by learning from highly experienced conservation professionals (ICON 2021).
Conservation Practitioner	A volunteer, student, intern, employee and/or contractor who practices conservation on heritage objects and/or for heritage institutions.
Conservation Scientist	A conservation scientist is a museum professional who works in the field of conservation science and whose focus is on the research of cultural heritage (e.g., art, artefacts, buildings, and monuments) through scientific analysis. Scientific analysis is investigation according to rules laid down in exact science for performing observations and testing the soundness of conclusions (ICON 2021).
Conservation Spaces	As opposed to environment, are the places conservation is undertaken. Examples include conservation laboratories or workshops.
Conservation Technician	Working within the cultural, heritage and creative industries [where] specialist knowledge of objects is required in order to move, install, pack and transport them safely and effectively. Technicians assist conservators working on objects. They also design and make mounts and fixings for objects. This work-based level 4 diploma … covers the wide range of skills

	and knowledge required to work as a technician with museum collections, historic artefacts and works of art (Victoria and Albert Museum 2022).
Conservation Treatment	A conservation intervention that involves action carried out on an object (ICON 2021).
Conservation-Grade	Materials which are used within conservation practice which have been tested to ensure they have no or minimal effect on a heritage object or collection.
Conservator	A conservation practitioner with professional training in conservation and/or holds a professional conservation role within a heritage institution.
Critical Epistemology	Critical epistemology is concerned with knowledge that is subjective and grounded in personal and professional sociohistorical processes (Farias *et al*. 2016).
Displayable Condition	Indicates an object is in a stable enough condition that it can be displayed to the public.
Eurocentric	Reflecting a tendency to interpret the world in terms of European or Anglo-American values and experiences (Merriam-Webster 2022).
Expert	A conservation practitioner who meets the following criteria: -authoritative knowledge of discipline and deep tacit understanding across area of practice; -excellence achieved with relative ease; -able to take responsibility for going beyond existing standards and creating own interpretations; -holistic grasp of complex situations; -moves between intuitive and analytical approaches with ease; -sees overall 'picture' and alternative approaches; -vision of what is possible (Henderson 2009).
Field Site	The place(s) fieldwork is undertaken.
Fieldwork	The undertaking of anthropological methods such as participant observation and/or interviews with the people, places and things with which the researcher is concerned.
Formal Interview	An interview with a set script of questions for a participant to answer. For example, a questionnaire or survey.
Forums	Focus groups
GM	Glasgow Museums
ICCROM	The International Centre for the Study of the Preservation and Restoration of Cultural Property

ICOM	International Council of Museums
ICOMOS	International Council on Monuments and Sites
ICON	UK Institute of Conservation
IIC	International Institute for Conservation
Informal Interview	An ethnographic interview is an informal interview that takes place in a naturalistic setting and is often the result of participant observation (Munz 2022).
Interlocutors	Participants throughout fieldwork who consent to participate.
Interventive Conservation	Any action, which has a physical effect on the nature of an object (ICON 2021).
Life-history Narrative	Life history interviewing is a qualitative method of data collection where people are asked to document their life over a period of time. It is a personal account of their life, in their own words and using their own personal timelines (Ssali *et al*. 2015).
MA	Master of Arts
Materiality	Materiality is the study of objects and their relationships to and in social life (Resnick 2021).
MDF	Medium-Density Fibreboard
Minimum Intervention	Achieving a desired outcome by the option that involves the least disturbance of original materials (ICON 2021).
Moveable Cultural Heritage	Tangible cultural heritage is divided into immovable heritage and movable heritage. Immovable heritage includes historical buildings, monuments, archaeological sites, etc. Movable heritage includes paintings, sculptures, furniture, wall paintings, etc..
Multi-sited Ethnography	Where an ethnography is conventionally conducted at a single-site location, a multi-sited ethnography is conducted at multiple sites of observation and participation (Marcus 1995).
Museum	A museum is a not-for-profit, permanent institution in the service of society that researches, collects, conserves, interprets and exhibits tangible and intangible heritage. Open to the public, accessible and inclusive, museums foster diversity and sustainability. They operate and communicate ethically, professionally and with the participation of communities, offering varied experiences for education, enjoyment, reflection and knowledge sharing (ICOM 2022).

Object	The term "object" as used for cultural heritage, both immovable and movable. In specific professional contexts, other terms are used: e.g., "artefact", "cultural property", "item", "ensemble", "site", "building", "fabric" (ICON 2021).
Object Conservator	Examine and treat three-dimensional works of art and cultural heritage objects.
Parkas	The gut parka is a garment which was traditionally made by sea-hunting peoples all across the Circumpolar North. It is a lightweight waterproof coat made from strips of dried sea mammal intestine, which was worn over normal clothing (Rowe *et al*. 2018).
Participant Observation	A method within ethnographic approaches to anthropology where the researcher observes interlocutors whilst also participating as much as they are able.
PDP	Paintings Drawings, and Prints at The Fitzwilliam Museum
Pedagogy	Pedagogy is the "art, science, or profession of teaching." This broad definition covers various aspects of teaching, and there are many moving parts to pedagogy that include teaching styles, feedback, and assessment. The term pedagogy is the study of different teaching methods (Merriam-Webster 2022).
Phenomenology	Phenomenology is concerned with the human encounter, experience and understanding of worldly things from the first-person point of view, and with how these happenings come to be possible.
Post-Processualism	Post-processual archaeology refers to an intellectual movement in Anglo-American archaeology that emerged in the 1980s. Significantly, post-processual archaeology expanded the reach of the field by opening up spaces for the investigation of gender, practice, materiality, and identity. It also encouraged archaeologists to acknowledge the relationships of humans and their object worlds and the different possible trajectories they travel. A key insight is that studies of materiality cannot simply focus upon the characteristics of objects; they must engage in the dialectic of people and things (Preucel 2018).
Preservation	Maintaining an object in its existing state and retarding deterioration. Preservation is the art of 'keeping safe', 'maintaining', and 'retaining' (ICON 2021).

Preventive Conservation	All conservation activities designed and applied indirectly to an object to prevent or minimise future damage or deterioration or decay. Examples are environmental control and pest management (ICON 2021).
Questionnaire	A set of printed or written questions with a choice of answers, devised for the purposes of a survey or statistical study (Cambridge Dictionary 2022).
Restoration	Actions to return an object to a former state to facilitate its appreciation, understanding and/or use (ICON 2021).
RH	Relative Humidity
Scientific Analysis	Investigation according to rules laid down in exact science for performing observations and testing the soundness of conclusions (ICON 2021).
Semistructured interview	A semistructured interview is open-ended but based on the use of an interview guide. Semistructured interviewing works very well in projects where field work is within working environments and interlocutors are accustomed to efficient use of their time (Bernard 2017).
Senior Conservator	The highest title a conservator can achieve other than within a management position. It requires a substantial career practicing conservation.
Significance Statement	A written statement that includes the opinions of all those consulted and provides details of the research methodology followed to assess the significance of an object (ICON 2021).
Stakeholder	As in other sectors and contexts, the discourse of "stakeholders" is central to a values-based approach, even if methods and mechanisms for engagement have been relatively underdeveloped (Poulios 2010; Waterton 2010). A stakeholder is anyone who can gain or has gained value from the heritage object.
STS	Science and Technology Studies
Tyvek	Tyvek is water resistant, difficult to tare, and inert material made from high-density polyethylene in the form of sheeting used to work on heritage material and/or as packing/storage material.
UCL	University College London
UCM	University of Cambridge Museums
UK	United Kingdom
UNESCO	United Nations Educational, Scientific and Cultural Organizations
V&A	Victoria & Albert Museum
Western	Relating to countries in the west part of the world, especially North America and countries in the west of Europe (Cambridge Dictionary 2022).

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Dedication

Para los mios, con la razon o sin ella.

For my family in Venezuela. For Venezuela.

For my babies.

Preface

Having now spent the better part of eight years working on this doctorate, I can happily admit that this piece of writing has become a large part of who I am. Perhaps this is because I drew from my experiences in order to design the research project. By summarizing some of my experiences and positionality as both conservator and ethnographer, I hope this preface will situate why my queries lie within the variability and complexity of what it is to be a conservator in the UK. I initially began the research with a curiosity about the intimate conservator-object relationship and what that means in regard to conservation expertise. Although this thesis also asks how the scale and type of museums one works within affects practice and why training can provide some with the appropriate tools, and others not, my concern with conservation practice and the people behind the scalpel began with a deep passion for artefact studies.

I trained as an anthropologist at The School of Human Evolution and Social Change (SHESC) at Arizona State University. As part of my undergraduate experience, I had been accepted into Barrett, The Honors College which meant I had to write an honors thesis in order to graduate. The thesis had to be a research project and I fell upon mine through an inspiring mentor who had been writing about and researching artefacts linking pre-Colombian Mesoamerican groups with those who inhabited the Southwestern region of the present United States (Nelson *et al*. 2017:15). By working on this research for Dr. Nelson, I quickly fell in-love with material cultural heritage research. I was coming close to the conclusion of my undergraduate degree knowing I wanted to continue studying an artefacts-based area within archaeology. I stumbled upon the MA program at Durham University titled: The Conservation of Archaeological and Museum Objects.

My idea of heritage conservation was not vast, but my expectation was that I would be trained to assess the manufacture and use of objects as they relate to the behavior of the people from which they came. I thought I would learn techniques for how to analyze the materials and processes used to create the objects, and how to best care for the objects to elongate their preservation for future study.[1] Throughout my fieldwork, I found many students and interns had this same line of thinking coming up to and throughout their training.

[1] The description provided for the course reads as follows: "This is a two-year course, which trains graduate students to be conservators of archaeological and museum objects. You will learn to research, analyse, preserve,

The conservation program at Durham, like many of the object conservation Masters in the UK, is a theory-into-practice approach (Henderson 2016:98). It required (and still does) two years; the first of which included content from archaeological material to historic objects, with students being given examples of materials and object-types to conserve alongside the theoretical and ethical considerations learned in lectures and seminars (Durham University 2019:1). Many colleagues, interlocutors, and my own memory recalls this initial year of training setting an overly theoretical and maybe even romantic notion of what the present conservation profession entails (Henderson 2016:103-104).[2]

The second year of training was a nine-month placement within a conservation lab. My placement supervisor had thought hard about what she may assign me as projects I could include in my Masters dissertation. At first, I was only given projects or objects which did not require conservation treatment. My supervisor later explained that her intent was to show me what she considered a more contemporary approach to conservation where preventive work was key and where conservation treatment was not a frequented reality.[3] This was the way she worked at the time.

She focused mostly on contemporary artwork where the conservation was centered around maintaining an object's condition by planning adequate documentation, handling, moving, installation, and storage of said object – preventive measures. Indeed, for the year I was placed with this conservator for my internship, I only saw them surface clean a couple objects. They spent most of their time at their desk, in meetings, and supervising gallery installations or condition assessing objects for display or loan. I knew that preventive work was a part of the conservation treatment of an object, but that it was not necessarily a treatment on its own. This is now being referred to as conservation action: "The term 'conservation action' is used rather than 'treatment' to include all the activities that a conservator may carry out in relation to objects/items, from interventive treatment to preventive measures, documentation, training, research, and advice for future care" (ICON

and care for a wide range of artefacts and you will learn how to make decisions to help safeguard this material for the future. The course is intended for those who wish to become practicing artefact conservators, or who want to work in the fields of artefact research or collections care" (Durham University 2019:1).

[2] See also the testimony of conservation professionals in the podcast, The C Word. Specifically, episodes: S0105 Emerging Professionals, S02E04 Emerging Professionals 2, and S06E07 Side Hustle. Available from: https://thecword.show/.

[3] She often alluded to Salvador Muños Viñas' (2005) book *Contemporary Theory of Conservation* which explicates the many other, precedential work of the contemporary art conservator.

Glossary 2021). Yet, my first experiences with a conservator's 'action' predominately consisted of computer work, meetings, and preventive conservation.[4]

Up to this point, my training had led me to the understanding that conservation work in museums is predominately a process of intervention where objects in less than adequate condition were conserved for structural stability and longevity.[5] A majority of my course work from the first year of training was focused on treating objects, theoretical ideas of why and how to go about this treatment and understanding ethical boundaries around such treatment. For many, this now seems to lie in that theoretical, 'romantic' notion of conservation practice (Henderson 2016:103-104). Similarly, I had understood preventive conservation in museums to mean large-scale documentation projects like the condition assessment of a collection that was newly acquired by the institution or the monitoring of environmental conditions within the areas where museums objects were displayed or stored. Preventive conservation could also be small-scale. For example, the rehousing of one object or the creation of a replica for use by teachers in the learning and access departments of museums (Lucchi 2018:180).

Yet maybe my Glasgow Museums supervisor was right. A lot of the conservation work which occurs in heritage institutions is to prevent the condition of objects from decaying or even being put at risk of decay via preventive conservation rather than conservation treatment (Ashley-Smith 2018:6). I now know from experience that my placement supervisor's day to day work could describe many conservators' work programs within a variety of museum contexts.

I spoke to the other students who trained with me bringing forward a variety of concerns:

- Large heritage institutions with many departments and regulations were difficult to train within because the bureaucracy disallowed timely decision-making.

[4] "Preventive conservation is an ongoing process that continues throughout the life of cultural property and does not end with interventive treatment. ... To defer, reduce, or eliminate the need for interventive treatment" (Prof. Dr. Ziad al-Saad UNESCO Course outline: Preventive Conservation, whc.unesco.org).

[5] The ICON glossary defines conservation as: "An approach to objects/items, which aims to preserve and enhance those objects/items for the purposes of public access and understanding. Conservation encompasses many different actions including investigation, documentation, cleaning, stabilisation, and long-term preservation to manage change over time. Conservation is concerned with the layers of significance objects/items have acquired over time rather than with repair to a projected former or 'as new state'" (ICON 2021). Three of the five actions included require intervention.

- Busy conservators expected at multiple meetings a week and reluctantly glued to their desk chairs did not have time to show interns practical skills and techniques relevant to the objects assigned.[6]
- Resource management within institutions did not value conservation as a priority and the established hierarchy within these same institutions would determine a lot of the decision-making regarding the conservation practice the intern would be exposed to and enact.

Some of the testimonies differed from my experience:

- There were set materials which the student would work on and the repetition of doing so would train them well for a career as an archaeological conservator.[7]
- Going overseas for placement meant being treated as a professional not as a 'student'; more specifically, a professional training to become an expert.

With all this variety my curiosity about conservation practice as it relates to the way in which conservators are trained grew enormously. I wanted to know more about how training affected a conservator's approach to their practice. I knew from experience at Glasgow that the context in which one trained, the objects which one was assigned, and one's personal attitudes could all play a role. I knew these more contextual questions were important to ask, but I also wanted to know more about the intimate process of intervention and how that formed a conservator and their expertise. The story that begins in the Introduction below will hopefully place the reader within my frame of mind, account for my positionality, and equally lead to the key questions which came to form the crux of this thesis.

[6] Jonathan Ashley-Smith summarizes this well in his article's concluding statements: "There are indications that post-graduate education is not set up to develop practical skill without the expectation of substantial post-qualification internships. The opportunity for such prolonged and closely supervised internships in limited. There are enough signs to suggest that practical skills are currently underused in large organisations and undersupplied in smaller ones" (Ashley-Smith 2016:131).

[7] There are many similarities between archaeological conservation and object conservation, but generally the main differences can be seen in the condition of the material where objects excavated tend to require intervention to adapt to environs above ground.

Introduction

Figure 1. Drawing of the outer most layer of the Tibetan prayer-wheel: my creation and memory of the object (Conservation Drawing, Suarez Ferreira 2015).

1.1 The case of a Tibetan prayer-wheel

I had moved to the southern part of Glasgow to be closer to the resource center where I would spend much of my internship. After a short walk to the train station, I was comforted by the quiet neighborhood, the local Morrisons, and the regularity of the train schedule. I felt like I had chosen correctly for what I assumed would be a challenging year, needing a quick commute and peaceful resting place. The train arrived and now reminds me much of that which I would later help conserve at Locomotion, The National Railway Museum in Shildon. It was an old, creaky commuter train carpeted with grey and frayed seats, the windows always open to keep out the musk, and the bathroom doors never quite shutting properly. The ride was loud and the scenery visible through the large windows very much approximated that particular city life associated with Glasgow. After a short 20 minutes, I alighted and whilst queuing up the staircase of the pedestrian bridge a glimpse of the rest of my journey was overhead. Through a make-shift landfill, ridden with fly-tipping and the smog of industry next door, my heart now sunk – not entirely the most pleasant commute after all.

I walked through the broken sidewalk crunching the bits of beer-bottles below and scurrying under the creepy tunnels to finally arrive at the resource center. An enormous facility, with grumpy receptionists and far too many doors compartmentalizing the offices, workshops, studios, and storage facilities in an initially over-whelming matrix of vast, wide halls, warehouse lighting, and white plaster. My supervisor, on a previous visit arriving by taxi, had already shown me around the many stores containing thousands of objects organized by established departments: natural history, world cultures, contemporary art, technology, etc. We spoke of my projects and her reasoning behind my assignments at her desk located in a large communal office. She tried to whisper but the tall ceilings and irrelevant cubical dividers did little for privacy. I would have no desk or workspace of my own, would have to be constantly supervised, and would have to spend countless hours, if not much of my internship navigating the intense bureaucracy of Glasgow Museums. I was disappointed by plans for little to no conservation treatment but was at least intrigued by the assigned objects themselves – my inclination towards artefact studies allowed for a silver-lining. Indeed, I would later see the whole experience of my placement as at least one spent with interesting objects, especially the prayer-wheel.

The prayer-wheel was part of the world cultures collection. I was to discuss its conservation with the world cultures curator who was very excited to have someone give it

some 'TLC'.[8] It was months before I ever got to see the prayer-wheel and my supervisor was unaware of the cultural origin, so I could only imagine it more as a traditional spoke wheel. I had assumed it was made of bronze and soon realized these images were clearly an influence from all the Mesoamerican archaeology reports and readings I had engaged with when working for Dr. Nelson. Retrospectively, I now realize that this is where I began my queries around conservation practitioners and their background, experience and how these play a role in practice. Chapter 4 *Experience of Expertise*, will elucidate how my research sheds light on practitioners' background and experience and their effect on practice.

The curator could not see me soon or for very long, the prayer-wheel was housed elsewhere and had to be arranged to be brought to the resource center – an exemplar of the multi-layered bureaucracy I had to navigate to do the work I had been sent to do by my MA program. Chapter 5 *From Ethnography…*, gathers vignettes and interview excerpts to exemplify how conservation professionals are limited by financial restrictions and uncertain ethical codes and standards and continually bounded by how museums are organized in present-day Britain (Malkogeorgou 2010; Ashley-Smith 2016, 2018). The lesson of which I first learned at Glasgow where persistence is a way, perhaps the only way, to see action and outcomes resolved.

I persisted about the prayer-wheel, asking about it often enough to finally convince my supervisor to meet me at the storage facility where it was currently housed. I had to take three buses this time and walk down a rocky, muddy path to reach what seemed to be a dilapidated, abandoned building. The security officer at the only visible door let me in and quickly offered me a warm tea. I was led up to an office where the prayer-wheel had been laid horizontally in a ready-made MDF box (**Figure 2**), waiting transport to the resource center. The conservator stationed here told me she did not know much about the prayer-wheel but knew it was in 'pretty bad shape', as many of the objects she was confronting in that facility. It was a completely inadequate storage facility for heritage objects, flooding every year, with no insulation, overrun with pests, and even containing hazardous materials. I could tell she was doing the best she could in a difficult environment.

[8] Tender Love and Care.

Figure 2. The prayer-wheel during condition assessment (Conservation photograph, Suarez Ferreira 2015).

My supervisor arrived to have a look at the prayer-wheel and on the journey back to the resource center decided she thought it looked like a ‘stage prop’. She had seen a lot of Tibetan artefacts, namely Tibetan Thangkas which are intricately painted and have been heavily studied in conservation (see for example Cotte 2011). Because of this experience, she thought the decoration of the prayer-wheel was too messy and inaccurate to have come from Tibet and was likely a bad replica or at most, a learning tool for a young person rather than anything created by a monk. I was taken aback by her evaluation of the prayer-wheel given we only looked at one side of it for a few minutes and had no other information.

When I finally spoke to the curator, she completely disagreed with my supervisor. Stating that unless otherwise proven, we had to take the prayer-wheel to be ‘authentically Tibetan’ and that I should treat it as any other object in my care. Her intention for the prayer-wheel was for it to be on open display in the world cultures store at the resource center. She had hoped the prayer-wheel could be ‘brought back to life’, given that much needed ‘tender love and care’, be ‘beautiful again’. Because my supervisor felt adamantly that the object was a ‘fake’, it became imperative that I focus much of my work on authenticating the artefact, yet I felt the pressure from the curator to structurally repair it as well. And so began my

journey of meeting the varying expectations of my supervisor, the curator, my degree program, and myself. At this point I quickly learned that different perspectives collide around objects, the prayer-wheel being an example of the bigger tensions that exist in conservation. What one thinks something is (and how and why they value it) affects the kinds of interventions and treatments that are given and helps define a practitioner's approach (Muños Viñas 2005). Pedagogy and discourse in conservation in the UK surrounds approach theories: materials-based, values-based, and peoples-based. The second half of Chapter 5 includes discussions on which approaches I witnessed enacted in practice and why.

Upon reflection, my affinity for the in-depth investigation of object materiality really drove many of my sentiments and decision-making throughout the conservation of the prayer-wheel. I had initially linked it within my mind to work I had done for Dr. Nelson, where my passion for artefact studies had been ignited and supported. I then felt my inner rebellion surfacing when my supervisor made value claims that disagreed with the ethics in a values-based approach to conservation I had spent the last year studying at Durham. While all conservation can be considered an expression of values, a values-based approach is often defined as a paradigm which makes the value-judgements underlying conservation decisions explicit (de la Torre 2002:3). A values-based approach, hence, is based on the assessment of significance to the conservation object. This involves identifying what is valuable about the object, why, by whom and for whom (Avrami *et al*. 2000:7). I was confronted with that supposedly historic bifurcation between a curator focused on aesthetics and a conservator focused on authenticity, an imperfect dichotomy of course but one I had not realized persisted.[9]

Figure 3. The prayer-wheel before (left) and after (right) treatment (Conservation photographs, Suarez Ferreira 2015).

[9] See for example, Constable 1954.

Glasgow Museums' structure in terms of conservation actions gave me a lot of stress; I had to ask permission to do everything and anything, which required sending emails, setting up meetings, filling out forms, etc. It always felt like I was running out of time and that my practical skills were being lost instead of being improved upon. Even my commute, the constant stormy Scottish weather, and my isolation from other interns or young professionals made tangible the guineapig I was as the first Durham conservation student to place with Glasgow Museums. That is, my MA program sent me there without any previous experience of what kind of placement my supervisor and GM could offer; as the first, I was testing this site for the university to see whether it was a good match for the conservation program at Durham. Without any comparison, I began to question whether resource restriction, heavy bureaucracy, conflicting supervisors, and personal, emotional perseverance was so integral to being a conservator? All these elements help explain what occurred when it was time to act onto the prayer-wheel.

Unboxed, propped vertically on a new makeshift MDF box, I firstly condition assessed the object. A large Tibetan Buddhist prayer-wheel decorated with a repeating Ranjana script stating Om Mani Padme hum (**Figure 3**). Auspicious emblems of an eight-spoked wheel and lotus flower are found on the top and base of the wheel respectively. The prayer-wheel is mounted on a custom wooden frame that has an attachment to hang a bell. Prior to conservation, the prayer-wheel had large tears on its side and top, with smaller tears on and around the base. The exterior textile had severe creasing and had shrunk in comparison to its inner layers, a presumed consequence of the various environmental fluctuations it had been exposed to. There were many areas on the exterior where pigment was flaking or had been lost, although the majority of the paint was still intact. The entire object was covered in soot, especially at the top. The soot may have been deposited from a fire at Kelvingrove Art Gallery where this object had been temporarily stored, from when used in India or by its use from the most previous owner as a ring was present on top of the frame that appeared to be from a wax candle. The prayer-wheel had bowed out in the middle from being stored horizontally; the inner rods would have pushed out on this area of the wheel when on its side. Frass, or insect faeces, was found between layers on the top and side tears of the body, yet no major losses of materials from a pest infestation were present. The custom frame was similarly unstable and covered in soot, one pillar displaying distinct fire damage. The frame was in eight pieces with all remaining screws covered in rust; the top of the frame had been broken into three pieces. Only some of the decorative edges

corresponding to the top and bottom of the frame were present; one possible decorative piece, unlike the others, could not be placed.

1.1.1 Reflections

I include this meticulous description of condition to highlight the expected norms (as established by my training) of assessment where each material component of an object is described in terms of its decay and qualifications of the reasoning behind condition are made (British Standard Institution 2012:5-6). A large portion of this knowledge came from x-raying the prayer-wheel, taking samples and analysing them; some were revealed after an initial clean of the prayer-wheel, and a thorough investigation into its acquisition, previous use, and when comparative objects were found. It is important to note that this level of detail and recording is not the norm for everyday conservation practice but is a requirement of the MA dissertation and is covered in the guidelines and policies practitioners are measured by. Every step in this condition assessment revealed to me that despite its appearance or initial affect, the prayer-wheel had a long history before its time with Glasgow Museums. Its most detrimental decay had begun and continued whilst in the hands of the museum, an irony I would later find to be more common within UK heritage institutions than not (Tomás-Hernandez 2021:10). Chapter 6 covers how the process of getting to know an object can lead to an attachment that produces specific knowledge.

In my conservation record I simply stated the facts as was expected of me, but what was never written was how the prayer-wheel was in a shocking state and how that made me feel (Drysdale 1999). The lack of care was made obvious to me and was hugely disappointing. I easily inferred how forgotten this object had been which begs the questions many of my interlocutors would echo with their own work on museums objects:

- Why acquire it in the first place?
- Why have it take space in much needed museum storage?
- Does an object have to be shiny with 21st century qualifications of beauty or intrigue to be treated like our conception of what a museum object is, or means?

This questioning and realization throughout my experience at Glasgow Museums led to a complete reshaping of what being a conservator in the UK really means to me. Whilst treating the prayer-wheel, I began to wonder whether I could be a conservator myself. My theoretical, romantic notion of the conservation profession began to dismantle, making me

very curious as to why I had been trained into this way of thinking and why the reality was so distinctively different than that expectation. The final, 7th chapter of this thesis, *...To Autoethnography of Conservation Practice*, proposes a more open form of practice and documentation to facilitate holistic understandings around work with material cultural heritage.

The initial decision-making around the treatment of the prayer-wheel was more intuitive than the actual intervention, probably because it mimicked an artefact study. I had gone through all the hoops to acquire permission to sample the object and investigate its history. From pigment analysis I was able to date the prayer-wheel, wood analysis of its frame placed its provenance in India, the historical background I uncovered concluded that it could have been Tibetan Buddhist in origin. Exploring comparative examples gave me a deep understanding of how the wheel was created, used, its significance, how to read its decoration, as well as its value, its uniqueness, and its survival. This fulfilled the authenticating needed for my supervisor to allow me to act as the curator hoped I would. Below is an excerpt of my first days treating the prayer-wheel.

1.1.2 Intervening on the Prayer-Wheel

The foggy, crisp morning I decided it was time to clean was one I will never forget. I prepared the tools I would need, asking around the other workshops for a museum vacuum[10], collecting all the soft brushes I could find, ensuring I had enough light and my nitrile gloves. The workshop only had hanging wall sockets which seemed useful but dangerous. I plugged my vacuum in, put my gloves on, picked up a soft brush with one hand and the vacuum nozzle with the other. The loud hum of the vacuum is still one of my present dreads, working all day with that in the background ensures me a steady headache until the next day. I walk over to the prayer-wheel who's top I have removed to clean off the frass accumulated there. The layers are exposed as well as the top edges of the prayers themselves. As soon as the nozzle is inches away, the vacuum turns off. I check the plug; I try again but the vacuum does not restart. I borrow another vacuum from next door, promising to return it by the end of the workday. I make very similar moves as before and once again, the vacuum turns off and will not come back on. My anxiety is now heightened and my practical mind questions: am I

[10] A museum vacuum is especially designed for use in conservation. For example, it disallows pests to crawl back through the hose after the vacuum is shut off and re-infest the area within the museum where the vacuum is stored.

setting off a fuse? I put everything down and grab my key card to go ask my supervisor if there is a switch I did not know needed switching.

I find her at her desk and not exactly happy to hear my morning story. 'There is no switch, the vacuums should work, have I tried another vacuum?' We speed walk through all the doors, down the stairs, into the workshop. The vacuums do not work for her either. She walks me to a store cupboard down the hall which has the vac-packs used by the technicians when cleaning display cases and the like. We take both in case one is broken, saving another potential speed walk. When we arrive, my supervisor straps up and walks towards the prayer-wheel, momentary success until the vacuum shuts off. It must be broken and so I strap up the spare and have one more go. No surprise, we are stumped. My eyes are wide, my hands sweaty, I feel very strange. Thankfully my supervisor speaks first:

> "Something like this happened to me once. I was working on an object that I had suspected shouldn't be conserved, not even cleaned. After I did it, I then had all this weird stuff happen to me. Like my car broke down and the giant stone table in my flat broke, other things I can't remember. It was really spooky. Maybe it's all coincidence but I definitely felt like it was related. Maybe this doesn't want to be cleaned. It has the prayers in, maybe that's why. You should think about that, and we'll sort another vacuum if you want to continue tomorrow".

Over the summer before moving to Glasgow, my course cohort had been assigned a human skeleton as our group project for the term. We knew next to nothing about him, other than the fact he had been found by the department photographer in a dumpster outside a closed doctor's office and that a staff member wanted to use him as a teaching tool in her bioarchaeology labs. I had early-on drawn a line about working on the skeleton because I felt we did not have enough information and my personal feelings about conserving human remains was deeply rooted in my cultural background and upbringing. I helped by conducting research and 3D scanning the bones of the skeleton, but I was very uncomfortable that the cohort had decided to clean the bones, print his missing ones, and 'display' him with these newly 3D-printed parts for use by students. Most of the cohort disagreed with me and had their own ethical reasons for the treatment. I had found a way to contribute without crossing my own ethical boundaries. Again, not an uncommon occurrence in UK museums which, for example, house thousands of objects which were acquired within the legacy of colonialism (some of which contain human remains) and therefore push controversial ethical considerations into conservation spaces. Chapter 6 *The Material Object Negotiates*, discusses and gives example of how conservation approaches differ or are complicated by how objects

were acquired and by practitioners' own sentiments and ideas around intervening on such material.

The prayer-wheel fell into this ethical-quandary for me. I was aware that the significance of inscribing a prayer to be placed inside a wheel is something I could only understand by reading about it, but not something I could understand as those who wrote the prayers had. The object felt like it was challenging me, decreeing its own agency. Which felt like a familiar but unjustifiable report I could make in my dissertation. I did have a conversation with the director of my course about it, and he dismissed what had happened and my feelings about it. From his perspective, museum objects lose their originally assigned agency, mysticism, religious intent, etc., as soon as they enter the museum (see Hall 2002 for a similar situation and conclusion). Their identity becomes predominantly one of its current uses, not that which had qualified the object as heritage to be acquired in the first place. As a student novice, I heeded my program director's perspective and cleaned the prayer-wheel, repaired it back to one whole object, and wrote the report without a hint of the emotional turmoil I had faced and still feel from having intervened.

1.1.3 Reflections

There are many authors who will be quoted, referenced, and revered for their assessment and thoughts surrounding inanimate objects and agency in the chapters to come. It is important to note that this thesis is not focused on such matters but rather was influenced by them. I had made deep connections with many of the objects I conserved whilst on placement. Many of my memories about living in Glasgow, the age I was, what I was like as a person, are dotted and dated by which objects I was working on in those moments; you will read similar testimony from my interlocutors in Chapter 7. Every evening whilst I contemplated what to do next with the prayer-wheel, I would sit hunched over on my stool across from it, hand on chin much like the beloved Thinker seemingly dotted everywhere around Glasgow, and stare at the prayer-wheel, thinking:

- This emotional, weird experience had been validated by my supervisor but have other conservators faced similar situations?

- Why do personal boundaries feel unprofessional in conservation practice when we give a lot of ourselves to the objects in our care? It feels like we are expected to have a large sense of care for inanimate objects but at the same time cannot show it.

- This emotionality and extreme complexity I face every day with my work, why have I not read about this? Why is there such little hint to it within the literature or within conservation records?

- I know there are many scholars who think about and write about the life-histories of objects, and the moments where they were alive or possessed or held agency for the groups which made and used them. In those contexts, many ethnographic, there is no sense of impossibility for object agency. When these objects enter the museum, the potential for similar validation and affect is stripped from the objects by the next humans to spend quality time with them. Why?

And so, my questioning continued into my doctoral research.

The narrative I have given has walked through how my passion for artefacts began and grew into a passion for those who preserve them. I was inquisitive about the impact of my conservation training, which led to wanting to know more about variability and contextual impositions on practice. The histories, approaches, and observations of conservation practice which can help explain the contemporary conservation profession is covered in Chapter 3 *Intervening on Objects*. I fell deeply into a complicated conservation treatment and knew at its end that what occurred needed questioning beyond just me and my mind. The study and treatment of the prayer-wheel involved various stakeholders' backgrounds and conflicting experiences; Chapter 4 *Experience of Expertise* will cover the wide breath of stakeholders who are also practitioners and how experience plays a vital role in their work lives. Similarly, due to engrained hierarchical/power structures within the museum complex, my conservation decisions for the prayer-wheel were limited/pre-determined yet overloaded with paperwork. Chapter 5 *From Ethnography…* covers how this built-in structure, financial restrictions and uncertain ethical codes and standards affect the work of conservation professionals (Malkogeorgou 2010; Ashley-Smith 2016, 2018). At the end of my time with Glasgow Museums, my own life-history narrative had been imprinted by my conservation of the prayer-wheel. Chapter 6 *The Material Object Negotiates* and the Chapter 7*…To Autoethnography of Conservation Practice* will discuss imprinting within conservation practice and how such memories of practice are also valuable conservation records. The thesis foregrounds the everyday reality, issues and dilemmas that arise in practice; how conservators frame and understand these issues in their quotidian working life. The thesis pulled on some threads of inquiry beyond the expected and therefore found some

new understandings of the knowledge and forms of knowing being used, created, and stored by conservation practitioners in the UK. The following section covers the conceptual approach to the research and how it is in balance with anthropological understandings of expert, practical work which incorporate all actors. A history of conservation theory and practice, alongside how the thesis is in conversation with other contemporary ethnographies of conservation will be found in Chapter 3. This chapter focuses on describing the research design, how it draws from a conceptual approach in line with ANT and concludes with a more traditional overview of the thesis structure and the key questions asked by the research. Materials and methods will be covered in detail within Chapter 2 before a more traditional literature review contextualises the remainder of the thesis.

1.2 Conceptual Approaches to the Methodology

The methodological approach to this study lies within an 'anthropology of experts', a conceptual approach, where I am attempting to understand what sources of knowledge and which forms of knowing are enlisted during the conservation of heritage objects. The anthropology of experts can be defined as the anthropological engagement of professional intellectuals that are socially 'like us academics' in most respects other than in their specific expert practices and knowledges (Boyer 2008:42). This conceptual approach entails understanding the process of becoming an object conservator and taking into consideration any other factors which may affect practice. Taking inspiration from Boyer's (2008) *Thinking through an Anthropology of Experts*, I attempt to address his manifesto calling for an advancement to the study of experts and cultures of expertise:

1. Engage the non-professional!
2. Pay attention to process [of professionalization]!
3. Operate reflexively!
4. Challenge the rational (ist) core!
5. Humanize the expert! (Boyer 2008:44-45)

1.2.1 Boyer's Manifesto: 1, 2 & 5

I conducted an ethnography of multiple groups practicing object conservation (volunteers, students/interns, professionals), at different levels and within multiple field sites.

The three groups of practitioners each represented a different phase of object conservation which can collectively be seen as a common trajectory (although not necessarily a linear one) within the professionalization of conservation (**Figure 4**).

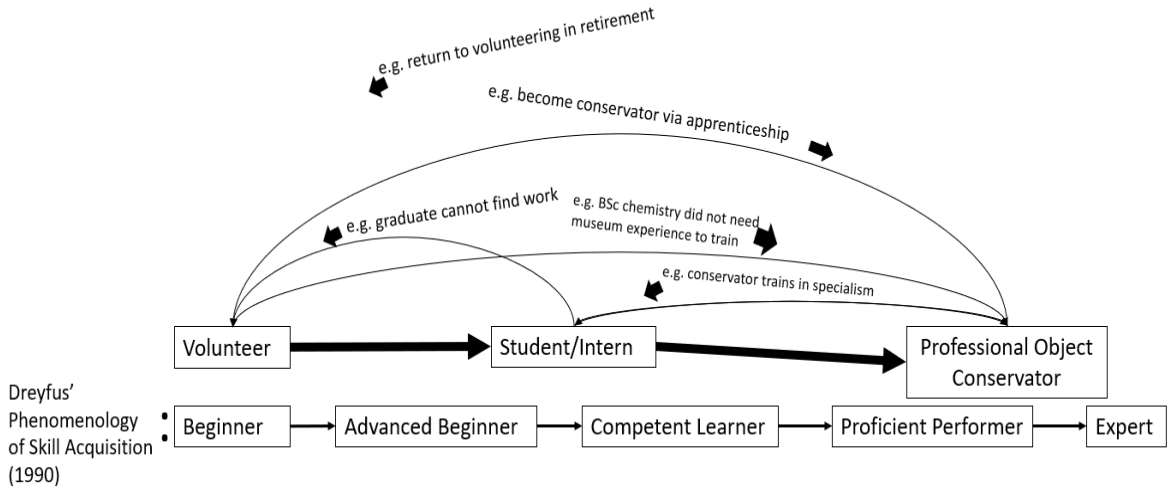


Figure 4. Diagram of the non-linear trajectory towards professionalization and expertise within object conservation in the UK.

Following Dreyfus' (1990) model of expert skill acquisition, including volunteers, students, and professionals within this study, I paid attention to the process of becoming an object conservator (i.e., Boyer's 2. Pay attention to process [of professionalization]!). Through this process, the individual experiences, learns, redefines their ideas and themselves and indeed, the way in which they practice conservation (Dreyfus and Dreyfus 1990:240-244). By witnessing this process, my hope was to humanize it, as volunteers and students are not yet professionals and professionals were either one or both of these before becoming object conservators. I approached conservators not just as extensions of their knowledge but also as subjects with personal lives that have all the complexities of more conventional ethnographic subjects of enquiry (i.e., Boyer's 5. Humanize the expert!). Within the humanization of these experts, I needed to understand non-professional knowledge alongside the expert knowledge that makes the conservation of heritage objects possible. I followed Law's (2004) *After Method* where within the process of professionalization I attempt to understand forms of knowing as 'emotionality or apprehension, as indistinct and slippery, as deliberate imprecision, as situated inquiry....' (Law 2004:3). Actor Network Theory (ANT) also aided my approach as ANT scholars see macro sociological categories such as class,

gender, institutions, etc., as abstractions constructed and deployed – performed. Performativity relates to how ideas materialize through practice. Actors bring these categories to bear in their everyday interactions both within their professional and nonprofessional lives (i.e., Boyer's 1. Engage the non-professional!) (Michael 2017:24). These realities (professional, non-professional, and everything in between) can conflict, sometimes sit in parallel, sometimes merge, sometimes depend on one another's absence and so ANT guided me to develop a keen sense to avoid 'othering' realities and abstracting them as effects of higher or deeper processes or phenomena (e.g., neoliberalism). Instead, the aim was to empirically extract patterns of associations, of relations, of coordination and conflict in their specificity, engaging human and non-human actors by following any heterogeneity, multiplicity and complexity (Michael 2017: 151-152).

Selinger and Crease's (2006) appraisal of Dreyfus's phenomenology of skill acquisition pointed out the necessary inclusion of hermeneutical sensitivity (i.e., to be open and perceptive) to a normative account of expertise and practical knowledge (Selinger and Crease 2006:229-234). The methodological approach to this study therefore requires a consideration of the variability of object conservation within the UK. By working with different groups, at different field sites (Error! Reference source not found.), I ascertained how different heritage institutions, different types of objects, as well as different types of people produce different approaches to object conservation. This enlisted contributions by the objects worked on, the space worked within, as well as the limitations that bureaucracy produces within heritage institutions (Muñoz Viñas 2005:150-158; 202). This was evidenced by what I observed of peoples' behavior in their conservation spaces and heritage institutions (participant observation), what they said about themselves and their work with objects (interviews and focus groups), as well as what they wrote down about their decisions and ideas within conservation records and other forms of knowledge/media accessible to the public (questionnaire on conservation documentation, conservation blogs, podcasts, and social media posts). With a holistic view, this multi-sited ethnographic approach engaged with how various phases of expertise play out in relation to place and interrogated how different forms of documenting conservation work produces knowledge about objects as well as conservation practice (Moore 2001). The places and social nature of practice and its documentation is where I unpack the complexity of forms of knowing, and the process of professionalization, within object conservation in the UK.

Table 1. Brief Overview: Variability within Field Sites and Interlocutors and Years I Visited			
Field Site	**Year(s)**	**Interlocutors**	**Context**
Locomotion The National Railway Museum at Shildon; The Shuttleworth Collection; Fakenham Museum of Gas and Local History	2016-2017 2018-2019 2018	Conservation Volunteers; Conservation Volunteer Managers; Regional Conservators;	• Volunteering is a common introductory phase to object conservation and a post-retirement activity. • In many cases, volunteers are the only people practicing conservation in UK museums and they play vital roles (Keene 2005). • There are restrictions in the type of conservation they can practice, depending on the structure of the heritage institution. • Volunteers generally work with objects which are in fairly good condition.
Object Conservation Training Course, Institute of Archaeology, UCL & University of Durham Department of Archaeology	2015-2019 2015-2017	Students; Conservation Interns; Conservation Teachers	• MA programs tend to be attended by students of different ages and with varying previous training. • Students are exposed to theoretical approaches to object conservation. • Students are often assigned with the creation of materiality and have the time, as well as expectation to document thoroughly (Henderson 2016; Cutajar *et al*. 2016). • Students work within heavily populated laboratories. • Students work with a range of objects, both in type and condition.
University of Cambridge Museums (all individual participating museums within this	2017-2019	Object Conservators; Conservation Interns; Conservation Managers;	• Practicing conservators have varying backgrounds (e.g., training, specialisms, museum experience). • Practicing conservators must work with materiality proposed by various stakeholders (e.g., managers, curators, technicians, public, etc.) (Muños Viñas 2005).

complex in Appendix III).		Conservation Technicians	• Practicing conservation work within strict timescales and within varying spaces. • Practicing conservators work with a range of objects, both in type and condition *yet* conservation treatment is normally enacted on nearly displayable objects.
Beamish, the Living Museum of the North	2015-2016	Conservation volunteers, interns, students, practitioners, technicians, managers, directors.	• These sites were visited for the purpose of understanding object conservation documentation, particularly conservation records. • Conservation records are variable and dependent on the author, object type, and institution within which they are based. • There is no agreement as to how records should be created or what should be within. • Practitioners are often using analogue templates of databases to create records; examples of which can be found in Appendix V.
Documentation Network, UK Institute of Conservation	2015-2019		
Glasgow Museums (all individual participating museums within this complex in Appendix III)	2014-2016		
Manchester Museum	2015		
Museum of London	2015-2018		
National Railway Museum York	2015-2016		

Oriental Museum, Durham University	2014-2016		
Royal Albert Memorial Museum and Art Gallery	2015-2016		
Royal Armouries Museum	2015-2016		
The Bowes Museum	2015-2016		
York Archaeological Trust	2015-2016		
York Castle Museum	2015-2016		

Visiting museums which rely on volunteers to care for their collections gave me insight into how conservation practice is conceptualized and utilized by those who have no formal or academic training in object conservation but instead use expertise from their working lives to intervene on objects (see Table 1, row 1). By spending time with conservation volunteers, I was able to better address Boyer's call to engage the non-professional. Some of these field sites allowed full scale restoration on their collections by volunteers (e.g., Locomotion) whilst others sometimes sought the oversight of a regional conservator to provide advice and related workshops (e.g., Shuttleworth, Fakenham). In many cases, including at the three sites listed, volunteers are the only people practicing conservation in UK museums and they play a vital role (Keene 2005). It was therefore important to understand their approach to conservation as a type of practitioner caring for heritage within the UK sector at present. At these sites, practitioners mainly worked on large-scale, industrial heritage like trains and airplanes but also objects seen at the other field sites such as costumes and artworks.

Students and conservation interns (Table 1, row 2) are also often the practitioners who are intervening on objects within heritage institutions whilst professional conservators are relied on to manage or oversee public programs rather than intervene, as showcased above within the Preface and my own experience at Glasgow Museums (more on this in Chapter 5). Similarly, Ashley-Smith (2016) summarized that "there are indications that post-graduate education is not set up to develop practical skills without the expectation of substantial post-qualification internships. The opportunity for such prolonged and closely supervised internships is limited. There are enough signs to suggest that practical skills are currently underused in large organization and undersupplied in smaller ones" (Ashley-Smith 2016: 131). To understand practice, I intended on witnessing it and student and intern conservators were actively intervening on objects both within their university laboratories and whilst out on placement at a variety of institutions throughout the UK, although not necessarily under close supervision. The students I spent time with conserved a large variety of objects from archaeological finds to historic ceramics, to contemporary art. Spending time with them throughout their training gave me the opportunity to see the process of becoming an object conservator (i.e., Boyer's 2. Pay attention to process [of professionalization]!), interrogating the realities of doing so under the circumstances Ashley-Smith (2016) had uncovered. Students were able to share with me the important elements of becoming a successful conservator within the present-day UK heritage sector. Both my time with volunteers and students are drawn on heavily in Chapter 4 Experience of Expertise.

In Table 1, row 3 it is highlighted how I spent a substantial amount of time at the various museums within the University of Cambridge Museums (UCM) complex (2.5 years). Here I was exposed to a variety of practitioners each playing distinct roles toward the conservation programs assigned by the stakeholders which determined their public program. At the field sites noted above, I witnessed students and volunteers more so in isolation to other practitioners or stakeholders. At UCM I was able to witness how the variety of practitioners work together and what delineates the type of conservation work they enact. Again, the variability of objects worked on was vast, covering many different time periods and types of objects separated by established departments or types of museums (e.g., at the Museum of Anthropology and Archaeology practitioners worked on archaeological and ethnographic objects in tandem whilst at The Fitzwilliam practitioners were separated into departments such as Antiquities, Applied Arts, Works of Art on Paper, etc.). Here I was able to uncover what conservation practice looks like for conservation technicians as well as

professional conservators (alongside student interns and some volunteers). These two types of practitioners I had not been exposed to until reaching UCM except when I visited museums to enquire on their conservation documentation practices. Chapters 5 and 6 focus on my time spent with professional object conservators and the conclusions about practice I was able to draw on based on this time.

The final row of Table 1 outlines all the field sites I visited to speak with practitioners about their documentation. The purpose of these visits, early on in my research, was focused on witnessing this element of practice. In the multi-sited ethnographic tradition, I was following conservation practice through time and space and this initial time visiting practitioners in order to understand how they document their practice led the study to open up to further questions and modes of investigations. Indeed, anthropological enquiry allows the researcher to advance their research focus as interlocutors present their everyday realities to the ethnographer. I did not discontinue investigating conservation documentation throughout my field work, but it is visible within Table 1 that the research began with this enquiry in 2014 and slowly adapted over time and space as I followed conservation practice from 2014 until 2019 across the UK. Again, the types of objects worked on by those who shared with me their documentation practices spanned the types of objects I would later be exposed to at the other field sites explicated above: from industrial heritage, to textiles, to archaeological remains, to historic objects, to ethnographic objects, to artworks including contemporary art, and so much more. This variety of object types characterizes object conservation which includes all moveable heritage (as opposed to immoveable heritage such as buildings).

To summarize, I addressed Boyer's manifesto calling for an engagement with the non-professional by including volunteers, students, and technicians within the study. They all enact conservation practice in varying ways dependent on their role and the type of institution and objects they work on. Similarly, as volunteering and student interning are part of the process to professionalization within object conservation, including these practitioners gave insight into how one becomes a conservator within the present-day UK heritage sector. By witnessing this process, my hope was to humanize it, as volunteers and students are not yet professionals and professionals were either one or both before becoming object conservators. I approached conservators not just as extensions of their knowledge but also as subjects with personal lives that have all the complexities of more conventional ethnographic subjects of enquiry. I followed Law's (2004) After Method and Actor Network Theory (ANT) to understand forms of knowing as emotionality, indistinct, slippery, deliberate imprecision, and

situated inquiry. The aim of the research was to empirically extract patterns of associations, relations, coordination, and conflict in their specificity, engaging human and non-human actors by following any heterogeneity, multiplicity, and complexity within conservation practice.

The methodological approach to this study requires considering the variability of object conservation within the UK. By working with different groups and field sites, I ascertained how different heritage institutions, types of objects, and people produce different approaches to object conservation. Observations of people's behaviour in conservation spaces and institutions, their self-concept and work with objects, and their writings about their decisions and ideas within conservation records and other forms of knowledge accessible to the public were evidenced. The multi-sited ethnographic approach engages with how various phases of expertise play out in relation to place and how different forms of documenting conservation work produce knowledge about objects and conservation practice. The places and social nature of practice and its documentation are where the complexity of ways and forms of knowing within object conservation in the UK is unpacked.

1.2.2 Boyer's Manifesto Points 3 & 4

Boyer asks: "How can I document another expert culture without precisely re-framing their expert knowledge in the analytical categories of my own, thus absorbing them into my jurisdiction?" (Boyer 2008:41). Having pursued the 'common trajectory' to become an object conservator myself, I am able to relate the experiences I witnessed to ones I had when becoming a conservator and when conserving heritage objects. Throughout fieldwork, I was simultaneously ethnographer and conservator which allowed reflexivity to emerge from internal experience as well as external observations of participants' behavior (i.e., Boyer's 3. Operate reflexively!). Similarly, ANT guided me to be acutely aware that not everything relevant was directly in front of me. Indeed, I, with my own specificity and complexity, had to be careful to understand that perhaps the interactions I had with interlocutors, heritage institutions and objects, as I encountered them throughout my research, could inhabit different realities or ontologies to my own (Michael 2017: 151). Therefore, I took a para-ethnographic approach where I collaborated with interlocutors to adapt and analyse the findings, focusing on internal theorizing in the modern, professionalized, and conceptually designed heritage institutions that became my key questions and field sites as practitioners introduced me to relevant ideas and gatekeepers along the way. Para-ethnography involves

collaboration within members of the organisations one studies: “It begins from the premise that contemporary workplaces involve theorizing that, although distinct from academic theorizing, can inform and ground organizational theory” (Islam 2015:231).

In addition, I was ideally situated to avoid the desire to enlist a ‘crypto-rationalist’ orientation because I understood the basis of many processes within the practice of conservation and the organizational theories which impact the work, having myself undertaken them on a variety of objects, within a variety of different institutions (i.e., Boyer’s 4. Challenge the rational (ist) core!). This sympathy and experiential understanding pushed me to have a sensitivity for the different realities I came across, aiming to monitor the possibilities that emerged by involving human and non-human actors without unnecessarily abstracting from patterns or happenings observed (Michael 2017:151-152). I was both critical and excepting of my former expert knowledge whilst still attempting to understand conservation practice anthropologically. I used ethnography to understand conservation practices on their own terms; and this understanding then allowed a position to critically think about the limitations of these practices and the assumptions that inform then. Critical possibilities arose from the ethnography as part of the role of ethnography is to highlight the structuring assumptions that may be paradoxically invisible to practitioners because they are too familiar and therefore taken for granted.

To summarize, this research explored the process of professionalization by including different types of groups which contribute to the trajectory of object conservation within the UK. Addressing this process, the research allowed the opportunity to engage the non-professional and humanize the expert. I pursued these specific points by ethnographically addressing sources of knowledge as they manifested in practice with participant observation and informal interviewing. Semistructured interviewing outside of conservation spaces and work environments allowed the practitioners to speak freely whilst focus groups engaged them with concerns and ideas colleagues presented. I also recognized other factors that affected the conservation of objects. Following ANT, this research included the importance of the material objects and conservation records, reflecting how the social is seen not as a means for explanation, but rather as the outcome of heterogenous practices (Michael 2017:12). The variation within object conservation practice heavily influenced my interpretation and use of methods and analysis, developing the approach to the research throughout the fieldwork (Law 2004). Finally, my unique position of conservator-ethnographer allowed for accessibility to the field sites, experiential reflexivity and easy

assimilation into the work where I conducted my research. The ethnography opened up critical possibilities as I came to understand conservation practices on their own terms. In this way, my positionality of conservator and ethnographer provided a way to understand the other. This holistic methodological approach yielded ethnographic depth for the interrogation into the related practices of being an object conservator within in the UK. The following thesis structure will summarize the empirical and comparative focus of the research by describing the related autoethnographic excerpts, interviews and participant observation selected to explore and exemplify the above. The chapter will conclude with the key questions which framed the research.

1.3 Thesis structure

The Preface situated the thesis by explaining where the research questions came from and began to explain the reasoning behind the research design. It begins with an autoethnographical account of my life-history narrative starting from the introduction of artefact studies to the conceptualisation of my doctoral research, introducing my positionality within the research. Autoethnography is a self-reflexive qualitative research method from the social sciences which foregrounds the ethnographer's subjectivity. Reflexivity refers to the assumptions framing the analysis alongside one's own positionality and as an effort to use fieldwork to critically reflect on and interrogate the ideas one begins research with (Stigter 2016; Adams *et al*. 2015; Chang 2008; Ellis 2004). This was highlighted in the Preface by my experiences of theory-into-practice conservation pedagogy in comparison to my peers and our varying experiences of professional practice (Henderson 2016). It did so phenomenologically or with deep descriptions of my experiences rather than purely relying only on explanations and causes. Bernard (2017) argues that "good ethnography – a narrative that describes a culture or a part of a culture – is usually good phenomenology, and there is still no substitute for a good story, well told, especially if you're trying to make people understand how the people you've studied think and feel about their lives" (Bernard 2017:20). Therefore, fieldwork vignettes are written descriptively throughout the thesis and sometimes focus more on narrative than the theorical frameworks by which to understand the stories to come.

The Preface also introduced the discourse within conservation practice on the roles of interventive and preventive conservation (Muños Viñas 2005; Ashley-Smith 2018). Seeing the complexity of conservation practice unfold, I began to question the intimate process of intervention and how it forms the conservator and their expertise. In this way, reflexivity is

also about how theories are challenged through practice and how experience of fieldwork can result in new ideas. In the Introduction, this thematic importance to my research was highlighted through a case study which explores the impact of the object and its conservation on the conservator (i.e., the prayer-wheel). Continuing with an autoethnographical narrative, the Introduction unpacked how pedagogy, discourse, professional context and scientism[11] disallow for emotive and/or sensual understandings of heritage objects and their conservation. In this way, the autoethnographic elements of the thesis showcase the inherently collaborative, para-ethnographic nature of the work as I was able to use my own conservator lens to access and relate better to interlocutors and their practice. The ethnography opened up critical possibilities as the structing assumption of conservation practice were highlighted and opened the thesis to advocating for change via this critical enquiry.

The experience of conserving the Tibetan Prayer Wheel in Chapter 1, and the ones covered in the remainder of the thesis, rely on theory to ask and explain the nuances of an experience and the happenings of this professional culture – a qualitative research approach that uses narrative techniques like autoethnography and reflexivity to place theory and story in a reciprocal, inter-animating relationship. Theorizing cannot be an add-on story within this mutually influential, ongoing, movement-driven process linking the concrete and abstract, thinking and acting, aesthetics and criticism. In the para-ethnographic tradition, I have not written my story alongside my interlocutors in order to 'fit' a theory to them outside of the relevant cultures and politics and contexts (Jones 2017). Instead, I have used theories as a language for thinking with and through, asking questions about, and acting on the experiences and happenings in our stories, often shared with one another in conservation circles, but remaining unknown in the social sciences and beyond. This research then brings these stories through the theoretical lens to the wider audiences within anthropology and heritage studies in a collaborative, para-ethnographically justified sense. As many would argue, anthropology as advocacy allows crucial impacts of research to benefit participants, opening further access to these places, people, and practices for future study (Wade 1996).

The Introduction ends with a clear explanation of the research design and its key questions. Covering Boyer's (2008) manifesto towards the study of professionals and expertise, my multi-sited ethnography (Gupta and Ferguson 1997; Marcus 1995) is explained as making use of participant observation, interviews and forums, as well as autoethnography to better understand contemporary conservation practice. I conducted the ethnography with

[11] excessive belief in the power of scientific knowledge and techniques

multiple groups practicing object conservation (volunteers, students/interns, professionals), at different levels and within multiple field sites (volunteer-run museums, universities training conservators, and different museums housing the spectrum of small to large heritage collections). My positionality as ethnographer and conservator granted me access to sites and interlocutors because I could exchange conservation work and aid in conservation programmes. The difficulties with enacting the methods and their evident failings are also covered in Chapter 2 *Materials and Methods*.

A multi-sited ethnography adapts the long-standing modes of ethnographic practices to more complex objects of study. Where an ethnography is conventionally conducted at a single-site location, a multi-sited ethnography is conducted at multiple sites of observation and participation (Marcus 1995:95). Participant observation is a method used within ethnographic fieldwork that involves 'getting close to people and making them feel comfortable enough with your presence so that you can observe and record information about their lives' (Bernard 2017:256). This slightly crass definition is purposeful as it confronts the truth about the deceptive and impression management elements of participant observation.

Interviewing can have many forms and throughout my fieldwork I relied on many depending on the place I was in and people I was with. Informal interviewing went on throughout my research where I took continuous field notes from conversations and observations I felt were relevant or which I wanted to query at a later point. I conducted semistructured or scheduled interviews that always began with an autobiographical explanation from the interlocutor as to how and why they were presently working in conservation. Unlike other structured interviewing, I let the semistructured interviews take form in the ways that were relevant to the interlocutors and their conservation spaces. Following Actor Network Theory (ANT: how what people know relates to where, when, how and with whom they know), this research saw knowledge not as an abstract or propositional claim but as a set of practices. Therefore, the only formal interviews I conducted were regarding conservation records via a questionnaire but this took place during or after I visited museums, allowing me to engage with practitioners in their conservation spaces whilst practicing and recording. This opened up a hermeneutic analysis of the questionnaire responses alongside the ANT and phenomenological interpretations threaded throughout the thesis.

Similarly, the final method I employed were forums or group interviews. These also took a semistructured form as I scheduled the four forums and pre-planned questions for the groups. As the forums were on-site and often included management members from the heritage institutions, discussion was often limited. Although, interlocutors got some glimpse of what concerns and ideas were important to colleagues. Vignettes from participant observations, alongside excerpts from interviews and forums from within the ecological spaces of practice, help to individuate and contextualize the expertise (Sutton and Bicknell 2021; Bernard 2017:156-185). A more in-depth look at these various methods and a discussion on how the information gleaned from interlocutors and self-reflection was analysed concludes the second chapter of the thesis (Rabelo and Souza's 2003, Monk 2007, Law 2004).

Chapter 3, *Intervening on Objects*, will first give a brief outline of the history of interventive conservation theory where conservation intervention can be defined as any action by the practitioner which has a physical effect on the nature of a heritage object. The chronology of intervention is critiqued from the perspective that the core ideas currently shaping conservation theory are largely Eurocentric/Western (Winter 2014; Mehr 2019; Harrison 2013), influencing the various approaches to the practice we can find example of today (Cutajar *et al*. 2016; Poulios 2010; Poulios 2014; de la Torre 2002; Avrami *et al*. 2000; Fredheim and Khalf 2016; Walter 2017; Wijesuriya *et al*. 2018; Emerick 2018; Henderson and Nakatomo 2016). As the recent ethnographic work summarised strives to highlight, a decentring of the expert conservator role can alleviate conservation's authorised, undiversified heritage discourse (Jones and Yarrow 2013; Stigter 2016; Yarrow 2019; Høllelend and Skrede 2019; Spaarschuh and Kempton 2020; Ashley-Smith 2018). In general, Chapter 3 serves as the background information needed to better understand the chapters to follow (Chapters 4-Chater 7) which evaluate these ideas about conservation practice with my own experiences in the field (the multiple sites of the ethnography).

Chapter 4, *Experience of Expertise*, begins by introducing the various types of practitioners I worked alongside throughout my fieldwork. Beginning with students, pedagogical approaches are evaluated for their theoretical frameworks and glean a demographic sample of present and future practitioners via interviews and conversations with students about their opinions of their training courses, placements and career plans (Henderson 2016). A focus group on conservation practice reveals a crucial element of early career conservators' ideas around the roles that experience, and confidence play in practice.

Rather than seeing expertise as intuitive and tacit, recognizing its conscious, controlled nature allows the imperative need for practical experience to be highlighted (Montero 2021). Experience as a theme is further untangled with selected excerpts of participant observation with conservation technicians where practitioners are confident and experienced in their work but undervalued by institutions and colleagues due to their skills not being acquired through formalized, academic routes. This leads to a related interview with a conservation volunteer within an industrial heritage context. This segregation of knowledge furthers the lack of socio-economic diversity within the profession, pointing to a future where the heritage sector cannot address decolonizing and diversifying the museum (Hick 2020, Winter 2015, Harrison 2015, Franquesa 2013).

Chapter 5, *From Ethnography…*, delves further into the ethnographic perspective of object conservation by describing the 'mess' of its spaces and practices (Law 2004; Yarrow 2019). It introduces my interlocutors holding professional positions within heritage institutions as conservators. A case study concerning historic fans sheds light on how expertise is restricted by finance and uncertain ethical codes and standards (Denis and Pontille 2015; Malkogeorgou 2010; Ashley-Smith 2016, 2018). In doing so it is revealed that the only 'peoples-based' approach being enacted is that which is led by the actors most relevant to the public program (e.g., funders; curators; directors;) and not by or for relevant communities tied to the object – as the ideals behind a peoples-based approach would have it (Henderson and Nakamoto 2016). Similarly, the financial issue affecting conservation seems to be more of a hoarding issue, where collections are neither repatriated nor catalogued due to sheer size and lack of maintenance (Tomás-Hernandez 2021). The excerpt from the field in Chapter 5 regarding parkas helps illuminate the problem: Objects indefinitely boxed and never conserved places a greater magnifying glass as to whether museums and conservators are what they propose to be.

Chapter 6, *The Material Object Negotiates*, focuses more on the role that the material heritage plays onto the practitioner. It considers matter as an active participant in the iterative process of the world's becoming: matter as neither a given resource nor a mere effect of human action, but rather moving, transforming, damaging, mutating, forming alliances in a more or less durable way and as constitutive parts of humans or animated things (Mol 2002, Ingold 2007, Barad 2003). Conservation intervention is enacted with tools and specific techniques but also via the very gaze of the conservation practitioner. In dealing with the ability of things to be taken care of, the question of preservation highlights the physical

difficulties conservators may encounter treating or even intervening on objects. This leads to a reminder by Colloredo-Mansfeld (2003) and others (Hansen 2003; Hetherington 2004; Lucas 2002: Van Hoorn 2003) that routines of daily life depend, often, on the material transformation of physical objects: "people use things up, expose them to the elements, consume and combine" (Colloredo-Mansfeld 2003:250). The last section of Chapter 6 uses the concept of language materiality to explore how practitioners enable or secede material transformation – allowing for the possibility that at least some objects can have social lives and places as well as biological and chemical lives – evidently only perceptible when an object begins to decay or by the 'skilled vision' of a conservation practitioner (Grasseni 2007; Edensor 2005). Language materiality, defined by Shankar and Cavanaugh (2017), sees materiality as conceptualizing how humans encounter experience and interact with their surroundings, focusing on how the language of everyday life can reflect those meaning and value creation processes. By engaging with object agency, ignorance as an ethnographic object, and language materiality, this thesis explores how heritage material can ask certain things from practitioners: from specific bodily commitments to a yielding to ignorance of the unknown to conservation language as evidence.

Concluding the thesis is a call *...To Autoethnography*. Imprinting within conservation practice and how such memories of practice are also valuable conservation records will be discussed. The act of condition assessing objects will be used to explicate the sensorial experience and impact of heritage. The thesis is concluded thematically with emphasis on self-reflection. Interlocutors in professional practice always told me of missing 'the bench', where the intimate process of enacted changed is made tangible and impactful by the individual. Interlocutors wanted an expertise that was valued but not at the expense of its premise, fighting against unjustified, exponential acquisitions and mismanaged resource allocation. And interlocutors began seeing how transparency of the work, including the widest spectrum from computer work to intervention, could aid the public program of the museum. An opportunity for transparency comes with a call for autoethnographic conservation records as a step toward the public need for an unauthorised, diversely represented heritage sector that is both lived and shared.

This chapter will end with the key questions asked by the research.

1.3.1 Key questions

The aim of this study was to achieve a new understanding of how conservation practitioners' backgrounds and experiences relate to their work on heritage objects. It examined the treatment and the representation of objects throughout the conservation process, in terms of:

- the behavioral, observable decisions and actions made
- the effect of space on practice
- the effect of the objects on practice
- the uses of verbal and written language

Through these four aspects, the study sought to offer a new interpretation of conservation roles and processes by answering the questions:

- How are conservation approaches drawn on and used by those engaged with object conservation within the UK heritage sector? How do these approaches inform their practice? And what ideological/ethical issues do they face when they translate abstract and sometimes contradictory principles into specific (non-) interventions?
- What other sources of knowledge are applied throughout the conservation process?
- What patterns in approaches to different types of objects might we observe and how do they vary over time and space?
- How is conservation practice represented within conservation records in the UK?

The followings chapter outlines which methods and materials I employed to answer these questions.

Chapter 2 Materials and Methods

Figure 5. Top: Image of an ancient Egyptian sandal from the conservator's perspective under the microscope. Bottom: The same image but from outside the microscope. In one, sand particles are

visible. The methodology for this thesis is both a detailed introspection and a detailed extrospection (Conservation photographs, Suarez Ferreira 2018).

As highlighted above, this research was designed as a multi-sited ethnography that integrated a range of evidence from conservation documentation, interviews, focus groups, participant observation, para-ethnography and autoethnography. I volunteered at conservation laboratories within participating museums (Appendix III: *Participating Museums*; Table 1) to conduct observational studies of volunteers, students, and professionals practicing object conservation (three groups within the non-linear trajectory to professionalization). I paid attention to how institutional organisation, the types of conservation objects worked on in space, and the level of conservation undertaken influenced practice. I conducted semistructured interviews engaging participants in life-history narratives leading up to and throughout their participation in object conservation. I held forums where groups of conservation practitioners discussed current topics related to conservation practice. Visits to museums across the UK were accompanied by an online questionnaire interrogating the use, creation, and storage of conservation records and documentation. My positionality as ethnographer and conservator granted me access to sites and interlocutors because I could exchange conservation work and aid in conservation programmes. Many interlocutors were themselves working to develop the discipline and its practice, lending a para-ethnographic modality to the research which impacted institutions and interlocutors directly and often contemporaneously.

A hermeneutic phenomenological approach (i.e., shedding light and reflecting upon the lived meaning of the experiences shared and encountered by myself and my interlocutors) to the analysis of fieldnotes and interview transcription addressed how, within conservation spaces, forms of knowing influence practice. I analysed survey replies and fieldnotes concerning the production of knowledge within conservation records revealing how practice is displayed within the record – the presumptive evidence for direct dissemination of object conservation knowledge. Each method and analytical technique are described in more detail below.

Appendix *I: Consent* Form Template includes a template of the consent form participants signed prior to inclusion into this research. All participants are anonymised by the use of pseudonyms and in cases where they could be easily identified via the institution(s) they worked for I have not included the name of the field site. In instances where the location

of the fieldwork made an impact on what was shared/observed, I have included a description and/or the name of the site. My own experiences of conservation practice interwoven throughout the thesis with autoethnographic intention also includes descriptions and/or names of sites as I do not wish to remain anonymous.

2.1 Multi-sited and Para- Ethnography

Ethnography is an eclectic methodological choice which engages in contextually rich and nuanced qualitative social research. The everyday interactions of interlocutors (also called participants and/or informants) are transformed into fine grained data by employing field techniques such as note taking, auto-/visual recording, interviews, examination of textual sources, observation, and the like. Ethnography conventionally involves several months (or more) in a field site. Conventionally informed by Malinowski's pioneering research, early and mid-20th century approaches tended to focus on particular sites and locales where the field was thought to be a container of a specific set of social relations and might also be generalized into an area or region (Malinowski and Young 1988). This was challenged later, particularly from the 1980s onwards in the wake of critiques by Clifford and Marcus (Larson *et al.* 2020). Multi-sited ethnography seeks to break with convention by studying phenomena that cannot be accounted for by focusing on a single site. The essence of multi-sited research is to follow people, connections, associations, and relationships across space. In doing so, a 'world system' is collapsed into and made an integral part of parallel, related situations and places. In terms of method, multi-sited ethnography involves spatially dispersed fields through which the ethnographer moves. These fields can be of two or more places, and/or conceptual by means of juxtaposing data (Marcus 2011; Falzon 2009).

As covered above, addressing Boyer's (2008) manifesto to the study of expertise, this research involved various heritage institutions as I aimed to understand the process of professionalisation alongside forms of knowing and practicing conservation. Certain interlocutors could only be found at certain sites (e.g., volunteer-run museums). Each field site offered different constraints, different workspaces, and different types of objects and so within the multi-sited tradition to ethnography I was following conservation practice (interventive and preventive conservation as applied through professional policies, principles and approaches) through time and space. Multi-sitedness is not simply about geographically distant sites, it is also about the culturally differentiated spaces which are somewhat unrelated (Alloatti 2019). The study is focused on understanding object conservation practice, and this

cannot be characterised by one site alone. The politics at play in some institutions, their status and image set them and their practices apart from others. For example, a volunteer driven programme at Shildon, a site approached from an unpaved and coal textured carpark, has very different aims and methodology to the structured regimen of conservators at the world-renowned Fitzwilliam Museum in Cambridge. The depth attained from one site is not representative of the profession as a whole. If the methods of attaining and maintaining knowledge vary from place to place and if the values affecting the inputs and outputs of practice vary from place to place, it is necessary to move from place to place. As Falzon candidly explains, this may result in "a broader but possibly 'shallower' world" but one where "understanding the shallow may itself be a form of depth" (Falzon 1979:9).

Initially (2014-2016) I had access to a variety of conservation practitioners through the established network of the object conservation training course at Durham University. As I travelled across the UK to interview interlocutors within that network about their conservation records from 2014-2016, more gatekeepers were introduced and gave me access to the practitioners and sites where I would spend the latter years of fieldwork. In 2016 I began participant observation and semi-structured interviews at Locomotion, and in 2017 I moved to Cambridge to continue this work until 2019. At these field sites I was also introduced to new interlocutors and sites. For example, a regional conservator for East Anglia who also worked at UCM introduced me to more museums which were run and/or where the care of collections was predominately done by conservation volunteers. Within Table 1, Error! Reference source not found.I briefly describe the institutional organisations that participated in my ethnography and that determined space, resources, and other relevant variations (Appendix III also has a full list of participating institutions). In Table 1 Error! Reference source not found., I also include a general profile of participants highlighting that at certain field sites I spent time with students, volunteers and/or conservation professionals. It is important to note, that sometimes these groups were all represented within one field site or throughout certain projects. Having addressed the importance of the process of professionalization to the study of object conservation, there are commonalities of practice that relate to the running of heritage institutions and the conserving of material heritage objects within the UK.

For the purposes of outlining a general profile of participants, Error! Reference source not found.Table 1 also explains the level of conservation they worked within and what that meant for the conservation of the objects with which they engaged and the types of records

they kept. For example, some volunteers were only in charge of surface cleaning objects and did not intervene if the object needed a structural repair. At other field sites, volunteers were the only conservation practitioners and therefore participated in a wide range of conservation activities including full restoration. Following Table 1, I characterised the differences between field sites and interlocutors more precisely, highlighting the main differences and contrasts I found and was able to draw out across the different sites. In the multi-sited tradition, I therefore followed conservation practice through the lens of these various practitioners at their sites of work. More detail about these conservation practitioners, their conservation spaces and the material heritage within will be addressed alongside relevant vignettes and analysis throughout the thesis. What unfolded by undertaking participant observation and interviews is how these individuals, within these different groups and organizations, engaged with conservation practice.

Throughout fieldwork I was both an ethnographer and a conservator, allowing reflexivity to emerge from both internal experiences and external observations. I was ideally situated to avoid a 'crypto-rationalist' orientation, as I understood the basis of many processes within conservation practice and the organizational theories that impact the work, having experienced them myself (Boyer 2008). This sympathy and experiential understanding pushed me to have a sensitivity for the different realities that I came across, aiming to monitor possibilities that emerged by involving human and non-human actors without unnecessarily abstracting from patterns or happenings observed. To adapt and analyse findings, I took a para-ethnographic approach, which involved collaboration with the members of the organizations studied, as contemporary workplaces involve theorizing that can inform how and why conservation practice is enacted (Islam 2015). Many interlocutors were engaged in academic scholarship within studies of conservation and three interlocutors, in particular, were engaged in their own critique and publications of present conservation practice and so I was also learning from these scholars and by engaging in discussion, also participating in their work. Therefore, my relationship with conservation practice was different from a traditional ethnographic perspective –I was learning from and with interlocutors. I have incorporated the notion of para-ethnographers as “nodes in distributed systems, perceived as knowledge-makers and not merely holders” (Coleman & Hellermann 2011:5).

According to Holmes and Marcus (2011), para-ethnographers exist in social realms of which they have expert knowledge derived from their positions; they deal with different

levels of data, information and other information within the specific field which they are also producing, mediating and distributing (Holmes & Marcus 2002: 238-240). This perspective towards para-ethnography allowed me to (re)define my working relationships with interlocutors where my positionality was already distinct from many traditional ethnographies (Alloatti 2019:10). Findings were shared with interlocutors via discussions with individuals and by bringing up findings at forums with multiple participants. I also shared some of my writing with interlocutors, collaborating with them to ensure I was including accurate representations and relevant contributions. This multi-sited, para-ethnographic approach allowed me to follow conservation practice through time and space which informed my key questions and field sites as practitioners introduced me to relevant ideas and gatekeepers along the way. Collaborating with interlocutors to adapt and analyse the findings, this research was then able to bring my experiences and those of my interlocutors through the theoretical lens to wider audiences within anthropology and heritage studies alike.

Classic critiques to multi-sited ethnography includes the questions below. I have paraphrased Marcus' (2011) responses.

Q: What prevents the fieldwork from becoming overwhelmed by the multiplication of sites; what gives multi-sited fieldwork a boundedness and an intensity?

A: Multi-sited ethnographies begin with orienting collaborations within certain sites, the interest of which is an appropriation of para-ethnographic perspective (e.g., how the expert subject sees the world versus how another, the anthropologists, sees the putatively same world). In this way the fieldwork is designed with interlocutor(s), allowing for perhaps the thickest descriptions. Having trained and participated in the conservation expertise, my research design and access to field sites was a collaboration with heritage institutions and training programs.

Q: What preserves the sense of working through participants' points of view rather than mainly being in conversation with social theory -seeing points of view as data?

A: Multi-sited ethnography works with participants' points of view through collaboration. The object of this collaboration is to move the research to other places, both imagined and visited, in order to eventually bring the ethnography back as inputs to those participants. The output of this research has always been intended as a reciprocation of adding knowledge and insight within both the anthropological and conservation disciplines.

Q: What replaces the trope of 'being there' so central to conventionally inhabiting a place?

A: In multi-sited ethnographies the salient factor in defining significance is not so much about location in space as it is about location in time – detailed situatedness in 'the contemporary'. Contemporary conservation practice is a complex sum of approaches, attitudes and cultures, rejecting uniformity (Hölling 2017:94) and thus location in space became less important than following the process to professionalisation alongside forms of knowing and practicing conservation.

Q: What preserves the sense of difference or 'defamiliarization' as a mode of argument in multi-sited projects?

A: Defamiliarization in conventional ethnographies helps the researcher 'defocus' into an ethnographic state of mind which enables the production of data (Falzon 2009:8). Accountabilities are built into the collaborations which insighted and designed the fieldwork of a multi-sited ethnography. As aforementioned the para-ethnographic nature of multi-sited ethnographies of experts is a collaboration between researcher and participants, allowing for shared inputs and outputs.

In summary:

> "Multi-sitedness represents three things – the objective relations of a system which can be studied independently of ethnography (e.g., a network); the relations set into play as an artifact of a research design (this is the reflexivity of the fieldwork); and the para-ethnographic perspective… which is always spatio-temporal, that the ethnography works within for its own purposes and produces results in conversation with" (Marcus 2011:28).

More specific critiques to multi-sited ethnography include an acknowledgement that all ethnographies begin in the priorities, claims, and politics of the academy and return to those. The extended social field of ethnography is really stretched from the academy to research site(s) (Crang and Cook 2007). On return from the field, where one writes and makes sense is a heterologic place where field sites and the extended relations among them, our personal pasts, and our academic sites are all drawn into a tangled web (Crang 2011:38-39). Similarly, Marcus (2011) notes that ethnography is conceived and pursued by an individual; this contrasts with the modality of multi-sited ethnography where research becomes de facto collective by the diversification of the space of fieldwork and by the incorporation of forms of reception within the frame of research itself. The need, therefore, to develop forms and norms in research design to anticipate and manage this collective nature of multi-sited

ethnography is still present (Marcus 2011:22). Many multi-sited ethnographies, including this one, have informants who are highly educated professionals, anthropologists find that the knowledges we seek to understand are themselves already in some measure para-ethnographic. Although this can lead to genuinely novel problems of analysis and presentation, practically there is a lot to be filled in here about issues on research practice (Ferguson 2011:197). For example: "how a collaborative alliance amongst professional interlocutors emerges [if not already within the network like I was]; the various ways the connection to para-ethnography can be established; what para-ethnography, in practice, is; and so on" (Marcus 2011:23). Indeed, textual forms of ethnography (fieldwork design; field notes; transcriptions, etc.) can have a powerful regulative influence on what is expected of fieldwork in professional culture, calling for a change to what the sense of written ethnography might be. For example, informal interviews within professional workspaces make interlocutors uncomfortable and often disallows for complete or sincere responses. Critiques of para-ethnography also include that by focusing on expertise the focus turns to organisational elites. By looking to diminish the distance between academics and informants, researchers may seek out informants from expert populations only. Of course, studying elites may also expose "fissures, inconsistencies, and critical possibilities within elite cultures that can be used to promote change" (Islam 2015:246). Additionally, using expert interlocutors through para-ethnography threatens to decentre researchers' own expert knowledge, revealing it to be itself a form of professional knowledge characteristic of a particular community (Mosse 2007) which is arguably, a fundamental aspect of the reflexive process within ethnography.

Marcus (2011) points to sociological ethnography as remaining focused on description, modelling, and analysis of processes of professional communities with theoretical frameworks such at Actor Network Theory (ANT). The anthropological multi-sited intervention to ANT allows its arguments and articulations to have constituencies within the field that exist in relation to and alongside the professional network. Involving interlocutors from within, in relation to, and alongside the professional conservation community is why this multi-sited ethnography looked also to ANT for a conceptual approach to the methodology.

Following ANT, conservation practitioners were seen not as having some sort of direct access to conservation knowledge or practice, but rather a constructed knowledge made through their activities and within organisational structures. Within these activities all human,

nonhuman, and textual elements were considered within the relevant conservation spaces. Elements are seen as 'assembling, combining, representing and circulating' (Michael 2017:11). Conservation spaces could be conservation laboratories, but as this thesis continues, it will be made clear that both the practice of conservation and conservation spaces are more multi-faceted, complex, and widespread than how the discipline has been previously understood. For example, the UK Institute of Conservation's (ICON) glossary gives a strict definition for 'conservation'[12] whereas this thesis opens up to conservation's various and sometimes, undefinable qualities. Similarly, para-ethnography allowed critical practice to emerge internally from and across the heritage institutions, rather than solely from external academic critique (Voronov 2008).

Actor Network Theory allowed for this research to see society not as a dualism between human actors and social structures, but rather as comprised of humans, nonhumans, and textual elements who are aligned in networks of differing extent. Within ANT, it is through close empirical study that it becomes possible to identify the particularly prominent actors. There is no a priori as to whether it was a human or nonhuman actor that played the decisive part in network creation. ANT scholars generally do not assume that actors 'posses' power, rather the purpose of analysis is to trace how those actors wield influence, deploy various resources, marshal other human and non-human actors and establish and make durable a pattern of associations amongst those actors (Michael 2017). The ethnographic focus allowed me to connect the substance of knowledge to the material and spatial conditions – this informed an ethnographic concern with the specific conditions that situate conservation and attuned me to the more human (i.e., material, spatial, infrastructural) elements of these practices. The empirical study within this research was enacted through the method of participant observation.

2.1.1 Participant Observation

As a method, participant observation is both a humanist and scientific one – relating to methods as epistemology or the study of how we know things. Within the study of how we know things are the key questions of whether the researcher subscribes to the philosophical

[12] "An approach to objects/items, which aims to preserve and enhance those objects/items for the purposes of public access and understanding. Conservation encompasses many different actions including investigation, documentation, cleaning, stabilisation, and long-term preservation to manage change over time. Conservation is concerned with the layers of significance objects/items have acquired over time rather than with repair to a projected former or 'as new state'" (ICON 2021).

principles of rationalism (humans achieve knowledge because of their capacity to reason) or empiricism (humans come to know what they know as the result of our experiences); and whether there is a reliance on the assumptions of the scientific method (often called positivism) or humanism (also called interpretivism). Humanism can have different definitions, but in this research, humanism means a commitment to subjectivity where our own feelings, values, and beliefs give insight into the nature of human experience. A trained subjectivity is the foundation of participant observation within a multi-sited ethnography (Bernard 2017:2-18).

Participant observation centres on long-term intimate engagement with a group of people who were once strangers to understand their everyday through their perspectives and actions. Shah (2017) refers to four core concepts when describing the basis of participant observation: long-term engagement, understanding a group of people and their social processes, holistically studying all aspects of their social life, and how befriending strangers forms a dialectical relationship between intimacy and estrangement. Participant observation makes the ethnographer question their fundamental assumptions and pre-existing theories about the world, enabling them to discover new ways of thinking about, seeing, and acting. By taking seriously the lives of others, participant observation enables an understanding between history, ideology, and action in a way which cannot be foreseen. The holistic undertaking of participant observation allows an opening up, considering new possibilities in research forcing the researcher to constantly revisit theories and assumptions. Participant observation enables contributions to theory no matter what rubric or which discipline the researcher is working from, making it inherently interdisciplinary (Shah 2017).

Classic critiques of participant observation usually involve a description of the technique as merely collecting qualitative data or producing case studies. While there is nothing wrong with a case study, the implication is that researchers do not produce much else through our ethnographies. Participant observation often arrives at propositions that could have never been conceived of prior to fieldwork. This questions dominant theoretical and political positions for it is ever more difficult to make the case for research that prioritizes living for a long period of time with a group of people in an open-ended study, beginning with the premise that it is not possible to know what will be found or even what the right questions will be. Shah (2017) continues:

> "even if we tell our doctoral students that we expect them to eventually discard their proposals because of the new knowledge they will acquire in the process of

> fieldwork…we have still compromised by ensuring they produce pre-fieldwork proposals that in form resemble those of other disciplines—with research themes, questions, and sometimes hypotheses. In the compulsion to work beyond our disciplines and work with activists, practitioners, and in interdisciplinary teams, we are often under pressure to produce fast results and quick-fix solutions" (Shah 2017:46).

Along these lines, critiques from within anthropology argue that participant observation, and even ethnography as a whole, have taken on different definitions and applications no longer relevant to anthropology and its initial intentions (Ingold 2014). As a 'craft', participant observation takes practice, and it is being done more often within only doctoral research such as this one, disallowing the researcher to improve as fieldworker, data collector, and data analyser over time (Bernard 2017:274). During certain participant observation there is no room for error and less for reflection until after the workday (e.g., James (2007) being a chef apprentice to understand how to become one). This disadvantage is strengthened with inexperience. Indeed, although I studied anthropology as an undergraduate, I focused on artefact studies and therefore this doctoral research is my first ethnography. For its participant observation aspect, I was more of an observing participant as I was seen as an insider (a qualified conservator) who observed and recorded work life. In order to feedback input to the conservation discipline, I had a stake in both para-ethnographic inquiry and purely anthropological application, blurring the lines of my role throughout the fieldwork.

Challenges faced were not unlike others who have studied education and processes to expertise. There were issues of language where, for example, the professional culture of the museum disallowed certain topics (e.g., colonialism). There were issues resolving my position as participant observer, always wearing two hats and sometimes getting lost in my former expert knowledge (this ran through the writing process as well). Issues of acceptance ranged from general prejudice (being non-British; non-white) to established apprehension of critique within conservation as a discipline itself (more on this in the final chapters of the thesis). Even 'uniform' and never knowing if I needed to dress like a professional, or as a conservator, or as a doctoral researcher. The first included pencil skirts which are not appropriate for the labs of conservators where chemicals can spill, etc.; jeans and a t-shirt could sometimes be appropriate, but my lab coat could not follow me to meetings within the museums or out to lunch during semistructured interviews (James 2007). And then there are the emotional and psychological challenges of participant observation (Davies and Spencer 2010).

My aims were to produce a doctorate but more crucially, through utilising participant observation, to "produce new knowledge and potential transformation of ideology and action, challenging dominant theory, proposing alternative theories, and taking action that may potentially challenge the forces around [museum/heritage practice] …" (Shah 2017:50-5). Indeed, I used ethnography to understand conservation practices on their own terms; and this understanding then allowed a position to critically think about the limitations of these practices and the assumptions that inform them. Critical possibilities arose from the ethnography as part of the role of ethnography is to highlight the structuring assumptions that may be paradoxically invisible to practitioners because they are too familiar and therefore taken for granted. Hahonou (2019) suggests giving space to the ethnographer's empathy while doing obtrusive participant observation. This enables a deeper understanding of bureaucratic behaviours, bringing emotions back into the analysis of empirical findings and deepening reflexivity (Hahonou 2019). In this sense, I wanted my participation in conservation within various institutions in the UK to encourage reflection on the drawbacks of scientism and expert power dynamics within conservation as a discipline while pushing practitioners towards opening up to different ideas/approaches to heritage objects and materiality (e.g., outside Western norms as discussed in depth in the chapter to come). Though mostly unsuccessful due to interlocutors having no experience with critical heritage theory nor being in conversation socially or professionally with their privileges as predominately social-economically affluent[13] white Europeans, participant observation allowed both a feeling of rapport (insider) and 'otherness' (non-European, brown, and originating from a very 'poor' previously colonised country) which complicated the research outside my own experiences. This was continued within semistructured interviews where the focus was on the interlocutor and the emotions and stories they wanted to tell, action and/or challenge.

2.1.2 Semistructured interviews and forums

A semistructured interview is open-ended but based on the use of an interview guide (Appendix II: *Semistructured Interview Guide*). Semistructured interviewing works very well in projects where field work is within working environments and interlocutors are accustomed to efficient use of their time (Bernard 2017:156-158). Informal interviewing

[13] See Heyes *et al*. (2018) who explain that those who inhabit permanent well-paid roles are white, privileged practitioners usually with ties to informal networks inaccessible to 'others'.

occurred within conservation spaces as part of my participant observation. Semistructured interviewing was scheduled outside of the workplace, often at the lunch hour or after work for about an hour. Semistructured interviews and focus groups were recorded using a voice recorder. Transcription of both audio recordings (from interviews and forums) and field notes (from participant observation) were done manually. I transcribed quotes and excerpts from the interviews which were relevant to the research questions and findings and as the relevant ideas formed the thesis throughout the ethnography. Following Rabelo and Souza's (2003) ethnography, this qualitative data was analysed using a hermeneutic phenomenological approach.

Phenomenology was founded and developed as a philosophy by Husserl (2012); he sought to establish, or re-establish, the fundamental contribution of human experience to the natural sciences. According to Husserl, "meaning which can be intuited (through consciousness), can be described precisely as intuited with the help of a method" (Suddick *et al*. 2020:1). He termed this method phenomenological attitude and reduction, but Giorgi (2009) pointed out that Husserl described more of a philosophy, then a method: phenomenology was a philosophical, epistemological project that offered a descriptive science to the study of lived experience (Moran 2000). Heidegger (2003) brought phenomenology to a method of ontology[14] where phenomenology became a method of interpretation through which to disclose human existence as ontological being (Spiegelberg 1994). For Heidegger, "uncovering the basic structure of human understanding and existence, was always interpretive in character" (Suddick *et al*. 2020). Despite these distinctions, there is coherence in philosophical and theoretical notions in both Husserl's and Heidegger's writings. Adding Gadamer's (2008) philosophical hermeneutics, Suddick *et al*. (2020) help contemporize the methodology of hermeneutic phenomenology. They describe phenomenologically and hermeneutically grounded research as aligned with both Gadamer and Heidegger: grasping the lived experiential meanings and understandings of being. Human lives, experiences and the world as lived are understood within their particular temporal, situated frame (Suddick *et al*. 2020:2). Hermeneutic phenomenology means working in an open and interrogative way to understand the people who produced the data (my conservation interlocutors), the person doing the hermeneutic phenomenological work (myself), and the

[14] A basic definition of ontology is as a branch of philosophy that studies concepts such as existence, being, becoming, and reality.

phenomenon that is brought to awareness and made manifest as a result of the work (conservation practice in the UK) (Suddick *et al*. 2020:12).

The method of hermeneutic phenomenology requires deep involvement with the social relations of participants, including an intimate familiarity with the language, so that the symbolic referents emerge during the study of those expressions (Bernard 2017:415). With the observations of process and practice, I designed the interviews of informants to include their life history leading up to and throughout their experience conserving objects. There was a focus concerning informants' autobiography, specifically as it related to their choices to involve themselves in object conservation and how their work with objects has in-turn added to the biography of their lives. Following Actor Network Theory, this is furthered with a demonstration of how knowledge is situated through practice as my interlocutor's biographies tended to be highlighted by projects and objects worked on. After participants explained their story into conservation, questions were personalised to my experiences with the individual, where we were working and with what object(s) or conservation project(s). Through understanding the backgrounds of my interlocutors, I was able to understand their motivations and actions more clearly. Questions asked informally during participant observation could be readdressed. Semistructured interviews gave participants an opportunity to ask me questions and feedback about the impact of the research. All semi-structured interviews were done outside the workplaces of participants and the mention of some museums and not others within vignettes and interview excerpts were intentional. Some field sites, as explained above, gave me access to a particular type of practitioner and sometimes they were the only one. To ensure anonymity, I may have included perspectives and observations of the practice of an interlocutor but excluded their institution to ensure they remained anonymous.

I also led forums[15] through the University of Cambridge Museum 4C group[16], which brings together conservators and care of collections professionals throughout the museum consortium. I led four forums throughout my fieldwork and treated them like semistructured, para-ethnographic group interviews for the purpose of my research. Group interviews or focus group interviewing allows participants to create meanings collectively which the

[15] Also referred to as focus groups.

[16] University of Cambridge Museums is often referred to as UCM. The 4C stands for Collections, Connections, Communities, Conservation.

ethnographer would not otherwise get from individuals (Babbie and Mouton 2011). The focus groups allowed participants to respond to the comments and concerns of colleagues stimulating contribution of interesting issues and topics which were useful for them (Goulding 1997), as well as my research questions (this is why forum is an apt term). This also allowed interlocutors to better understand the para-ethnographic element of my research and to ask questions around the practical elements of conducting the multi-sited ethnography. During the forums we discussed various topics which included the practical side of conservation, the risk of loss of practical skills, working with unfamiliar objects or sensitive materials, gender and class in conservation, responsibility in conservation, experiences with objects, and difficulties in becoming a professional conservator. Transcriptions were done of relevant excerpts from these conversations using the hermeneutical phenomenological approach aforementioned (Suddick *et al*. 2020). The institution where the forums took place is named throughout the thesis as it was a variable which affected the responses and behaviours of interlocutors. Interlocutors' resistance to certain topics and/or their phrasing was in part a condition of their professional environment as the forums were conducted at The Fitzwilliam Museum unlike all other interviews which were conducted outside practitioner's workplaces. The hermeneutical phenomenological analysis applied to the informal interviews were also applied to questionnaire responses which came from my initial investigation into the use and creation of conservation records.

Critiques of interviewing methods within qualitative research echo those made around inexperience and participant observation: the inexperienced researcher may be ill-equipped to deal with "unexpected participant behaviour, dealing with the consequences of the interviewer's own action and subjectivities, constructing and delivering questions and handling sensitive topics" (Roulston *et al*. 2003:643). When broaching the topics of colonialism, gender, and class, interlocutors were reluctant to respond or discuss these topics – moving away from the themes quickly or responding with jokes or disingenuous answers. I found it difficult to bring these matters up again and so took these awkward responses, or lack thereof, as a form of data itself.

Biases and subjectivities of myself as interviewer, similarly, became a challenge as I wore both the hats of ethnographer and conservator throughout my fieldwork. Critiques of interviewing allude to such a position by explaining that interviewers become a part of the interviews by asking questions and responding to participants, sometimes sharing their experiences with interviewees. Additionally, analysis of the interview data by selecting from

it, interpreting and describing it regardless of one's discipline can be challenged in keeping the interview data as the product of respondents. Likewise, focus groups as a method of interviewing have disadvantages and have been critiqued as requiring a lot of attention onto the ethnographer, providing less depth and detail from the opinions and experiences of any given interlocutor. Moreover, although the influence of participants on one another can generate fruitful discussions and allow for interesting topics to emerge, it can equally be taken over by one dominant respondent negatively affecting the outcome of comments made by other individuals (Wimmer and Dominick 2014).

Forums included the entire hierarchy within the UCM consortium represented by conservation managers, professional conservators, conservation interns and students, and conservation technicians. This diversity had benefits but created tension for natural, unsupervised responses. Indeed, a focus group is an unnatural social setting, and it is directed by the ethnographer and has all the other potential downfalls of informal and formal interviewing methods. Diefenbach (2018) has usefully tabulated many other critiques of qualitative research using semistructured interviewing such as that described and including focus groups or forums (

Figure 6).

Stage of Research	Potential Issues
A. Research Design	
	I. researcher's positionality can affect the key questions, methodological approach and analysis of data
	II. key questions are not fixed and wiil be redefined or changed throughout research process
	III. no precise qualitative scientific methods to investigate key questions
	IV. investigative case studies are not state which theory they are based on
B. Collecting Data	
	V. selection of unit of investigation does not happen systematically
	VI. selection of interviewees does not happen systematically
	VII. Interviewees are influenced by where they are interviewed and have unconscious biases
	VIII. interviewees consciously or deliberately attempt to mislead researcher
C. Making Sense	
	IX. data is insufficient becaue of quality, quantity, or time frame they cover
	X. internal validity of data does not mirror reality
	XI. no objective criteria for slection or grouping of data
	XII. Interpretation and writing up of data characterised by ambiguity and subjectivity
D. External Validation	
	XIII. generalizing findings or generating a theory is not possible
	XIV. findings can not be replicated or tested
E. Impact	
	XV. lack of critique and critical discussion of academic research
	XVI. case studies do not place findings in a historical and structural context

Figure 6. Based on Diefenbach's table on the methodological problems of qualitative research which is mainly based on semistructured interviews (Diefenbach 2018:891).

Diefenbach (2018) determined five categories which relate to the potential issues of interviewing in qualitative research such as ethnographies: research design, collecting data, making sense of the data, external validity of the findings, and implications of the research on the social sciences. Adding to what has already been covered, Diefenbach points out that there are no precise qualitative scientific methods for investigating research questions and often, case studies do not explicitly state which theory they are based upon. Figure 6 category (*A.*) was addressed within the description of my research design from the preface of the thesis to this point. Although case studies do not form much of the thesis, vignettes taken from fieldwork do and, as covered in section 2.1.1 *Participant Observation*, hermeneutical phenomenological sensitivities allow an open and interrogative way to understand the human lives, experiences and the world as lived within interlocutor's particular temporal and situated frame. It also allows the ethnographer and the phenomenon to be brought to awareness and made manifest because of the work, mimicking the capacity of multi-sitedness and Actor Network Theory to draw out a para-ethnographic possibility and an inclusion of both human and non-human actors (Suddick *et al*. 2022; Michael 2017).

Diefenbach (2018) section on collecting data (*B.*), points to the critiques of interviewing and responses as an unreliable source of information. Additionally, Diefenbach

notes the lack of systematically and objectively including lines of inquiry as well as selecting participants in qualitative data collection. Ethnography, particularly multi-sited ethnography, seeks to break with convention by studying phenomena that cannot be accounted for prior to following the people, non-human actors, connections, associations, and relationships across space, transforming the everyday into fine grained data. Diefenbach's points on making sense of the data (*C.*) can be addressed by highlighting the benefits of a researcher who acknowledges their influence and impact onto their research through reflexivity and para-ethnographic understanding. Likewise, a resistance to generalisation and a need for replication (*D.*) can be seen as the strengths of qualitative research utilising methods of informal (participant observation) and semistructured interviewing. Such research takes seriously the lives of others, holistically opening up and considering new possibilities for research inquiry, disallowing a lived world to be extrapolated into systems which cannot account for the continually complex and evolving existence of human experience. Finally, as a critical epistemology of conservation practice within the UK heritage sector, this thesis aims to address Diefenbach's last category (*E.*) by retaining interlocutors particular temporal and situated frame throughout vignettes, case studies and interview analysis. As exemplified by this chapter, critique of methods and approaches to the study of conservation practice, fieldwork remained evaluative and para-ethnographic so that input and output can be overlaid onto anthropological and heritage studies alike. The final method employed through a questionnaire concerning the use and creation of conservation records can be seen as a structured interview method.

2.1.3 Questionnaire

The places and social nature of practice and its documentation is where I unpack the complexity of forms of knowing within object conservation in the UK. Actor Network Theory guided me to empirically extract patterns of associations, of relations, of coordination and conflict in their specificity, engaging human and non-human actors (including records) by following any heterogeneity, multiplicity and complexity (Michael 2017: 151-152). Selinger and Crease's (2006) appraisal of Dreyfus's phenomenology of skill acquisition pointed out the necessary inclusion of hermeneutical sensitivity (i.e., to be open and perceptive) as part of a normative account of expertise and practical knowledge (Selinger and Crease 2006:229-234). The methodological approach to this study therefore required a consideration of the variability of object conservation within the UK. By working with different groups, at different field sites (Table 1Error! Reference source not found.), I

ascertained how different heritage institutions, different types of objects, as well as different types of people produce different approaches to object conservation. This enlisted contributions by the objects worked on, the space worked within, and the conservation records used and created – evidenced by participant observation, interviews and focus groups as well as what interlocutors wrote down about their decisions and ideas within conservation records and related documentation (e.g., blogs, podcasts, etc.). With a holistic view, this ethnographic approach interrogated how different forms of documenting conservation work produces knowledge about heritage objects as well as conservation practice (Moore 2001).

Visits to museums across the UK were accompanied by an online questionnaire interrogating the use and creation of conservation records and documentation (Appendix IV includes the questionnaire as well as reasonings behind each question asked). Participants normally gave me a tour of their museum and conservation laboratory. We would then sit down within the lab for about an hour where I would ask the interlocutor the questions from the questionnaire, adding context from what they had shown me throughout the tour. Museums which had large catalogues of conservation records often let me see these storage facilities, normally located in proximity to the laboratory. Here I took pictures and was often offered any conservation record templates or examples which interlocutors thought would be helpful (Appendix V has some examples of these). A hermeneutic phenomenological approach to the analysis of questionnaire replies, and fieldnotes concerning the production of knowledge within conservation records, revealed how practice is displayed within records – the presumptive evidence for direct dissemination of object conservation knowledge.

Conservation records explain the techniques and materials used on an artefact with both written and graphic forms of documentation. A conservation record may include:

- condition reports of the artefact as first presented to the conservation practitioner;
- material analysis and investigation implemented on samples from the artefact or on the object itself;
- treatment or intervention proposals and reports of the actions and decisions made by the conservator;
- preventive conservation measures recommended or taken by the conservator for the long-term preservation of the cultural heritage object;
- and any relevant drawings, diagrams, and/or images created during the above procedures.

(Beck 2013:85-86; Moore 2001:1-7; Velios 2016:13; Cutajar *et al*. 2016).

A conservation record gathers all the crucial information about an object in one place. This makes the conservation record an irreplaceable information source for conservation practitioners and others within the heritage sector. Conservation records can be used to illustrate the skills and abilities of conservators, as well as the overall impact of the conservation discipline over time. There are a multitude of uses of conservation records for management, administrative, scientific or research purposes, etc. (Moore 2001:9-11). Although, the UK Freedom of Information Act mandates a considerable level of access to those who request information about public collections, this law does not appear to have prompted increase in request for conservation information from the public, rather cultural heritage institutions are suggesting that the public is more interested in conservation while they are looking at objects. The extent of access to conservation records that would be desirable seems predominantly aimed at enabling conservation practice by conservation practitioners (Rudenstine and Whalen 2006:2-4).

Yet, there are multiple potential evidential functions[17] conservation records could provide to the conservator, cultural heritage institutions/professionals, and the conservation discipline as a whole (more on this in section 6.3.3.1 *Background: Conservation Records*). Some of these ideas are set out in the international conservation and cultural heritage bodies which make available ethical guidelines, codes of conduct and documentation standards (Cutajar *et al*. 2016).

The aim of identifying the present state of conservation recording and use within heritage institutions and conservation spaces throughout the UK was to better understand knowledge production within conservation practice. The sample size for this element of the research was organized by categorizing the types of conservation laboratories found within the UK and ensuring a diversity of material and object-types would be included (Appendix IV: *Questionnaire Description*):

- Large institutions have multiple conservation departments with laboratories suiting material and/or conservation by object-type.

[17] Unlike the use of conservation records for enabling conservation intervention, the evidential function of records could provide broader understanding about the practice and its practitioners (e.g., frequently used materials and techniques).

- Museums with only one conservation department will have records about the corresponding collection which could vary in size and the types of objects included.
- Material specific laboratories can be both publicly and privately owned and operated. They produce records for one type of object and will provide insights into how the sub-disciplines in conservation have varying approaches to documentation.
- Universities and institutions offering courses for conservation training normally function with laboratories where students produce records. These records may be of the institution's own collection or may be of objects from organizations associated with the course (e.g., Durham University MA Conservation students work on objects from Beamish Museum). It has been determined that the type of recordkeeping learnt whilst acquiring qualification is the type of recordkeeping done throughout a conservators' career (pers. comm. A. Schmisseur 2016).

Data collection was done by interviewing conservators using a questionnaire and sending the questionnaire via email networks. Responses to the questionnaire were given in person, whilst others were answered online via the link provided in email. Transcriptions were done of relevant excerpts from these interviews and quotes were selected from the open text bars available at various points within the survey. A hermeneutical phenomenological approach was employed to analyze the text responses and interview transcriptions (Suddick *et al*. 2020).

Critiques of the use of questionnaires or structured interviewing processes within research are not too dissimilar from those of semistructured or informal interviewing in that all are seen as qualitative methods. Additionally, survey research can be flawed in its sample size and design: certain individuals can be unknowingly excluded from the sample, the individuals who are included do not represent the characteristics of the population, questions do not accurately reflect the topic of interest, the questionnaire/interview does not evoke truthful answers, and/or there is a lack of response from individuals in the sample. These were mitigated against by designing a multimode study which clearly identified key groups of interlocutors and their participation in the study. The questionnaire was user-friendly and follow-up procedures were conducted both via email and in person (Ponto 2015).

The methodological approach to this research engages people at different levels of object conservation, where the type of organisation they work in, their conservation spaces as well as the objects and their conservation records all play a role in understanding practice.

The research observed how each of the groups within the trajectory to becoming an object conservator offered their own insight to the sources of knowledge in use throughout practice. The focus of this research is the forms of knowing by which conservators intervene on heritage objects – how this knowledge is performed and how it is related to material contexts of various kinds. These sources and forms are relative to individual participants but also influenced by non-human actors. Knowledge production within conservation can be seen through its records where the complexity of such evidential functions within the contexts of heritage institutions is seen as crucial to a holistic understanding of object conservation in the UK.

2.2 Autoethnography and Positionality

Autoethnography refers to ethnography as the structured study of one's own group and is a frank acknowledgment of the subjective position of the researcher within the context they conduct field work. It focuses on the ethnographer's subjective positionality and does so in a confessional style which does not seek objectivity but honesty and authenticity in self-presentation. Autoethnography untangles the experiences of the researcher as a source of insight, illuminating the subjective aspects of the researcher that could otherwise be thought of as extraneous or unwanted bias. It also gives insights into organizational member's attitudes, values and behaviours (Karra & Phillips 2008; Zickar & Carter 2010; Islam 2015).

Within the Preface and Introduction, I explained that my experience of training and working as a conservator was where the ideas and questions which came to form the thesis originated. The Preface begins with an autoethnographical account of my life-history narrative starting from the introduction of artefact studies to the conceptualisation of my doctoral research, introducing my positionality within the research. Autoethnography is a self-reflexive qualitative research method from the social sciences which foregrounds the ethnographer's subjectivity. Reflexivity refers to the assumptions framing the analysis alongside one's own positionality and as an effort to use fieldwork to critically reflect on and interrogate the ideas one begins research with (Stigter 2016; Adams *et al*. 2015; Chang 2008; Ellis 2004). This was highlighted in the Preface by my experiences of theory-into-practice conservation pedagogy in comparison to my peers and our varying experiences of professional practice (Henderson 2016). It did so phenomenologically or with deep descriptions of my experiences rather than purely relying only on explanations and causes. The Preface also introduced the discourse within conservation practice on the roles of

interventive and preventive conservation (Muños Viñas 2005; Ashley-Smith 2018). Seeing the complexity of conservation practice unfold, I began to question the intimate process of intervention and how it forms the conservator and their expertise. In this way, reflexivity is also about how theories are challenged through practice and how experience of fieldwork can result in new ideas.

Having pursued the 'common trajectory' to become an object conservator myself, I was able to relate the experiences I witnessed to ones I had when becoming a conservator and when conserving heritage objects. In the Introduction, this thematic, autoethnographic importance to my research was highlighted through a case study which explores the impact of the object and its conservation on the conservator (i.e., the prayer-wheel). Continuing with an autoethnographical narrative, the Introduction unpacked how pedagogy, discourse, professional context and scientism disallow for emotive and/or sensual understandings of heritage objects and their conservation. The experience of conserving the prayer-wheel and the ones covered in the remainder of the thesis, rely on theory to ask and explain the nuances of an experience and the happenings of this professional culture – a qualitative research approach that uses narrative techniques like autoethnography and reflexivity to place theory and story in a reciprocal, inter-animating relationship. In this way, the autoethnographic elements of the thesis showcase the inherently collaborative, para-ethnographic nature of the work as I was able to use my own conservator lens to access and relate better to interlocutors and their practice when they shared experiences similar to my own.

I was also granted access to sites and interlocutors because I could exchange conservation work and aid in conservation programmes. Throughout fieldwork, I was simultaneously ethnographer and conservator which allowed reflexivity to emerge from internal experience as well as external observations of participants' behavior. This positionality influenced my research questions and aims, the perspectives I adopted carrying out the research, my motivations and how I conducted the research, as well as how I analysed the findings. As aforementioned, the multi-sited ethnography allowed me to understand these practices on their own terms; and this understanding then allowed me a position to critically think about the limitations of these practices and the assumptions that inform them. Autoethnography allowed me to be honest and direct about this positionality from the beginning of the thesis onwards. Actor Network Theory further guided me to be acutely aware that not everything relevant was directly in front of me. This sympathy and

experiential understanding pushed me to have a sensitivity for the different realities that I came across, aiming to monitor possibilities that emerged by involving human and non-human actors (e.g., the heritage objects and conservation records) without unnecessarily abstracting from patterns or happenings observed. In addition, to adapt and analyse findings, I took a para-ethnographic approach, which involved collaboration with the members of the heritage institutions which came to form the multiple sites of the ethnography.

Autoethnography emphasizes the importance of researchers' complex relationships with interlocutors, self-knowledge, and reflexivity (Karra & Phillips 2008). Para-ethnography shares these aspects, reframing subjectivity and situatedness from biases into resources for ethnographic understanding. It acknowledges varying positions regarding participants' status, problematizing the researcher-researched relationship without necessarily inverting it.

> "If conventional ethnography involves translating 'others' into terms comprehensible to one's own community, and autoethnography involves translating the self into another's terms, then para-ethnography emphasizes the acts of translations inherent within terminological systems, meaning that we are all to some extent both researchers and actors of our own cultures" (Islam 2015:236-237).

2.3 Conclusion

In the wake of recent debates around the roles and methods of ethnography [18] as well as the shift in the underlying cultural conditions against which ethnography takes place (Holmes & Marcus 2006), other forms of ethnography have emerged in parallel, bringing distinct but related theoretical points to the table: multi-sited ethnography, para-ethnography and autoethnography. Multi-sited ethnography has acknowledged the dissolution of local, contained spaces, and follows the circulation of people, connections, associations, and relationships across space (Marcus 1995). Addressing Boyer's (2005) manifesto to the study of expertise, this research was designed as a multi-sited ethnography that integrated a range of evidence from conservation documentation, interviews, focus groups and participant observation and followed conservation practice through time and space. At the beginning of the ethnography, it became clear that a para-ethnographic approach would be beneficial as I found "situations in which expert knowledge is both deployed and contested from within cultural sites by informants themselves, where professionals use forms of ethnography to augment, hone, or critique systematized expert knowledge" (Islam 2015:232). Para-

[18] See for example Clifford & Marcus 1986; Vaughan 2007; Goodall 2010.

ethnography explores what it means for ethnographers to take seriously the efforts of their informants in producing academically relevant knowledge (Holmes and Marcus 2005). It aided my aims of understanding conservation practice in a holistic, relevant way.

Biographical semistructured interviews were conducted in order to understand how life experiences have led individuals to participate in object conservation. Here, a hermeneutic phenomenological approach to the transcribed text from the interviews shed light on how forms of knowing affect conservation practice. An element of the interviews asked participants to narrate their experiences with objects, conservation projects and conservation records. This was done on an individual basis as well as within group interviews. Participant observation was the method that ran adjacent to these other activities; the field notes taken during observational studies were integrated into the text analysis of the interviews, providing background. Para-ethnography was used to adapt and analyse findings which involved collaboration with the members of the organizations studied ultimately allowing the relevant key questions to emerge from the ethnography and for me to follow conservation practice throughout the UK via gatekeepers who were interested and invested in the work. Overall, the multi-sited ethnography that these methods and analysis produce yielded a better understanding of expert knowledge and 'messy' practice within object conservation (Law 2004:18) and allow it to make key recommendations and inform future research in a way that aids in the progression of the object conservation discipline.

The third form of ethnography employed throughout the thesis was autoethnography. Autoethnography untangles the experiences of the researcher as a source for insight, illuminating subjective aspects of the researcher's sense-making that could otherwise be thought of as extraneous or unwanted bias (Karra & Phillips 2008; Zicker & Carter 2010; Islam 2015). This was particularly possible given my positionality as ethnographer and conservator throughout the research and helped integrate reflexivity throughout the thesis, profoundly addressing Boyer's (2005) manifesto to the study of expertise. Autoethnographic reflections are interwoven throughout the thesis and mimic the fluctuating positionality I had throughout the fieldwork as both ethnographer and conservator. The following chapter introduces the reader to conservation intervention theory by giving a history of the practice, reviewing approaches to conservation and summarises other observational studies of contemporary practice. Chapter 3 forms the background for the remaining chapters within the thesis.

Chapter 3 Intervening on Objects

Figure 7. The slow transformation of a conservation object throughout its intervention (Conservation photographs, Suarez Ferreira 2014).

3.1 Introduction

The previous two chapters have covered the motivation behind this research and its design. Using autoethnography and para-ethnography alongside the methods of participant observation, interviews and a questionnaire, I was able to grasp a holistic understanding of the conservation profession; I established relationships with volunteers and senior practitioners alike and visited museums whose collection material ranged from locomotives to antiquities to moon rock. I did not discriminate between practitioner or object-type because I believe that those demarcations made by the people and places enacting conservation had significance in and of itself. I let them explain why they chose to work with certain objects or why they insisted on a certain title. I began my research with an emphasis on intervention and quickly realized the depth and variety of conservation practice; not just because my field sites and interlocutors were diverse in the aforementioned, but, because contemporary object (moveable[19]) conservation practice in the UK, as I witnessed, is seldom evidenced by conservation treatment. Conservation intervention is more complex than simply treating objects, and often, one can be a conservator and spend little time treating or intervening on material heritage.

3.1.1Chapter outline

This chapter will first give a brief outline of the history of interventive conservation theory. It does so with the perspective that the core ideas currently shaping conservation theory are largely Western, influencing the various approaches to the practice we can find example of today. As the recent ethnographic work summarised below attempts to highlight, a decentring of the expert conservator role can alleviate conservation's authorised, Western heritage discourse. In general, 0 serves as the background information needed to better understand the chapters to follow which evaluate these ideas about conservation practice with my own experiences in the field. My ethnographic research gives example for much of this discourse, covering how pedagogy (section 4.2 *Pedagogy, confidence, and experience*), institutional influence (section 5.2 *Financial restrictions and uncertain policies and*

[19] UNESCO divides cultural heritage into two categories: tangible and intangible cultural heritage. Tangible cultural heritage is divided into immovable heritage (e.g., historical buildings, archaeological sites, monuments) and movable heritage (e.g., sculptures, furniture, wall paintings) (Munjeri 2004).

guidelines), and conservators' personal incentives (Chapter 6) play a role in treatment intervention on heritage. Finally, within Chapter 7, reflections by conservators on their careers and present practice invites an addition of phenomenological consideration through autoethnographic practice to the history and understanding of conservation intervention in the UK.

3.1.2Background: conservation intervention

As noted above, I set out to enquire about the work of the object conservator. In this chapter, I will define, chronical, and critique what is presumed to be the bulk of that work: interventive conservation. Within ICON's glossary we find the following definition for conservation:

> "An approach to objects/items, which aims to preserve and enhance those objects/items for the purposes of public access and understanding. Conservation encompasses many different actions including investigation, documentation, cleaning, stabilization, and long-term preservation to manage change over time. Conservation is concerned with the layers of significance objects/items have acquired over time rather than with repair to a projected former or 'as new state'" (ICON 2020).

The work of object conservators in the UK is variable and more than simply 'treating' objects. The term conservation intervention is often used synonymously with conservation treatment, although any change made onto the object by a practitioner can be considered interventive. As noted by ICON's definition for conservation treatment: "A conservation intervention that involves action carried out on an object. Note: Treatment is one of the possible interventions for conservation… Intervention [is] any action, which has a physical effect on the nature of an object" (ICON 2020).

For example, creating a new storage solution for an object can be considered a preventive conservation action but does not require the conservator to necessarily act onto the object. They may simply create a more suitable box and place the object within. This intervention may reduce the risk of the object being mishandled or being exposed to adverse environs but would not be a conservation treatment according to ICON's definition as it did not require direct action onto the object. However, as Jones and Yarrow (2022) have found within their ethnography, debates between those involved in conservation at Historic Environment Scotland (HES) were not only about different perspectives on how to intervene and how much, but on what constituted intervention. In one of their case studies, the desire to

stabilize the environment involved a casing solution not too dissimilar from one that may be used for storage. The heritage scientist thought of the solution as non-interventive whereas the architect was very critical of the effect on the overall visual appearance of the building (Jones and Yarrow 2022). Indeed, a change in environ via casing for display or storage can have an impact of the material, aesthetic, and accessibility to the object. All of which can be deemed interventionist depending on the stakeholder.

Figure 8. Image from a photo-op for a project on historic fans I worked on as part of my fieldwork. The work for the photo was staged: from lab coat, to gloves, to pretending to treat the fan. Normally I did not wear the coat, my hair was tied back, and I would have been working under a microscope (Fieldwork photograph, Suarez Ferreira 2018)**.**

And so, despite the popular and popularized (by heritage institutions and ICON alike) idea that the work of the conservator is as **Figure 8**: white coat, in a lab, treating an object, the work of the professional conservator involves much more and, I have found, often cautions against treatment or even intervention.

3.2 History: interventive conservation theory

As Winter (2014) points out, the core ideas that shape contemporary heritage conservation theory are rooted in European contexts (Winter 2014:556). If we look at the 21st century literature addressing the modern conservation movement[20] used to educate the next

[20] See for example: Caple (2000), Jokilehto (2017), Muñoz Viñas (2005), Stubbs (2009), Glendinning (2013) and Mehr (2019).

generation of conservators, it is widely argued that conservation as an ideal and as a practice emerged in Western Europe. These authors trace conservation theory and its institutions to seventeenth- and eighteenth-century cities such as Rome, Venice and Paris. Ideas about restoration and preservation, antecedents to conservation[21], are described as coming via the writings of Eugéne Viollet-Le-Duc in France and John Ruskin in England in the mid-late nineteenth century (Viollet-Le-Duc 1990; Ruskin 2008). These men had quite different perspectives as to the aims of conservation (the exact and lengthy details of which will not be covered here as there are many sources which have done so in great detail, ibid n 20). Yet they were not the first to magnify the value of conservation or set out the foundations upon which a practice might be based (see for example Hucklesby 2008), but they are regarded as the 'founding-fathers' of the modern conservation movement, forming the profession's guiding principles and discourse we can observe today (Winter 2014:557-558). Other references, texts and commentaries about conservation intervention theory include those seen in the adaptation of Mehr's (2019) table below (**Figure 9**). Although Mehr is focused on heritage buildings, the same chronology for the history of conservation theory can be seen in Chris the last 2(

Time Frame	19th century after French Revolution	19th century Victorian era	19th century Victorian era	19th and early 20th Century	19th & early 20th Century	1931	20th century	20th century post-WWII
Theorist	Viollet-le-Duc	Ruskin	Morris	Boito	Riegl	Athens Charter	Brandi	Venic Charter
Contributions	pioneer of stylistic restoration movement where building are reinstated in a condition of completeness and with the resources of the original master	critic of Viollet-le-Duc leading instead the conservation (anti-restoration) movement with a focus on daily care of heritage buildings	follower of Ruskin; founder of Society for the Protection of Ancient Buildings (SPAB)	pioneered the restoration-conservation movement by addressing both with three classes of age enabling separate levels of intervention to keep all authentic layers of heritage building intact	preservation of heritage building by identifying the values of its period; introduced three categories of intervention and idea that pure conservation is impossible	first internation document addressing restoration/conservation of heritage buildings; values all styles of all periods and advocated for identifiable regular as well as permanent maintenance in order to retain usability	pioneer of modern restoration-conservation movement; preserving historical, functional and aesthic values of a heritage building with identifiable intervention and not removing signs of decay	introduced adaptive resuse as a way of conserving a heritage building by considering architectural integrity and historical authenticity

[21] It is important to note that these terms are often defined distinctly to one another, although they are closely related. But, as seen with the terms 'conservation treatment' and 'intervention', these terms are defined and used by practitioners given their own unique perspectives as stakeholders.
ICON's glossary definitions for each:
Restoration: "Actions to return an object to a former state".
Preservation: "Maintaining an object in its existing state and retarding its deterioration"
Conservation: An approach to objects which aims to preserve and enhance for the purpose of public access and understanding (ICON 2021).

Figure 9. An adaptation of Mehr (2019) table which outlines the theorist, timeframes and key ideas related to the history of buildings conservation (Mehr 2019:932). This is the same history given for objects conservation.

Heritage studies has of course expanded and diversified its interests in the last two decades, but within the various readings summarized here, heritage's conservation history thematically remains remarkably consistent in that of the privileging of Europe. Even Lowenthal's (1998) historical account of heritage which cites other regions of the world is written through and from the point of view of the West, linking heritage to a wholesale socio-spatial transformation of modernity and therefore presenting it in largely universalistic terms. "Such an observation may be read as a platitude, but the critical issue here is how this bears upon our theorisation of that amorphous entity we call heritage today, and the epistemological paradigms that orient fields like conservation" (Winter 2014:559). Indeed, Harrison (2013) suggested that heritage is 'both a product and producer of Western modernity' (Harrison, 2013:39), furthering Harvey's (2001) point that a lack of historical depth and diversity in the way heritage is conceptualised draws us further back into a European past. For example, in section 6.2.2, Harrison and Harvey are further evidenced by discussions on how unknowns within object biographies and conservation decisions do not need to be qualified through the popular lens of scientism, yet present conservation discourse and practice are pressured by a use of heritage for purely public consumption. Disallowing the materiality which deemed an object worthy of acquisition in the first place (agency, soul, ancestry, ritual, etc.) to guide the conservation practitioner and the evolution of the discipline.

This telling of conservation established with themes rooted in European modernity denote a post-traditional period and one that is marked by progress through the rise of industrialism, the nation-state, capitalism and secularization. Urry (1990) addressed the rise of the heritage industry as a late-modern leisure consumerism in his highly influential thesis, *The Tourist Gaze*. Those working from the analytical perspectives of geography and sociology reveal how the representation and production of heritage objects in the present operates as an arena of power, injustice, exclusion, hegemony and so forth. The critique of public life museumification and Disneyfication can be seen where heritage studies became concerned with the gentrification and transformation of urban landscapes under the conditions of late capitalism (Zukin 1991; Kirshenblatt-Gimblett 1998). As alluded to above, Harvey (2001) expressed anxiety about the 'presentness' of this understanding of heritage

and its inadequate recognition of the deep, diverse history of heritage practices (Hucklesby 2008).

Contemporary conservation attempts to break with earlier restoration practices, yet the use of original materials and a knowledge of traditional practices are espoused as pivotal within the field. Binary oppositions of traditional vs. non-traditional, and ways to reconcile conflict between theory and practice, present and future, object-subject, material-immaterial, is the basis to much discussion in current conservation discourse (Malkergeorgou 2010:36-38; González 2010). As Winter (2014) argues, pluralising how heritage is studied and theoretically framed will better address the heterogenous nature of heritage in relation to the rapid geo-political and geo-cultural shifts perpetually taking place. He stressed that "if our conceptualisation of heritage is to be grounded – and responsive to – some form of empirical reality, then the field needs to account for its relationship to today's regional and global transformations" (Winter 2014:559).

For conservation theory and its application to practice, this can be examined in a contemporary philosophical shift from a 'scientific objective' approach, to a socially constructed one. Although this shift is far from absolute, and both these broad approaches remain current (aiding the emergence of ethnographic questions about how practitioners draw on these different approaches and navigate the contradictions where these intersect, *more on this to follow*):

> "Conservation is currently re-evaluating itself in relation to society and acknowledging both its role in assigning and perpetuating cultural value, and its need for greater dialogue outside the profession.… fluctuations are happening within conservation theory, including the philosophical shift from scientific objective materials-based conservation to the recognition that conservation is a socially constructed activity with numerous public stakeholders" (Richmond and Bracker 2009: xvi).

We can trace the increasing focus on public engagement and consultation to the early 2000s.[22] Pye (2001), taking inspiration from archaeology, elaborated on the importance of communication to explain the complexities of conservation to the public and taking the public's concerns seriously (Pye 2001:185). Muños Viñas (2002) argued that conservation should not be imposed but agreed upon by all the affected subjects making it the conservator's responsibility to engage the public in collaborative conservation (Muños Viñas

[22] See for example: Molina and Pincemin (1994); Avrami, Mason, and de la Torre (2000); Staniforth (2000); Pye (2001); de la Torre (2002); Muños Viñas (2002).

2002:30-31). This community-based consensus-building approach in the heritage field was also discussed by Smith (2006) who was one of the first to critique the authorised heritage discourse. More contemporary debates on discourse (Schofield 2014; Waterton and Watson 2015; Jones 2017; Hølleland and Skrede 2019) have paved the way for reflection on how conservators relate to the public and deal with numerous claims to an object. How a conservator approaches the conservation of a heritage object can determine which claims are addressed.

3.3 Approaches to heritage conservation

There are three approaches to conservation practice that have parallels to the Western account of the history of heritage conservation discussed: materials-, values-, and peoples-based. The exact and lengthy history of these approaches will not be covered here as there are many sources which have done so in great detail.[23] Instead, a discussion as to what these approaches mean in terms of practice and how they are evidenced will be covered. Critiques of each approach will be included as the thesis aims to further such arguments and understandings with ethnographic research and findings. It is important to note that materials-based approaches remain alongside values- and peoples-based and are, to some extent, in tension. To summarise, **Figure 10** based on Cutajar *et al*. (2016) explains the differences between each approach and outlines which supporting documents can trace their origins.

	Approaches to Object Conservation		
	Materials-based	Values-based	Peoples-based
Who's Values?	Universal Values	Stakeholder Values	Community Values
Structure	Expert-led, top-down	Expert-led, top-down with stakeholder consulation	Community-led, people-up
Conservation Action	Guided by a condition assessment	Guided by a statement of significance and includes a condition assessment	Guided by locally appropriate references (e.g., vision statement)
Relation to Material Fabric	Welfare of material fabric takes precendence	Welfare of material fabric is balanced with contemporary stakeholder needs	Welfare of contemporary communities takes precedences over material fabric
Treatment Results	The True Object	The Expected Object	The Plausible Object
Supporting Documents	Athens Charter 1931; Venic Charter 1964; World Heritage Convention 1972	Burra Charter 1979; Nara Document on Authenticity 1994	The Convention for the Safeguarding of Intangible Cultural Heritage 2003; FARO Convention 2005

Figure 10. Based on Cutajar et al. (2016) table on materials-, values- and peoples-based conservation approaches (Cutajar *et al*. 2016:82).

[23] See for example: Cutajar *et al.* 2016; Poulious 2014; Fredheim and Khalaf: 2016; Pye & Sully 2007.

3.3.1 Materials-based approach

A definition of a materials-based approach to conservation can be linked to foundational documents such as the Athens Charter (ICOMOS 1931) and the Venice Charter (ICOMOS 1964). These documents focus on materiality and are therefore tied to concepts such as authenticity, minimal intervention, historic evidence, and reversibility. Intervention is then perceived as a technical process, aimed at resolving structural instability in an object in order to preserve it for future generations. Arguably, the significance of the object is drawn from qualities inherent in its heritage material(s) and requires an expert to qualify (Cutajar *et al*. 2016:83). The conservator as expert is seen by Poulios (2014) as one of the significant weaknesses of a materials-based approach as the conservation process and its results become dependent on the outlook of that one practitioner. Additionally, heritage institutions where materials-based conservation is practiced tend to rely on state support and funding (and not broader community or non- museum/academic consensus), which is not always seen as stable or sustainable. Furthermore, this approach does not embrace or acknowledge non-Western communities' associations with the heritage being conserved but rather the values and aims of the isolated museum and its state funder (Poulios 2014:20). From my experience, the most evident indication of a materials-based approach within contemporary conservation practice can be found within conservation records, past and present (see more on conservation records in Chapter 6 and Chapter 7).

Conservation records explain the techniques and materials used on an object with both written and graphic forms of documentation. A conservation record may include:

- condition reports of the artefact[24] as first presented to the conservator;
- material analysis and investigation implemented on samples from the artefact or on the object itself;
- treatment proposals and reports of the actions and decisions made by the conservator;

[24] Conservation object and artefact are used interchangeably: "Definition of conservation object/item: The term 'object' as used for cultural heritage, both immovable and movable. In specific professional contexts, other terms are used: e.g., 'artefact', 'cultural property', 'item'…" (ICON 2021).

- preventive conservation measures recommended by the conservator for the long-term preservation of the cultural heritage object;
- any relevant drawings, diagrams, and/or images created during the above procedures.

(Beck 2013:85-86; Caple 2000:71-74; Moore 2001:1-7; Velios 2016:13).

In alignment with ethical guidelines and documentation standards established through international cultural heritage bodies, inclusion of the considerations mentioned above theoretically allows conservation records to have an evidential function (AIC 1994, Collections Trust 2011, ICOM 2013, ICON 2014). I critique and contest this idea in Chapter 7 where a materials-based approach seen within conservation records exemplifies how they fail their presumed evidential function. They are used sparingly by practitioners for reference, are often created without much detail, and use jargon-heavy language making them illegible for those outside of conservation and for future practitioners who will not, for example, be up to speed with the acronyms used for certain materials decades before. Conservation records become another show of uncertain ethical codes and standards of practice (Malkogeorgou 2010, Ashley-Smith 2016, 2018) where resources are spent on a task disliked by most practitioners and centred on the creation of obsolete documentation.

3.3.2 Values-based approach

In 2016, Cutajar *et al*. published an article describing a documentation project conducted by students in the University College London Institute of Archaeology conservation laboratory aimed at realigning conservation treatment documentation to reflect a values-based approach. The main component of which includes a statement of significance:

> "The production of a statement of significance is used to provide a clear reference point from which to consider the impact of proposed conservation actions. As a tool of heritage management, compiling a statement of significance involves extracting the necessary contextual conservation assessments from a comprehensive account of all the cultural values associated with a place/object. The statement flows from value assessments, understood as a summary of the cultural heritage values ascribed by heritage communities" (Cutajar *et al*. 2016:84).

While all conservation can be considered an expression of values, a values-based approach is often defined as a paradigm which makes the value-judgements underlying conservation decisions explicit (de la Torre 2002:3). A values-based approach, hence, is based on the

assessment of significance to the conservation object. This involves identifying what is valuable about the object, why, by whom and for whom (Avrami *et al*. 2000:7).

A values-based approach to heritage conservation was adopted and is still advocated by major conservation authorities both at the national and international levels, and by major research educational institutions (Poulios 2010:170). This approach emerged alongside developments in post-processual archaeology as well as in relation to wider societal shifts which have promoted a values-based approach to planning, development, etc., and more generally, the rise of participatory methodologies and ideas of participatory democracy (Hodder 1991). This encouraged conservation professionals to recognize other values, stakeholders, and perspectives in the practice and interpretation of archaeology (Poulios 2010:172). The main criticism of a values-based approach to conservation is the power or influence wielded by conservation practitioners. Although they do not have the exclusive power over the conservation process (as in a materials-based approach), they retain particularly increased influence. Indeed, conservators get to define values where this approach is used. Therefore, there is no shifting in the power of experts necessarily, but rather a reconfiguring of their role as experts in defining and representing other people's values.

Conservators continue to favour the tangible in a values-based approach and therefore conservation continues to reflect mostly 'Western-based' views. For example, the traditional care of heritage by communities is recognised and considered, but only to the extent that it does not undermine modern 'scientifically based' conservation principles and practices. Furthermore, groups that tend to remain associated with the preservation of the fabric (e.g., heritage institutions) are the most favoured stakeholder and therefore, the aim of conservation remains focused on the material as a non- 'renewable' resource "considered to belong to the past, from the people of the present, for the sake of the future generations" (Poulios 2014:22). The question of whether the definition of significance as proposed by a values-based approach is adequate or even present has been examined by, among others, Fredheim and Khalaf (2016). They challenge that the multiplicity of value typologies present within conservation practice is indicative of a discipline incapable of self-reflection (Walter 2017:4). My experiences when investigating this approach tie closely to these evaluations (see more on values-based conservation in Chapter 5). The peoples-based approach to conservation draws heavily from its values-based predecessor but is not one I witnessed throughout my fieldwork. Therefore, it is not possible to discuss the application of a peoples-based approach or evaluate it for its implications on practice.

Dean Sully (a prominent scholar in peoples-based theory) and Isabel Cardoso (2014) applied a peoples-based approach by sharing the analysis of paint samples from Hinemihi (a Maori meeting house) to engage the community with designing an effective conservation response. They explain that within a peoples-based approach the aim is to consult with the relevant community and develop an appropriate conservation response with them. This goes beyond a predetermined expert driven solution and instead, reflects the aspirations of the community. They note, as others have (e.g., Wijesuriya 2015), that a peoples-based approach is aligned to a values-based approach but has different aims (see also Figure 10). A values-based approach seeks to maintain the cultural significant of the object in ways that place the welfare of the material heritage and stakeholder needs as the primary concerns. A peoples-based approach differs in that it prioritises the welfare of the relevant contemporary community over the material heritage (Sully & Cardoso 2014: 182). Below further explains this approach and discusses how other conservators have found its applicability.

3.3.3 Peoples-based approach

A peoples-based approach to conservation, which is also referred to as a living heritage approach "—or a heritage in use approach— favours:

- a more 'people-up' approach;
- benefits being gained by both heritage and people;
- continuity and sharing of knowledge and resources;
- a more direct connection to livelihoods and thus social, economic and environmental values;
- primary community members being central to decision making, not just being placed in a secondary role;
- the engagement of the primary holder of cultural values – the connected community – being unavoidable" (Wijesuriya *et al*. 2018).

Those forming and engaging in this approach around the world[25] agree that it is not necessarily a substitute for earlier approaches such as materials- and values-based, but a peoples-based approach is a complementary development or an improvement and can be

[25] For example, participants in the 2009 ICCROM meeting in Bangkok (Wijesuriya 2015:3).

adapted to deal with any category of heritage (Wijesuriya 2015:3). In summary, a peoples-based approach is about heritage and conservation practice centred on community and public benefit. Some examples of this approach in practice can be seen with Brajer's (2008) pilot study investigating the general public's values and opinions ascribed to wall paintings, influencing their restoration. As well as with Sully and Cardoso's (2014) aforementioned project with Hinemihi (referred to as 'she') which was brought to Clandon Park, Surrey, in the 19th century. The criticism of the approach is once again tied back to the practitioners and whether they can engage with people and change the way they think about and see heritage (Emerick 2018:66). These 'participatory' approaches more often involve a redistribution of expertise than an absolute undermining; a transfer of power from those who claim to know things with authority to those who claim authority through speaking on behalf of other "publics", "stakeholders" and "communities" (Waterton 2010; Cooke and Kothari 2001; Jones and Yarrow 2022:29).

From my experiences, action towards this approach had not reached my interlocutors; many were unaware of a peoples-based approach and as such, I did not witness it within practice, nor did I have previous experience of it in my own conservation work. The summary above has been included to ensure all contemporary approaches to conservation are outlined and critiqued, but as seen with the article on significance statements in conservation records (Cutajar *et al*. 2016), UK object conservation training institutes are still advocating for a values-based approach (see also Pearlstein 2016). This is mirrored in Henderson and Nakatomo's (2016) published case studies where involving consultation with communities shows an elaboration of the meanings or significance of objects and, to a lesser degree, these objects' conservation. Yet, when consulting on treatment, conservators often fell back on their own technical authority (Henderson and Nakamoto 2016:67-74).

The varying approaches, the history and theory behind them, as well as their use in practice exemplifies a present renegotiation of the conservator expertise. A decentring of the expert role can alleviate conservation's authorised, Western heritage discourse (Smith 2006). Although, as Jones and Yarrow (2022) have concluded, these shifts reconfigure expertise from authority exercised through claims on 'the truth' of an object, to authority exercised through claims of knowing and managing 'the values' around the object – the role of experts changes but is not straightforwardly displaced. As Winter (2015) suggests, specialist skills are still required and essential, but they need to be coupled with a stronger grasp of the socio-political complexities which envelope global heritage studies today (Winter 2015:541). As

the role of experts is in question in heritage conservation (Hølleland and Skrede 2018) alongside a range of other contexts (Collins and Evans 2007; Schon 2013), Schofield's (2014) edited volume poses the rhetorical question "Who needs experts?". Answering this in a range of ways that reflect an increasing consensus in critical heritage studies that if the significance of the past is an artefact of the values people give to it, their role is reconfigured in more "participatory" terms as a form of facilitation (Jones and Yarrow 2022: 31; Hølleland and Skrede 2018). Previous ethnographic work summarised below sheds light on a broader set of dynamics underpinning the facilitation of internationally recognized conservation theory and approaches in a range of institutional contexts.

3.4 Observations of contemporary practice

The call for affective communication about conservation practice accompanies the development of the academic profession from a craft-based tradition. In 1988, Drysdale urged conservators to work with clients and create a well-balanced space for negotiation (Drysdale 1988:20). Such advocacy is often listed as one of the responsibilities of the conservator, promoting conservation both in and to the public. Yet, Caple (2000) indicated that there was a lack of understanding outside the field regarding the activities of conservation. Similarly, Drysdale (1999) suggested that conservators look to the arts and humanities to enable use of language that is unashamedly subjective and can express the passion they feel for their work, pointing to the unknown or unshared complexity of conservators' work experiences. As mentioned above, Pye (2001) elaborated on the importance of communicating conservation to the public at about the same time that public archaeology developed as a separate branch (Pye 2001:185; Merriman 2004; Moshenska 2017).

An ethnography of archaeological practice highlighted the importance of engaging in an observational study of archaeologists in order to 'unfold the relationship between worker and material evidence' (Edgeworth 2003; Yarrow 2003). Object conservators, like archaeologists, often engage with material evidence at 'the scalpel's edge' rather than Edgeworth's 'trowel edge' for archaeologists. In 2008, Jones and Holden moved away from ideas of impartiality and abstracted relationships with preserving heritage objects and made the following argument:

> "Conservation is therefore rooted in social action and refers to the management of change in objects that have fluctuating value in the society in which they exist. It is in conservation's favour that it is not objective. Conservation is about refreshing and renewing culture and heritage in ways that reflect and contribute to

> society's values, thereby making a statement about values to others, and a statement about the present to the future" (Jones and Holden 2008: 27).

This was soon followed by Malkergeorgou's 2010 thesis, *Discipling Conservation: Conservators, Conservation and the V&A*. Using an ethnographic approach, Malkergeorgou spent time with V&A conservators trying to interrogate the idea of physical authenticity in relation to representational truth much more than a technical involvement. She found that this was not discussed and as a result its significance and how it contributes to understandings of heritage objects is not acknowledged or appreciated. Conservation then appears as a mechanical process defined by narrow empirical confines, but Malkergeorgou's work on the ground shows that what was competing for recognition was the conservator's ethics for an approach to care (Malkergeorgou 2010:376-385).

Following work on the role of experts such as archaeologists, architects, and historians as stewards of the past in the development of the European discourse on heritage, Malkergeorgou found that the conservator's work influences management policies and practice by reinforcing the concept of materiality and aesthetics. Consequently, safeguarding the intangible becomes accessible through the professions within museum hierarchies. She concludes:

> "Trying to locate the methodological moment in conservation is much more than an ideal approach to objects or negotiating technical intervention and the ability to carry out treatment. It can become a problem about inclusion, hierarchy, disruption, negotiation of reconciliation and a question of 'how to tolerate ambivalence' in relation to favoured pasts and avoided pasts, and which in the effort to resolve it recreates material and human experiences in a constant process of authentication" (Malkergeorgou 2010:390).

Jones and Yarrow's 2013 article *Crafting authenticity: An ethnography of conservation practice*, interrogated similar questions to Malkergeorgou but with architectural conservation undertaken at Glasgow Cathedral. Following on from the insights of Edensor (2011) and Tait and While (2009), Jones and Yarrow use an ethnographic perspective to reveal how conservation actors navigate networks of relationships with other actors and materials. In their studies of conservation and maintenance, Tait, While (2009) and Edensor (2011) argue that conservation ethics are founded on an ontology of buildings as stable, unified objects. Arguing, on the contrary, that buildings are formed from assemblages of materials and agencies that are continually made and unmade, they suggest that the objectives of conservation need to be rethought. Jones and Yarrow also acknowledge conservation instruments and policies which provide guidelines and principles as necessarily general and

underdetermining of what should happen at specific sites and to specific objects. Their ethnography reveals how all of the following play a role:

- conservation actors and their enacted, embodied expertise,
- other actors and their enacted expertise,
- the context of the conservation project or reasoning behind the intervention,
- the material object itself.

All the practitioners seek to guarantee the authenticity of maintenance, repair, and reconstruction (conservation) by anchoring it to the past, even if they enact this in different ways. The authors conclude:

> "material conditions, in this case the nexus of materials that constitute the Cathedral, also play a crucial role. Distinct forms of expert knowledge and skilled practice are refracted through specific material contexts, as articulated by the image of different forms of expertise and skilled practice coming together on the scaffold. Thus, authenticity is neither a subjective, discursive construction nor a latent property of historic buildings and monuments waiting to be preserved. Rather, it is a distributed property that emerges through the interaction between people and things" (Jones and Yarrow 2013:24).

Through their ethnographic study, Jones and Yarrow were able to explore how various actors confront and resolve problems with a subtlety and reflexivity that is often neglected in theoretical critiques of policy discourse (Jones and Yarrow 2013:22). Self-reflection about the role of the conservator and their practice has also been the subject of more recent discourse (see the Chapter 7 for my take).

In 2016, Stigter published an article titled *Autoethnography in Conservatio*n. She argues that autoethnography as a method in conservation would allow for a process-based assessment of practice which foregrounds the conservator's personal input. As a method common to the social sciences, in conservation, autoethnography would imply conservators describing how the object affects their actions while at the same time considering and recording how their actions affect the object. This addresses the cognitive processes and micro-level decisions steering the desired result. Stigter concludes that such testimony imposes the reflexivity needed in the conservation of cultural heritage (Stigter 2016:228-231). Indeed, Yarrow's (2019) ethnographic research on conservation and renovation practices in England, shows that the temporal orientation to buildings, and arguably all material heritage, invests them with a significance that is individualised in a range of ways, including through notions of character and personality. Following from work which has

observed buildings attributed with a 'thing-like character', Yarrow enhances our understandings as to how those working with these objects, make and negotiate this attribution; concluding that conservation matters to a broad range of actors and a diverse range of orientations, "not only as a way of knowing but also, indissolubly, as ethical orientations, emotions, identities and ideologies of various kinds" (Yarrow 2019:19). Therefore, we see calls for heritage experts to practice self-critical reflection about their own role and strive to emphasize democratic heritage involvement (Hølleland and Skrede 2019:8-9). Yet, there are the realities and constraints on practice to consider. Spaarschuh and Kempton (2020) found some of these other contributing variables.

Through their interviews of conservators working on religious objects, they found that conservators had a strong sense of self-restraint and aimed to keep their personal impact minimal in terms of intervention. Yet, several of the informants reflected on how all intervention entails interpretation to a certain degree. Indeed, conservation decisions are subjective "as they are made by subjects on non-standardised terms, having little in common with neutrality and universality" (Spaarschuh and Kempton 2020:368). Acknowledging what the authors above have noted about reflexivity, Spaarschuh and Kempton also noted that a large, if not the largest, contributing factor affecting intervention was financial. Indeed, Ashley-Smith's (2018) commentary on reduced interventive conservation in the UK identified rigid theory and ethics, as well as budgetary constraints as the factors affecting practice (Ashley-Smith 2018:14). Nevertheless, Spaarschuh and Kempton found that conservators faced financial restrictions with idealism and creativity, stating 'the best' was achieved for every object under the given circumstances.

Interestingly, on the scale of Sully and Pombo Cardoso's (2014) materials-based, to values-based, to peoples-based conservation, Spaarschuh and Kempton saw their informants spread along a line between materials-based and values-based. Although conservation work was done in service for people, the object's individual context, condition, and biography 'decided' what was enacted: "In most cases the welfare of material heritage is set first, but a projection of stakeholders' positions and wishes are considered and integrated in the development of conservation concepts" (Spaarschuh and Kempton 2020:369). Jones and Yarrow's (2022) account highlights how heritage professionals re-imagine their own role in relation to these ideological changes of approach. Their perspective revealed how broader challenges to expertise are situated in a range of specific ways, associated with redefinitions of the role, and of the nature and value of the historic environments they manage. Jones and

Yarrow highlight how values-based approaches reconfigure intrinsic understandings of heritage, without entirely displacing them (Kisić 2016). These contradictory versions of the aims and remit of conservation are threaded through the working lives of conservation professionals as a range of conflicts and contradictions.

Additionally, a tendency to apply human qualities to an object was detected in several of Spaarschuh and Kempton's interviews. This came in the form of emphasising an object's individual preconditions and needs. Here the common patient-metaphor was used to trigger associations with human rehabilitation from injury or disease (also used in Jones and Yarrow's 2022 ethnography of buildings conservators). This humanisation of objects was seen as an attempt to communicate the objects' uniqueness and processual history, giving an impression of conservators' personal bonds and social relatedness. The authors conclude:

> "When studying objects as closely as we do, we simply come very close to them – perhaps sometimes in a double sense of the word. To the authors of this article, it appears not unlikely that one can become (emotionally) attached or related to some of the objects we get to work with throughout our career. Thus, apart from using the patient/doctor comparison as a rhetoric metaphor, personification could indicate an emotional aspect which affects and influences our relation and attitude to objects of conservation. For example, it may be reflected in our attitude to object materiality opposed to its significance for the public" (Spaarschuh and Kempton 2020:371).

This harks back to Drysdale (1999) and the understanding that conservators' experiential knowledge and ways of knowing could help the profession evolve towards reflexivity, diversity, decoloniality, etc., or simply, towards attaining a stronger grasp of the socio-political complexities enveloping global heritage studies and societies today.

3.5 Conclusion

To summarize, at the turn of the century, a turn in theory around conservation practice began. It was accompanied by more interrogation into the reality of practice and the experiences of practitioners. Observations of conservation theory, policy and guidelines as enacted in practice revealed that they are insufficient, rigid, and uncertain. Conservation intervention has been observed as a negotiation between actors and materials. Recent testimonials have determined how heavily impacted practice is by financial restrictions. By the start of my research in 2015, autoethnography was proposed as a way to invite reflection into conservation practice and intervention. With a look towards diversifying both the history of conservation and the ways in which it is understood and practiced self-critical reflection

entered conservation discourse. This has not dismissed but rather reemphasized ideas about the conservator-object relationship and the complexity of intervention. My ethnographic research can validate some of the observations outlined above with examples from various field sites and with testimonials from a variety of interlocutors. Rather than continuing to narrate a history of the conservation sector, I explore how that historical context was narrated to me in the way that both reflects and creates contemporary institutional realities for a variety of practitioners.

In the next chapter, I begin unveiling my experiences in the field. I address the chronology of conservation intervention summarised above. As previously covered in section 3.2, the narrative found in 21st century literature addressing the modern conservation movement is problematic in its Eurocentric origin story and overall Western bias, particularly if applied uncritically pedagogically. My time with conservation students and interns at the University of Durham and University College London (section 4.2) give example of such problematic syllabi, material- to values- based approaches, and the future of a profession lacking in socio-economic diversity.

Figure 11. Interlocutors repaint a train where visitors often take a ride. Materials and methods used by these volunteers mimics their practice throughout their work lives and is therefore an intervention based on experience (Fieldwork photograph, Suarez Ferreira 2017).

4.1 Introduction

This chapter will explore how experience, confidence and socio-economic class affects conservation practice within the UK. Lived testimony of those planning for a future in conservation shows how the buildup of experience is essential for the practitioner to self-identify as conservator, with the confidence of decision-making at the expert level. Rather than seeing expertise as intuitive and tacit, recognizing its conscious, controlled nature allows the imperative need for practical experience to be highlighted (Montero 2021). Senior practitioners testify that current pedagogical structures in the UK disallows for this need to be ameliorated as hosting institutions and their conservators are not allotted the time to train newcomers in contextualized practice. They themselves have little time to upkeep their own skill-oriented expertise (Ashley-Smith 2016). Furthermore, gaining experience is at the helm of finance where excepting low-paid internships or unpaid volunteer work means only economically comfortable individuals can gain that coveted confidence that may lead them to professional positions. Yet there are practitioners who are confident and experienced in their work who are undervalued by many heritage institutions because their skills were not acquired through formalized, academic routes. This segregation of knowledge furthers the lack of socio-economic diversity within the profession, pointing to a future where the heritage sector cannot address, for example, decolonizing and diversifying the museum (González 2010). Indeed, as described in Chapter 3, if approaches to conservation still rely on conservator's power to determine the value of heritage material, can they meet the inclusivity of such expectations within these approaches if they as practitioners form a non-diverse professional community. Excerpts from participant observation, alongside semistructured interviews and forums from within the contexts of practice individuate and contextualize this expertise (Sutton and Bicknell 2021).

4.1.1 Chapter outline

This chapter commences with an explanation of the various interlocutors I worked with during my fieldwork. Beginning with students, their experiences revealed information about conservation pedagogy and career trajectories within the UK (section *4.2 Pedagogy, confidence, and experience)*. Time with students and interns began to paint a demographic picture of the future of conservation in terms of diversity and representation. In section 4.3 *The right kind of experience*, I begin by untangling issues around training qualification hierarchy with an example from my time spent with a conservation technician. As explained

in Chapter 3, those practicing conservation within the UK are experiencing the theoretical turns and issues on intervention facing the discipline.

All of these practitioners each represent a different phase of object conservation which can collectively be seen as a common trajectory (although not necessarily a linear one) within the professionalization of object conservators (**Figure 12**).

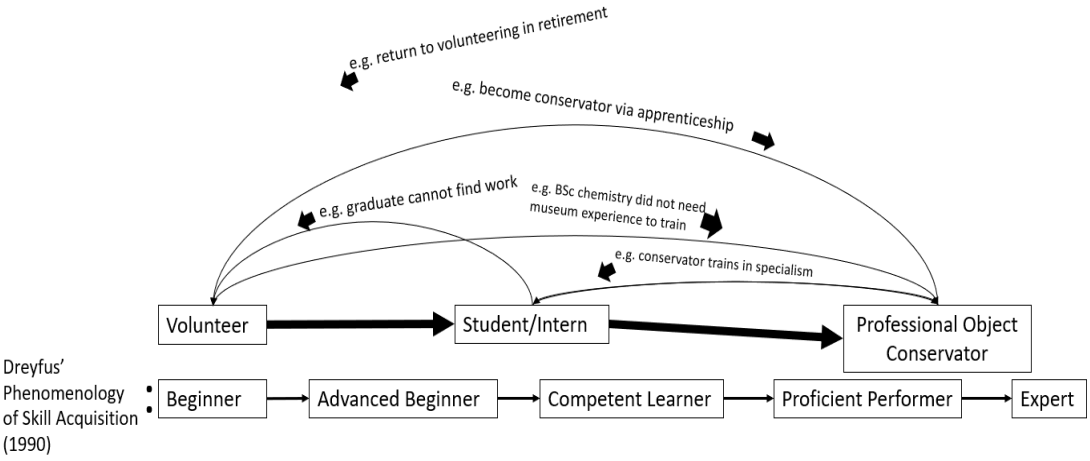


Figure 12. Dreyfus' (1990) phenomenology of skill acquisition has been used by ICON and scholars concerned with conservation pedagogy (Henderson 2016) to determine the development of the conservator. Here it is overlaid with my interlocutors' roles**.**

Following Dreyfus' (1990) model of expert skill acquisition, including volunteers, students, and professionals (technicians and conservators) within this study, I am paying attention to the process of becoming an object conservator (Boyer 2008). **Table 2** organizes why each group is included in this discussion on conservation intervention and expertise, and briefly summarizes the body of text corresponding to their testimony. Together their knowledge and familiarity of intervention adds to the history of practice, alongside other contemporary ethnographies of conservation. The conclusion of this chapter will emphasize the interconnectedness of the various practitioner roles and how, together, they characterize present conservation intervention.

Table 2. Practitioner Groups Included in the Discussion on Conservation Expertise

Practitioner	Inclusion	Section	Testimony
Students; Interns; Early career	Representing the future of the conservation profession.	4.1.2-4.2.1	Confidence is a main concern for these practitioners. It is gained through contextualised practical experience. Experience that is hard to gain without financial stability and networks in metropolitan areas.
Conservation Technicians	Representing a group of practitioners who regularly intervene on objects and gain expertise through practice.	4.2.2-4.3	Expertise in conservation intervention gained through practical experience but a non-academic background leaves practitioners feeling undervalued and misrepresented.
Conservation Volunteers	Representing a group of practitioners who regularly intervene on objects with previously acquired vocational expertise.	4.3.1-4.3.2	Vocational expertise allows practitioners to conserve heritage with skills that are undervalued by museums and society alike.

4.1.2 Background: studying conservation

In the UK, a common step towards becoming an object conservator is to undergo training at the Masters level within a university. The students will generally be allocated time where they are studying conservation theory as well as working on objects within the university laboratory. As Henderson (2009) explains, "The curriculum for the first year of the MSc in Conservation Practice will contain elements which are primarily about skills and some which are primarily about comprehension and application. A substantial section of the course element will be devoted to practical projects where students work on objects that bring both those sides together" (Henderson 2009: 10). Students then have a period of training through a museum placement. I was able to observe and speak to students in both these situations at the Institute of Archaeology at University College London and the Department of Archaeology at Durham University.

At these institutions, students worked on several objects ranging in type and condition and engaged in preventive and interventive measures of conservation. They produced information about objects' historical and cultural backgrounds as well as the conservation measures undertaken to preserve them. They received lectures about the history of the discipline, the theoretical basis of the work, and the ethical guidelines in place for practice. Students were expected to integrate all information related to and about the objects they were assigned to conserve. They were expected to engage with this level of materiality as well as document their research and practice thoroughly (Cutajar *et al*. 2016:86-92).

The students undertook a placement. As covered in the Preface, Introduction and Table 1, different museums have different expectations for their interning conservators. The size and aims of the museum results in exposure to different types of objects, where workflows and expectations vary (Ambrose and Paine 2006:6-8). The documentation standards and approaches to conservation also vary depending on the aims and ethos of the museum (Cutajar *et al*. 2016:81-86). When at the intern level, students may have increased expectations that exceed what they were accustomed to at university. Their working environment changes and the number of stakeholders they must appease grows.

I worked with students within their university laboratory, I interviewed them separately as they were training, as well as when they were on placement. These interviews were often completed in groups where a comparison of experiences was discussed amongst participants. I visited students at the museums where they had been placed, meaning I was able to see a variety of conservation spaces and discuss changes in participants from: 'a university student' to 'a conservation intern' to 'a recent graduate applying for work' or in terms of ICON's scale (**Figure 13**), from the novice level to at least the competent level (ICON 2008).

	Knowledge	Standard of work	Autonomy	Coping with complexity	Perception of context
1 Novice	Minimal, or 'textbook' knowledge unrelated to practice	Unlikely to be satisfactory unless closely supervised	Needs close supervision or instruction	Little or no conception of dealing with complexity	Tends to see actions in isolation
2 Beginner	Working knowledge of key aspects of practice	Straightforward tasks likely to be completed to an acceptable standard	Able to achieve some steps using own judgement, but supervision needed for overall task	Appreciates complex situations but only able to achieve partial resolution	Sees actions as a series of steps
3 Competent	Good working and background knowledge of area of practice	Fit for purpose, though may lack refinement	Able to achieve most tasks using own judgement	Copes with complex situations through deliberate analysis and planning	Sees actions at least partly in terms of longer-term goals
4 Proficient	Depth of understanding of discipline and area of practice	Fully acceptable standard achieved routinely	Able to take full responsibility for own work (and that of others where applicable)	Deals with complex situations holistically, decision-making more confident	Sees overall 'picture' and how individual actions fit within it
5 Expert	Authoritative knowledge of discipline and deep tacit understanding across area of practice	Excellence achieved with relative ease	Able to take responsibility for going beyond existing standards and creating own interpretations	Holistic grasp of complex situations, moves between intuitive and analytical approaches with ease	Sees overall 'picture' and alternative approaches; vision of what is possible

Figure 13. ICON's novice to expert scale (Henderson 2009:8).

What became evident early on was the emphasis on how experience is tied to a practitioner's confidence in their work, but also to how experience is tied to how employable they would be post-training (i.e., how far one is on ICON's scale was felt to depend heavily on experience and confidence). These individuals were often aiming for as much experience

as possible yet for those practicing conservation but not as ‘conservators-to-be’ (e.g., volunteers or conservation technicians), experience was valued on a spectrum tied heavily to whether they had trained academically.

4.2 Pedagogy, confidence, and experience

This subsection draws heavily from my time spent with students and interns studying object conservation at the University of Durham and University College London (UCL). When interviewing students, I was predominantly an ethnographer yet my recent experiences training myself made my time with these interlocutors have a contemporaneous sensitivity. Whilst at field sites, I was exposed to interns and at that point I was both ethnographer and conservator as my access to the sites and their staff was in exchange for my aid in their conservation programs. Below is a summary of a forum dealing with conservation experience, how important it is for becoming eligible for a paid, long-term role within a museum in the UK and how it affects the way an individual feels about their practice —their confidence in their practice. By focusing on experience, some underlying points about the profession arose.

When speaking to students, I found that they were heavily focused on future employment. As I asked about their concerns, I found where the lack of diversity within the profession can be exemplified. They told me that there is an understanding that a Masters degree in conservation is not necessarily enough for most entry-level posts and so the focus throughout training and directly after training becomes gaining experience. Often roles offered to trainees and graduates, alike, are unpaid and so not only do these persons need to have the ability to pay for university (as limited funding for post graduate study in conservation is offered), but they also need to be able to support themselves financially whilst gaining unpaid experience. We can see evidence of this in discussions had on The C Word: The Conservator’s Podcast where in recent episodes hosts and guests speak about zero-hour contracts in museums (Mathiasson *et al*. 2020: S11E07) and the need for a ‘side hustle’ (Mathiasson *et al*. 2020: S06E07). They termed a ‘side hustle’ to be any type of employment that is additional to your conservation role or whilst seeking to be mainly employed as a conservator. One of the hosts begins by noting: ‘It is hard work staying in conservation sometimes’ and advises listeners to try and sell things on eBay, become an Uber driver, wash cars, tutor online, or simply find a ‘regular old part-time job’.

She goes on: 'We all know there are peaks and troughs in terms of conservation careers sometimes. You might be between contracts and stuff and then you need to do something else for a bit. These [side hustles] are things that help you stay in conservation' (Mathiasson *et al*. 2020: S06E07). Listeners then share their own stories regarding the sometimes dozens of jobs they had after graduating from their Masters in conservation whilst trying to find work or simply 'pay bills' (as some conservation roles pay so little that practitioners find they need to work other jobs or create/rely on a 'side hustle' in order to manage their financial commitments). In their 'emerging professionals' episodes (S01E05 and S02E04) hosts, guests, and listeners alike give testimony such as:

> 'applying for a 6-month job in a place I'd have to move to hoping that it might lead to something. Otherwise, I'll be unemployed by Christmas. Friends and family are concerned with such a big gamble, but my gamble is not being able to pay my bills or having major gaps in my CV. When applying for all these jobs it feels like shit having to write 4 months unemployed or 5 months unemployed even though I am looking for work every single day' (Mathiasson *et al*. 2020: S01E05).

The response is advice on 'filling one's CV' with volunteer work, hoping employers do not notice or do not mind that it was not paid.

This is where the bottleneck leading to a lack of diversity in terms of social-economic status within the profession can begin to be illustrated. Furthermore, the majority of paid object conservation roles appear in London, or other major urban centres where the cost of living is higher. Interlocutors found and are still finding hardship in seeking employment if they are not wealthy, they do not have family in metropolitan cities, if they do not have differential access to opportunities via existing informal connections and networks and/or if they do not have unlimited time to devote to gaining experience. What these variables inevitably lead to is permanent professional roles populated by those originally from a more affluent[26] socio-economic class.

On a related note, The C Word podcast, created by conservators who all worked at various of my UCM field sites, have questioned diversity within conservation in the UK. Using the data created by the Conservation Labour Market Intelligence Survey showing that 97% of conservators are ethnically white, they surmised that the variability of individual experiences could and should change the conservation object, or even the conservation

[26] i.e., financially capable of affording a Masters degree and working for free at the start of their careers or living off zero-hour/part-time/temporary work in urban centres (Heyes et al 2018).

objective, shedding more light on the potential for the role of diversity within practice (Mathiasson *et al*. 2020: S01E01; Henderson 2020). It has been established that experience with objects shapes the way we see and understand heritage (Yarrow 2019; Spaarschuh and Kempton 2020). Yarrow summarises that his ethnographic work shows, 'how conservation comes to matter for a broader range of actors and as a diverse range of orientations, not only as a way of knowing but also, indissolubly, as ethical orientations, emotions, identities and ideologies of various kinds' (Yarrow 2019:19). Diversity of practitioners is therefore paramount to a representational museum, where those in the care of objects come from various backgrounds and bring their 'range of orientations' to the conservation of material heritage. This is especially true for conservation intervention where change is often at least semi-permanent and entails interpretation to a certain degree (Spaarschuh and Kempton 2020:368; Henderson 2022).

In the next section, how issues of diversity are related to experience will be unpacked. Ashley-Smith (2016) noted that many conservators are not able to actively intervene on objects and therefore lose certain experience and skills overtime. Sometimes leading them to 'excuse' not working on objects by allying with 'ethics' or concepts like preventive conservation. Conscious of the dilemma, practitioners attribute their lack of action to the way in which they frame their role. They then may find a way of integrating, or choosing among, the values at stake in the situation (Schön 1994:63). Indeed, stipulated in the guidelines and codes of ethics of conservation practice in the UK is a theme on ability[27] – recognizing whether you have the knowledge and skills to carry out the work, and if not, choosing another approach or not intervening at all. There is another unlikely route if time and workflow pressures have already led to loss of skills: to learn via research or courses what is necessary to best complete the work. ICON calls this professional development; it is required for accreditation[28] and many funding bodies give financial aid in support of furthering individuals' careers in this way. Experiential knowledge as well as continual development are fundamental to ethical practice. One way dialog around experience manifested in conversations I had, was when on the subject of confidence.

[27] See for example: AIC 1994, Collections Trust 2011, ICOM 2013, ICON 2014.

[28] "The Professional Accreditation of Conservator-Restorers (PACR) is a professional qualification, administered by ICON. Becoming an Accredited Conservator-Restorer (ACR) demonstrates to clients, employers and peers that an individual has an in-depth knowledge of conservation, a high degree of competence, sound judgement and a deep understanding of the principles which underpin their practice, by showing that they are proficient across ICON's professional standards in conservation" (ICON 2019).

4.2.1 Confidence as Experience

Experience is arguably fundamental to individual confidence. This became most evident when speaking to students training in conservation, or early-career conservators. Using UCM's network to draw an audience, I scheduled a morning coffee forum where practitioners gathered in the meeting room below the Fitzwilliam Museum's director's flat. Whilst conducting research at The Fitzwilliam, I was simultaneously conservator and ethnographer as my access to the site and its staff was agreed in exchange for my aid in their conservation programs. Below is an excerpt where a conservation intern (Daisy) shares her biggest concern around progressing as a conservation professional. This concern is echoed by two early-career conservators in the room (Mary and Emily), with the senior conservator (Chris) advising they all just need to practice more. All these interlocutors are white European or British nationals who have studied conservation in UK universities and come from middle- or upper-class socio-economic backgrounds. From this point forward interlocutors will be introduced by describing their race, ethnicity and socio-economic class to showcase the lack of diversity I encountered throughout my fieldwork. In congruence, to work and intern within UCM, particularly The Fitzwilliam, the weight of opulence ever surrounds practitioners.

> The large oval table where we gathered feels as though it was made for feasts; especially accompanied by large windows and their ornate drapes. Indeed, the director's private garden can be seen from just outside, pristine in its manicured lawn and exotic vegetation. The informality of a forum drops from purview as interlocutors gather around the table with their dainty teacups and pretty biscuits. Thankfully, the conversation turns more honest as they share:
>
> Daisy (conservation intern): I'll volunteer then, my main problem is confidence...there you go.
>
> Mary (objects conservator): For me its related to very specific aspects of my work, and certainly like in real life within my hobbies I have no problems with confidence. It's related to specific bits of what I do but it's a real barrier and it's taken an awful lot to try and move forward and find ways to deal with it.
>
> Chris (senior conservator): Yeah, and that does link to support because if you perhaps had a bit more support you might feel a bit more reassured and a bit more confident, maybe. Maybe you've got to practice a bit more, I wouldn't say I was

> particularly confident, but on the blog writing, I mean you get the same thing about giving presentations, and out of college I would have run a mile to do that, but start out in small groups and research what you are going to say and then your confidence builds, and the same with the writing, you'll find if you do a bit and you perhaps do a blog you get someone to read it and you publish it, the second one won't be nearly as difficult.

> Emily (early-career conservator): Yeah I wanted to say I agree with you that confidence is something that um, changes, and can be shaped and built and with it also, like for me personally, I know that I've had times where I have lost a lot of confidence in my work, especially practical work or being able to make the right decision or… but then it's something that comes and goes depending on the, there's a lot of factors around it, but also personal life, it sometimes gets in the way, um, but yeah it can be built up. And for me I am so lucky because my line manager helps me a lot and sees a lot of, um, how confident I am and he gives me projects that, um, may make me feel more confident but sometimes, what makes you feel more confident is having a challenge and sometimes it's not the challenge, sometimes it's more like something you know and then you can move on. It takes time to get to know as you go but it's good to be able to work collaboratively.

I have included this excerpt to highlight that confidence in conservation work is thought to be heavily allied with experience but that gaining such experience is difficult when recent graduates need to have a certain financial stability to gain that experience. Jane Henderson (2009), the program director for one of the leading university's conservation programs in the UK, gives testimony:

> 'After years in conservation I look at an object and several treatment options come straight to mind. I am not necessarily clear how I know this, experienced conservators have tried and tested their methods in a range of different contexts, drawing empirical conclusions and making decisions so that over time they become impervious to the process by which they made those decisions…Is this the definition of expertise?' (Henderson 2009:7).

ICON's novice to expert scale (**Figure 13**) describes the expert conservator as having tacit knowledge, moving between situations intuitively, and achieving excellence with ease (Henderson 2009:8). My student and intern interlocutors were not confident that expertise was ever going to be something they achieve, most certainly without opportunity to gain experience. Describing 'real experts', Sutton and Bicknell (2021) state:

> "Experts are, as we say, experienced performers who hone their skills over time, through long and arduous training regimes which directly alter and shape their bodies, tuning perceptual, cognitive, emotion- regulation, and motor capacities which continue to improve and knit together in action… In this sense, the embodied experience of experts is their history of practice" (Sutton and Bicknell 2021:195).

As recounted by the forum participants, pressure of 'the right decision' seems to be allied with experience, of knowing all the correct processes and possibilities and how to precisely and tacitly enact them as though the individual can be extrapolated from the decision. But as Grasseni (2007) explains, "once acquired, skill is an essential element of practice, a meaning-making attitude is developed and applied throughout every day. This amounts to a sense of identification or emplacement" (Grasseni 2007:10). Similarly, recent advances in the philosophy of skill and expertise point to a contested expert know-how that is implicitly intuitive (e.g., the just-do-it principle).

Dreyfus and Dreyfus (2014) thought that skillful action is the nucleus of embodied, embedded agency "and used such action as an example motivating a non- representational theory of intentional action" (Fridland and Pavese 2021:10). In *Consciousness and Skill*, Montero (2021) highlights the shortcomings of this and the just-do-it principle, arguing that conscious thought about what one is doing is compatible with expertise. She surveys some empirical evidence showing that in fact skillful performance might require the full consciousness of the expert – taking seriously phenomenological evidence and personal reports and by looking at skillful performance from the perspective of the embodied experiences of the real experts. This ecological approach, much like a multi-sited ethnography, to the study of skillful performance is theorized and defended by Sutton and Bicknell (2021). They argue that a properly ecological methodology requires looking at the real performances of experts in the environment where they are intelligently attuned, rather than in artificial and regimented experimental settings. Sutton and Bicknell draw from rich bodies of applied research but also from practitioners' own fallible but unique self-understandings – mirroring the semistructured interviews and forums I conducted with the aim to ethnographically try and understand conservation as a way of thinking, seeing, feeling and acting that is practically performed (Mol 2002). The link between skill and agency, and the relation between automaticity on one hand, and control and attention on the other, is further investigated by Wu (2021) who concludes that skill emerges from a shifting balance between automaticity and control over time (Fridland and Pavese 2021:10-11). To summarize, skill and expertise have been found to be neither unconscious nor automated, but rather also controlled and conscious performance structured by intentional agency. Individuating and contextualizing the practitioner shows how the buildup of experience is essential for the practitioner to self-identify as conservator, with the confidence of decision-making at the expert level.

Yet, support within the profession, even after gaining employment, is strained by the expectation of practitioners to encompass increasingly complicated roles whilst still making time to train students, interns, and successors alike. Emma, a sponsor for both conservation students and ICON interns at The Fitzwilliam, told me that training institutions, as well as the accreditation system needs to be revised to consider that working professional conservators do not have the time to teach hands-on practical work, nor time to keep up their own practical skills to be able to relay their 'expertise' in the first place. Although this is not the case for everyone, we know from Ashley-Smith's (2016) interviews that this has recently impacted the profession – a story I, many of my fellow-alumni, and many of my interlocutors experienced. Before moving on to how these expectations and corresponding financial restrictions affect conservation intervention, below is another example concerning experience. Here it is the conservator's 'base knowledge' or that which she gained before her post-graduate training in conservation. This begins the conversation as to whether there is a particular kind of experience that is needed, for the object or perhaps, for the role of the conservator. My interview and time with Rose were when she was interning for a field site where my positionality was both as ethnographer and conservator as access to the site and its staff was done in exchange for my aid in their conservation programs.

Rose had come from an art historical background where she had spent a lot of time working on paintings and other fine art.[29] Her knowledge of archaeology was scarce, and she found this to be a struggle when she was revealing information about the Ancient Egyptian coffin she was working on. The coffin was laid out on the tall tables in the center of the laboratory. The space always so clean, white, and quiet. This coffin panel sat on a make-shift plinth, covered by Tyvek[30] to allow it to be moved and to keep it safe (

[29] "'fine art' is of recent origin—in fact, as well as that it originated (along with its name) in the eighteenth-century West… as we now use it in reference to paintings, sculptures …etc." (Clowney 2011:309).
[30] "DuPont™ Tyvek® – a spunbonded material made from high-density polyethylene fibres – offers a portfolio of tough, durable sheet products that are stronger than paper and more cost-effective and versatile than fabrics. Since Tyvek® was initially discovered in 1955, DuPont has been a recognized global leader in selective barrier technology. Lightweight and durable, water-resistant yet breathable, DuPont™ Tyvek® has introduced new dimensions of protection, security and safety in a wide variety of categories, including building envelopes, industrial protective apparel, and medical packaging" and heritage conservation (Dupont 2022).

Figure 14). Rose discovered that the dowels and dowel-holes present on the coffin were irregular, sometimes containing what looked like different wood than that of the majority of the coffin. She already knew modern intervention had not been done on the coffin and so questioned whether this was evidence of previous conservation intervention. Emma, Hilary and I, all conservators but also the archaeologists in the room, began to suppose all the different behaviors relating to coffin-making that could explain these anomalies. The one that surprised Rose the most was to think of the coffin-making workshop.

Figure 14. Rose photographs the Ancient Egyptian coffin panel she's been conserving (Fieldwork photograph, Suarez Ferreira 2018).

The craftsmen could have made this coffin at the end of a workday, or a work week and just used whatever pieces of wood they had access to in that moment. Hilary (senior conservator, renowned archaeologist; English white upper-class) added that archaeological sites, which she excavates in Egypt, have included workshops which are so far removed from the locations where the wood would have been extracted. The craftsmen could very well have had a lazy day where they did not want to collect the wood needed and so used what they had to hand. Rose adds, "but, it doesn't make sense to me how these dowel holes were created. Some of them are so perfect, whereas others were clearly created by hand". Having trained in archaeology, unlike Rose, we implicitly understood that what remains for archaeologists to uncover is a very small sample (Barker 2018). Just because a tool which could make this dowel hole has not been found in the archaeological record, does not mean that it either existed nor that a tool was necessary. We cannot know the full breadth of a past reality and sometimes can assume that it is okay to say that we will never know. Not all objects are made to last, and all knowledge need not follow present cultural constructions of reality.

Emma (English archaeologist turned conservator; white middle-class) later tells me about training in archaeology before training in conservation:

> "I think it does give you a way to looking at things, just an experience of knowing what things look like coming out of the ground. That is something that I notice with archaeological material, people that aren't archaeologists working with archaeological material, they tend to under clean. Because they look at dirt that, you're just like, it's just excavation dirt, that's not anything interesting. It's just that they cleaned it that much when it was excavated.
>
> It did make me chuckle when on first year on my [Masters in conservation] course, a few people had pretty straight forward archaeological objects: a bone pin or the like. And, you know, this kind, careful, painstaking process of, nothing decorated of anything, and this really painstaking, like hours people rolling this cotton swab over it and I'm like well, if that had come out of my site, I would have been cleaning it was a toothbrush. Hahaha.
>
> Don't get me wrong, I think there is a balance, sometimes you have to be careful. But I think you kind of have to be practical, I think there is a pragmatism that sometimes people who haven't worked in archaeology don't have. That they have an accepted preciousness, well you're just making that time-consuming, for the sake of it. There's actually not any value to being that cautious".

Emma gives more testimony to processes as organizing schema within conservation intervention. Her experience makes her act with a scrubbing toothbrush – her less experienced peers, a carefully rolled swab. Conservation work appears as controlled, conscious processes where there is seemingly an automated approach to assessing and treating objects and where the conservator unconsciously conceives of objects in terms of what processes can and cannot be applied to them (Fridland and Pavese 2021:10-11). All of which are heavily dependent on the individual practitioner and their history of practice (Sutton and Bicknell 2021:195). As seen with Emma, her approach to archeological objects will always contain elements of her fieldwork experience as an archaeologist, as well as her history of practice in conservation. My interview and time with Emma were when she was working as an object conservator for a field site where my positionality was both as ethnographer and conservator as access to these sites and their staff was done in exchange for my aid in their conservation programs.

Experience in all its diverse forms within the heritage industry is important to the maintenance of the conservation profession. As we have seen from the various conversations and field notes above, experience boosts confidence which boosts substantiated action in a discipline which has principles in verifiable decision-making. Confidence allows for expertise: "as confidence grows reflection may encompass wider aspects of practice but

ideally will still continuously question and challenge orthodoxy by using evidence, experimentation and experience to confirm or adapt hands-on processes of conservation" (Henderson 2016:102). As witnessed by Rose and Emma, the right kind of experience can be an important factor when interpretatively working on a specific type of object. And this particular kind of experience can come down to training, but it can also come down to class and cultural divides. In section 4.3 *The right kind of experience*, I begin by untangling issues around training qualification hierarchy with an example from my time spent with a conservation technician. My interviews and time spent with conservation technicians was when they were working for a field site where my positionality was both as ethnographer and conservator. I shadowed technicians throughout their days, aiding them and providing conservation advice. I also spoke to them separately, outside their work environments in a more traditional ethnographic engagement.

4.2.2 Background: conservation technicians

In order to become a conservation technician in 2022 a diploma is required. For example, the Victoria and Albert Museum in London and ICON have partnered to offer a work-based diploma in becoming an object conservation technician. Their website describes the role of a technician as:

> "working within the cultural, heritage and creative industries [where] specialist knowledge of objects is required in order to move, install, pack and transport them safely and effectively. Technicians assist conservators working on objects. They also design and make mounts and fixings for objects. This work-based level 4 diploma … covers the wide range of skills and knowledge required to work as a technician with museum collections, historic artefacts and works of art" (Victoria and Albert Museum 2022:1).

You can see how this description is not dissimilar to ICON's definition of conservation intervention where the work requires both preventive measures and conservation treatment and is done by a specialist (e.g., mount-making can often be a treatment if the object is unable to support itself without causing itself further damage; see **Figure 15**).

Figure 15. The left shows this Turkmen headdress before conservation. The main work done to conserve this object was to build a mount for it to be stored so that the various elements would not tangle and damage one another (Suarez Ferreira 2014:24-25).

As my aim was to understand the work of those who practice conservation, I inevitably spent a lot of time aiding technicians in their work, as well as interviewing them. Unlike, perhaps those presently becoming technicians, my interlocutors at UCM gained employment in their technician roles from experience (**Figure 16**); without having trained in anything in particular but rather attaining their posts after several years of working with heritage objects in a variety of institutions. These individuals often had more experience than their conservator counterparts yet, the hierarchy in place meant their experience was incomparable to an academically trained conservator. As the discipline evolved and academic roots became the normal path to practice, conservation technicians became superseded by conservators. Many times, these conservators were young women. The tensions that ensued have remnants in an ever-present technician, conservator clash.

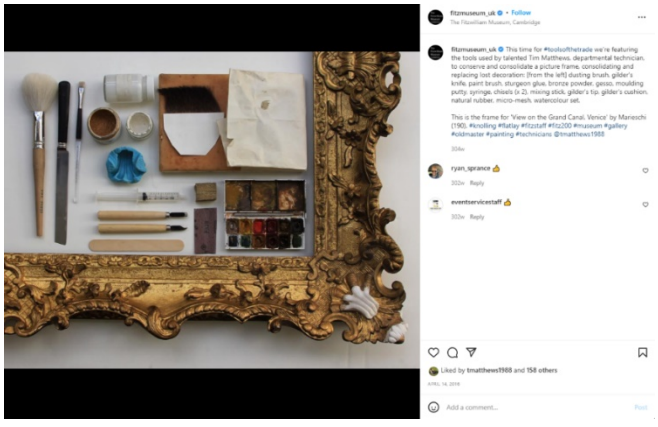


Figure 16. The tool kit of a technician as shown by the Instagram account of The Fitzwilliam Museum. The comment notes how the technician's role is to conserve this frame just as a conservator would (The Fitzwilliam Museum 2015).

In many institutions I visited, technicians were doing the interventive conservation work whilst conservators were busy in meetings and at their desks. Some technicians have

been told that their work is not conservation: "I'm not a conservator, this is in no way scientific… What do you think, you are the conservator?" – a common comment and question when I was shadowing practitioners. Indeed, some conservators told me they 'want their technicians to know 'the difference' (between conservation technician and conservator knowledge) so that they can be better trained and drop habits which are deemed inappropriate and contradictory to established conservation principles. This harks back to Grasseni (2007) where skill and expertise can create an identity, emplacement and "the very substance of ideology in that it perpetuates self-justifying criteria of propriety and correctness that are internal to communities of practice and their hierarchies" (Grasseni 2007:10).

Disgruntled conservators often commented in disappointment of treatments or interventions previously done on objects by the technicians. And so, experience of the practice is particular and tied to much more than intervention. From the exemplar below of the 'right kind of experience' (section 4.3) began the question as to whether conservation practice requires other types of knowledge to preserve objects. I found my time with conservation volunteers at Locomotion: The National Railway Museum in Shildon and The Shuttleworth Collection drew out the importance of other forms of knowledge and experience (section 4.3.2 *The loss of experience*). My time with conservation volunteers was when I myself was volunteering for the field site. My positionality here was as ethnographer, entering a position and type of conservation I had not been exposed to previously.

4.3 The right kind of experience

This last example about confidence and experience in conservation presents another approach to practice. Below is a reflection I had during fieldwork over the couple of weeks coming up to an ICON meeting on apprenticeships[31] as a route into conservation practice and expertise.

Fred is a conservation technician with the Arts Department (AA) at the Fitzwilliam (English white working-class). He has worked as a technician for a long time and at auction-houses as well as other museums over his career. He is extremely knowledgeable about the collections at the Fitzwilliam, particularly those which fall into the remit of the Paper,

[31] The UK Institute of Conservation, on March 22nd, 2018, held a meeting with the purpose of: "The event draws together Conservation professionals from across the UK to engage in debate around the development of Apprenticeships for the Conservation Profession, to air concerns and to ensure that when developed they are fit for purpose for the profession" (ICON 2018). I did not physically attend this event but spoke to interlocutors about it.

Drawing, & Prints, and the AA departments. A fan of impressionists, a tall, strong and soft-spoken man – Fred always knows what events are on at the museum as he takes pride in contributing to their advertisement. He is involved in much of the internal issues of the museum via gossip. He believes in professionalism, voicing his disappointment in imprudent behaviour or lack of knowledge.

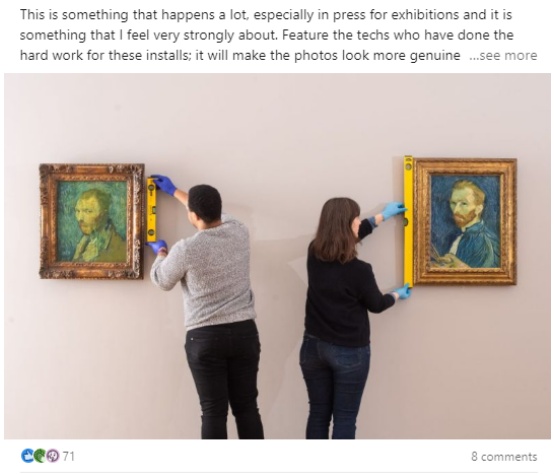
Years ago, he created a strong relationship with the ceramics conservator (Amy, English white upper-class) that was contracted by AA to care for their extensive collection (the previous head of department was a ceramicist by historical training acquiring many ceramic collections). This conservator who came into the discipline by way of an apprenticeship rather than by university training, took Fred under her wing and taught him how to identify ceramics and how to surface-clean them. He often sits across from me in our cluttered spaces of the AA conservation lab, peering at each other through the façades of objects as we chat and clean (**Figure 17**).

Figure 17. Fred is normally sat where the woman in this image is sat. You can see the chaos of conservation work. Note how the other conservator wears no coat or gloves. This is far from a pristine lab setting yet realistic of how and where conservation is enacted (Fieldwork photograph, Suarez Ferreira 2018).

Fred knows his wares and appropriate conservation techniques well and is eager to learn more. He often speaks of the gaps in his knowledge and asks me questions about my approach to conservation materials and techniques. I do not have as much knowledge about ceramics as he does, especially historical chronological typologies, so I learn more from him than he learns from me. Any AA exhibition involving ceramics will include Fred's conservation cleaning – he alleviates the workload for the conservators and with Amy now gone, he is essentially the ceramist-conservator of the department. Unfortunately, his title of

technician disallows much credit to be given (**Figure 18**) and is still superseded by his university-trained conservator colleagues – whether they know much or have experience working with ceramics or not.

Figure 18. An interlocutor posts this on her LinkedIn account (a social media platform for work-related content). The comments explain that other museum professionals are used in press for exhibitions when it was the work of the conservation technicians which made the installation of the exhibition possible. Conservation technicians' invisibility and sentiments of being undervalued come from treatment by both conservators and other museum professionals and are tied heavily to the established hierarchical organisation of heritage institutions (LinkedIn 2021).



Fred has experience and is confident conserving ceramics (**Figure 19**) (as well as other materials and object-types). Henderson (2016) notes that the goal of university level teaching is far more than offering education on performing tasks, but rather is aimed at creating independent, reflective and skilled new professionals (Henderson 2016:102). All of which can be said of Fred and his conservation practice, yet his knowledge is deemed incomplete within the terms of conservation's academic paradigms.

Figure 19. Fred conserved every bust seen here. He also designed this display himself, having worked on this project for so long, he was able to be involved in every aspect – from acquisition to display (Fieldwork photograph, Suarez Ferreira 2018).

The acknowledgement of this can be seen in the aforementioned ICON meeting on apprenticeships routes into conservation. When I asked a senior conservator more about this, she said, 'I thinks it is a great idea but wonder about the impact it could have on objects and the discipline if training does not include formalized engagement with the history of conservation and its contemporary ethical and theoretical approaches'. She concluded 'I think

it would be a great scheme… for technicians'. Here Isabela (English white upper-class) refers to the in-built idea that conservators should only be trained through academic routes.

On the one hand, conservation students are not exposed to the in-depth practical skill training needed for confidence and experience in conservation practice, but on the other hand the university system of training is deemed to supersede anyone who has that apprenticeship style or 'in-house' training. Conservators value and gain confidence from experience but in certain respects practical skills are not valued or at least valued less than conceptual/academic knowledge. As previously mentioned, ICON asks conservators to identify their lack of knowledge and act accordingly and is open to the idea of apprenticeship routes into conservation practice to alleviate the current criticisms and evident decrease of practical skills within the profession. This leads back to the comments and discussion I had with my placement supervisor when training (see the Introduction): is the conservation profession leading to one predominant in consultancy? Henderson (2016) states for her Cardiff students that:

> "Is a conservator someone who 'undertakes technical examination, preservation, and conservation-restoration of cultural property' [quotes from International Council of Museums], or someone who 'maintains and manages change to a heritage asset in a way that sustains and, where appropriate, enhances its significant'? [quotes from UK Government's Depart for Communities and Local Government]. These definitions have very different implications for teaching practice and at Cardiff University teaching is very much oriented around the latter" (Henderson 2016:108).

This can be summarized as taking a values-based approach, rather than a materials-based approach, where intervention is a decision-making practice eventually automated in acting upon the object but controlled in overlaying those actions with significance (Wu 2021) yet Henderson notes that "there is a strict correlation between experience, feedback and expertise" (Henderson 2016:106).

Is a consultant-like profession being motivated by conservators who would like the profession to evolve into a more traditional academic role where graduates have attained in-depth knowledge of practice, risk assessment, negotiating possibilities for object preservation, etc., but do not have any practical skills? Indeed, we have already seen this 'university-stamped' legitimization led to value within the profession. As Isabela noted, she is happy for technicians to acquire relevant practical conservation skills via apprenticeship but wants conservators to lead with their academic backgrounds, putting them in heritage positions where intervention is a rarity.

Or would ‘consultancy conservation’ be prompted by the sheer lack of practical experience and intervention on heritage objects because of contextual pressures such as lack of resources, and of course, knowledge? Emma had spoken to me several times of universities relying too heavily on placements to train their students in practical skills when their museum supervisors barely have time for it themselves. Yet for these early career interlocutors their confidence was tied to experience, experience that can only be gained contextually as Sutton and Bicknell (2021) point at: fabricated exercises within university labs can only do so much towards the acquisition of an expertise (Sutton and Bicknell 2021). The students and early-career conservators who want more experience, and confidence, acknowledge what is necessary to get them there and are grappling with the fact that it may never come as the profession they thought they were training into actually looks much different in practice – an expertise most probably not embodied.

From my experiences as a conservator and within this research, it seems to be that both those paths to consultancy are at play for current conservators, leading to frustration for parties on either side of the argument. The training, the pedagogy, even the value for kinds of conservation knowledge is at odds with the everyday work of the conservation practitioner; reflecting a discipline which is highly affected by its lack of transparency, as the summarized conclusions of Malkergeorgou (2010) to Spaarschuh and Kempton (2020) above revealed. Conservation’s fragmented, varied nature: for example, the existence of sub-disciplines like paper conservation and paintings conservation being deemed separate to objects conservation, or conservation technicians having their knowledge valued by academic standards rather than experience. Yet early-career conservators find that academic/experience combination difficult to come by except for those from a specific socio-economic class. Daisy, the conservation intern quoted above within the UCM forum, went on to retrain in nursing telling me she could not find conservation work to build up her experience and confidence or it was often short-term and poorly paid. She was not able to save enough money working part-time customer service jobs between temporary conservation contracts to support herself whilst living in London where her conservation contracts did not cover all of her expenses (including the student loans she acquired to train). This is what the conservators of The C Word podcast echoed when providing advice on how early career conservators can find ways to make more money ‘on the side’ to sustain them through the voluntary and low-paid temporary work plaguing the profession at present. Indeed, ICON’s recent Conservation Salaries Survey found that the average salary for an early career practitioner is £26,346 when

they recommend £28,491. Mid-career conservators earn about £3000 less than ICON recommends, and Senior Professionals earn about £8000 less than ICON recommends showcasing a profession which is generally underpaid and therefore increasingly difficult to enter without financial stability/backing from the beginning of training onwards (ICON 2022).

Generally, only those who can afford a Masters degree and are able to gain unpaid experience can become conservators in the UK. There are few undergraduate courses and even fewer alternative routes into conservation. Barrier to enter conservation professionally begins here with high tuition fees with unpaid internships leading to precarious employment and not much financial security in the end. Academically justifying the discipline has segregated it into a particular exclusiveness where diversity is rare in terms of socio-economic class and ethnicity (e.g., bracketed with the introduction to every conservation practitioner above was how they were all white, European/British, and middle or upper-class apart from the technician who had come from a working-class background). These mimic engrained hierarchical societal structures and institutional racism. Interestingly, conservation practitioners can be heavily involved in manipulating the material, or at least significance/interpretation of heritage objects in order to enable a viewing of said objects within the perceived materiality placed on that object. The question then arises: how can approaches like values-based or even peoples-based be enacted or managed when the discipline itself does little to combat issues of diversity nor attempts to address them as a source of innate bias? Those not able to access academic routes toward training had been able to work in museum contexts at the level of technician, but now this pathway has also been formalized.

There are heritage institutions not qualified as ‘traditional museums’ which require skill sets only learned via apprenticeship, like those of industrial heritage where I found both employees and volunteers in care of the objects to have skillsets derived from careers as electricians, joiners, mechanics, engineers, etc. With economic and political sectors affecting the opportunity for training and apprenticeships, there is a direct and present impact on this work, but also a legacy which is and will affect the heritage sector long-term. Section 4.3.2, *The loss of experience,* covers loss of experience and skill in conservation from the perspective of industrial heritage as a juxtaposition to these previous sections where students want experience to gain confidence and employment and technicians have experience but are unacknowledged.

4.3.1 Background: Conservation volunteers

Volunteers within cultural heritage institutions represent a common introductory phase into object conservation as well as a post-retirement activity. In many cases, volunteers are the only people practicing conservation in UK heritage institutions, making them a very important group (Van Hoven and Wellman 2016:1-10). This can be the case in volunteer-run museums, as well as museums who do not have the resources to employ conservation staff and provide conservation laboratories. Following Dreyfus' (1990) model of expert skill acquisition, including volunteers within this study, I paid attention to the process of becoming an object conservator, as professionals were most likely volunteers before becoming object conservators (Boyer 2008). I approached volunteers not just as extensions of their knowledge but also as subjects with personal lives that have all the complexities of more conventional ethnographic subjects of enquiry. Actor Network Theory also aided my approach as ANT scholars see macro sociological categories such as class, gender, institutions, etc., as abstractions constructed and deployed – performed. Actors bring these categories to bear in their everyday interactions both within their professional and nonprofessional lives (Michael 2017:24).

At the two field sites I worked with volunteers, they were the practitioners enacting conservation; both Locomotion: The National Railway Museum at Shildon and at The Shuttleworth Collection had no conservators on staff. At Locomotion, conservation volunteers were managed by a conservation technician with many years of experience in related industries to the objects being worked on (but no formal training in conservation) and at Shuttleworth volunteers had access to a regional conservator via various networks (who required funding to be able to come out and help volunteers with their conservation work).

Volunteers generally practiced preventive conservation on objects that were in fairly good condition at The Shuttleworth Collection, some interventive conservation/restoration did occur for specific objects but not for the main museum attraction: airplanes. The airplanes were conserved by trained engineers. Other objects in the collection and in more compromising conditions might have led to the hiring of a professional conservator or enlisting of a consultation from a regional conservation officer. Volunteers at both field sites underwent some training and had access to information that gave them procedural knowledge about how to treat objects with conservation-grade materials and techniques (e.g., MLA Northeast and Durham University (2008) Guidelines for cleaning objects).

Volunteers and conservation technicians at Locomotion undertook interventive conservation projects more so than preventive, the museum had a separate volunteer group who dealt with regular cleaning maintenance of the locomotives and trains.

In heritage institutions which rely heavily on volunteers, like The Shuttleworth Collection, it was up to the volunteers to oversee the organizational structure of the institution. They had a committee which dealt directly with the board, all of whom were senior volunteers of the collection. There was not a dedicated conservation laboratory for either of these institutions but rather workshops with limited resources. The structure of how, why, and where they worked on objects was designated by the volunteers and was sometimes a project taken on personally by one volunteer.

By spending time with volunteers, it quickly became evident that their skill sets were at risk of being lost because of societal shifts at large but also because of heritage institutions and training institutions equally underestimating the need and value of knowledge and experience which can only be acquired through non-academic routes, as witnessed by conservation technicians in the previous section (**Figure 20**). Alison Richmond, the Chief Executive of ICON has been quoted as stating: "A varied and continually developing field, conservation requires people with a wide range of skills and knowledge, including practical craft skills, judgment and ethics" (Victoria and Albert Museum 2022:1). Locomotion volunteers were able to show a straight-forward example as to how their vocational skills and experience was being undervalued and, in some cases, lost (section 4.3.2 *The loss of experience*). As covered in section 3.2, the definition of conservation treatment and conservation intervention is particular to the practitioner. At Locomotion, the workshop was called and advertised throughout the museum as The Conservation Workshop. Some may argue that the practitioners were enacting practice closer to 'restoration' rather than 'conservation', especially because the objects are 'working objects'. This is to say that they are used by the museum in much the same way they would have been used before becoming a museum object (e.g., the commuter trains are still ridden by museum visitors).

Figure 20. An expert painter/decorator is hired out to come paint the trains. He patches the holes, then comes back to sand them, then comes back to prime, then paint, then paint many more layers. After each time he comes to Locomotion, the work must stop until he is able to free up his schedule to come back for the next step. A reliance on his expertise is fundamental to the upkeep of the museum collection (Fieldwork photograph, Suarez Ferreira 2016).

Yet, I make the case that all museum objects are working objects as their new uses (whether that be to sit in a display case or to ride out on the tracks) all continue to enact decay in the material from which they are made – using them up through work. Exposure to light, oxygen and water (via humidity) will impact any object and therefore be interventive to varying degrees. All museum objects are working objects. What and who they are working for depends on the museum, not the 'type' of conservation action. In Jamie's (2005) discussion of the Surgeon's Hall, she describes rows of jars with specimens preserved in fluids. This 'fixing' is intended to arrest decay but as Jamie argues "time does pass even in this fixed place" (Jaime 2005:139). Indeed, within Zoology museums much of the work of conservators is taking specimens out of old fluids, cleaning the jars, and placing the animals back in their glass containers with more contemporary conservation-grade materials. Techniques of preservation, classification and display can change and so the specimens created over time reflect these temporal shifts for "nothing is truly fixed" (Jaime 2005:140). Heritage objects and conservation actions are necessarily in and of time, even as conservation practitioners aspire to make them atemporal (Jones and Yarrow 2022:140). And so, intervening on metal objects such as trains where they are conserved and used, puts them at less risk of decay than if they were to be stored with all the other metal work perpetually turning into fragments from lack of collections care via inadequate resource management and underuse of conservation skills (see **Figure 21** for examples).

Figure 21. Just a few examples of metal work corroding away in a storage facility; this one happens to be well-resourced with a dedicated conservator and a new cohort of eager conservation students every year (Fieldwork photographs, Suarez Ferreira 2015).

Loss of experience and skills has been justified alongside financial restrictions and uncertain ethical codes and standards of practice (section 5.2.1 Fans: A race to scientism) (Malkogeorgou 2010, Ashley-Smith 2016, 2018). After having engaged with the various trajectories and settings within which this can occur, for whom, and why, it is important to discuss the professional perspective as that is what has been highlighted in the literature thus far (see section 3.2). Firstly, addressing the loss of experience for volunteers is expressed in the vignette below.

4.3.2 The loss of experience

I take three buses to get to Locomotion: The National Railway Museum at Shildon. The last bus drops off at the end of a long straight road. At first there are houses on one's right side, but soon the right-hand side turns into open, grassy fields. On the left-hand side (**Figure 22**) there are large, rectangular concrete platforms where weeds have cracked through. Shrubs and wild grass will soon delete these foundations from visible existence. I think of the industrial aesthetic of this abandoned landscape and find it oddly appropriate. Both in terms of the harsh, dirty, grey feel of a patch of land housing both abandoned foundations and a railway museum. But also, in the sense of feeling potential loss of the land use and of, as I come to find, the knowledge stored in the minds of those who often drive through this landscape to contribute to the conservation of the museum's locomotives and trains.

Figure 22. Images of the left-hand side view as one walks towards Locomotion (Fieldwork photographs, Suarez Ferreira 2016).

Suddenly, the sidewalk disappears and just in the distance you can see the makings of an outpost. Closer and closer a building appears at the end of a wide runway. After a few turns and a desperate look for signage, the runway turns into railroad tracks. Am I supposed to step on these? The entrance is the second door in. I finally reach my destination feeling a bit confused. Although, that first impression was the only time I truly felt the grandness and openness of this railway museum hit me. With tall ceilings and one large room to work with, the collection feels spread out. Seven railroad tracks divide the middle of this large room into

four walkways (**Figure 23**). The furthest from the door (no.4) will lead one straight to where I wanted to be. I have to cross two barriers to finally get in and feel that same exclusivity I always feel when I walk into a conservation laboratory. This is not a laboratory. This is a conservation workshop, and its organization speaks to whom it populates.

Figure 23. View of the inside of Locomotion from the visitor entry point (This is Durham 2024).

There is a plastic folding table just as one enters the workshop and it is the meeting ground, the watering hole. I often find the men sat here drinking tea and laughing. This is where questions get answered, and stories get told. Someone is always complaining or conflicted. Maybe about the work, maybe about society, maybe about both. I take a seat and decide to listen.

Health and safety are the hot topics of the month. Whether it be the new, necessary training or how it is affecting their everyday practice in the workshop, most are disgruntled. Today they have been told that the garbage bins need to be emptied more regularly. When asked by the health and safety officer how often the bins are emptied, someone, now unnamed, responded: 'they're emptied when they're full'. An obvious, and logical answer, but not the one a health and safety officer wants to hear. I got the feeling that everyone understood why the bins need to be emptied more regularly, but because the request was themed in the larger issue of 'health and safety implementation', the situation got a negative

reaction. I had to ask why these changes were such an issue. The response is one having to do with knowledge.

Many of the volunteers in the conservation workshop at Locomotion are retired. Almost all the ones I have come to know closely, are all experts in various trades. Indeed, some of them have come to volunteer at Locomotion by request due to their skill set being relevant to the preservation of the locomotives and trains. And these gentlemen have undergone a lot of health and safety training in their lifetime. All the volunteers were men, apart from myself. There was a general ambivalence to heritage professionals (often female, middle-class) who were perceived as turning 'real' engines into 'stuffed steam' so that the act of conservation was seen as inauthentic and disconnected from their practical 'working-class' knowledge. As multiple of them put it: 'we've made it this far without any major injuries, that should mean something…'. They have been asked to offer their skills and time to the museum but are now not being recognized for the knowledge they have. Of course, this is contextualized: the museum is most probably having every employee and volunteer re-train in health and safety measures for insurance purposes and for the utmost relevant reason: they will soon be amalgamated into the large National Railway Museum complex.

For these men, the lack of consideration for their occupational history almost led a few to discontinue volunteering. And this is where we enter the highest risk of loss. The health and safety situation at the Locomotion conservation workshop is just one aspect of a cycle which is leading practical skills sets to become less available in various industries. The retired joiners and electricians and draftsmen tell me that hardly anyone is being trained in these professions in comparison to when they trained and worked. That those who are trained will go through shorter apprenticeships and are being pushed out of their courses too soon. In fact, Bob's son worked teaching a new generation of joiners, but he had to quit. The institution he was working for pressed him to train students quickly and send them off to work without the necessary skills. He was so disheartened by the situation that he decided to quit teaching and go back to working as a joiner.

The theme here being that my interlocutors feel that vocational courses do not offer as much training as in the past and they are attended by much fewer pupils. If the case is that there are very little young people being trained in trades relevant to locomotive conservation,

who will retire and help museums in future?[32] The museums are not funded well enough to hire tradesmen or even conservation staff and rely heavily on volunteers to care for their collections. It seems that locomotive heritage will be at even more risk in the future than it is today.

Bob was the most vocal about this issue. Bob was also a joiner. He begins his interview by telling me:

> "well, really me background doesn't got to do with railways at all… Right, when I was a kid I passed so many exams at school and I went on to be an apprentice joiner at a shop fitting company. That, in those days, they were all old fellas that use to teach you the ropes one to one. On a work bench opposite you spent four years like that, getting taught how to be a shop joiner as they call them. And then you moved outside to be what they call a fixer which meant you took the stuff out the joiner shop and fixed it on site, okay. In them days, I served five years apprenticeship and one year as an improver so it was six years. You were learning for six years, okay. And pretty well at the end of it after you'd had experience of different carpenters and joiners and cabinet makers you virtually knew quite a lot about the business and you were capable of performing fully at that time. Which I go back to that things now are done differently, and this is the reason why there is failure. It is as simple as that, you know. There is people now that couldn't teach you one to one because they don't know anything about the game really. But anyway that is how I started."

Figure 24. Electric passenger train mid- conservation: emphasis of the multiple doors which are doubled on the other side (Fieldwork photograph, Suarez Ferreira 2016).

[32] It is important to acknowledge that there are also other elements to this resistance to health and safety implementation. There were congruent ideas about society becoming increasing sanitised making my interlocutors perceive that others are less responsible and less resilient. The loss is therefore for skillsets but also for a time when society was 'more real' and work was 'more real'.

What is interesting here is that Bob does not feel like his expertise in joinery is directly relevant to railways even though he now plays an integral role in the conservation of the museum's locomotives and trains – much like the conservation technicians who have convinced themselves of their undervalued role.

At that point, the workshop was conserving an electric passenger train where the door frames had rotted and needed replacing (no small task, **Figure 24**). Bob and his friend Sam, a retired draftsman, were recreating the door frames from scratch. They did not have sketches of what the original wooden frames looked like or how they were built; this electric passenger train is now one of three still in existence. Bob and Sam have created new frames which 'fit like a glove' into the appropriate spaces. When I first met them, Bob explained how they were using mahogany to recreate the frames but how teak would be more appropriate. Bob understood that teak is not as readily available due to its endangerment from the excessive exploitation of its natural population, and it is therefore very expensive. Bob's knowledge is extensive in all aspects of joinery. He explains this well:

> "I went through everything more or less from stainless steel shop fronts, aluminium shop fronts, hardwood shop front, interiors of cafes, clothes shops, you name it. Every aspect of shop fitting. Went through fitting night clubs out, pubs, clubs and mainly banks. I spent a lot of time on banks. Doing the interior of banks which in those days they were real quality where now they're just a glorified post office really. And that's basically the outline of what I've done. I've worked on oil rigs, building cinemas and restaurant and so forth. I mean it goes from one end of the spectrum to the other. I thought that there was a lot of people employed in the industry that professed to be cabinet makers, and carpenters, and joiners, whatever you want to call them and really, they weren't. They were short of the mark. And my intention was to get to know everything about it with a view of going into management at a later date, which I did. And I also learnt plumbing and electrical, air conditioning. I went in to be a manager and I always believed that if you're going to be a manager and tell people what to do you, you needed to know what they were going to do before you told them to do it. And that's really how I've conducted meself as I've come through in the years."

Figure 25. One of Bob's display cases was created purely with joins using various materials and now sits in the middle of the cafe area of the museum (Fieldwork photograph, Suarez Ferreira 2016).

It is true that I would hear stories from the others as to all the amazing things Bob had built in the seven years he had been a volunteer at Shildon. Similar to his career, the tasks ranged across a spectrum of things the museum needed from him (**Figure 25**). Aside from the door frames for the train in the workshop, Bob was also working on another custom part needed for the conservation of the train. David, the workshop manager, found that the area between the floorboards of the train and the doors included a metal apparatus which is no longer made and is very expensive to recreate in metal. This piece slides between the bottom of the door opening and the floorboard so that when carpet is put a top there is no gap. Because these were originally made of metal and were near the doorway, they had corroded quite heavily and also needed to be replaced. David used his extensive network of tradesmen and asked someone to recreate an example of the piece in metal so that Bob and Sam could recreate the ones needed for the train from wood. Again, Bob did this perfectly, with the pieces fitting exactly as the original metal version. Making his knowledge and skills comparable to what is required by the conservator and/or the conservation technician; material knowledge, recreating gaps in available materials; doing other 'odd jobs' like mount making; being undervalued or misunderstood by the museum hierarchy and public alike. As a key strand of my analysis, how practitioners variously imagine institutional shifts in relation to previous organisation arrangements, working practices and conservation ideologies traces how institutional pasts emerge as a reflex of contemporary realities. At times these are negative characterisations as earlier approaches from which progress has been made; at others as positive and nostalgic visions that make evident what is lost. In doing so, what is revealed

is how institutional changes are understood and negotiated through invoking visions of the past (Jones and Yarrow 2022: 24).

Comparatively, to the conservation discipline as a whole, there are many who are also concerned for the loss of practical skills in institutionalized heritage conservation. Recently, Ashley-Smith (2016) article, *Losing the edge: the risk of a decline in practical conservation skills*, outlined that the loss of practical skills stems at all levels of education, beginning in school where classes geared at developing such skills are being depleted and are at risk throughout the UK because they score less favourably with national quotas. A UCM interlocutor told me of a former colleague who retired from his preventive conservation role to go and teach practical skills to school children as he was also concerned about the loss of practical skills. Ashley-Smith speaks of this as a need for development in children and uses authorities within school education to emphasize that students may be acquiring excellent digital and STEM[33] skills but are fundamentally missing out on experiences to learn from bodily sense and by creating things with their hands (Ashley-Smith 2016:121-123).

Ashley-Smith also mentions how vocational careers are being undermined, as Bob and my other informants suggested: "Discouraging attitudes toward people who want to develop manual skills are apparent at all stages of education. This may not be a conscious anti-skill stance but a mixture of risk aversion, class discrimination, academic snobbery and economic opportunism" (Ashley-Smith 2016:122). Interestingly, he questions the ethics of an individual conservator intervening on objects when their practical skills have been diminished over time. Ironically stating that relying heavily on fashionable ethics of the present is one of the reasons practical skills are diminishing. He concludes that the objects will inevitably be those that suffer the loss most greatly. And so similarly to the skills at risk, both in training and within newly restructured museums such as Locomotion, the heritage and its preservation are tied up in the practical skills of practitioners. All the while, institutionalized conservation training has become less about practical skills and more about 'managing change' (Henderson 2016).

What my experiences at Shildon adds to this discussion is a larger range with which to analyse the loss of practical skills than can be applied to conservation. There are those skills which we learn as conservators within universities and there are those skills where other practical expertise becomes relevant to conservation in contexts such as Locomotion or

[33] Science Technology Engineering and Mathematics.

Shuttleworth and the hundreds of other volunteer-run or led museums and their conservation departments (not to mention those learned-by-doing for conservation technicians). The knowledge needed to acquire and retain these skills is being stifled.

Ashley-Smith (2016) focused on practical skills being lost by the need for conservators to have a wider-ranging skill set and by ideological approaches to conservation. For example, he alludes to preventive conservation mimicking ideas such as minimal intervention and authenticity in terms of conservators losing confidence and finding 'ethical' excuses to practice less interventively. Vocational skills relevant and necessary to the conservation of material heritage are also being lost by the undervaluing of those who represent these bodies of knowledge. Bob was the first to mention that he was considering not volunteering any longer because of how the new health and safety regulations were being implemented. If experience is only validated by 'academic expertise', then a lot of knowledge and value can be lost and a lot of prejudice and discrimination around socio-economic class will continue. Fred, as a conservation technician, can echo the story of Bob the conservation volunteer and the feelings around being undervalued. Ashley-Smith reminds us that conservators 20 years ago used to tell this story but having gained 'a seat at the table' are now applying their own "self-justifying criteria of propriety and correctness that are internal to communities of practice and their hierarchies" (Grasseni 2007:10).

In this sense, conservation in the UK seems to be a discipline which is noble in its idealism and justification, but the way in which it is taught (Western/Eurocentric) and performed often seems to contradict its premise (lack of intervention; lack of collection care, whether by choice or driven by contextual pressures). Class divides and lack of diversity are exhibited by its practitioners – from training through to volunteer work. For example, the students and recent graduates who cannot work for free and do not have the means to live in metropolitan areas or the technicians gaining experience by doing rather than by pursing academic degrees and the volunteers with expertise gained through vocations, again, instead of the academy – all of these groups are undervalued and happen to be demographically characterized by similar socio-economic criteria and perhaps most importantly, are enacting the bulk of interventive conservation physically needed for at least certain material and object-types to survive (e.g. see my comments about iron and working objects).

Additionally, Western heritage institutions have a record of using questionable ethics for longer periods of time than necessary (e.g., deferring repatriation claims), yet they have

an apparent workforce resource that they do not acknowledge or value (namely conservation technicians and conservation volunteers). The above examples of volunteers' experience-led intervention show the importance of these workforces, but the justification of the strains on practical intervention have been previously blamed on systematic applications to practice. This is often explicated by leaning on financial restrictions uncertain ethical codes and standards of practice (Malkogeorgou 2010, Ashley-Smith 2016, 2018). Framing an expertise that is performing its 'active public program role' of condition checkers and couriers to an extreme, instead of enacting with what it says its role is within the heritage sector – conservation actors (Ashley-Smith 2016:129). Turns in neoliberal, audit culture and its effects on approaches to conservation are also adding to the issues faced by practitioners. Another way to see Ashley-Smith's grievances is through Mol's (2002) engagement with a critique of analytical perspectivalism within heritage practice. Here she argues that the object is left physically untouched due to the multiplicity of observers and the naturalization of conservation objects as singular, solid, bounded things (Mol 2002:12). Chapter 5 *From Ethnography…* will unpick these claims defining whether deskillment is the consequence of how the profession is conceptualized in the first place.

4.4 Conclusion

Practical skills within conservation are essential for intervention and the confidence to enact such intervention can be gained through experience. Intervention expertise need not be seen as a tacit knowledge which is inescapably difficult to describe, but rather as a conscious and intentional practice that reveals as much about the individual practitioner as it does the object (Montero 2021). Indeed, lack of practice or performance can be tied to senior conservation practitioners who recognise their inability to train any practical expertise having lost it themselves. Instead, they frame their roles differently, perhaps adding to a definition of practice which is 'a heterogeneous and discontinuous series of domains' (Harrison 2015:171) – making for an even greater challenge of imbuing the profession to the next generation of conservators, especially if practical skills are to be gained atop. Yarrow's (2019) account develops this insight ethnographically, "revealing the myriad ways in which these logics are entangled in practice: how distinct versions of conservation overlap, intersect and diverge; how they are made to matter by specific people with specific understandings of what is 'real' and important about the past; how that importance relates to other kinds of commitments and values; and how these intersect in relation to particular… material circumstances" (Yarrow 2019:18). This heterogeneity can be seen within the role of one conservator, as well as within

the shared practice of conservation by other groups (technicians and volunteers) enacting intervention. Their experience and skill are what early-career practitioners seek.

Yet, experience is fundamental for competing in the job market and gaining such experience can be quite the financial burden. This sits alongside the seeming contradiction that experience is valued and necessary, but practical skills are not (if gained outside academic routes). Already understanding how the history of practice is largely Western/Eurocentric, it is also known that whether and how conservation gains traction is political, privileging the interests of some at the expense of others. To then have a workforce representing only **a** socio-economic class and **an** ethnicity complicates the aim of diversifying the museum. Equally, taking the available workforce of technicians and skilled volunteers at less value than academically or formally trained counterparts, continues the heritage industry's elitist past. Excerpts from participant observations, alongside semistructured interviews and forums from within the ecological contexts of practice individuated and contextualized conservation intervention (Sutton and Bicknell 2021), pointing to various forms of knowledge and ways of knowing which are currently in practice, exploring how experience, confidence and socio-economic class evidences the conservation profession and its intervention on material (moveable) cultural heritage.

The following chapter delves further into the ethnographic perspective of object conservation practice. It introduces those holding professional positions within heritage institutions as conservators. Their expertise is critically revealed to be restricted by financial restrictions and uncertain ethical codes and standards of practice (Malkogeorgou 2010, Ashley-Smith 2016, 2018). It will be compared to the loss of practical skills seen in this chapter where in section 5.2.1 a case study concerning historic fans sheds light on the same issue for professional conservators. The work of the conservator is tied heavily to the politics of the privileged some and their choices equally help the conservation profession lose its premise.

Chapter 5 From Ethnography…

Figure 26. This is what the majority of storage facilities within heritage institutions I visited looked like. A visual representation of the reality of conservation work and its challenges in the present-day UK (Fieldwork photograph, Suarez Ferreira 2018).

5.1 Introduction

This chapter will begin by giving an overview of what the role of a conservator or conservation professional can entail, giving background to my interlocutors (section 5.2.1 *Background: conservation professionals*). As covered in the previous chapter, moveable cultural heritage conservation knowledge is crystallized and reproduced through a non-linear trajectory towards professionalization. Attainment requires the body, self, experience and may include apprenticeship, graduate level training, volunteering, preventive and interventive practice, as well as exhibition and display. The museum embraces and rejects conservation knowledge based on allocated, systematic agendas of status within the heritage sector (as covered in Chapter 3 and Chapter 4).

Additionally, within the UK, His Majesty's Government plays an important role in object acquisition, veneration, and regulation. What this chapter will ethnographically elucidate is not only the underlying structural issues of inclusion/exclusion and how museums reflect and engender wider hierarchies and inequities (again as seen in Chapter 4), but also the more subtle, less structural, and less systematized set of relations and practices. The vignettes and narratives of interlocutors in this chapter will show that there is some space for negotiation (section 5.2), (re)interpretation (section 5.3.1) and resistance (section 5.3.2).

Ethnographic enquiry alongside conservators, curators, enthusiasts, specialists, technicians, and collectors on a seemingly procedural project began with an obligation created by acceptance in lieu (AiL) of inheritance tax of a large collection of historic fans. As the project progressed, the intricacies of conservation requirements were negotiated in order to fulfil this British tax law, the museum's own policies, and adequate care for the collection. Those who performed the work struggled with their individual preference for practice and found resistance in the hidden, social forms often at reach to conservation practitioners within the UK heritage sector. Section 5.2 Financial restrictions and uncertain policies and guidelines will introduce the multifaceted and complex nature of conservation knowledge and its negotiation as it follows a fan project from in lieu of inheritance tax to conservation justification to completed, recognized display.

Furthering the discussion on how financial restrictions and uncertain ethical codes and standards of practice (Malkogeorgou 2010, Ashley-Smith 2016, 2018), the concept of storing heritage will dissect the fundamental basis for an underperforming approaches in conservation. Echoed is the criticism of a profession lacking in diversity, for the people taken

into consideration throughout the conservation process are those who traditionally have held power or wielded influence within museums. By exploring a conservator's workday within an ethnographic museum store, section 5.3 Negotiating with actors sees the ideological and practical difficulties towards conservation objectives created by UK museum practice, past and present. Here the conservator reinterprets conservation intervention to suit storage needs in order to meet wider care of collections remits.

In section 5.3 Negotiating with actors, we will see why Hicks (2020) is addressing this topic critically as UK museums storing billions of objects and still claiming ownership over those stolen in conditions of duress, are also simultaneously in 'favorable dialogue' within repatriation claims. Posing a politically correct rhetoric with little tangible result. At the heart of this is a backlog need for adequate storage and care of collections which is at least in part exasperated by acquisitions not heeding conservation knowledge (as covered in section 5.2.1 *Fans: A race to scientism*). As care of collections is a primary remit of the conservator, these various failings end up falling on conservators' overloaded work programs.

The conservator has the power to enact change onto these objects and can derive work satisfaction and potential value from doing so. There are some who have approached the ethical divides of doing so and questioned the profession's lack of action alongside their colleagues (e.g., as covered in section 1.1 *The case of a Tibetan prayer-wheel*). Section 5.3.2 will look at the links between object diversity and when conservators have pushed back and engaged in topics around diversifying practitioners and the work of the conservator. My time with conservation professionals was in exchange for aiding the conservation programs of the sites they worked within and so my positionality was both ethnographer and conservator.

5.2.1 Background: conservation professionals

The academic background and outlook of practicing conservators is dependent on the time and way in which they were trained. Some practicing conservators will have years of experience acquired from several different institutions. Sometimes specialised conservators (e.g., metals conservator or furniture conservator) become preventive conservators and therefore work with the full range of objects within the collection of the museum. Sometimes object conservators become specialised in a specific material or object-type. Object conservators can also work solely as preventive conservators. Ashley-Smith (2009) notes, "even within one institution it is possible to see distinctly different attitudes in the different

specialist sections. The variation is even more obvious when comparing different types of institution" (Ashley-Smith, 2009:14).

Within heritage conservation there are distinctions made between movable and immoveable, tangible and intangible heritage. These oppositions are used to help categorise the immense variability that the term 'heritage object' includes. An objects conservator is generally someone who works with heritage which is moveable (e.g., as opposed to a building or a fresco) and tangible (e.g., as opposed to an oration or dance). There are exceptions to this, and all heritage has intangible aspects. Although, the categories do help in the description of the work of an objects conservator, whose broad training allows for the terms moveable and tangible to encompass a large majority of their experiences with heritage objects.

Similar to the student undergoing a placement, professional conservators' work depends on the size and aims of the museum, where workflows and expectations are dependent on the institution. The type of institution also exposes conservators to different types of objects with varying levels of condition, yet the objects intervened upon on are normally displayable.[34] The documentation standards and approaches also vary depending on the aims and ethos of the museum. As outlined in Table 1, I spent nearly 2.5 years working with conservators of the University of Cambridge Museums (UCM). The variety of conditions, documentation, and conservators was distinct even amongst the amalgamated UCM which also profited from a conservation group where colleagues had access to seminars, conferences, funding opportunities, and sometimes shared resources.

Conservation laboratories within museums are generally not known to be well-resourced in all areas. Equipment and materials will be appropriate to practice but will not generally include analytical equipment. The Fitzwilliam Museum was an exception within my fieldwork sites as they employed a conservation scientist, although it appeared the use of material analysis in order to aid conservation practice and decision making was not the primary concern, it rather focused on forwarding research aims. The number of stakeholders that conservators must appease is large, producing conserved objects at the standards those

[34] Displayable generally indicates that the object is in good condition where condition refers to the "physical state of an object/item at a particular time" (ICON 2021).

individuals have established within the institution. The variation in number and types of stakeholders determines the types of objects worked on which determine the level of conservation undertaken (Muñoz Viñas 2005:160-163).

Harkening back to what is known about the importance of experience, the loss of skills and the financial, political restriction facing the practice, time spent with a paper conservator on a project for historical fans highlights the decision-making processes and everyday reality of conservation work in museums.

5.2 Financial restrictions and uncertain policies and guidelines

Similar to previous accounts of object conservation and its practitioners, by focusing on standardization policies or stabilization processes, we miss 'mess' (Law 2004). In the hands of conservation practitioners, moveable heritage objects are unsteady objects, and conservators' interventions are more a matter of entangled material agencies (Barad 2003; Edensor 2001). Heterogeneity and disorder, two issues that are supposedly covered by standards and guidelines, are at the core of their work. Indeed, we know from Chapter 3, Jones' and Yarrow's (2013) work with buildings conservators, as well as from Malkogeorgou's (2010) work with textile conservators and Ashley-Smith's (2016, 2018) work with a variety of conservators that standards and guidelines are uncertain. That is, practice is complex and messy and though it is structured by boarder policies, organisational aims, etc., it is not determined by these. Instead, practitioners interpret and work through these in particular ways. Beginning with place, the workspace of the conservator can come to illustrate some of the 'mess'.

Object conservations labs tend to be within the museum, although a recent push is to move labs to storage facilities as collections grow, offering an apt and regularly necessary opportunity to upgrade the 'objects lab'.[35] Indeed, all the labs I have worked in and almost all the ones I have visited (besides the large London based institutions like the Victoria & Albert Museum or The British Museum) have been grievously wanting for more room for temporary object storage, record keeping, photography nooks, for housing packing material, chemicals and tools. Most importantly, of course, to allow the practitioners a better, more conducive environment in which to work. Time in the Arts Lab at the Fitzwilliam Museum exemplifies this succinctly. Next is an excerpt from the field that will introduce the multifaceted and

[35] 'Objects Lab' is how conservators would refer to it colloquially. I will continue to use this term throughout the thesis.

complex nature of conservation knowledge and its negotiation as it follows a fan project from in lieu of inheritance tax to conservation justification to completed, recognized display.

5.2.1 Fans: A race to scientism

I often tell people that I am conserving fans, and they misunderstand me. Sometimes they think of big, grey electric fans used to cool down a room. Other times they are waiting for me to say more, believing that the work relates to sports memorabilia. I quickly take out my phone to show them an image of the type of fans I have been working on (**Figure 27**). And then proceed to explain what the work entails:

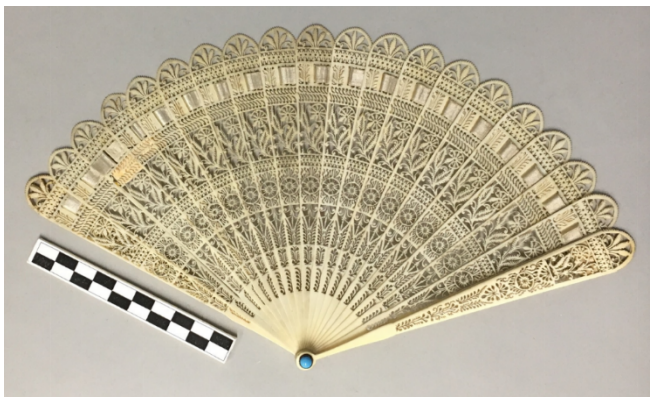


Figure 27. A brise fan I conserved for the project; the left side was left unclean for the exhibition to didactically visualise the work of the conservation (Fieldwork photograph, Suarez Ferreira 2019).

At the first meeting to discuss what the fans project will entail we gather in the Arts conservation lab (**Figure 28**). The Art department defines itself as containing "about 30,000 pieces of decorative arts and sculpture from Europe, the Middle East, India and the Far East…The main groups of objects are pottery, porcelain and glass, textiles, fans, furniture and lacquer work; clocks and watches, domestic metalwork, including silver, pewter; jewellery and snuffboxes, armour and weapons, and sculpture in many different materials ranging from ancient Chinese jades to 20th century European bronzes" (The Fitzwilliam Museum 2022).

Figure 28. The objects lab (Fieldwork photograph, Suarez Ferreira 2018).

It is no surprise that the conservation lab is a full space. There is a small area where one can walk around the central rectangle of tables. These tables are where the microscopes sit and where many objects within boxes are temporarily stored until their conservation is complete. On the perimeter of the room is the sink, the fume cupboard, the cabinets, a desk full of books and paper piled horizontally floor to ceiling, the air conditioner, and the large humidifier. Above is the extraction system and its tubing, along with the lights. There are two doors to this lab, but one cannot be opened because of the clutter and when peaking below the tables and desks, one finds more boxes, bins, step stools, and documentation piles. We gather the five chairs available for use in the room, moving some more piles of documentation to any space which can suitably house them temporarily. Above the sink there are small square windows mostly obscured by the buckets, and glass chemistry equipment stacked on the shelving atop. The lights must be on even on the sunniest summer day, exhibiting the expected white strobe often found in a laboratory. Finally, we gather in a semi-circle around one end of the central tables and begin to construct more ‘mess’.

The aim of the project is to conduct a condition survey on a portion of the Lennox Boyd Fan Collection. The collection was acquired by the head of the Arts department and has been split between her department and that of Paintings Drawings, and Prints (PDP). The reason for this is that a small proportion of the fans are simply a paper leaf. A paper fan is created by first decorating a semi-circular piece of paper and then folding into that springy

accordion-like structure that allows the fan to open and close (**Figure 29**). Sticks are added to extend the object to a pointed V and with those, on the two outer edges, are guards which protect the folded leaf when closed. The sticks and guards are not made of paper but other materials such as wood, bone, ivory, plastic, etc. Collectors of fans collect them in their complete form, as well as the components used to create the fans.

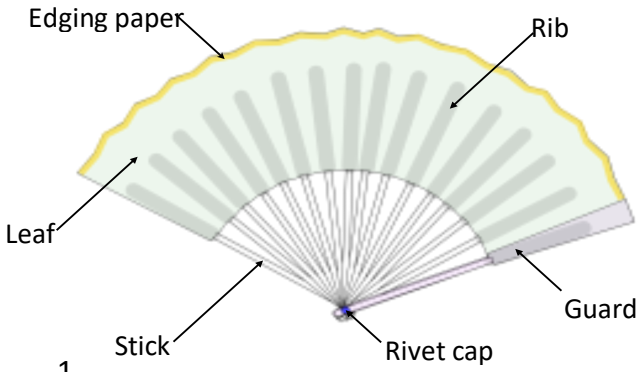


Figure 29. A diagram of a fan I created for the exhibition (Suarez Ferreira 2019).

This collection, therefore, has some paper leaves which are decorated but have not yet been folded. These are seen as being similar to works of art on paper and therefore fall into the remit of the PDP department. Because the fans become three-dimensional objects when all components are present and are not always primarily paper (textiles, feathers, wood, ivory, etc. can also be used for 'the leaf'), the remaining fans fall into the Arts department remit. The collection contains nearly 650 fans. Taylor, the contracted paper conservator, and I, have three months to complete the condition survey. I will be with the Arts department for two months, full-time until I move to another conservation laboratory for the purposes of my research. Taylor has been given a part-time contract where she will be working on the project Thursdays and Fridays for the three-month period. Taylor (upper class), originally from Australia, was trained as a paper conservator and has held posts in many of the major heritage institutions in London. She now hops from part-time temporary contract. Although, her informal connections and networks with institutions like the Fitzwilliam gives her differential access to opportunities. She has other temporary work she will be doing for PDP so with her two days a week and my two months we have a very limited amount of time.

Denis and Pontille (2015) describe maintenance work as care work, and I will describe conservation work as care work in that: 'it starts out from the fleshiness and the

fragility of life' (Mol 2008: 11). Care work considers vulnerability as the 'natural' state of things and failures, fragilities of bodies as the mundane conditions of the lives of people and things. This very vulnerability is what justifies the attention that people and things 'deserve'. This care of things is contingent on constant attention, drawing on watchfulness in order to not be normalized (Orr 1996, Mol, Moser, and Pols 2010). The senior conservator responsible for the care of those 30,000 objects within the Arts collection, is also responsible for the care of any departmental objects that go on loan to other institutions around the world, and for those that come to the museum for temporary exhibitions. Isabela is helped by a part-time conservator and three conservation technicians who all have their own projects as well. The department often contracts outsourced conservation work for textiles, ceramics, and armour. In this case, also for historic fans. When speaking to Isabela, the senior conservator, about the fans project, she explained:

> "Essentially the collection was available through the AiL[36] scheme. Meryl bid for the collection but decided she wanted to keep it whole. Other offers wanted to cherry pick which is what I would have done. I knew from the little communication and documentation given at the start of this, that much of the collection was in poor condition and that we were going to replicate some of our existing holdings. Because the decision was out of my hands, the next and usual step is justifying my original point. I wanted the survey we are asking you to do with Taylor to show how acquiring a collection without understanding the costs surrounding its preservation should not be acceptable. We had to find the money to pay Taylor and thankfully you came to volunteer."

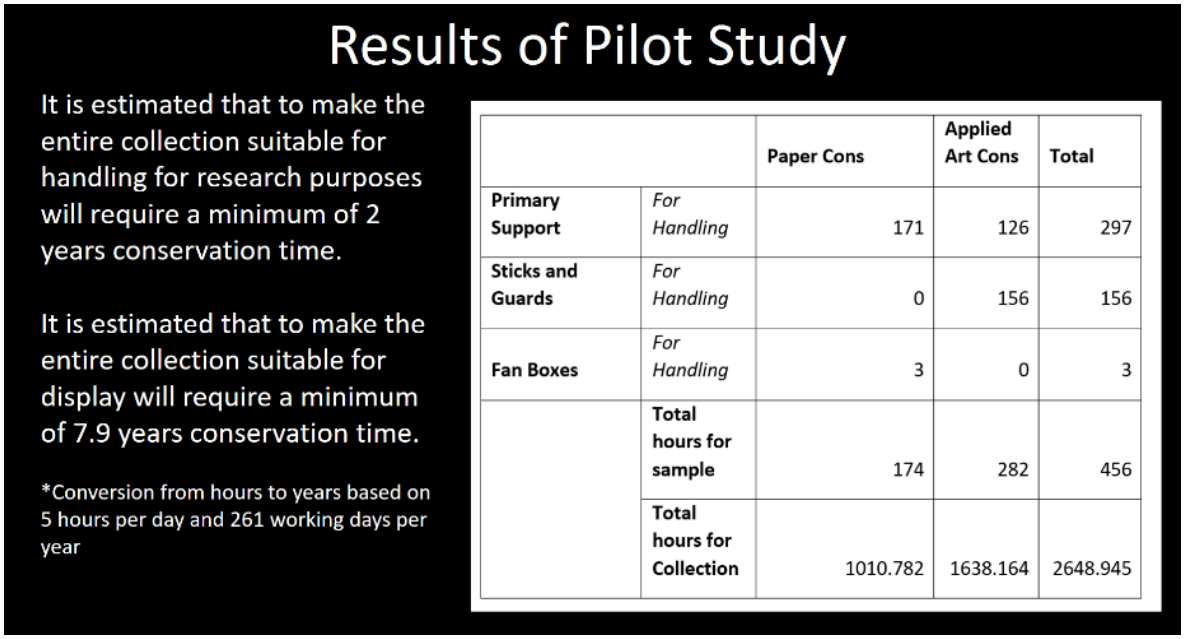
Stakeholders, like the department head Meryl, are involved so that conservators can strive to make the case for interventions or lack of intervention for objects. Conservators regularly try to make others sensitive to the vulnerabilities of heritage objects and the necessity of taking care of them (Denis and Pontille 2015: 357). Although museumgoers can be seen to hold minimal stake in the care of heritage objects, conservation is entirely centred on the importance of intervening before visitors are able to become aware of the vulnerability of objects – leading to a conclusion that the shared skilled vision is largely occupational. Indeed, as recorded in section 3.3.3, a peoples-based approach is potentially considered by conservators, but not enacted. Instead, negotiating with actors other than conservators or public communities affects practice, as do the orientations of the various actors involved.

[36] "Acceptance In Lieu (AiL) allows those who have a bill to Inheritance Tax or one of its earlier forms to pay the tax by transferring important cultural, scientific or historic objects and archives to the nation. Material accepted under the scheme is allocated to public museums, archives or libraries by the appropriate minister and is available for all" (Arts Council England 2022).

The senior conservators make it clear that other work will correspond with the fan project and therefore a strategy is needed. My input is to run some basic statistics so that we aggregate a representative sample and to create a digital survey for accessibility to records of the fans. The survey was conducted using a stratified sample. The multi-media fans, from a conservation perspective, require consideration of the various materials likely to be found and their condition/potential to decay. Isabela asks that once we begin assessing the fans that images also be taken. Conservation images normally include all sides of an object, as well as close ups of any concerning decay. Isabela's logic includes that of her experience with the museum workflow:

> "If the images are not taken now, it is unlikely they ever will be which really makes accessibility to the fans difficult. It may be that after the survey the fans are not looked at again for a long time. That is how things generally happen here. There are just too many projects and a lot of work, but not enough hands or resources. Photographing them well and in detail is probably the best conservation we can offer aside from the condition assessment. See how you get on and if it is too time consuming, we can readdress it, but I really think we should take the time to do it now".

The findings from the sample were extrapolated within a 95% confidence interval (**Figure 30**) and they were not as stark as Isabela had hoped for.



		Paper Cons	Applied Art Cons	Total
Primary Support	*For Handling*	171	126	297
Sticks and Guards	*For Handling*	0	156	156
Fan Boxes	*For Handling*	3	0	3
	Total hours for sample	174	282	456
	Total hours for Collection	1010.782	1638.164	2648.945

Figure 30. Slide from Fanned Curiosity: how conservators negotiate the care of museum collections (Suarez Ferreira 2019).

The results had come from a modification of the methodology Taylor, and I had intended to enact in the first instance. Photographing the sample of fans took up weeks of our time; the

digital files of which were never edited, creating nearly obsolete records to take up server space indefinitely. We had hoped to run a quick survey focusing on a hand full of key condition identifiers, but 'stakeholders' continued to add fields to the questionnaire, making the assessment of one fan at least 30 minutes long. Once a dozen entries had been completed, the team met again and decided Taylor and I had evaluated the fans for display, not for handling, making the fan's condition appear much worse; and so, our skilled vision was rewritten once more. Continual adaptation is required; improvisation is the main fuel of conservators in the care of objects, not just because standardised procedures are uncertain or unrealistic (Malkogeorgou 2010, Ashley-Smith 2016, 2018), but also because lack of appropriate resources often disallows for appropriate tools and timeframes with which to do the work. And, often, actors complicate work to meet their own agendas, an example of which can be seen below.

Despite the results indicating that about 20 percent of the fans were in poor or unacceptable condition to be handled by researchers, it also indicated that 7.9 years would be needed to conserve each fan to ideal, displayable standards. The former statistic became the focus that justified the acquisition whilst the latter became irrelevant, knowing full well that no such time would ever be dedicated to one collection. Indeed, although AiL clearly states that the primary benefit for the museum was receiving an important collection at no cost, there is a hefty cost in maintaining and caring for the fan collection:

- There are monetary costs of hiring a conservator to ensure the collection is safe to handle by researchers.
- There are monetary costs in the supplies and space needed to undertake such work.
- There are physical costs to a collection if not stored and cared for properly.
- There are ethical costs for Isabela as the carer of this collection if she does not comply with her role as the person who preserves the Arts department collections for the future.
- There are cultural heritage costs for all of us if the collection is inaccessible.

The appeal of studying conservation reveals assemblages that are not merely describable, inert results, but rather actions in the making where conservators attempt to hold the assemblage of a collection or collections together. The list above summarizes the concerns faced by the senior conservator Isabela. She had hoped for stark results so that her point about acquiring a collection without prioritizing the conservation considerations would be evidenced as a burdensome responsibility with unaccounted financial, physical, and

ethical costs. She was unable to have that result because many stakeholders came onto the project insisting that the acquisition had benefits which outweighed any costs. In the middle were Taylor and I, attempting to abide by this range of stakeholder input which ultimately left the work incomplete as we ran out of time. In this way failure is structural and pervasive as conservators negotiate with various stakeholders against time restraints, limited funds, and lofty, contradictory ambitions.

For Denis and Pontille's (2015) maintenance workers in Parisian metros, the vulnerable versions of signboards, enacted by the work, is entirely oriented toward the success of the stabilized version, but this relationship witnesses a sequential process wherein the designers' version prevails and constantly frames the work. For conservators, the designers or creators/ original owners/ collectors, are not normally available and so they must rely on approaches to guide them: Materials-based aiming for material stability, values-based aiming for stable materiality, and peoples-based aiming for political stability. Therefore, in terms of care, a concern for preservation 'translates material permanency into a sociotechnical sustainability, and recognizes that stability, like reality, is "an active verb"' (Haraway 2003: 6; Denis and Pontille 2015: 360). One could argue the main active verbs aspiring to stability in object conservation are preservation and intervention, seemingly in conflict but practically intertwined within a conservation action. Stability, especially in relation to material heritage, is only attainable through conservation and conservation action is not singular nor should it be. Heritage objects require constant preservation measures and monitoring in order to survive – at least according to standards and guidelines.

Conservation intervention engages in two version of objects: a stabilized one, which relies on standards and detailed guidelines, and a vulnerable one, which is in 'preservation practices' like condition surveys – both material ordering performed. The coexistence of these two versions, enacted in distinct situations and through different practices, complements Denis and Pontille's study of signboard maintenance workers. Conservators like maintenance workers, show similar improvisations, attentiveness, and diversity in material ecology underpinning the apparently stable environment for museum visitor's comfort and curiosity. Conservation intervention shows 'fragile and mutating entities, the boundaries of which are sometimes blurred; things that have to be cared for, despite their' material or materiality. This politics of knowledge (Puig de la Bellacasa 2010) shows the largely neglected narratives of moveable heritage objects (more on this in Chapter 6) and the relational invisibility of conservation practitioners (especially students, interns, volunteers,

and technicians). As Denis and Pontille (2015) summarize: “Demonstrating that the care of things is important —including the things that appear to be the most solid and stable—brings to the surface the work that underlies the production of sociomaterial order, while acknowledging the vulnerability of things and the importance of their maintainability: that is, their capacity to be taken care of” (Denis and Pontille 2015: 361).

Denis and Pontille (2015) use perspectivism and constructivism explaining the diversity of reality as the result of material enactments where differences do not derive from particular standpoints upon a supposed external, singular, and intangible reality, but from the performances that contribute to distinct forms of existence. As such, signboards and indeed, heritage objects can exist as two versions completely separate from one another, they may be contradictory, located on different sites, but they may also be aligned, partially connected, added together, and/or even included in one another (Law 2004). In the case of historic fans, we saw fans as duplicates in vulnerable versions at different states of deterioration, qualified distinctly based solely on their potential handlers. And yet some of the collection was in pristine condition. We pulled ones that were in ‘good condition’ to display, ignoring those that would take extended periods to conserve, and in this decision, we can see how objects on display in museums are identified and intervened upon by conservators because their condition is treatable (and analyzable) in a relatively short period of time. And not necessarily because they are the most appropriate example.

The exhibition preparation came and almost immediately the question was put forth to include ‘scientific analyses of the fans. The conservation scientist had not been willing to contribute to the project until the output was at the stage of display. A video would be made and as the treatment of fans is largely unknown to the wider conservation and art historical community, there was potential for publication.

> “The public loves the analytical, sciencey bits. It’ll produce more interest to potential funders” says Meryl (head of Fitzwilliam arts department, English upper class) in one of our meetings.

As aforementioned, the conservation scientist (their formal title) does not prioritize conducting material analysis to aid conservation practice and decision-making. In this case, it was no different. They identified a rare vermillion on a fan that was of interest from an art historical as well as chemical perspective. The red pigment was in ‘very good condition’ so helped neither Taylor nor I to ensure best conservation practice. The identification of

materials theoretically allows conservators to make informed decisions about what conservation materials to apply and how to apply them (e.g., Wertz *et al*. 2018). In this case the vermillion was stable and needed no intervention. As the display was themed in conservation intervention, Taylor and I felt that this analysis had been done for other reasons. The focus turned from our experience and work on the fans to that of 'the scientist'. Equal time on the promotion video, an entire display case, and the means for a publication were afforded to the conservation scientist, despite their investment in the project involving considerably less time, a day as opposed to the year spent in terms of conservation work. All because the 'science' element would bring in more funders (as Meryl explained), would satisfy the funders who paid for Taylor's work, and ultimately justify the project to stakeholders higher up in the museum hierarchy – justifiable conservation measures through scientism's appeal.

After explaining the diversity of field sites as well as the variety of participants I was aiming to reach, the conservation scientist still said no to participating in my doctoral research. They had decided that producing knowledge for the material analysis of heritage objects and working within a heritage institution still did not qualify her as a conservation practitioner. Indeed, her project to come after the fans would be based on uncovering unique material identifications, rather than as a means to aid preservation efforts. She said to me when I asked if she would like to participate in my study: "I'm a conservation scientist not a conservator. I don't think I could help." Similar to conservation technicians, despite their title and intended role, they qualify their professional identity separately to that of a conservator suggesting again that what a conservator does or what conservation is remains underdefined and particular to each partitioner.

Although scientific analysis of objects is part of conservation training programs in the UK, conservators do not employ the scientific method (Henderson 2010) and despite potentially training on analytical equipment or having relevant and deep understandings of chemistry, they are not scientists. Nor do any I have met identify in this way. The chemical and physical knowledge assumed to be essential and embedded within conservators and their practice allows them credence, respect, value, titles, salary grades, etc. This falsity is a strategically political one where 'science' seemingly enacted/employed is enough of a reason to provide funding or allow for a certain conservation project. As exemplified by this fans project, financial restrictions and uncertain ethical codes and standards of practice impact the work of the conservator (Malkogeorgou 2010, Ashley-Smith 2016, 2018), not because of

anything unique but because of the stagnant values-based approach to conservation practice, the values of the active public program that is, where 'science' feels like a sense of order.

> 'Order does not get rid of disorder, just as bringing disorder to light does not remove order' (Denis and Pontille 2015: 353).

Figure 31. A conservator condition assesses her 7th vase of the day. Although decorated slightly differently, they are all in good condition. Yet, the 're-enactment' performance of meticulously condition assessing each one is deemed necessary and creates a send of order (Fieldwork photograph, Suarez Ferreira 2018).

Producing order in conservation draws on situated reordered micro-processes that have to be continually repeated. Involvement in the active public program sees conservators used as condition checkers and couriers. Law (2004) reminds us that 'if things seem solid, prior, independent, definite and single then perhaps this is because they are being enacted, and re-enacted, and re-enacted, in practices' (Law 2004:56). As seen with **Figure 31**, due to meticulous and repeated condition assessment, restored stability seems particularly obvious, (as expected, these dozens of vases were in displayable condition in the first place). Until the next venue and the next conservators' condition assessments, and the next, and so forth. Order is reinstated in the displayed object. Here is the description of a stable signboard:

> "Solidly attached to the wall, stuck to the brackets, free from traces of glue or plaster dust, it becomes an individualized and objectified thing. The damaged object becomes once again a constituent part of the standardized graphical apparatus until a possible future intervention…Therefore, accounts that insist on the stability or the vulnerability of the Paris wayfinding system are not exclusive. Rather, they stage two versions of the same phenomenon" (Denis and Pontille 2015: 354).

Below is a depiction of this movement of the vases from secure crate, to awaiting condition assessment in Tyvek, to being on display with its ceramic counterparts (**Figure 32**). Large, cylindrical sandbags were made to go into the vases so that when the public inevitably bumped into them, they would resist falling to the ground. No such incident ever occurred, but conservation technician and conservator alike prepared for the innate vulnerability of displaying giant vases on the museum floor next to display cases already vigilantly monitored by attendants.

Figure 32. One of the same vases from **Figure 31** moves from stored, packed object to 'vulnerably' awaiting conservation to 'stable display' (Fieldwork photograph, Suarez Ferreira 2018).

Perhaps the duality of displayed material versions allows all occupational stakeholders agency, not just those in direct care of the objects. Objects behind the museum doors may not reveal as much stakeholder care; rather, museum stores are the immediate purview of conservators, and they are often a more visible 'mess' than even conservation laboratories (**Figure 26**). Does the duality continue past the public eye?

Similar to my position as conservator within my ethnographic inquiry, for Denis and Pontille (2015) shadowing maintenance workers allowed them to discover another mode of existence of technical objects which Denis and Pontille claim users are rarely aware of. Struck by the different states signboards were in, they became aware of both the significance

and plurality of their fragility. They describe states which are also common for museum objects:

> "During some interventions, for example, we dealt with signboards that had to be replaced because their colours had faded, or because they were worn out. We saw other boards whose surface had been attacked by mould, which reminded us that some Paris stations are situated near the Seine River and are prone to serious leakage problems. Besides wear and tear, maintenance operations are also concerned with acts of violence directly targeted at the signboards" (Denis and Pontille 2015: 348-349).

And in observing intervention, we are confronted with the fact that these objects have a more turbulent life than they initially had imagined. We can see this when conservation practitioners begin to face the reality of collection stores in museums. To exemplify, the following fieldwork excerpt (section 5.3.1) describes the larger picture of financial restrictions and uncertain ethical codes and standards of practice (Malkogeorgou 2010, Ashley-Smith 2016, 2018). Museums in the UK keep and acquire more objects than they could possibly care for, leaving conservators to feel the ethical impact, creating a form of ownership or responsibility.[37]

Ownership is often seen as a contentious word in the museum context due to the acquisition practices of the past. And aside from contemporary art which may allow for access to the original designer, there are few other examples of objects with allocated 'original intentions'. Perhaps this is not as vital to conservation work as exemplified by maintenance workers of metro signage where material properties are the sources of worries that come from their specific, acute engagement with objects. Just like metro maintenance workers, conservators enter a museum store to assess "not single things ordered in settled form, but as part of a complex material ecology" (Denis and Pontille 2015:350-351).

5.3 Negotiating with actors

As the majority of museum collections are within museum stores (Tomás-Hernandez 2021), we can look to them to exemplify the reality of work for conservators. Below is an excerpt from the field where I traveled with a conservator to look at parkas stored in their offsite unit. This warehouse was amongst other university buildings, hidden by its exterior appearance which made it seem unimportant. Inside: your self-service Ikea of culture with large metal shelving stacked to the brim with boxes upon boxes of artefacts with extra-large

[37] See Morgan 2018 and Morgan and MacDonald 2020 for an overview of the curatorial perspective on what they term as an issue of profusion.

objects more visibly resting between the aisles. The kitchen and break room had been recently updated to make users more comfortable, but the storage facilities were themselves unregulated in temperature, full of dust, and requiring steal-toe boots, perhaps even hardhats. Not exactly what you would expect for a place housing thousands of years of material heritage; much of which came to the museum by nefarious acts. For all I knew, there were souls, memories, tales and/or ancestors trapped in this place – I left feeling wrong, as though I was enabling a continuation of colonial behavior. This was a place that was far removed from the International Council of Museums most recent definition.[38] That is, museum stores seem to be the best evidence for how unlikely it is that conservators can apply a peoples-based approach to practice. The vignette below (5.3.1) elucidates this further. Within this vignette I spent time with an object conservator where my positionality was both ethnographer and conservator as access to the site and its staff was in exchange for aid in their conservation programs.

5.3.1 Parkas: Treasure Problems

> Having spent many years traveling to museums and meeting with museum professionals, I have had the pleasure of seeing many stores. To generalize, stores tend to have some form of shelving lying perpendicular to the longest wall in the room. They tend to have an 'old book' smell and one or two tables piled with boxes and paperwork. Very rarely are stores tidy. The shelves are normally packed with boxes which have various label types stuck on, penned in with marker, and/or crossed out. Amongst the boxes will be oblong objects covered in plastic sheeting and/or white, yellowing tissue paper (**Figure 33**). What lies in these boxes or under the sheeting is not often clear. I can assume the types of objects that the store may have based on the type of museum, but variability is common. The distinctiveness of unique items will surface behind the packaging and surely surprise. Indeed, my privilege as conservator-researcher means I can ask to walk down an aisle and uncover the treasure. As I inevitably crouch to meet the artefacts at eye level and peel back the obscuring materials, the excitement begins. Without fail, my curious mind is impressed. I want to know more so I will check labels attached to the object or begin to ask questions. This may happen a

[38] "A museum is a non-profit, permanent institution in the service of society and its development, open to the public, which acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of education, study and enjoyment" (ICOM 2007).

few times before we exit the store. I will instantly wonder when the last time a human viewed those objects. What is their purpose on that shelf?

Figure 33. On the left is an image of other objects stored with the parka boxes; on the right a few of the parka boxes can be seen, as well as the entrance to the mezzanine (Fieldwork photographs, Suarez Ferreira 2018).

Recently I was helping a conservator assess some sealskin parkas stored at an offsite storage facility. The aim was for us to view their condition, measure their dimensions and those of the boxes they were housed within. This would be the first step in deciding how the parkas would be conserved. According to the conservator, the issues to consider were three-fold: The boxes the parkas were housed in were oversized and made of unknown foam. The boxes were shelved mysteriously in an attic-style mezzanine that is difficult to access and monitor (**Figure 33**). Lastly, the parkas were laid out flat, sometimes unsupported and 'unnecessarily' as researchers had not queried to see them in over a decade (**Figure 34**). The parkas' storage situation was taking up too much space and space in a museum store is always needed. There is a valid reason for parkas to be laid out in full form as this allows researchers to inspect them and therefore learn from them. This collection of parkas in particular were each different in both the materials from which they were made, as well as where they had been made. My awe of each one had filled me with delight and the aforementioned curiosity.

Figure 34. On the left is an image of one of the flat packed parkas; on the right an image of me measuring a vertically stored parka (Fieldwork photographs, Suarez Ferreira 2018).

The conservator I was helping informed me they would be conserved via humidification, increasing their flexibility so they could be stored in smaller boxes that could be shelved in a more accessible area. As no researcher had asked to see them in so long, altering their form to fit them into small square boxes was not of concern. The conservation project would add knowledge to the conservator's practice on organic materials.

In my experience, humidification of organic materials is a lengthy process and can be very tricky. Humidification chambers need to be regularly monitored for condensation as pooling of water in any measure onto the object could cause irreversible damage. Although organic material reacts to moisture fairly easily, in most cases the absorption of moisture will change the fabric of the material- allowing flexibility but also potentially degrading the cellular make up via inflation (Holdcraft *et al*. 2021). As a permanent humidification chamber is neither possible nor wanted, the object will be dried out once again. In this case, the parkas will be entirely reformed both in shape and on a molecular level. Conservators have the expertise to do this risky procedure but often choose not

to.[39] The conservator who would undertake this project had colleagues who could aid them with the process and decision-making. They had scheduled a 'knowledge exchange' with the other conservators so they could be informed about all the practicalities and learn through the experiences of others.

Why did I still feel uneasy about the parkas being conserved in this way, despite knowing the logical reasons? I circled back to the store and how I felt opening the lids to the large foam boxes and being overwhelmed by the evident exactness of human creation clearly represented by the practical yet beautiful parkas. How about the massive canoe in at least five pieces dotted around the parka boxes, also in the attic? Or the plaster casts of Mayan script I learned to read in my undergrad and have longed to see in-situ? Or the cylindrical ceramic vessels lined in rows on each shelf of a unit that occupied the height of the store. Sitting there by the dozens in almost geometric pattern, waiting for a typology to be written or for a residue analysis to be sampled. Yet they are piled high and densely within an offsite store where only curators and conservators view them periodically. The probability of the plain, or ugly, or very damaged ever being chosen for display is low, near zero (as seen with the fans in section 5.2.1). There are not enough resources for the damaged to be conserved and there is not enough research interest for the others to be freed from their packaging.

Yet, I still wonder whether no one else is concerned about the stockpiling of these objects and the continual acquisition of more objects demanding more space and resources for more objects to be stored. Each object unique with narrative and possibility of heritage representation yet doomed to lie dormant in boxes collecting dust until it needs to be moved to the next store. I use the word treasure for a reason. Sometimes I get the sense that museum stores are inflated treasure boxes with labels, collected by a non-diverse group of people who are not concerned about the obsolescence of a hoard.

[39] The conservators on this project decided to leave the parka being treated dry when replacing previous conservation stitching that was causing tares; they did this after communication with relevant communities as well as experts in organic and textile conservation (Holdcraft et al 2021:8).

This vignette is in place to show the dislocation I always feel when entering and then leaving a store, with all the mixed feelings in between. As a conservator, there is this privilege of having access to storage facilities and being given the authority to look closely at objects. The conservators' eye, trained to see detail and to be curious, gets excited and begins to ask all those questions. But then, reality sets in. The care of these objects is only up to the point of storage, and we know that is not enough.

Tomás-Hernandez (2021) summarises this well with the concept of storage debt. She refers to ICCROM (2021) stating that storage facilities house around 90 to 95 percent of the objects held by museums worldwide. This is often the perception museums professionals have of the volume of objects within a given collection that is not on display. Although, this perception and estimate by ICCROM is difficult to apply to certain institutions, such as archaeological museums or museums with incomplete inventories (Gardner 2007:39). For years this inadequacy has been noted in terms of accessibility, conservation or overcrowding and many studies confirm that a high percentage of these spaces are in a 'critical state' or are incompatible with the safekeeping and conservation of collections set by ICCROM-UNESCO (2011). Of course, the poor condition of these facilities prevents institutions from carrying out their basic activities and presents significant risks for the future preservation of collections. Indeed, there has been little improvement to these conditions despite the occasional ambitious renovation project, undoubtedly advertised to give at least a sense of improvement (Lambert 2011). In most institutions, which I can attest to from having visited 'behind-the-scenes' dozens of in the UK alone, the problem remains, and the causes have not been eliminated nor mitigated (Lambert *et al*. 2019). Even with repatriation (also undoubtedly advertised when actually completed) becoming slightly more popular in the last couple of years, repair of global relationships can hardly begin if museum stores continue to elicit a sense of treasure hoarding (Hicks 2020:19).

The duality of the material behind museum doors is then of a more obvious vulnerability, owned by the duty of care conservators tend to invest. The stability is that of 'holdings' acting for the need of stakeholders to verify the process of continued acquisition. It is not care as such. Here is Meryl's (head of Fitzwilliam art department) take on the aforementioned results of the survey of fan conditions. For her, 7.9 years of conservation work with 20 percent of a collection not able to be handled even by researchers was validated with status:

> "The thing is I knew it was an important acquisition. I fought to keep the collection together and now we know we are in the ranks with The Fan Museum and the V&A in terms of fans. I am adamant that we lead on keeping this important material and associated craft skills alive."

Keeping the metro running, even though it is crowded, always late, and no one can read the disintegrating signage for all but a couple dozen of the over 600 fans will sit in boxes within a store and not be conserved or studied. Fan making craft skills are embedded within the objects but there is no opportunity to learn from them if there are no resources to make the collection accessible. And so, the status of the museum increases for its holdings, but the value of the museum decreases for its lack of attainability and care of collections.

It is attitudes such as these which lead to the idea that the museum is not evolving at a fast enough pace and that the 'commitments' to diversity or decoloniality and associated care, are more about 'buzz words' or 'being seen to be doing something' (Hicks 2020:19). The values-based and peoples-based approaches to heritage and its management leave practitioners with disjunctive situations and tensions brought on by perspectivalism. Beier-de Haan (2006) characterises late modernity via an 'accumulation of diverse perspectives' associated with this recognition of multiple publics, producing distinct values (Beier-de Haan 2006:188). Such perspectivalism is often manifested within the museum and heritage sectors in a stakeholder model (i.e., values- and peoples-based approaches) but as Jones and Yarrow (2022) showed, perspectivalism only works up to a point. Framed by subjectively plural perspectives, trying to include all stakeholders within conservation decisions ultimately depends on some heritage experts being able to have an overarching perspective on all perspectives. This creates a struggle for practitioners to find a singular vision of what heritage objects are and how they should be cared for (Jones and Yarrow 2022:208). Similarly, if those who enact change onto objects are restricted in social and ethnic diversity, can museums claim to be engaging with a variety of perspectives or within a global heritage community? The next section (5.3.2) covers how viewing this issue through the lens of the objects can add to the discussion on profusion (Morgan 2018) and ultimately continues the conversation and critique begun in Chapter 3 where authorised expert power structures, proliferation, and non-diverse professional communities of practice characterise object conservation within the UK.

5.3.2 Object Diversity

It is important to state that during my fieldwork prior to 2020 and the Black Lives Matter movement gaining visibility and traction on a global scale, the topic of diversity and inclusion within the colonial backdrop of the museum was seen as sensitive, controversial, and even unprofessional to bring up. I was met with much apprehension and defence. Rose, for example, had come to the frequented argument asking where she needed to draw the line of responsibility, using the age of archaeological artefacts to circumvent the topic of collections "appropriated in the aftermath of violence, for example in the context of a colonial intrusion or war" (UCM 2019). She was not able to see any repercussion or particular considerations or responsibilities one could have not only as a person with European heritage but also as a conservator enacting change. She was also not aware of this choice phrasing by UCM so as to not have to engage in conversation around repatriating their impressive collection of Ancient Egyptian artefacts for example, the coffin of which was her most important internship project. Dan Hicks reminds us:

> "Museum 'dialogue' so often takes the form of filibuster, of stonewall, of obstruction, and even of silencing and redaction – not least through the idea of 'entanglement' or complexity. But many of these histories are not so complex, or so difficult, or so entangled – they are straightforward. Where an object has been looted, and a community asks for it back, western museums have a duty actively to make a return, both of the physical object and additionally of other sharing of knowledge, resource, connections and platform. Every return offers an opportunity to fulfil the curator's principal job: to understand their collections better" (Hicks 2020:239).

This is a call for those with power in museum contexts or heritage institutions to ally with reparations and the claimants. As those in care of the objects and with the power of enacting change, conservators should be held as responsible to Hicks' call as curators and other museum professionals.

Two interlocutors, one at the Department of Archaeology at the University of Durham and one at the Museum of Archaeology and Anthropology at the University of Cambridge, spoke to me about not liking when students and interns came to work in their conservation labs who did not know how to speak English without a heavy accent – displaying some racist nationalism that was openly shared with me, alluding to a behavioural norm which made me uncomfortable. At the same time, they were in the care of objects from countries where English is not the main language and where in-depth knowledge of how and why the objects were created would have been accessible only in a non-English language. This privileged

dysfunction stems from within a values-based approach (as both these women were trained) where, although conservators do not have the exclusive power over the conservation process (as in a materials-based approach), they retain particularly increased power. Conservators continue to favour the tangible and therefore conservation continues to reflect mostly 'Western-based' views and prejudices.

Aside from the apprehension I experienced from conservators and museum professionals to engage further in this conversation, the diversity of collections within the UK does not match the diversity of those in care of those collections. Out of dozens of my interlocutors, only two were from a non-western country or background (2% of the over 80 conservation practitioners I worked with throughout my fieldwork). A lack of diversity that could not be compared to the populations of both the universities in which they studied (had studied) and/or the cities in which they lived. The syllabi I used and gleaned from students noted the Eurocentric/Western narrative dissected in Chapter 3. Practitioners were taught a European origin to the practice and have seldom opportunity to engage with discourse highlighting issues around representation. Yet their exposure and responsibility were of material culture that had come from all over the world. This is not necessarily to say that one must come from the place where the objects originated in order to conserve them, but rather that pedagogically, students are not trained to seek those who have, nor to work via international communication and understanding. Their study, work and expertise are drawn from very narrowly defined perspectives and life experiences (middle-/upper-class, European/North American, 'expert'). This is then reinforced within the museum environment, especially British national museums (Hicks 2020).

Kim, born in the United States in a middle-class but ethnically diverse setting was training at UCL to become an object conservator. When I interviewed her, I did so predominately as an ethnographer although with increased sensitivity to her position as a student intern in conservation as I had recently been one myself. She had chosen her placement internship at The Science Museum in London and shared with me:

> "I wanted to come here because unlike conservators before me and my ancestors, I want to contribute to my own heritage instead of the stolen heritage of colonialized or mistreated people from a place I've never been to. Science is close to like a human universal and something I'm more comfortable being a part of."

Materiality can be assigned by the museum, colleagues, history or moment in time: "context-dependent modes of making meaning" (Edwards 2001:14). Kim exemplifies how materiality

can also be moulded by the individual conservator; relying on their own sociality to interpret reality and indeed, objects. She told me her awareness of issues with diversity in the heritage sector had come from her undergraduate training at a female university in the USA. All her modules engaged in heavy debate around issues of representation, and she felt encouraged to evaluate and criticize organisations as well as concepts along lines of inclusion and diversity. We can see how the trajectory to professionalization within conservation, although not necessarily a linear one, has important points at which knowledge acquisition can change the heritage object and its materiality, as well as the work of the conservator.

5.4 Conclusion

Financial restrictions and uncertain ethical codes and standards of practice obstruct the conservator in that conservation as care is impeded by a constant negotiation with stakeholders (Malkogeorgou 2010, Ashley-Smith 2016, 2018). These circumstances relate to a now globally ubiquitous set of broadly neoliberal, late modern approaches which promote the linked ideas of fiscal austerity, marketisation, 'participatory' ideologies and the valorisation of audit and transparency as ways to promote 'good governance' (Jones and Yarrow 2022:23; Bear and Marthur 2015:38; DuGay 2007). As covered in Chapter 3, within conservation the materially essentialists ideas about intrinsic, authorised significance shifted towards values- and peoples- based approaches for socioeconomic benefits to the heritage sector and presumably, the past (Jones and Yarrow 2022:23; Cooper 2010; Emerich 2014; Pendlebury 2008; Waterton 2010). As seen in this chapter, this context in which care needs to be applied is in opposition to the vulnerability of the complex material ecology ordered and stabilised only by display. Conservation as care is seemingly contingent on when funders and scientists are afoot. A 'peoples-based approach' is actually populated by people in charge of and affectively manipulating the active public program rather than any stakeholders or communities tied to the background and/or materiality of the heritage involved. Approaches to conservation of both objects and collections can be seen as highly dependent and restricted by their contextual counterparts who hold more weight within heritage institutions: namely curators, and others involved in acquisitions, even those who can use the Acceptance in Lieu (AiL) tax deduction. This is an institutional issue which has been supposedly slowly mitigated out of the professional environment by training conservators and curators alongside one another.

From my experiences, the intricacies of conservation requirements must be negotiated. With my fieldwork and conservation of historic fans, for example, the AiL tax law, this museum's own policies, and adequate care for the collection have consequence, needs, and are valued disproportionately to the pillars of the idealized heritage sector. As Taylor (2015) in 'Embodiment Unbound' concludes: "heritage is not the object or material itself, but the reason that the object is conserved" (Taylor 2015:66). Status tied with national significance, public appreciation, and funding manipulation supersede preservation for the future. Issues around diversity, and representation also colour the work of the conservator, emphasising the impossibility of enacting a values- or peoples-based approach when practitioners show prejudice themselves and collections elicit treasure hoards (Hicks 2020).

John Pendlebury (2008) describes the current "age of consensus" where values- and peoples-based approaches are propagated, in which conservation is at once seen as an inevitable and widely accepted "good", and one whose specific value is highly contested, especially within heritage institutions themselves. Beyond these contradictions and conflicts, he captures how a broad shift to emphasise the extrinsic value of heritage has occurred, without entirely surpassing an earlier set of discourses and professional commitments as covered in Chapter 3 in terms of authorised expert power structures. Kisic´ (2016) points out, this is because international conservation instruments and national policy documents tend to build on, rather than displace, earlier foundational doctrinal texts. In consequence, Pendlebury suggests that the heritage sector faces a difficult challenge: "to sustain its historic trajectory away from patrician elitism while sustaining core meaning and practices where appropriate. Pluralism, diversity, and the partial 'letting go' of power and control they imply, are inevitably a challenge for a practice traditionally expert-defined and led" (Pendlebury 2008: 220; Jones and Yarrow 2022:27). As the power dynamic for object materiality is at least partially in the hands of the conservator, whether they intervene on an object or negotiate for its care or are the carers of collections in total, it is important for the lack of diversity and the lack of awareness in inclusion issues be criticised alongside the other forms and ways of knowing covered thus far.

Chapter 6 turns to a discussion more heavily tied to the material object and materiality, asking questions around the relationships formed between practitioner and object. Through language, it can become apparent how invested practitioners can become and how their interaction (even without enacting change) can still speak for the work of the conservator. Push back to the disequilibrium within the premise of a museum and its actual

practice may only lie within the material objects themselves. The next chapter reminds us that materiality is the object of interest in heritage studies prior to the priorities, processes, and publics of the museum (McCarthy 2015).

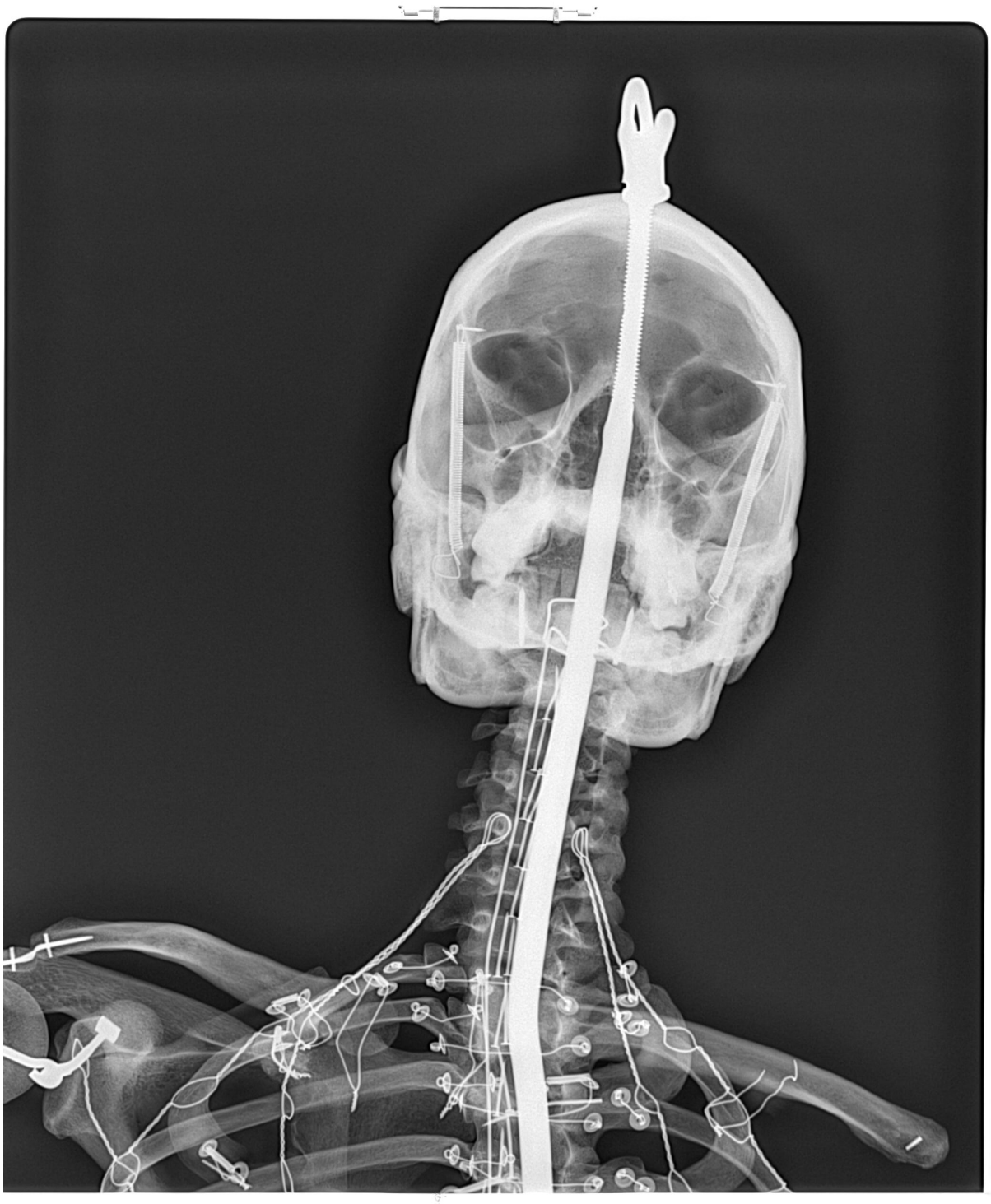


Figure 35. An x-ray of a skeleton I helped 'conserve' as part of a group project during training. I was ethically opposed to the intervention based on my background and beliefs and so I conducted research for the group but did not actively 'treat' this man's skeleton who we knew very little about and was going to be used as a teaching prop by a bioarchaeologist (Conservation photograph, Suarez Ferreira 2014).

6.1 Introduction

This chapter focuses on the impact of material heritage on the practitioner. It considers matter as an active participant: matter as neither a given resource nor a mere effect of human action, but rather moving, transforming, and forming alliances in a more or less durable way and as constitutive parts of humans or animated things (Mol 2002, Ingold 2007, Barad 2003). Conservation intervention is enacted with tools and specific techniques but also via the gaze of the conservation practitioner. In dealing with the ability of things to be taken care of, the question of preservation highlights the physical difficulties conservators may encounter treating or even intervening on objects. Section 6.2, addresses conservators' 'preferential treatment', that is, their ability to treat and intervene on objects which is often also driven by their own personal choices (influenced consciously or unconsciously).

This leads to a reminder by Colloredo-Mansfield (2003) and others (Hansen 2003; Hetherington 2004; Lucas 2002; Van Hoorn 2003) that routines of daily life depend, often, on the material transformation of physical objects: "people use things up, expose them to the elements, consume and combine" (Colloredo-Mansfield 2003:250). Therefore, unknowns are inevitable by the time heritage materials reach conservators; section 6.2.2 discusses unknowns within conservation practice reflecting Ingold's (2007) discussion where the properties of materials are not fixed attributes of matter but are processual and relational. I attempt to draw this out with a discussion on what inevitably remains unknown about heritage material, despite thorough investigation by the conservator. What the conservator does not know about the unknowns of an object can transform into an understanding that they may never know. This process is often unspoken and reflects a notion of materiality by which humans encounter, experience and interact with their surroundings, related objects, people and places (Mair *et al*. 2012:17).

For Denis and Pontille's (2015) maintenance workers, materiality does not mean anything; the life of material entanglements and signboards are, on the contrary, part and parcel of their daily concerns. A materials-based rather than values-based approach, one could argue:

> "The maintenance workers encounter several kinds of materials located on multiple layers: the wall (itself made of tiles, the glue that holds them, and the plaster they lay upon), the metal brackets, and the signboard. Their work consists in considering these different material sites, strengthening their composition according to their own criteria, and making them hold as a coherent assemblage

> with the help of other materials: glue cement, plugs, and screws. Throughout the intervention, which goes from the workshop where the metal brackets are made, to the workbench in the van where the holes are drilled, and all the way to the metro station, the boundaries of things remain blurred…They also rely on tools, whose manipulation underlines other forms of material interdependence…The tools that help maintenance workers in repairing signboards link them to a complex network of infrastructures. Usually transparent, this network complicates each intervention when any kind of failure occurs" (Denis and Pontille 2015: 352).

This example of interventive maintenance as a care of things, allows a reversal of traditional views around the role of artefacts in society by concentrating on the material fragility of things and the constant necessity of taking care of them. Care of things is also at the forefront in the conservation of heritage material. We can see this care as both tangible (through intervention) and intangible where work in changing an object provides satisfaction and the work of advocating for an object shows how conservators take ownership over the responsibility to care for the object in the short and long-term.

The last section of the chapter (6.3 Language Materiality) uses the concept of language materiality to explore how practitioners enable or secede material transformation – allowing for the possibility that at least some objects can have social lives and places as well as biological and chemical lives – evidently only perceptible when an object begins to decay or by the 'skilled vision' of a conservation practitioner (Grasseni 2007; Edensor 2005). Language materiality, defined by Shankar and Cavanaugh (2017), sees materiality as conceptualizing how humans encounter, experience and interact with their surroundings, focusing on how the language of everyday life can reflect those meanings and value-creation processes. By engaging with object agency (6.2.1), ignorance as an ethnographic object (6.2.2), and language materiality (6.3), this chapter explores how heritage material can ask certain things from practitioners: from specific bodily commitments to a yielding to the ignorance of the unknown, to conservation language (verbal and non-verbal) as evidence – a topic which will be explored even further in the following and concluding chapter of the thesis. The field excerpt below details my interlocutors' disappointment with inadequate storage, but also digs deeper into why caring for things comes from the ability to change things: to be entitled to like them, repair them, and take responsibility for their care. My positionality during the excerpt below was of both ethnographer and conservator as access to this site and its staff was in exchange to aid in their conservation programs.

6.2 Preferential Treatment

We walked through a door almost hidden in the hallway. There is no sign indicating this is the store. It is not until several days working out of the store that we stop confusing other doors on that side of the hall for the one we need. Once you enter, the room appears as though it is at maximum capacity. The rolling shelves move manually so heavier ones escape their intended position and allow you to get a peek of what is inside: mostly stacked boxes. There is a very tall ceiling with fluttering florescent lights which we later find have not been cleaned in a very long time. We are to start from the far end of the room where the department of anthropology store their collection. The majority of the week will be spent packaging these objects with plastic sheeting and parcel tape (**Figure 36**).

Figure 36. An example of how the objects looked after we completed the packing task (Fieldwork photograph, Suarez Ferreira 2015).

We know the reason: there is a moth infestation, and objects must now be treated and quarantined so that the moths can be eradicated. These packed parcels of heritage objects will be sent to an industrial freezer[40] so that the cold can turn the moths and their larvae into skeletal carcases.

Everyone is shocked and disappointed by the nature of the storage of the objects we encounter. They are incredible objects from all over the world, but they are literally shoved on top of one another with no consideration of what might happen to them in the future. We

[40] "A freezer capable of reaching minus 20 degrees F (minus 29 degrees C) will sufficiently lower the materials to the freezing point within four hours, which kills adult insects as well as their eggs" (Integrated Pest Management Working Group 2018).

suspect that there is no consideration for what the objects mean either. This emotional reaction to the storage conditions sets the scene for the remainder of our time in the store. We are about to dig deep into what many conservators have before: the confusing hoard of a heritage institution's store. My interlocutors ask with much indignation:

> "Why keep these things if you're not going to take care of them?"
>
> -Bill (Emerging Object Conservator, English middle class) & Elizabeth (Object Conservator, English middle class)

Conservators have been trained to see the value in almost all objects, yet we tend to have selective preferences for which objects we like to see and work with, and we are subconsciously attracted to reject other types of objects for reasons we cannot quite explain (Eastop *et al*. 1996). A venture into a store can reveal a lot about such preferential treatment.

We enjoyed uncovering the objects, shelf by shelf. Even though there was a time constraint, we could not begin to package a box of items without looking into it first. It depended on the person as to what they found interesting (**Figure 37**). Bill enjoyed unusual things, objects made from materials one would not expect or an object whose purpose or function initially eluded us. I enjoyed objects which showed detailed craftspersonship and were symbols of specific behaviour.

Figure 37. Left: One of Bill's boxes of intrigue which he later conducted some research on vs. Right: What caught my attention: detailed metal work. (Fieldwork photographs, Suarez Ferreira 2015).

Elizabeth played a minor role in this aspect of the project but tended to favour things which were recognizably objects, and which could be dated historically (as opposed to boxes full of pieces of Roman ceramics; **Figure 38**).

Figure 38. The majority of the archaeology boxes in the store looked like this image: 'boxes full of pottery sherds' (Fieldwork photograph, Suarez Ferreira 2015).

At another field site where I was both ethnographer and conservator, Rose is interested in the experiential knowledge component of conservation. She explored this topic within her Masters dissertation and tells me: "what really struck me from one of my interviews was the conclusion that there is no 'correct' approach to conservation but rather that there is a correct approach for the conservator. It's about what is right for you". Being comfortable with a specific type of object, material or even technique, can be because you prefer, admire, and easily understand it (as seen with the storage examples above), but it could also be because the conservation work required is 'right for you'. This may be due to experience, the size of your hands, your eyeglasses prescription, or the degree of patience you have, etc. as well as your innate attraction to the object – a sort of negotiation emitted by the material object itself. Indeed, when speaking to a book and manuscripts conservator, Tim (English upper class), about bodily commitment and conservation work I was told that: "one must have hands large enough and strong enough to handle large manuscripts correctly; especially ones with fragile spines or ornate decoration… over time your hands will become stronger and understand things like weight better…".

From Rose and Tim's testimonies, as well as the conservators sharing their reactions in the storage project highlighted above, it became clear that conservation intervention is enacted with tools and specific techniques but also via the gaze of the conservation practitioner. Like most forms of perception, Grasseni's 'skilled vision' is not limited to a single visual capacity and does not mean that only eyesight is engaged. Rather, it depends on movement and relies on gestures that involve the entire body (Grasseni 2007). Conservation work requires that objects themselves have certain properties; objects must be treatable

(Denis and Pontille 2015). And of course, in this respect, objects are far from equal. In dealing with the ability of things to be taken care of, the question of preservation highlights the physical difficulties conservators may encounter treating or even intervening on objects. The less treatable an object is, the harder the bodily commitment to its care.

Additionally, if an individual conservator does not relate to a certain material, they may spend as little time with it as possible. If they appreciate an object, it may take them longer to complete its conservation and they may find a sense of territoriality about its future use. Or vice versa. Conservators get a bad reputation for being obsessively stubborn. Is this reputation a consequence of missed opportunities to express their attachment to, and interactions with, objects?

In a seminar I attended during fieldwork titled *The Creation and Transformation of Value and the Satisfaction of Work*, Sanchez (2020) argued that practical work, even when of the repetitive and seemingly mundane nature, is satisfying because the practitioner creates change and that transformative process for both object and person is valuable (echoed for conservators by Henderson 2022). I often think of work satisfaction for conservators in the museum contexts I was able to conduct research within. As above, within large museums knowledge is compartmentalized by value systems which do not necessarily overlay with conservation principles – as covered in Chapter 5, the role of the conservator is evolving.

For those who trained under materials-based, or more recently values-based theoretical frameworks, the move to 'consultant' or 'condition checker' is not satisfying (Ashley-Smith 2016). Historic and current conservation pedagogy has been predominately motivated by the preservation of physical materials and objects through enacted change, and so the older and even present generation of conservators are not necessarily equipped or satisfied with attending meetings all day, managing people, and working within structures where they never touch objects unless to assess their condition for transport or display (i.e., aiding the public program as 'condition checkers and couriers' as described by Ashley-Smith 2016:129). 0 covered how they did not become conservators to extract satisfaction from such type of work. They became conservators to extract satisfaction from implementing change on objects, and in the process, transform their knowledge and themselves. Every interlocutor who had a permanent role within my fieldwork sites always noted how they 'missed the bench'. That is, they missed hands-on, transformative work with objects.

Sanchez (2020) found that his interlocutors enjoyed taking objects apart to evaluate their different components depending on their metallic make up as well as their size. I know conservators similarly enjoy repairing objects, cleaning them to visible change, adapting them to mimic a perceived materiality. They like working with their hands, and are skilled at material identification, just as Sanchez's informants. Scrap-yard workers, unlike conservators, do so without the ethical and cultural baggage of 'creativity' which is outside the 'objective', 'science- driven' discourse that has allowed for conservators to be legitimized within the heritage sector. Craft and authorship are similarly rejected within the discourse despite the mirrored skill sets needed for both 'art' and conservation (Ashley-Smith 2016:122). Instead of extracting value from the creative process, conservators gain status within heritage institutions by abiding to the most current Western notion of heritage: owning, seemingly 'preserving', and interpreting objects via 'expertise'. Yet, Sanchez's interlocutors working in a scrapyard in India are similarly cognitively and practically satisfied because when both scrap-yard workers and conservators enact change, they move their assigned objects through regimes of value. For those interlocutors within the conservation profession who are now being transformed into managers and consultants or who predominately work as 'condition checkers', their satisfaction lessens: they 'miss the bench'.

Changing an object is satisfactory and happens to be a part of its care. Sweetnam and Henderson (2022) are advocating for visible intervention for displayed objects but the 'six-inch, six foot' rule is much more common in practice. The 'six-inch, six foot' rule is defined as the intervention being "clearly visible at a distance of six inches but blends at a distance of six foot" (Hartog 2009). Making a conservators' enacted change invisible to most viewers. To see conservation intervention on heritage objects on display or within museums in general, we need conservators to reveal them. Yet, just like Denis and Pontille's (2015) maintenance workers, there are no precise rules to help conservators know when an object has to be repaired.

Figure 39. A historic fan displayed with its conservation record showing the fragility of the object alongside the fragility of the conservator and their practice (Fieldwork photograph, Suarez Ferreira 2016).

Discovering vulnerabilities via condition assessment is a situated practice where conservators draw on their 'skilled visions' (Grasseni 2007). This intervention is a version of the performance seen with displayed objects – seemingly stabilized versions (until, as we saw with the large vases in Chapter 5, condition assessments verifying the fact are re-enacted, and re-enacted, and re-enacted (Law 2004)). Petrucci (1993) focused on the design of specific inscriptions as an instrument of public power and mainly emphasized the issues of emplacement, visibility, and legibility. The display of writing in public settings also implies its exposure to numerous dangers. Because of its very publicity, public lettering is fragile lettering. The display of conservation intervention as Sweetnam and Henderson (2021) proposes could see the fragility of object and the fragility of the practitioner highlighted (**Figure 39**); perhaps advancing an appreciation and a visibility of the interventive elements of practice. And in turn, advocating for a return to the bench.

How about when intervention is not sought or undertaken? A conservator can decide not to intervene on an object or a part of an object because they acknowledge they do not have enough knowledge (e.g., how to coordinate the techniques and materials needed to humidify and reshape a seal skin parka as covered in section 5.3.1). They can use their absence of knowledge to learn, to change or progress as a caretaker of material cultural heritage. Sometimes the decision to not intervene lies within the material makeup and

associated materiality of the object itself. An example comes from one of the forums I held at University of Cambridge Museums (UCM) where I was both ethnographer and conservator as access to this field site and its staff was in exchange for aid in their conservation programs. This forum included the entire breadth of conservation practitioners working at the various museums: conservators, conservation interns, managers, technicians, and students.

6.2.1Human hair as appendage

I had recently learned about Emma Tarlo's (2016) work on human hair following transformation into objects used and changed to suit a variety of social, religious, and personal purposes. Tarlo asks of these 'hair objects' what they mean for the donors, creators, and users. It made me think about human hair on or within artefacts, as well as other parts of the human body that may be part of museum collections. Like Tarlo, I began wondering if hair is seen as a body part for conservation practitioners. When present on an object, do conservators change their approach? I brought these questions to one of the UCM 4C forums I held throughout my fieldwork. Here is an excerpt of the conversation:

> Bill (English, middle class, early career): I think it is a trade-off, yeah… between the ethics at play within the museums and the personal ones. Sometimes it's hard to, um… not necessarily put your opinions onto, say its hair or human remains, but you have to get to a point where you're beyond your opinions. So, like in terms of hair, I have this idea that I am quite comfortable with human remains but the hair on the object would make me think more about it. I think the object without that human hair would be less emotive or less, um, kind of tepid in dealing with it, whereas the hair does make it more human, I think. It's definitely these things that make me think in certain ways that will affect the way that you approach the object.

> Chris (English, upper class, senior): I think it's a really good point the institutional ethics. I think when you're working in an institution you do pick up the general trend, but you've obviously put your own history to it. I think the institution does help when comparing, but that's just an observation.

> Victoria (French, upper class, early-career): To keep going about the human thing, what you were saying about the skeletons. One of our colleagues was doing all the primates and had no problem with it but when they went to the human skeleton, she said she was quite weirded-out because it was human, but she had no problem with the gorilla or any others and at the end of the day it's the same, it's a skeleton. So, she said she kind of had to forget it was human.

Bill: It would be weird if she knew before, well obviously she would if she's working on it, but if you could see her reaction if she didn't realize it was a human and then as soon as she did realize, not that it would happen.

Victoria: Yeah, like if she just had the hands.

Rose (Spanish, upper class, Intern): I think working with coffins is similar to working with people, you have to pay some respect to them. I was talking to my ICON supervisor and how I have a tendency to want to use more natural treatments. The treatments that are more natural instead of adding synthetic materials to the coffins; it's something that's respecting more the Egyptians that were trying to preserve their people.

Bill: Natural material, so organic?

Rose: Like I would, rather than using Klucel G[41], I would rather use something more natural… starch paste or checking another consolidation treatment instead of maybe using Lascaux[42]. And I feel there is a conservation argument for that, there is an argument for respecting the coffin as it was.

Victoria: Would you use the same materials as a coffin if it wasn't a coffin, if it was a human or something different, do you think you would adapt your treatment or…?

Rose: Maybe.

Preferential treatment, as discussed in this forum excerpt, has described the complexity of the working conservation practitioner where the material objects, their various components and associated materiality are meaningful, and those meanings are material – blurring the distinction between the material/semiotic. Human remains and their associated burial material can come with more meaning for some, creating an extra layer of materiality on top of the one used to acquire the objects or remains. For at least one practitioner, Victoria, a human skeleton became an 'object' once placed onto the conservator's bench. Victoria questioned why one would have second thoughts or change conservation approach

[41] Klucel G or hydroxypropyl cellulose, a cellulose ether chemically produced and used in conservation treatment as an adhesive or consolidant.
[42] The Lascaux Rose refers to here is a thermoplastic copolymer butyl-methacrylate dispersion used as an acrylic adhesive within conservation treatments.

purely on the basis of DNA. It is up to the practitioner to act and although it has been argued that lack of intervention is due to lack of ability (Ashley-Smith 2016:129), it can also be about lack of intangible knowledge or way of knowing. For example, the inclusion of human remains within an object can have a meaning associated with the creator or users of the object unbeknownst to the conservator or heritage practitioner (e.g., the prayers within the Tibetan prayer wheel in section 1.1). This negotiation with 'knowledge' pushes the conservator to transact with unknowns, potentially allowing them to secede that not everything can be known or needs to last forever. Indeed, DeSilvey (2006) notes "deposits of degraded material, though inappropriate for recovery in conventional conservation strategies, may be understood through the application of a collaborative interpretive ethic, allowing other-than human agencies to participate in the telling of stories about particular places" (DeSilvey 2009: 318). This is a more holistic philosophy regarding the sample of material representations we have at our disposal and how we can use them to understand our overall experiences and behaviors as a species.

DeSilvey (2006) writes of her time exploring the 'in-progress' decay of a homestead. She saw this material as still holding a half-identity, impairing the scene in which it obtrudes. Although not seeming to qualify as the stuff of heritage, contemporary archaeology, for example, does work with such sites (Buchli and Lucas 2001) and therefore such material has the potential to end up within a museum store. If we can analogize that potential to all the objects in decay at any heritage site or institution, we can see how not all things are made to last (or should) for materiality to be assigned and valued. These actively decaying objects can, for example, tell a story about a particular place (DeSilvey 2006). Indeed, on a biological and chemical level, all objects are decaying at various rates depending on their material make-up and how those materials age in the environmental conditions they exist. The discomfort and aversion in recognizing and qualifying heritage other than in terms of preservation can allow for other ways of knowing (Sloterdijk 1987:151). Given that so much material and intangible heritage has already been lost and that the sample of things to 'uncover' or 'preserve' is far from untouched by the present (Barker 2016), credence can be given to conservation practitioners who reject intervention when presented with too many unknowns:

- of provenance;
- of material composition;
- of creation;

- of the creators;
- of the reasons/purpose for creation;
- of how to intervene:

as conservator; as a fellow human; and/or as an 'other' or 'outsider' assessing/noting decay.

In the abandoned homestead, easily analogized with many archaeological and heritage sites no longer in use, "cultural matter has taken on an explicitly ecological function. To see what was happening required a kind of double vision, attuned to uncertain resonances and ambivalent taxonomies" (DeSilvey 2006:323). Holding the natural history and human history concurrently to reveal not only erasure but a process that can be generative of a different kind of knowledge: "hold[ing] contrary states in mind and allow[ing] the miasma to exude" (Taussig 2003:16).

It is clear that museum and material culture studies rely heavily on making a connection between social significance of an artefact (i.e., materiality) and its physical permanence but Colloredo-Mansfield (2003) and others (Hansen 2003; Hetherington 2004; Lucas 2002; Van Hoorn 2003) remind us that routines of daily life depend, often, on the material transformation of physical objects. Objects have social lives and places as well as biological and chemical lives which may only be perceptible when an object begins to decay or by the skilled vision of a conservation practitioner (Küchler and Carroll 2020; Edensor 2005; Grasseni 2007). In the next section, elements of conservation practice which are unknown or require other ways of knowing beyond purely preservation practice will be further exemplified. My interview and time with Emma were when I was both ethnographer and conservator as my access to her and her place of work was in exchange for aid in the conservation programs for this field site.

6.2.2Unknowns

Conservation practice is often about opening up to the unknown, allowing there to be unanswered questions and using this as a platform from which to intervene on the object. This can be very literal and simple. Emma explains an unknown that has been bothering her as a conservation laboratory manager who does not have the time to fill gaps in her knowledge or undertake experiments because of 'limited resources':

> "I know I need to spend a lot of time on lighting of Egyptian material because, you know, we've got our most important and our most light sensitive objects on

> permanent display. That's a problem, that's an ethical problem of whether that's appropriate for that part of the collection…
>
> There is a lot of pressure to keep them on display, there's also a lot of practical pressures and financial pressure, because, you know, rotating them is very time-consuming and resource consuming. It would be massive…. Because pretty much everything in there is light sensitive and ideally should not be on permanent display, and it is, affectively.
>
> *It's not said*, but affectively it's on permanent display because we don't have the resources to rotate it…It's a big deal. That's a nag, an ethical nag in the back of my mind. You know, that's why I'd really love to do it. A micro-fading project, to see…how guilty we should be feeling, basically.
>
> It could be that the fading that was going to happen, has happened. You know, a lot of the stuff, particularly the coffin collection has been here for 100-200 years. That is a long time for it to get use to the way the building behaves. And a lot of that stuff has been out on display pretty much the whole time it's been here. So, if there was going to be light damage, it's probably already happened, the worst of it. We've definitely moderated, you know, cause its significantly dimmer than it would have been…
>
> the thing is it is an unknown at the moment. I'm making an ethical decision on an unknown quantity. The risk may not be as big as I think, or it might actually be BIG. In which case you actually just need to find the resources."

I find that these types of opportunities arise with each project I have come across as a conservator. There is an uncomfortable tension of not knowing, being challenged by what to do next. Yet those moments of uncertainty are often what remains. Not knowing can be a form of knowing in itself as the authors of *Making Ignorance an Ethnographic Object* argue: "under certain circumstances, ignorance has a substance of its own, as the product of specific practices, with effects that are distinct from the effects of the lack of knowledge which the ignorance in question corresponds" (Mair *et al*. 2012:3). There is a utility to 'making ignorance an ethnographic object' because it leads to questions about how we become aware of our ignorance, what the forms of our ignorant conditions look like, how we are taught ignorance, what relationships does ignorance depend on or produce and what rationale do these relationships or practices relate to our other forms of knowledge (Mair *et al*. 2012:23). When a conservator consults an object for knowledge and is left with many unknowns, this can breed enthusiasm, curiosity, confidence and potential revelation or facts about materiality and self (i.e., what do/can I know?). Conservation as a discipline rests on the acquisition of knowledge via objects and their interaction – a negotiation with matter and self.

Of course, as explicated in Chapter 4, some unknowns are easily resolved via experience and therefore contribute to confidence. This point appears obvious, but what is

significant from my fieldwork and has been noted by scholars within conservation itself (e.g., Ashley-Smith 2018) is that students and early career conservators are doing a lot more of the practical conservation and research of objects than more experienced conservators who have taken on more administrative or managerial positions. The students and interns tend to have the time that is required for conservation intervention, yet they are the least experienced and often do not have the built-up confidence to easily carry out the work (as covered in Chapter 4).

Additionally, as Emma noted, the museum conservator does not have enough time to thoroughly train these young professionals[43] within what we might call formalized mentorships or apprenticeships. Senior conservators do not regularly intervene on objects themselves – degrading their own practical expertise over time and disallowing an opportunity to uncover unknowns. I apply to conservation what Grasseni (2007) notes as prohibiting the maintenance of a community of practice:

> "One grants, that the enskillment of vision goes along with the enskillment of the other senses, and in particular of bodily movement and dexterity, as part of a progressive process of joining a particular 'community of practice' -a process that Jean Lave calls 'legitimate peripheral participation'. Lave and Wenger (1991) coined this phrase to indicate the critical moment of socialization of new actors, through apprenticeship, in specific 'communities of practice', and as a fundamental mechanism of situated learning. These authors underlined the unity of cognitive and operative aspects on the one side and, on the other, the socializing and relational dynamics of to-be experts" (Grasseni 2007:10).

As the conclusion to Chapter 5 demonstrated, the lack of awareness of issues around representation, and the repercussions of ignoring (or ignorance of) both global communities and their heritage, distances the practitioner even further from a contemporary, relevant community of practice – both within the profession and the larger global heritage sector (Winter 2014). Conservation practitioners have histories, preferences, life experiences all within a complex material ecology or as Gunn explains, "working processes should be understood not as a series of abstract actions, carried on in isolation from the social world, but rather as a series of activity of persons situated within a field of social relations" (Gunn 2007:106). It is therefore relevant that conservators not only interact on a global scale but are representative of it.

[43] It is important to note that 'young' here refers to experience, not age.

Conservation practitioners have certain experiences with heritage, its creators, through or with the objects; and they have been learning from these objects for weeks, sometimes months, if not years. It is possible, and in many cases likely, that via intervention this person will end up with extensive knowledge of, even expertise in the materials, manufacture, and/or use of these objects. The heritage institutions conservators work within, the other stakeholders and experts, as well as their relations with other museums, galleries, etc., all influence a conservator. These various frames of reference are essential to understanding conservation practice. In addition to this 'field of social relations', is the knowledge of that which is difficult to describe or unknown and therefore in need of external observation and reflection.

Schön's (1994) focus on the reflective practitioner highlighted that a professional depends on tacit knowing-in-action where day-to-day practices include innumerable judgements for which the practitioner cannot state adequate criteria and displays skills for which they cannot necessarily reiterate the rules and procedures, even if consciously using research-based theories and techniques (Schön 1994:50-51). I attempt to draw this out with a discussion on what inevitably remains unknown about heritage material, despite thorough investigation by the conservator. What the conservator does not know about the unknowns of an object can transform into an understanding that they may never know.[44] This process is often inarticulable and can be helpfully elucidated ethnographically (Mair *et al*. 2012:17).

This is not to say important research is not being conducted by conservation researchers and materials scientists, but, as two interlocutors (Arthur & Ben, Senior Conservators, Conservation Scholars, English Upper Class) who embody the history of conservation in the UK and its turn away from bench practice noted: "There are no critical thinkers in conservation". Arthur and Ben referred to conservators as non-reflective practitioners because:

> "when a practitioner reflects in and on his practice, the possible objects of his reflection are as varied as the kinds of phenomena before him and the systems of

[44] The sociology of science has described as the "production of knowledge" the process by which facts (1: known knowns) are selectively produced out of nebulous information (2: unknown knowns). The ethnographic study of the production of ignorance, by analogy, would entail an understanding of how some of the things we happen not to know (3: unknown unknowns) are transformed through specific practices into specific forms of recognized ignorance (2: known unknowns).

1. Known knowns: things we know we know
2. Known unknowns: things we know we do not know
3. Unknown unknowns: things we do not know we do not know
4. Unknown knowns: things we do not know we know (Mair *et al*. 2012:17).

> knowing-in-practice which he brings to them. He may reflect on the tacit norms and appreciations which underlie a judgment, or on the strategies and theories implicit in a pattern of behavior. He may reflect on the feeling for a situation which has led him to adopt a particular course of action, on the way in which he has framed the problem he is trying to solve, or on the role he has constructed for himself within a larger institutional context" (Schön 1994:62).

That is, to advance conservation as a discipline and not repeat mistakes of the past 'reflective critical thinking practitioners' are in need. This long-awaited progression is coming to a critical point in the very places conservators do their work in the UK – museums (Hicks 2020). Workspaces and institutions of learning are places to study the interrelation in practice between perception, creativity and skill, but also outlines how some creative forms of knowledge resist institutionalization (Gunn 2007:109). Many aspects of conservation have brought the profession value and recognition within the heritage sector – 'a seat at the table' was an often-used phrase by my interlocutors. Yet many, especially senior conservators like Arthur and Ben, are now reflecting on what the practice has lost along the way and how it has therefore changed into something else. My interviews and time with Arthur and Ben were para-ethnographic as they also were working towards critique and evolution of the conservation discipline. A resistance to this loss can be seen in how conservators continue to talk about their practice; not only in saying they wish for a return to the bench, but also when reminiscing about previous work or exchanging knowledge with colleagues verbally and non-verbally through conservation records.

6.3 Language Materiality

Language materiality, defined by Shankar and Cavanaugh (2017), sees materiality as conceptualizing how humans encounter, experience and interact with their surroundings, focusing on how the language of everyday life can reflect those meaning and value-creation processes. The language of everyday life is what people do with and through speech as they work, making meaning and creating value in the process:

> "Meanings of materiality are central to conceptualizing how humans encounter experience and interact with their surroundings. To discern those meanings involves studying perception and the relationship of bodies to time and space, as well as efforts to understand and/or conceptualize the relationship of human minds to the environments – via their bodies, their histories, their nature and built environments" (Shankar & Cavanaugh 2017:6).

To understand language materiality, anthropologists have turned to philosophical discussions about the relationship between subject and object, agency, and the nature of knowledge surrounding materiality – which I summarise below.

Merleau-Ponty (2013) brought together knowledge and experience in order to conceptualise the body's role as active perception rather than simply passive absorption. In conservation, the body plays an integral role as tasks such as condition assessment and intervention require bodily knowledge and commitments from the practitioners. Here I draw from Heideggar's *dwelling* where humans craft dwelling places or sites where their actions produce meaningful connections to contextual places. To speak of places and human relationships to them is also part of how material is shared and made social (Basso 1996). Practitioners' conservation spaces reflect the type of work being enacted: the differences between a conservation lab and a conservation workshop are often found in the type and size of objects as well as within those who are conducting the conservation. Basso's attention to the context or setting in which language is used emphasizes the importance of focusing on physical contexts of speaking and the objects that might be paired with varieties of talk, as well as the emergent meanings and effects of such talk (Shankar & Cavanaugh 2017:12). I draw out talk as situated in place by analyzing the differences between how conservators refer to objects and their relationships with material heritage and how they present that work to colleagues and on written record (see section 6.3.1 and section 6.3.3). Austin (1975) set a precedent by attacking the view that language is referential using his notion of performative utterances. Such utterances, in the appropriate circumstances, are neither descriptive nor evaluative, but count as actions (Austin *et al*. 1975). Utterances as conservation actions within the complex material ecology of heritage institutions reveals more evidence of the politicized work of the conservator where 'what we do' and 'what others believe we do' can seem polarized – both internally within heritage institutions and to the wider public communities.

Goffman breaks open and systematizes participation roles in order to complicate understandings of the nature of participation: in terms of the distribution of roles, as well as how the roles unfold with certain times and places. Duranti (1997), building on the thinking of Goffman, notes how speakers draw on a range of semiotic resources, both linguistic and material, as they engage in what Duranti calls 'the problem of establishing and maintaining a particular version of the social world' (Shankar & Cavanaugh 2017:12). Internal and external language can describe the material world people experience and brings aspects of it experientially near (Carnap 1937). "What these analytical endeavors share is an implicit integration of language use – mainly talk – not only with material features of that talk but also with physical elements of their environment, from gestures to the seating arrangement of speakers" (Shankar & Cavanaugh 2017:13). As above, Actor Network Theory allowed the

current research to involve all actors within its design, fieldwork, and analysis. Actors include the inanimate of objects and space and allowed a more holistic understanding of factors affecting conservation practice in the UK.

Material culture studies encompass the value and agency of objects in social systems of exchange as well as in capitalist markets (Küchler & Carroll 2020; Hauser 2014; Gell 1998). This has been highlighted through discussions on financial restrictions and uncertain ethical codes and standards of practice (Malkogeorgou 2010, Ashley-Smith 2016, 2018; see Chapter 5), as well as on how scientism pushes the practitioner to ignore the intimacy of practice which can be personal, mysterious, arduous, or uncomfortable, for example (see section 5.2.1 *Fans: A race to scientism*). This leads us to Bourdieu's (1984) language as a form of capital, stressing not only consumption and objects alone, but also material and social worlds of meaning in which they signal prestige. Bourdieu shows how language not only reflects but also reproduces social hierarchies and power differentials. The discussions above mimic Bourdieu's reflection via the topics important to my interlocutors: lack of ability to gain experience, lack of bench time, and lack of resource management to aid care of collections. Bourdieu's basic insight that language is embedded and circulated within systems of political, economic, social and cultural distinction has been foundational to theorizing materialist treatments of language (Shankar & Cavanaugh 2017:13). Scholarship on global capitalism has illustrated the heightened significance of materiality in an era where domestic and foreign policy agendas are even more visibly dominated by profitable capital accumulation and the commodification of culture, as argued for the museum (Harvey 2005:7).

In the previous chapters I explored how social hierarchy and diversity, commodification of culture and how scientism politics affects how conservation is enacted and communicated. Highlighted was the common problem with both the forceful advocacy of conservation 'science' and the increasingly energetic critiques of it (Kandiah and Cassar 2014; Muñoz Viñas 2011). The issues stem from the association of science with universalism. Muñoz Viñas's theorization of conservation ultimately falls back on a form of semiotic perspectivalism. Those who deal with ontologies (e.g., Harrison 2015: 29-40) bring the notion of pluralism into frame to deal with the multiplicity of all the overlapping perspectives and approaches. If we explore practices involved in conservation (Mol 2002; Jones and Yarrow 2022), these perspectives are separated out and distributed in ways that allow them to be negotiated and coordinated by those involved (Jones and Yarrow 2022:178).

In the following section, I return to conservation practitioners and their spaces to examine the language of ownership and personification within object conservation. Annette Weiner (1992) 'keeping while giving' allows us to rethink questions of objects and ownership in the Trobriand Islands. 'Hard words' as noted by Weiner (1984), are used in contexts of ownership, suggesting that the relationship between language, materiality, and value is never about objects alone. Yarrow (2019) helpfully explored personified material essence as one of the complex interlinked concepts at play within buildings conservation. This chapter will conclude with a reminder from Miller (1998) of the importance of regarding materiality via metaphysical avenues of individual perception, drawing from why certain things matter and what people do with them so that the conversation remains anthropological. Language materiality helps point to the values embedded in the everyday talk of practitioners and therefore gives insight to conservators' everyday practice.

A prominent way in which conservators communicate their passion for their work is through personification of the objects they treat. There are terms within the language of conservation which are descriptors, terminology, or a way of saying something about objects and/or their conservation. When speaking to Tim (Books and Manuscripts Conservator) he explained why this type of terminology in conservation is problematic: "This type of language gives off the wrong impression. It's not professional and a lot of the time it is incorrect". For example, 'bronze disease' describes the presence of trihydroxychlorides within the corrosion products of an object made of a copper-alloy. Below is an excerpt from a project I conducted on 'bronze disease' (Suarez Ferreira 2015). My time and interview with Tim were when I was both ethnographer and conservator as my access to him and his place of work was in exchange for aid in their conservation programs. The excerpt on bronze disease below can be seen an a reflective, auto-ethnographical account of my time working as a conservator.

6.3.1Bronze Disease

Originally, 'bronze disease' was thought to be caused by bacterial infection and therefore 'disease' was an apt term. Since then, many studies have concluded that the formation of crystalline cuprous chloride during burial is the main cause. Upon reaction with moisture and oxygen, the unstable compound of cuprous chloride will expand in volume on conversion to one of the copper trihydroxychlorides. Various museum staff at the Burrell Collection separated 64 archaeological copper-alloy objects due to a suspicion they might have 'bronze disease'. Visual examination often leads to a determination of 'bronze disease',

with the confusion that it is synonymous with all types of active corrosion (Scott 2002:126). A study by Farrell (2014) highlighted that visual detection of active corrosion on copper-alloy objects is inaccurate; even when done by qualified and experienced conservators. The separating of the objects was the appropriate action as it disabled the ability of the objects to negatively affect any surrounding objects and brought attention to their condition. Unfortunately, the repercussion of doing so disables the objects from being considered for display due to them being labelled as 'not fit for display' on the collections management database; and therefore, most likely means no one will check on their condition for a considerable amount of time.

Realizing this history of collections management led to consideration of the previous storage conditions of the objects:

- Excavated from unknown contexts and previous ownership prior to Burrell acquiring them from dealers. It might be inferred that the objects were treated for sale (Norwich 1997:25).
- The collection building was not built until 1984, and therefore the objects were stored in various other locations of which the conditions are not documented.
- When housed in the current building, they were primarily stored in wooden cabinets where acetic and formic acids could have enabled degradation (Tennent *et al*. 1993, Thickett and Lee 2004; Gibson 2010).
- Some of the objects had been cleaned and analysed for their metal composition on three separate occasions (Wilthew 1988:1).
- They were presently stored in plastic containers with silica gel sachets that had not been monitored or changed for nearly 15 years.

These various conditions could have been detrimental to the objects, but the presence of 'bronze disease' would have probably been initiated within their unknown burial environments. This physical stress results in cracking, fragmentation, and light green/powdery eruptions (Scott 2002:125-127). It should be recognized that disfiguring light green corrosion on ancient bronzes does not necessarily imply that the bronzes are still unstable, even though they were excavated many years ago and kept in uncontrolled storage conditions since that time (Scott 1990:195).

At the end of the project, an object was deemed to have 'bronze disease' if the condition of the object, the nature of the sample of its corrosion product, and the analytical

results were all consistent. Twenty-three of the 64 objects had copper trihydroxychloride(s) present within their corrosion products, but only 19 were deemed to be suffering from 'bronze disease' given their condition and the sample(s) taken. Indeed, "existence of some trihydroxychlorides does not necessarily mean the object has bronze disease but may simply represent a localized or superficial chloride corrosion process" (Scott 2002:126). The other four were determined as having localized eruptions of copper trihydroxychloride(s) as less than ten percent of their surface area showed such eruptions. Although this distinction will not change the necessary environments needed for these objects to be preserved, it will place them in a different category of 'condition' on the collections database, enabling their consideration for display and therefore care – much more so than the 'not fit for display' category of 'bronze disease'.

The only way to detect 'bronze disease' is by analysis and the only way to treat it is with preventive measures. Chemical compounds are often used as barrier layers on the surface of copper-alloy objects so that the corrosion and remaining surface of the object is not exposed to the environment which causes the salts to initially react. But fissures within object surfaces could be missed, and some argue these treatments present a false illusion of protection and/or that the ethics of fundamentally altering material composition should stand paramount. This misunderstanding around the term means that when objects are assigned it, they often are abandoned or at least, 'improperly' treated.

As previously mentioned, 45 of the objects I tested could be cleaned and prepared for display or at least for handling by researchers. Instead, they sit in a cabinet awaiting slow, yet probable decay. This is quite obviously opposed to the general objective of conservation. So, Tim is right, language has significant connotation for how conservation is seen and practiced, even within its own community of practice. The word 'disease' is redefined to 'untreatable' even though, technically, many diseases are treatable. Bronze disease means contaminated: the presence of trihydroxychlorides is difficult to arrest and is prone to spreading but from a collection management perspective where little resource is allocated to treatment, bronze disease means 'death'. The term 'bronze disease' changes the conservator's approach, as well as their ability to advocate for the preservation of the object. Bronze disease is terminal because of its utterance and signposting by conservation practitioners.

6.3.2Personification and Familiarity

In contrast to the above, personification is also a way to make things familiar, and in a way, it is very telling of the intimacy of practice. Natural history museums often have taxidermy within their collections. Bill tells me:

> "it might be part of the treatment process to get away from personification. It might not directly affect the treatment, but you consciously have to erase thinking about its 'non object' status to carry out the right treatment. For example, taxidermy or an old dinosaur reconstruction might be scientifically incorrect but the relationship people have with it, the feeling that that is how it's always been, could affect what you do to it or at least have an initial impact on your thoughts and decisions. Taxidermy is always an issue because its actual creation is a relationship between how the taxidermist sees the animal, not necessarily scientific and that's part of why zoological museums don't really rate taxidermy." [45]

This conversation with Bill began with a discussion on the naming of animal skeletons or taxidermy in museums. My time and interview of Bill was as primarily as an ethnographer as I had not been exposed to zoological conservation prior to my visit to this field site. Although, it is important to note that the conservators at this field site had all been trained as object conservators like myself so there were commonalities to our overall understandings of practice and jargon, etc. He concluded that a probable purpose for this personification was/is to connect visitors and enable teaching school children about museum collections. Doing so puts conservators in a position to have to defend intervention based on public value. An often-losing battle as seen, for example, with Chartres Cathedral where Mullarkey (2015) concluded how current restoration/conservation projects (at least highly publicised ones) "represents an unholy – however unwitting – alliance between scholarship and circus. Or, put another way, between restoration and commission – however subliminal – to keep the public coming" (Mullarkey 2015:23). This echoes the discussion above concerning a 'peoples-based' approach to conservation (section 5.3 Negotiating with actors). Personification, whether it be for treatment or display, can bring an unwanted complexity. Indeed, another example comes from thinking about the gender norms assigned within this aspect of conservation language which are neither related to sex nor appropriate for work environments nor social progression away from such discrimination. But naming does occur, and often. And doing so it does not negate the ability or awareness of the practitioner but instead, may just be another

[45] It is important to note that some taxidermy is used for historical research of taxidermy practice rather than material or zoological analysis.

hidden way the conservator tells us about their feelings of work. As summarised by Spaarschuh and Kempton (2020) in their article *Acting on Behalf of Objects? Conservators' Reflections on Their Professional Role*:

> "When studying objects as closely as we do, we simply come very close to them – perhaps sometimes in a double sense of the word. To the authors of this article, it appears not unlikely that one can become (emotionally) attached or related to some of the objects we get to work with throughout our career. Thus, apart from using the patient/doctor comparison as a rhetoric metaphor, personification could indicate an emotional aspect which affects and influences our relation and attitude to objects of conservation. For example, it may be reflected in our attitude to object materiality opposed to its significance for the public" (Spaarschuh and Kempton 2020:371).

During my fieldwork I came across Luna working in an 'ethnographic' museum. Here I was both ethnographer and conservator as my access to this site and its staff was in exchange for my aid in their conservation programs. She had been assigned a mask to conserve for an upcoming display on life in the Pacific Islands.

Luna tells me she has named the mask Gargamel (**Figure 40**) – as in The Smurfs. There is a likeness, 'particularly the nose' she tells me. This is Luna's light-hearted way of showing passion for the objects she has been assigned to conserve. Her understanding of the cultural/ social context and use of the mask is vast. She can detail how these types of masks are made, how this particular one came to the museum, why it was chosen for display and, of course, all related conservation information (material identification, environmental needs, how the display mount should be made and appear, etc.).

Figure 40. A drawing Luna has made of 'Gargamel' as part of her conservation record for the mask (Fieldwork photograph, Suarez Ferreira 2018).

Conservators assigning names to objects normally given to humans, characters, etc., has been a common occurrence throughout my ten years as a conservator and researcher of

conservation practice. It speaks for the long intervals of time the conservator can spend with an object, it is an expression of the comprehensive types and forms of knowledge they have of objects, and it is a passive yet poignant allusion to the understanding that within this deep work, the conservator places their own values, their own self onto at least the narrative of that object's history.

When speaking on character Yarrow (2018) shows that descriptions of conservation projects within the historic environment arise from the qualities of the buildings and monuments themselves, as well as the epistemic orientations of the experts involved. He usefully elucidates that while anthropological accounts of character have primarily focused on the concept as applied to human subjects, extending this focus to the historic environment demonstrates how formulations echo and complicate ideas of character as purely a quality of people. As above, conservation practitioners see material heritage as an expression of the character of past people – a repository of the qualities of those who made and used these objects. Yarrow explains:

> "As in understandings of human character, the concept foregrounds relations between extrinsic appearance and intrinsic qualities…[E]xterior qualities, for instance the structure, material make-up or visual appearance of a building, point to interiority imagined as the embodiment of time: character points to the interior make-up and composition of an artefact, the embodied history of the various people and events through which it was composed. Inside things heritage professionals find the past from which their ultimate meaning and value derives, although different practitioners might detect and elaborate that past through distinct expert and disciplinary sensibilities." (Yarrow 2018:342).

And so, by naming a mask as a known fictional personality, characteristics are externally and internally assigned. Luna is creating memory of Gargamel as both a cartoon and a conservation project: externally a distinct nose, internally an ethnographic mask, with all the complexity of the mask's assigned materiality and now, after her treatment, Luna's own sensibilities. Even though a 'self' quality is not how Yarrow interprets the use of character for buildings conservators, names and self-identity are powerfully connected. Naming objects speaks to the political power of the conservator in their ability to name and to the property-like potential in names to transact social value (Vom Bruck and Bodenhorn 2006:2).

In Jones and Yarrow's (2022) ethnography with buildings conservators an interlocutor speaks on how he comes to see items of material cultural heritage as his own children, feeling protective and explaining how fond he is of the objects because he knows they have important stories to tell – the affective charge they elicit in him. At the same time, Jones and

Yarrow explain his apprehension to share these feelings (a transgression in relation to the objectivism expected of his expertise) showing these affective and ethico-political relations which would never be shared in the relevant conservation documentation. Values are presented as matters of fact, separated from personal, experiential concerns (Jones and Yarrow 2022:188). In the next section, language of ownership will add to the discussion on how conservators speak of objects and what that says about their practice and approach to conservation. This will be gleaned via a discussion on documentation where conservation records are seen as the non-verbal linguistic evidence of individual knowledge production.

6.3.3Documenting Ownership

Whilst interviewing participants about their conservation documentation, I was often confronted with the idea that conservation information should not be shared with the public. In these interviews I was predominately ethnographer as access to these sites and their staff was done on merit due to interest in the study. These comments tended to be about treatment details: conservation materials used, in what quantities, with what methods, in what order, etc. (i.e., what is normally included in a conservation record, see Appendix V). The idea behind this reluctancy to share such information was made simple: "Well, they'll go and ruin grandma's clock or whatever *heirloom* or object they've got their hands on. Then we'll end up doing the work to repair the damage they've done when they donate it to us or pay for it to be conserved or whatever. It's better they bring it to us in the first instance."

After hearing this from the lab manager of my training course, I had to know if more conservators felt this way. My main objective became to understand who the conservation practitioners are claiming ownership on behalf of. When an owner of an object comes into the conservation lab (public or private) their perspective on what is to be done is respected and pursued as much as possible, they are the primary stakeholder. These members of the public have a right to determine how, when, by whom the object is changed. It is their object, they own it. Yet, interlocutors point to the public at large as potential stakeholders not as owners of their shared material cultural heritage especially when held through an institution. Therefore, the question arises: who owns those objects and their associated information, including conservation documentation?

Reaching out to a network of various types of institutions to assess whether differences residing in the records were produced by differing organizational structures (**Figure 41**), I created a questionnaire to be filled in by a variety of practitioners and was

often done via in-person interviews where discussion was also available. As seen in **Figure 41**, categorizing the types of conservation laboratories found within the U.K. shows the potential variability of practice given such distinct contexts. Conservation recordkeeping is expected to be done by every conservation practitioner and it is dependent neither on what type of object is being treated nor on who is doing the treatment. Conservators can be superficially divided into private practitioners and those working for public institutions, but not all conservation activities are conducted by trained conservators, including documentation. There are other museum professionals, volunteers, students, etc. who play a role in the recording and therefore, preservation and care of cultural heritage objects (Moore 2001:7-8).

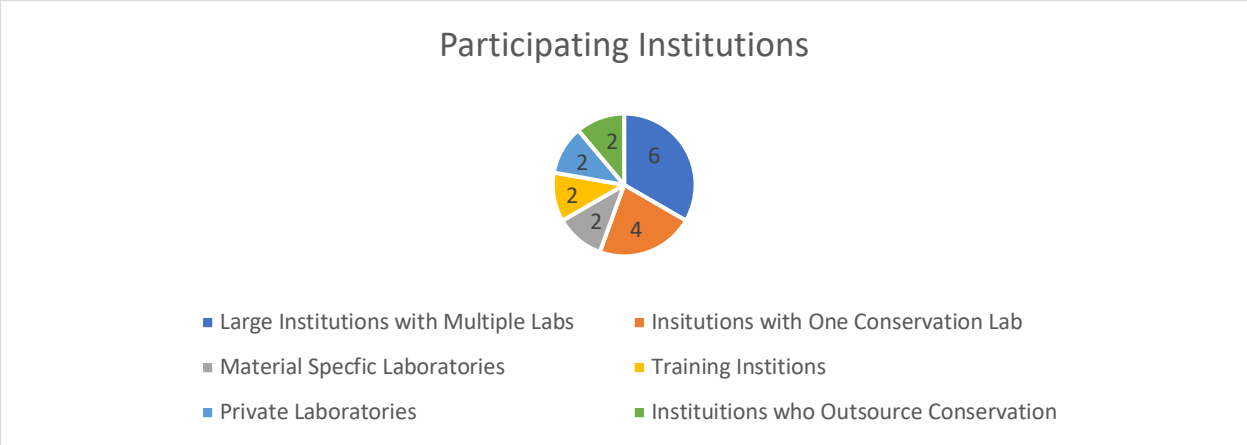


Figure 41. Graph depicting the types of institutions which participated in the questionnaire on conservation recordkeeping.

The questionnaire also began with questions on conservation roles, materials worked-on and when the practitioners trained. It was important these details were included in order to determine whether different types of conservators use and/or make records distinctly from one another, and if how they are trained is also a factor. Similar to my ethnographic fieldwork, the sample size for questionnaire interviews included students, working conservators, managers, volunteers, etc. (**Figure 42**).

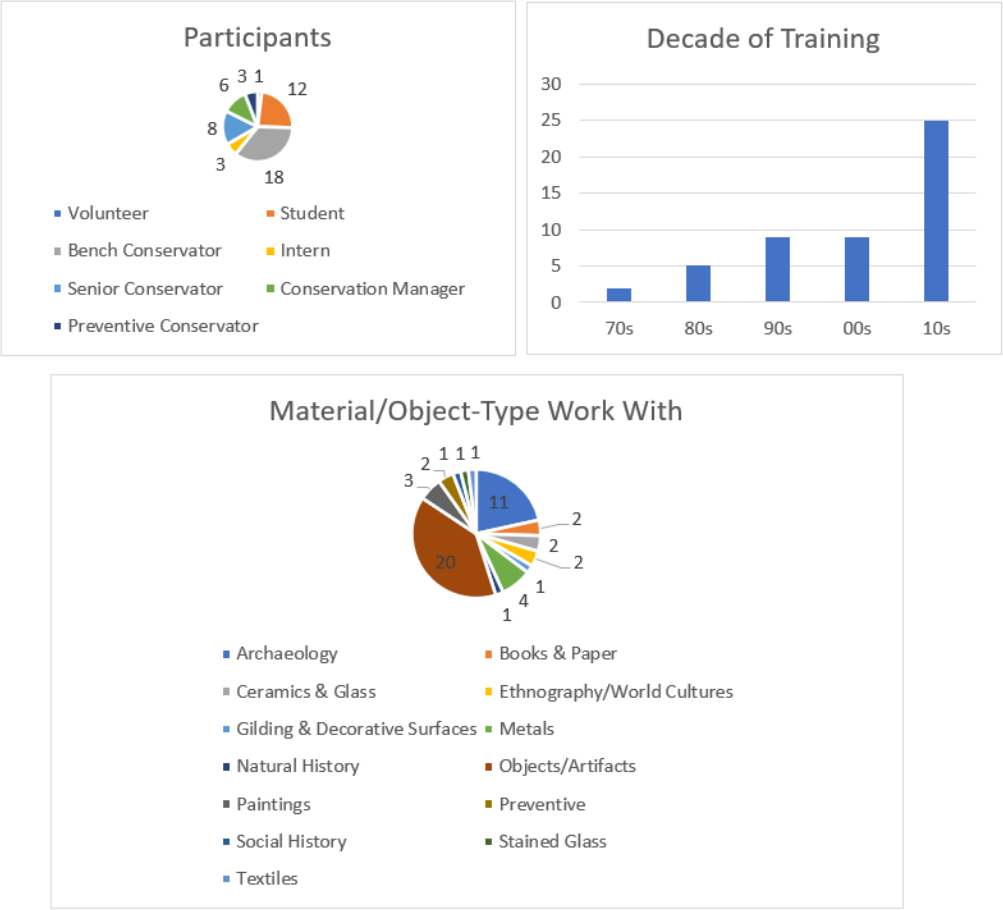


Figure 42. Three graphs depicting the information captured by the questionnaire (Q2-Q4).

There are many ways in which to document conservation work, and there is no universal agreement amongst conservators on what form is best suited. There have been attempts at standardization of documentation, notably from The Museum Documentation Association in Britain or from the International Council of Museums Committee for Documentation (ICOM-CIDOC). Still, the methods by which to record have been left up to the discretion of the conservator on an object-by-object basis. In line with this non-uniformity is an issue of terminology control. The conservation profession has been discussing this since at least the early 1980s; the diversity of conservation treatment, the materials involved, and the approaches taken are equalled by the terms used to describe them (Moore 2001:6, 14). Given this reality, an overview of what conservation records may entail is given for the purpose of understanding the variety of elements involved.

6.3.3.1 Background: Conservation Records

Complete conservation records (theoretically) provide a comprehensive narrative of what has happened to the object before it reached the institution and whilst inside the institution. For example, Jones and Yarrow's (2022) interlocutors noted that even previous numbering tags on a bit of string are kept on the object and documented within the conservation record-emphasizing how the previous number (whether contextualised or not) will always be part of the history of the object (Jones and Yarrow 2022:130). This highly detailed narrative is what is thought to be included in conservation records: what can be gleaned before it became a conservation object and what happened to it as part of the conservation process.

The process of conservation can be both passive and active and includes a variety of techniques and materials, all of which have changed and expanded as research into conservation continues. The recording process is both a collection of information and a revealing process. It can be divided into the following categories: administrative details, existing condition, material composition and technology, conservation methods used, materials used during treatment, condition after treatment, storage and display requirements. This information should be collected for pre-acquisition reports, after archaeological excavation, for technical/analytical reports, for treatment proposals/ reports, loan reports, pre-movement checks, condition surveys, and for insurance policies and security. Additionally, Jones and Yarrow (2022) saw documentation as processes that make knowledge available regardless of personnel with an increase in transparency where successors can understand which actions were taken and when. This allows for more interventive decisions to be justified. Their interlocutors connected the benefits of increased public accountability, to an improved "record" and better "evidence" (Jones and Yarrow 2022:32-33).

Another practical reason an object is thoroughly documented, especially in public institutions, is to demonstrate accountability of the institution to care for its collection and therefore help secure funding for a variety of schemes (Moore 2001:2-10; Beck 2013:86; Cutajar *et al*. 2016). In relation to the general development in 'audit culture' discussed in section 5.2, there is an imperative to make decisions explicit when boundaries between the 'public' and the 'private' are increasingly blurred (Strathern 2000; Rose 1999). Marilyn Strathern (2000) termed 'rituals of verification' for new forms of audit where ethical subjects and arbiters of institutional performance draw out the value of public institutions and experts

(Strathern 2000; Hull 2012). Likewise, greater documentation in formal processes can be seen as a way of improving internal decision-making processes.

Jones and Yarrow's (2022) interlocutors determined that records within heritage institutions like Historic Scotland had previously over-relied on 'folk memory' and that the new formal documentation 'captures the argument' and allows for transparency and accountability (Jones and Yarrow 2022:32-22). This perspective can be explained by Scott's (1998) 'seeing like a state' where documentation produces regularisation and simplification with the goal of facilitating the governance of populations and resources. Within heritage institutions, the practices of collecting, classifying, ordering and documenting are an example of how objects are demarcated and rationalised as 'timeless' so that they can be controlled and governed (i.e., owned). Documentary practices like conservation recording play a key role in attempting to produce fixity (Jones and Yarrow 2022:140). Notwithstanding the practical reasons conservation documentation is undertaken, there are also ethical reasons.

All the aforementioned activities are not covered by law; ethics are needed to guide the work of conservators and other museum practitioners. These ethics are put forth by national and international bodies who concern themselves with maintaining standards within the profession.[46] It is agreed upon by all these bodies that the conservator is obliged to keep permanent documentation in order to protect the integrity of the object, and therefore, must strive to ensure the conservation record stays with the object – if one is separated from the other, the significance of both is lost. Equally, there is no point in keeping data which will not be consulted; if conservation records are not accessible and/or usable then, they might as well have not been created.

Conservation records can be used to illustrate the skills and abilities of conservators, as well as the overall impact of the conservation discipline over time. There are a multitude of uses of conservation records for management, administrative, scientific or research purposes, etc. (Moore 2001:9-11). In theory, conservation records provide evidence of the treatments and materials formerly used on an artefact. This helps conservators make appropriate decisions when considering new conservation treatments for that object. It should be noted that not all previous conservation practice is detectable by eye, therefore there will

[46] For example: ICON 2014 Code of Conduct; ICON 2014 Professional Standards; Collections Trust 2011 SPECTRUM 4.0 The UK Museum Collections Management Standard; ICOM 2013 Code of Ethics for Museums; AIC 1994 Code of Ethics and Guidelines for Practice.

ideally always be an attempt to retrieve any possible previous conservation records an object may have.

6.3.3.2 The Questionnaire and Longevity

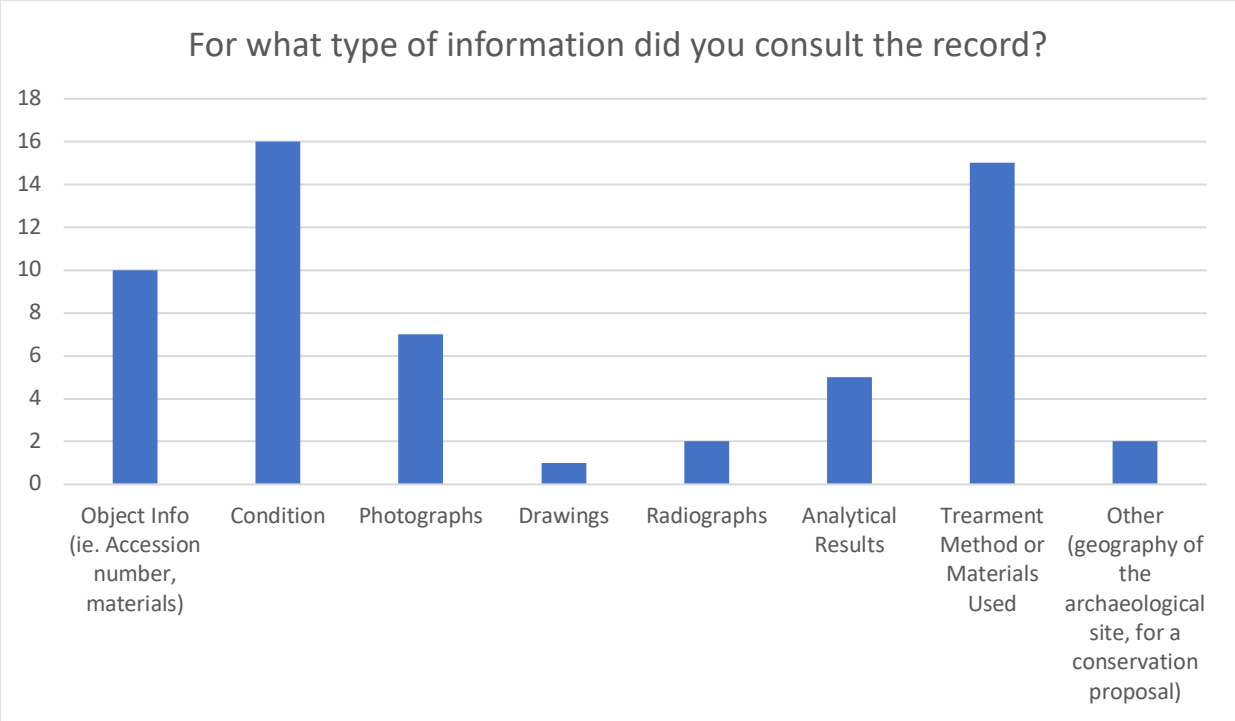


Figure 43. If consulted, conservators are looking for information on the physicality of the object -the same information they are likely into produce in their own records.

As seen in **Figure 43**, conservation practitioners are consulting previous records for condition information and for the previous treatment/materials used on the object – the same information they are likely to produce within their own records. Within this same line of questioning, 82% of conservators reported finding the information they are looking for within the records.

Conservation records also provide evidence of treatments and materials used in the past that were successful or failed. Conservators can reference conservation records to see if a treatment previously undertaken has failed and put the artefact at risk; equally, if the previous treatment has exhibited long-term stability, safeguarding the object over time. This can be done on an object-by-object basis, as well as with conservation materials used within an entire collection. Conservation records can be used to inventory treatment success or failure for specific artefacts as well as materials and treatments used on object-types throughout collections and over time. This enables cost-effective large scale condition assessments

within museums and informs the conservator about treatments which work best for each type of object. If the materials and treatments used on an object are not properly documented, then those objects will not be examined during the audit and therefore, left at risk of decay. Treatments or materials which have proven to be stable and fit-for-purpose over long periods of time can be evidenced by the records and corresponding artefacts. This information can be disseminated via publication or conference proceedings to the conservation community, enhancing the long-term preservation of material cultural heritage around the world (Velios 2016:13).

Conservation records can also provide reference information on how to approach an object or material previously unknown to the conservator (section 6.2.2). The conservator can learn about alternative types of treatments and materials that have been utilized. They can use this primary source to learn what to expect from those treatments and materials, as well as the techniques and steps needed to perform them. This allows conservators to learn from previous experience (Chapter 4). Again, this information enables conservators to skip experimentation phases and therefore, save time and resources. As seen with the remarks above, recordkeeping and documentation for conservators is contextualised by the wider workings of heritage institutions and the complexity therein. In their work on profusion, Macdonald *et al*. (2020) suggest that: "In some ways, profusion could be said to be an inexorable condition of heritage: there is always more that could be conserved than possibly can be, at least according to current technological and space-time conditions" (Macdonald *et al*. 2020:155).

Visibility, accessibility and findability (i.e., longevity) are informed by modes of classification, conservation, presentation, storage, audit and review. Associated documentation – catalogues, records, reports and databases – also play a key role in attempts to manage profusion (Geismar 2015; Macdonald and Morgan 2018). Macdonald *et al*. (2020) show that these practices and related documentation inform how likely it is that certain objects will make it into the future, in what form and for how long (Jones and Yarrow 2022:120). Documentation is therefore a means to define and control conservation objects, as Matthew Hull (2012) has shown for other domains, exemplifying the documenters' ownership.

Furthermore, documentation is revealed as not merely a means of stabilisation, but integral to the unfolding extended biographies of the objects themselves; part of the way they

change shape (Law and Singleton 2005:338; Bennett 2013). The role of classificatory systems and information infrastructures in disciplining things and people is widely discussed as regards museums (e.g., Bennett 1995; Bennett *et al*. 2017; Harrison 2013). However, research focusing on the immutability created by documentary practices tends to focus on discourse rather than on detailed explorations of practice. As Law and Singleton (2005) point out, these networks of relations take practical effort to sustain and Jones and Yarrow (2022) would add, particularly so in the face of profusion (Jones and Yarrow 2022:129-131). They summarise:

> "Whilst we think of collections as ordered, in practice they depend on specific and contingent practices, where things can proliferate, systems can get out of order, and things need sorting out. Yet, a key insight arising from our research is that there are (ethnographically speaking) constant dialectics between order and disorder, coherence and messiness, totality and fragmentation, in which each is made evident through the other… Looking at heritage conservation through the lens of profusion also brings into sharp focus its future-making consequences… the ways in which heritage futures are projected and imagined has implications for current documentary practices and related infrastructures…Through their repeated attempts to re-inscribe the objects of conservation there is an implicit recognition of the ways in which documents are constitutive of certain kinds of objects, actions and futures" (Jones and Yarrow 2022:141).

When I interviewed conservators about using and creating conservation records a main concern with the longevity of digital records and media themed many of the discussions. Conservation-focused digitization projects within the heritage sector have made tabulating numbers for expenditure purposes easier. The most relevant example argues for more resources to be allocated to conservation projects (as seen with the Lennox-Boyd collection in section 5.2.1). Yet, it has also caused anxiety about the sustainability of this 'surrogate' information. Twenty-three (nearly 50%) of respondents to the questionnaire agreed that they had witnessed a loss of information due to records being stored in a digital form. When I asked the participants to comment on the sustainability of conservation records, some of the more interesting responses concerning this topic were as follows:

> "There will be a problem with the sheer number of records, as there is no good way to store digital records, systems always have to be kept up, replaced."
>
> "We should be thinking about the sustainability of digital records; how are we going to store those large files?"
>
> "My old A5 cards are still here and very accessible; I wonder if digital records could last as long especially in the current climate. For example, records stored on a floppy disk are essentially lost."

> "I keep all the images I take of the object on my work computer; I was shocked to find that our database is only backed-up once every month."
>
> "I've considered getting an external hard-drive for the lab so I can be sure the records are being backed-up regularly."
>
> "When transferring to the current database we found about 100 records missing (maybe went missing from the last transfer from an even older database?)."
>
> "Our database crashed, and many images were not recovered."
>
> "We need to look into the storage of digital information (e.g., digital photos are just on the server, is that sustainable for the long-term future?)."
>
> "I do think a physical copy will last longer than a digital record. I do wonder what will happen to some databases into the future; in the case of resource cuts and not backing-up or updating properly or a disaster where the server is destroyed—then all the data will be lost."
>
> "Not sure whether our institution really thinks of our records as a priority. It seems like there is a long-term risk."

Despite these concerns and accounts, the questionnaire found that practitioners are mostly producing digital document files or recordkeeping into database templates (**Figure 44**).

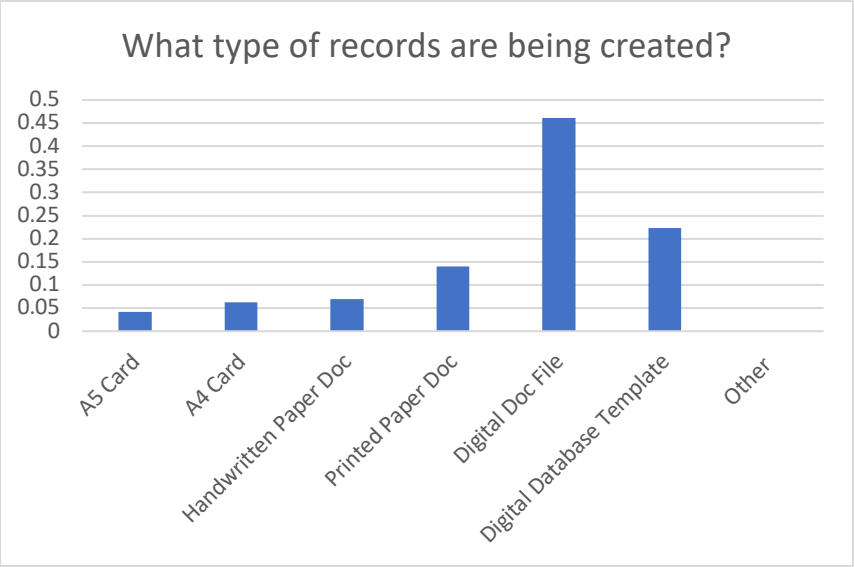


Figure 44. Practitioners are creating digital documents and database templates for their conservation records.

There are numerous digital documentation systems in place within cultural heritage institutions for conservation records to be stored. In terms of accessibility, it is important to note that many museums are also in the process of integrating conservation records onto their websites and ConservationSpace is being developed in collaboration with many museums as a web-based, open-source software application for managing conservation records (Richard 2013:11). Both internal digital systems and online resources create benefits for the

preservation and accessibility of conservation records and the associated material cultural heritage. For example:

- through enhanced access to a global network via the Internet who can search and link related information;
- through supported preservation via digital surrogates of rare and fragile materials leading to less handling of the objects themselves (i.e., a pillar of conservation principles);
- through bringing collections out of the dark not possible before due to sheer volume and dispersion (i.e., the hoarding concern as seen in section 5.3);
- through collections development by enabling better management and auditing (i.e., a more easily quantified justification for conservation principles to be enacted as seen in section 5.2);
- through reunification of objects or collections that have been physically separated;
- and through support of research and education across disciplines allowing for more varied, richer teaching material as well as new research questions and findings (directly correlated to issues of access, for example).

Institutional and strategic benefits include professional development of staff, prestige and PR value to the institution, and fostered collaboration among institutions leading to economic and innovation opportunities (Hughes 2012:4-7). Indeed, Tanner 2012 argued that the cost of creating digitized resources is continuously dropping, a product of international collaboration fostered by the ability to share knowledge and resources, as well as cost-effective workflows taking advantage of digital systems (Tanner 2012:105-113). While there are significant benefits to digitization programs in museums, there are also considerable obstacles to the implementation, management and sustainability of these initiatives.

Internal management of documentation is the critical prerequisite for digitization of conservation records (Rudenstine and Whalen 2006:3). Collections Management Systems (CMS) and Digital Asset Management (DAM) products have been vital in the development and advancement of digital conservation records. However, there are still limitations in existing application functionality. Ideally, conservation records should be integral to CMS, but the detailed information required by conservators is often not easily integrated with the requirements of registrars, collection managers and curators, whose use of CMS is most intense and whose requirements historically have shaped existing systems. Any supporting

digitization products offer flexibility, but they rarely achieve integration with the function and capabilities of other museum departments. The Mellon Foundation survey found that only 5-8% of respondents were "very satisfied" with their current digital management systems, demonstrating that much work remains to be done to provide robust tools that successfully meet the user requirements of the conservation profession.[47] Furthermore, experimentation and research into such tools must take account of the complexity of the information, the variability of the work, institutional and professional culture, as well as the need to balance the benefits and costs of the various available systems (Green and Mutalish 2009:11-66).

The importance of retrospective digitization is widely agreed upon as a duty of stewardship to preserve original documents, but the scope and costs associated with such an effort also needs to be realized (Roy *et al*. 2007:316; Rudenstine and Whaln 2006:3). In general, practical obstacles militate against applying a purely strategic or systematic approach to digitizing records: fragile materials, large objects requiring lengthy reports, collections and their associated records housed in off-site stores, varying conservation departments with different approaches to creating and keeping conservation records, etc. These present time-consuming challenges for the creation and digitization of records that inevitably add to costs (Hudson 2012:35, 46). Additionally, there are three significant issues with respect to the longevity of digital media: the storage medium itself, the hardware, and the interpretive software. For each of these, there are dangers of corruption of data or obsolescence of the software or hardware. A valuable point about the longevity of digital media has been made on multiple occasions: digital media corrupts absolutely, a stark difference from analogue/physical media which has various stages of deterioration. For example, the lifespan of the hardware used to store digital media can be as low as five years; paper and printed photographs can last as long as 100 years with minimal intervention. The amount of time spent on maintaining digital storage can be costly; it is beneficial for data to be refreshed as often as daily on a rotation of four different hard drives, one per week. The larger tasks of migration or emulation of data to new, up-to-date hardware are also particularly time-consuming (Beck 2013:85-88).

It is a widely expressed concern within the UK that while ministries and agents of government tend to approve strongly of digital recording of collections, resources to

[47] ICON establish the Documentation Network group in 2015 with aims of meeting user requirements for digital conservation recordkeeping and storage.

undertake these labour-intensive programs are not forthcoming. Similarly, digitization projects have tended to respond to funding opportunities, rather than to follow a rational strategy for developing content in a logical and systematic way (Hudson 2012:45). There has not been substantial understanding of what happens to digital resources once project funding terminates or the initial creation phase has been completed (Meyer *et al*. 2009; Showers 2012:63). Arguably, the major drawback to digitizing conservation records is maintaining access in the future; the notorious pace of technological change has serious implications for retrieving data from any machine-readable medium (Moore 2001:1). Additionally, the cost of implementing effective digitization of conservation records can be steep, often leading to dissatisfying database programs that may or may not be used – perpetuating the uneven structure and accessibility of conservation records as a whole. These preservation and accessibility obstacles are also discussed in terms of the creation and preservation of physical records.

In general, there is a loss of functionality in physical conservation records. One of the major disadvantages is difficulty in theme searches, such as treatment type, material, or type of object for someone who wants to conduct research (Radin 2011:6). Paper cannot, for example, represent a database or Geographic Information System (GIS) (Moore 2001:13). Audio and video lose functional behaviour in analogy form as well. The resources required to store and maintain physical material as well as the associated inaccessibility are different but comparable to digital records (Green and Mutalish 2009:17; Ferrante 2006:13).

It is evident that much of the recording process may now also be done in a digital form, but paper and pencil still have their place in certain areas for recording observations. Indeed, use of A5 cards on the bench allow conservators to record actions taken directly and at the time of treatment. Many, if not all conservators tend to keep handwritten notes of their treatment as a preliminary record for themselves and/or to then transfer these onto the documentation system established by the institution. Samples are also kept by many conservators and will always be in a physical form. There is still a high print-out rate of digital photographs as a way of maintaining standards (e.g., AIC Guide to Digital Photographs and Conservation Documentation); best practice in the storage of documentary photographs involves multiple digital copies, but also physical copies (Green and Mutalish 2009:16; Beck 2013:86). Within the Mellon Foundation survey, it was found that 101 of the respondents digitize their legacy documentation and, of those, three did not keep originals (Green and Mutalish 2009). The physical records being digitized were ‘preserved’ in a

variety of ways – from returning material to file folders in desk drawers to sending it off for professional conservation and archiving. Not much more information is known about the current state and preventive intentions for physical conservation records. Whether presently being created or existing as legacy information, the maintenance of the records has not been addressed.

It has been argued that it would be useful to set policies regarding conservation records within the broader institutional policies for all records, as there is considerable experience and expertise in record management within archival institutions and by documentation officers upon which those who are formulating policies for the management of conservation records might usefully draw (Roy *et al*. 2007:316). Paper conservation techniques may be useful in the material preservation of records (van der Reyden 1995). Similarly, The Smithsonian Institute Archives and the Rockefeller Archive Centre collaborated to form best practice techniques that can be used for the preservation of born-digital objects, including records (Ferrante 2006). And as the previous discussion emphasized, digitization via collections databases and online resources are also being developed.

Disparate digital and physical records created within organisations adds to the profusion discussed by Jones and Yarrow (2022). Nevertheless, there is a sense of striving for a complete, coherent system in many of the documentary practices discussed. More generally, Basu and de Jong (2016) link this impetus to an archival ideal of aggregated institutional knowledge rarely realised in practice. In their research on colonial archives, they identify an "epistemic disobedience and uncertainty" (Basu and de Jong 2016:6-13), which exceeds the all-encompassing capacity of the archive. They also complicate archival dynamics in time and space, arguing that they involve "multidirectional flows of texts, images, embodied practices and discursive strategies" (Basu and de Jong 2016:6). This is a useful characterisation for thinking through the systems and practices involved in organising knowledge within conservation records (Jones and Yarrow 2022:131).

6.3.3.3 The Questionnaire and Ownership

Through use, creation and storage, there are multiple evidential functions conservation records could provide to the conservator, cultural heritage institutions/professionals, and the conservation discipline. These ideas come from the international conservation and cultural heritage bodies which make available ethical

guidelines, codes of conduct and documentation standards. Conservation records could represent all of the aforementioned evidential functions to some extent and could therefore be seen as an archive of conservation practice. Yet for many of my interlocutors, the questionnaire showed practitioners defining conservation records distinctly to one another (as previously mentioned, with no cohesion or universality) and not necessarily as an adherence to the place or types of objects worked on (the thoughts around training or workplaces having an effect fell away).

Instead, the questionnaire found that despite training and guidelines on use, conservators rarely consulted previous records of an object or for a type of treatment in order to make decisions about current projects (**Figure 45**). This mimics Henderson's (2009) discussions on the lack of use of the scientific method in conservation practice and that often practice is predicated on poor quality data. Even if the scientific method is enacted with the analysis and selection of materials, other techniques are necessary for considering how to formally collect and work with data such as stakeholder-input in a rigorous manner (Henderson 2009:8).

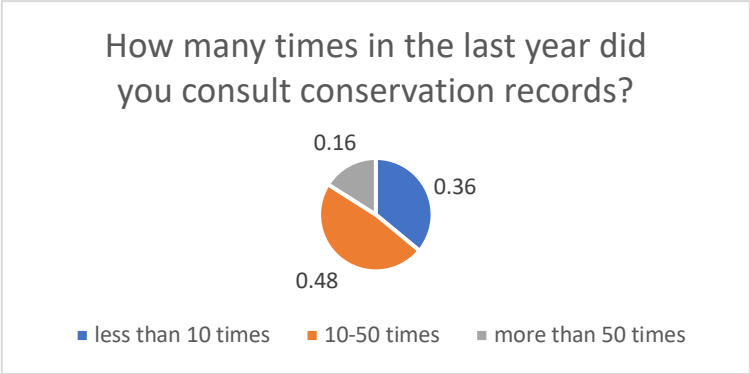


Figure 45. Out of the hundreds of records conservators are creating within a year, they on average only consult previous records 10-50 times a year.

Additionally, 60% of the time, conservators who did try to find previous records were unable to. Many of the reasons given, if known, were due to the storage of the previous record. As seen in **Figure 46**, the most accessible records were on a collections database or within filing cabinets in the practitioner's lab. Usability of records through the questionnaire responses comes into question.

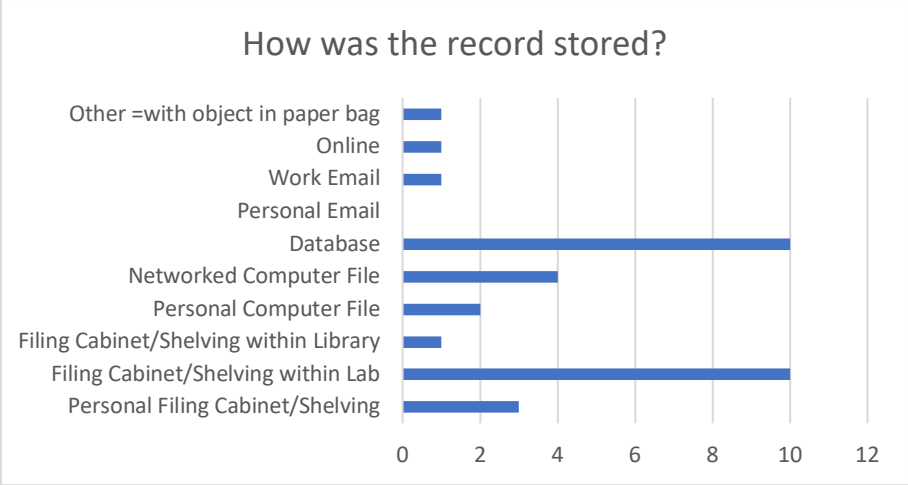


Figure 46. When found, conservation records tend to be stored on collections databases or within the filing cabinets of the practitioner's lab.

For Historic Scotland conservation practitioners, inscriptive work on objects had to be objectified through documentary practices. The resulting documents became a part of the biography of the conservation object and were seen as a potential surrogate in the face of loss or destruction. In this context, conservation records became 'second-order' objects (Bennett *et al*. 2017:37), contributing to the profusion Jones and Yarrow (2022) explicate. Yet fundamentally, the questionnaire responses gave a sense that knowledge production in conservation through the outlet of recordkeeping is individual and seen as a requirement -not necessarily as surrogacy work as the usability of conservation records was already being witnessed as moot within their own attempt to retrieve previous records and useful information within. With overarching regulations existing in uncertain ethical codes and standards of practice, conservation records become evidence of a materials-based approach to practice.

My questionnaire interviews found that storage of records for longevity and accessibility was a concern but was stagnated via contextual profusion so that previous records continued to be unused and new records continued to be made and/or stored in the way that would disable their future use. The aspiration of order simply produced anxiety about, and awareness of, disorder. The sense of the archive or collection as universal and transcendent made those working with collections aware of their own specificity and situatedness. Furthermore, the aspiration of totality made them acutely aware of the partiality of what they do; that the systems they work with often fall short of the ideal of what a collection and its documentation should be (Bowker and Star 2000; Jones and Yarrow

2022:141). And despite these anxieties, interlocutors did not see recordkeeping overall as an exercise in knowledge production nor in history-creation despite the acknowledgement of the fundamental reasonings behind conservation documentation (i.e., surrogacy and traceability of changes over time).

Despite 'order' enacted through templates, digital collections management systems, and sometimes regulated language-use via terminology, substantiation of decision making (**Figure 47**) and whether any *other* information outside of internal networks was sought was not predominantly recorded (**Figure 48**). This again echoes Henderson's (2009) conclusions that too often conservation actions appear to ignore available data (and, in turn, record it) (Henderson 2009:9). Whether practitioners are employing a variety of approaches, the questionnaire pointed to little use of conservation records for reference, the physical condition and treatment being the main form of documenting the conservation object – the definition of the materials-based approach.

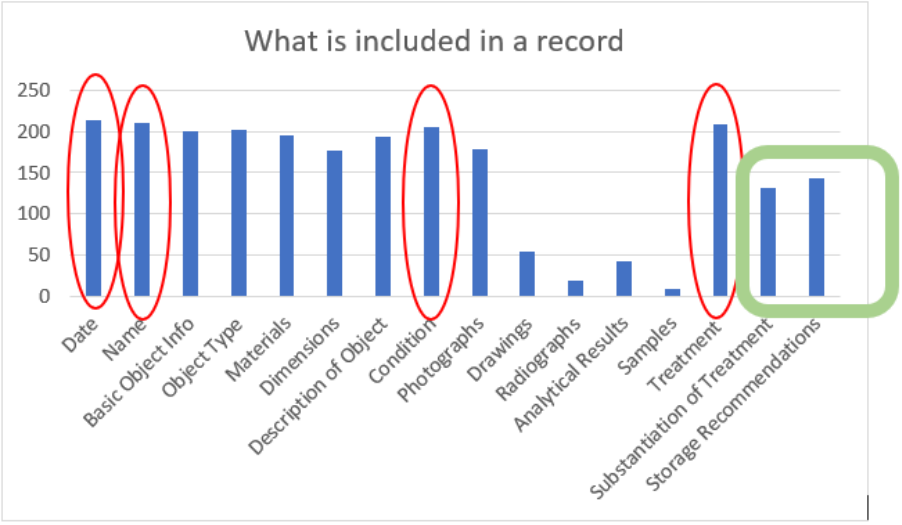


Figure 47. A graph from the results of the questionnaire on conservation records depicting what practitioners include in their records. The most common information is acquisition related and condition/treatment.

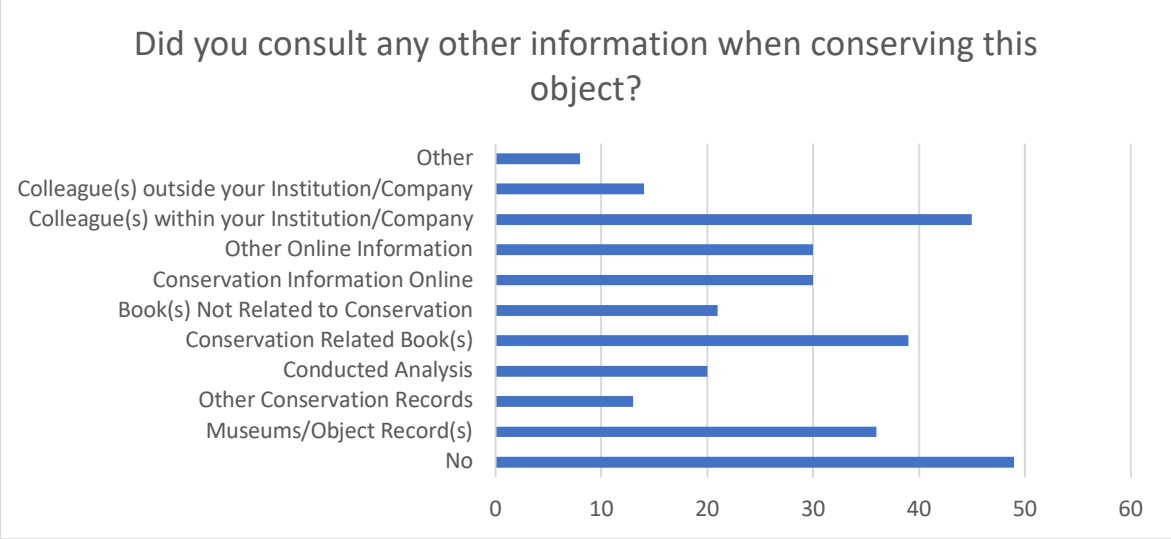


Figure 48. Conservators are not consulting other information, apart from conservation records, in order to inform their work on objects. If they are consulting other information, it is mostly from correspondence with colleagues within their institution, conservation related books, and/or museum/acquisition records.

In summary, there is no simple answer for what can be done to ameliorate the distrust of digital record keeping or clear explanation of the repercussions of disuse and lack of sustainability measures. Yet, record survival alongside the heritage material was found outside the remits of practice – reminiscent of authorised heritage discourse where record keeping is not undertaken with serious consideration for the potential accessibility and understanding for non-experts in the present or future. That is, to create a record with only specialist detail of treatment and condition is to record a materials-based approach to conservation practice. To create a record knowing it will unlikely be accessed in future due to its jargon and/or potential obsolescence via storage media is to negate other 'stakeholders', present and future. To create a record without substantiation of decisions and not be reliant on past records nor collaboration outside the institution is to insulate the conservation treatment to 'expertise' (Pearlstein 2017). The conservator as expert is seen by Poulios (2014) as one of the significant weaknesses of a materials-based approach as the conservation process and its results become dependent on the outlook of that one practitioner. Furthermore, this approach does not embrace or acknowledge non-Western communities' associations with the heritage being conserved but rather the values and aims of the isolated conservator and, perhaps, the museum they work for (Poulios 2014:20).

Additionally, many of the conservators I spoke to about disseminating their conservation records via more public outlets, held the previously mentioned distrust in the public. Often popular media will include stories of conservation work that had adverse effects (e.g., Chartres Cathedral, mentioned above[48]). The resulting reaction is a combination of current internet/media propagation and a fundamental misunderstanding of what the role of the conservator actually entails (**Figure 49**). And so, a distrust in the public may have something to do with job security, but I was always told by interlocutors that related fears for sharing conservation records/details were that non-conservators would act recklessly furthering an authorised approach to practice where conservation records exemplify practitioner's sense of ownership.

Figure 49. A conservation meme created by an interlocutor to show the confusion around the work of material heritage conservators in the UK (Interlocutor, 2015).

Through language, we see a turn towards attachment, of conservator to objects, tied to the aforementioned power enacted through materials- and values-based approaches and sometimes through naming. The most common spoken phrase exemplifying this attachment being 'my object'. Sometimes this is in relation to an object presently being treated. Other times in regard to objects treated in the past. The latter suggests that conservation practitioners form long-term bonds with some of the objects they treat (Spaarschuh and Kempton 2020:371). The responsibility and care involved in practice allows conservators to claim ownership – whether this be at the time of treatment or beyond via surrogate documentation. The personification and ownership imbued within the verbal and non-verbal

[48] See also: https://www.theguardian.com/artanddesign/2020/jun/24/monkey-christ-worst-art-repairs-of-all-time.

language of the conservator speaks for the passion and intimacy of the practice and a particular form of knowing tied to each particular practitioner.

As mentioned, perspectivalism identified in the social sciences is also integral to heritage governance. Taken to its logical conclusion it turns heritage professionals and the people who are attached to the heritage into equals (Mol 2022:10). Practitioners are attempting to orchestrate diverse communities and associated values into their decision-making and action despite these ideals being limited and fragmented in practice (Poulios 2010:172-174; Kisic´ 2016; Jones and Yarrow 2013). Nevertheless, from international conventions to national strategies and policies, there is an increasing emphasis on people's relationships to heritage and concepts like democracy, rights, inclusion, diversity and accessibility. As de la Torre (2005:5) puts it: "The search is on for an approach that assures equity, avoiding those [approaches] in which the values that prevail belong to the group with the most political power". Inclusion and diversity within the conservation profession in the UK could begin to reach for such an approach, acknowledging that work with heritage objects is not 'scientific or objective', when in fact it is preferential, a humbling revelatory battle with unknowns, personified and felt.

In the next chapter, life-history narratives of practitioners reveal autobiographies scattered by memories of time with objects. Perhaps they do not refer to objects in a personified sense nor do they claim ownership beyond their actions onto it, but what is revelatory is how in the examples to come practitioners remember points in their lives through the lens of objects. Remembering not 'times in their lives' but rather, recalling **objects** as times in their lives.

6.4 Conclusion

As the conservation discipline has grappled with the concept of authenticity since its conception, we should explore how the individual and context ally to value originality in particularly prescriptive ways, ways that resonate with both the history of museums and socio-cultural constructs in the UK. This chapter began with brief examples of how object agency exemplifies itself through the preferential treatment of heritage material via conservation practitioners. Qualified materiality is, in-part, determined by conservator's preferences – whether they hold awareness of it or not. Sometimes practitioners are situated by their version of reality (e.g., human remains become objects when entering a museum) and so influence the way heritage is treated and recreated. This recreation can be in the form of

naming or ownership via conservation records where the history of that object is translated to the vision of that who oversees its care.

When unknowns arise, opportunities arise to recognise ignorance as valuable with potential to change conservation practice towards inclusion and diversity. Unknowns teach the conservator that object agency often lies and stays in the past -not everything need survive forever. Ethnographic studies of conservation practice and conservation practitioners have led to a better understanding of these seemingly tacit forms and ways of knowing. In the next chapter, I merge Schön's (1994) reflective practitioner, Arthur and Ben's (conservation scholars) reflective conservator, Spaarschuh and Kempton (2020) attached conservation practice with the revelations my research and other conservation ethnographies have uncovered to advance and evolve object conservation in the UK – from pedagogy, to training, to participating in, to recording that work.

My call is for the incorporation of autoethnography into the practice of object conservation, via realistic and legible conservation records. To simply act in order to aid the perceived materiality of a viewer's object or simply act in order to appease an accepted approach or norm of intervention (whether guided or not) is missing out on the opportunity to share experiences of the object and all it holds, as we have seen with the interventive work in this chapter and the way interlocutors showed their care linguistically. If that were recorded, we could have a clearer history of practice and more meaningful approaches which reflect the practitioner but also aid them in advocating for the objects, their care, and for the people the objects came from and whom they represent (in the past and present). After spending years with conservators and seeing the practice in action for a variety of practitioners, it has become clear to me that output for the discipline is tied heavily to embodied knowledge learnt and accessed through experience. Without the ability to reform perpetual condition-checking for conservation professionals, a sidestep towards understanding the other forms of knowing made via heritage material and seen by conservation practitioners might enlighten a different approach to practice all together (Pink 2015). This would be an approach which enables the larger, more important goals of equality, inclusion, and diversity (Krmpotich 2019; Henderson 2020). In the next chapter, the 'condition-checker' will be revealed. This will be followed by a discussion on autoethnographic records as my contribution to the evolution of material heritage conservation in the UK.

Figure 50. A close up of Bill's Burmese drum. These patterns were imprinted onto Bill's mind and memory through his close inspection and treatment of the object. These details of his experience are the ones I think should also be recorded (Conservation photograph, Interlocutor Bill 2014).

7.1 Introduction

Similar to Christopher Tilley's call that 'every excavation has its own ethnographer and ethnography' (Tilley 2020:557), my call is for the incorporation of autoethnography into the practice of object conservation via realistic and legible conservation records. As covered in section 3.4, Stigter (2016) published an article titled "Autoethnography in Conservation". She argues that autoethnography as a method in conservation would allow for a process-based assessment of practice which foregrounds the conservator's personal input. As a method common to the social sciences, in conservation, autoethnography would imply conservators describing how the object affects their actions while at the same time considering and recording how their actions affect the object. This addresses the cognitive processes and micro-level decisions steering the desired result, and potentially the other unknowns within objects and practice (i.e., section 6.2.2). Stigter concludes that such testimony imposes the reflexivity needed in the conservation of cultural heritage (Stigter 2016:228-231). The following review of literature concerning phenomenology and intersensoriality within material culture studies will incorporate the potential advantages of autoethnographic recordkeeping in conservation.

As covered in Chapter 4 and Chapter 5, conservation lies within experience, the confidence in practice, the value of the practice, and the persistence of the practice. But the purpose of the practice lies within the experience of the object, its existence and its potential to change and be cared for (Chapter 6). A conservation object is thoroughly known by the practitioner who changes it. Conservation practice can be seen as a 'measure of being' (Merleau-Ponty 1974:124), the perceiving body is mutually intertwined or entangled with the phenomena it targets, bodies and environments co-shaping each other in ongoing processes of differentiation (Hoel and Carusi 2018:47). For a practice tied heavily to human behaviour and associated material representations, these influential components of self and its interaction with the environment and the object are not highlighted in conservation training. Nor are they documented during practice or in harmony with present professional culture. A way through this is by phenomenologically documenting the sensorial, embodied experience of practice in-situ within conservation records so that conservation may evolve forward into a relational practice supported with reflexive principles.

7.1.1 Phenomenology

Phenomenology is concerned with the human encounter, experience and understanding of worldly things, and with how these happenings come to be possible. Phenomenologists from Edmund Husserl onwards have argued that if science is to concern itself with the acquisition of information through the physical senses (e.g., in laboratory experiments or field observation) then the character of experience needs to be explored. Heidegger and Merleau-Ponty, by arguing that our most basic understandings can only be generated in the context of a social and phenomenal world, transformed phenomenology from a search for abstract essences to an interrogation of the everyday. What distinguishes phenomenology is a desire to see the everyday as an appropriate location for attending to the deepest of existential questions. This is because the tradition refuses to separate philosophical knowledge from the world of things, while viewing thinking as an embodied practice, and sees no observation as immune from an unending critique. Phenomenology consequentially has an invaluable contribution to make to the investigation of material culture and conservation practice.

An investigation of the qualities of objects as experienced by practitioners might prove productive in the understanding that the 'subjective' aspects of conservation are not superficial elements constructed on the bedrock of an invariable materiality but are the means through which the material world reveals itself to us. It is instructive to consider the variable ways in which the culturally constructed moods, attunements and emotional states of conservation practitioners in a variety of contexts disclose their material surroundings and conditions to them (Thomas 2006:56-57). Indeed, as Howes (2006) argues, the implication of 'the sensual' turn in material culture theory has shown that material culture, in addition to materializing social relations, gives expression to a particular set of sensual relations. In sympathy with Buchli's (2002) critique that material culture studies had reduced objects with inarticulate realms of sensual experience into classification and exhibition and that conservation conserves nowhere near as much as it produces a particular order of things, Howes (2006) argued that to truly access the materiality of an object, those qualities which cannot be reproduced in photographs (the feel, weight, the smell, the sound) are essential to consider (Howes 2006:168-169). This model of intersensoriality compels us to interrelate sensory media and objects, to contextualize them within a total sensory and social environment. While all objects may not be conveying the same message, or given the same attention, they are nonetheless all playing on each other in the experience of conservation

practitioners. This exploration of sensory relationships and embodied experience pushes conservation into a full-bodied discipline (Howes 2006; Pink 2015).

Candlin (2008) and Classen (2005; 2012; 2014; 2017; Classen and Howes, 2006) each developed arguments exploring how social class and theories of knowledge production have influenced which senses museum visitors have been permitted to engage through time. Both scholars provide histories of intimate artefact handling during times when museums were more private spaces, accessible to the upper classes, but also simultaneously times when vision was not the predominant sense or means of knowing. The privileging of the visual in museums thus has both a democratizing and an oppressive history. Increasingly in the twenty-first century, museums are reconsidering how to foster multisensory knowledge production in ways that do not always prioritize the visual. For example, *The Multisensory Museum: Cross-Disciplinary Perspectives on Touch, Sound, Smell, Memory and Space* (Levent and Pascual-Leone 2014) brings together multiple examples of sensory-engaged museum practice. Such efforts are not without obstacles. Binter (2014) argues that Western museum visitors have learned a particularly ocularcentric form of museum visiting and that repeated alternative offerings are necessary before visitors will be comfortable engaging the museum in other sensory ways. This is an undertaking worth the effort, as it can play a formative role in 'addressing and destabilizing the colonial legacy of museum collections' (Binter 2014:343). Due to the relationship between Western knowledge practices and the privileging of sight, the inclusion of other sensory forms of knowledge production in museum exhibitions invites other ways of knowing and experiencing the world into museum spaces (Krmpotich 2019:95-97).

Krmpotich (2019) explicates intersensoriality as studied within museums:

> "Classen (2014), Dudley (2014), Fors (2013) and Levent and Pascual-Leone (2014) all emphasize the system of sensory perception, where the senses work together to help bodies make sense of their interactions with objects and environments. Museum spaces, they argue, are no different. Our eyes see texture as readily as colour, impinging on our sense of touch. Smell and taste are a sensory pairing long recognized as interconnected physiologically, but also mnemonically and psychologically. Even when restricted to viewing objects in vitrines, visitors will still imagine other properties of objects" (Krmpotich 2019:96).

As participants in sensory museology, museum anthropology has contributed to constructive critiques of ocularcentrism in exhibitionary spaces. Indigenous peoples and museum anthropologists have pushed for direct, tactile and embodied interactions between community

members and their material heritage (e.g., Fienup-Riordan 1998; Clifford 1997; Gadoua 2014; Krmpotich and Peers 2013; Kunak and Dean 2006; Peers and Brown 2015; Henderson 2020). Such initiatives are driven by desires to decolonize museums; to reassert ongoing indigenous connections to collections; to support cultural and language revitalization efforts; and to support personal and collective healing. Attending to embodied and multisensory engagements with objects can help build cultural archives in the manner proposed by James and Ashton (2007). In turn, museums-as-cultural-archives can render a collection (including its documentation) into a site that traces how sensory perception and sensory engagement is shaped both by culture and through time. For museums, it opens real channels to not only imagine, but also document objects as alive and engaged in ongoing interactions and relationships with people, other objects and their environment (Matthews 2016). Through tactility and empathy, more recent museum and heritage initiatives are again seeking to help people (whether visitors from the general public, or cultural and familial descendants) approximate the feeling of historic human/object interactions and the embodied experiences of people in the past (Krmpotich and Somerville 2016; Peers and Brown 2006; Te Awekotuku 2006). These approaches are not solely about the multisensory, but also about the affective potential of objects, something conservators know all too well even if it is left unspoken, as previously mentioned (Krmpotich 2019:98-100).

Anthropologists since Mauss and Malinowski have asserted that the lines between persons and things are culturally variable, and not drawn in the same way in all societies. In certain contexts, persons can seem to take on the attributes of things and things can seem to act almost as persons. Studies of traditional exchange systems have elaborated on this insight by detailing how objects can be given a gender, name, history and/or ritual function. Some objects can be so closely associated with persons as to seem inalienable (Weiner 1992). Within this framework, things can be said to have ‘biographies’ as they go through a series of transformations and persons can also be said to invest aspects of their own biographies in things (Hoskins 2006:74). Museum objects pass through many transformations from creation to use to acquisition, cataloguing, conservation and display.

Appadurai’s call for a study of the ‘paths’ and ‘life histories’ of things inspired a whole series of new studies which looked at the ‘mutability of things in recontextualization’ (Thomas 1989:49). Kopytoff (1986) encouraged researchers to ask the same questions of objects as that they would of people. Steiner (2001) argued that via Kopytoff’s call, authors have attributed too much power to the ‘things’ themselves, and in so doing have diminished

the significance of human agency of individuals and systems that construct and imbue material goods with value, significance, and meaning. Hoskins (2006) readdressed Steiner (2001) by proposing that interpretation of agency and objects be alongside two separate directions where one is stressing the ways in which things are commodified and lose personality, the other looking at the processes by which they are invested with personality and may have an impact (Hoskins 2006:75). The malleability of objects, and the many ways they may be perceived or used, are linked to what Gell (1998) might call their 'instrumentality', affect or agency. He asserts that things are made as a form of instrumental action where objects which have previously been theorized as simply for aesthetic contemplation are in fact made to act upon the world and to act upon other persons. Material objects thus embody complex intentionality and mediate social agency (Küchler and Carroll 2020). This is not only in the sense of an object's identity as imported wealth, ancestral value or commodity but also as an interaction with the people who gaze upon it, use it and try to possess it (as shown in section 6.3.3 for conservators).

Strathern (1992) shows how gendering objects in itself allocates aspects of agency and identity to things (as seen in section 6.3.2). Hoskin (2006) notes: "The equivalence suggested between the agency of persons and of things calls into question the borders of individual person and collective representations in a number of ways. It implies that we need to pay more attention to the phenomenological dimension of our interactions with the material world and interrogate the objects which fascinate us as well as our reasons for feeling this fascination" (Hoskin 2006:75). As Gell proposed, works of art make it difficult for us to possess them in an intellectual rather than a material sense, so their effect on our mind is 'magical' -it is a form of enchantment. He furthered this by calling for anthropological theories of objects to be primarily concerned with social relations over the time frame of biographies; by looking at how people act through objects by distributing parts of their personhood into things. All objects, whether seen as art or material culture, have a making that is a 'particularly salient feature of their agency' (Gell 1998:68). As conservators use that making to unmake and remake objects for the purpose of 'heritage', their captivation can be seen in the biographical narratives of their time with objects in much the same way Gell asks us to see the objects' creators. The 'resistance' which Gell talks about in art objects – their ability to challenge us and captivate us visually – suggests that the 'magic' of mechanical reproduction will not remove the aura of heritage objects but only enhance it (Hoskins 2006:76-77).

Objects as the subject of biographies have been studied through ethnographic research which tries to render a narrative of how certain objects are perceived by the persons they are linked to and through efforts of interrogating objects via historical and archaeological research making mute objects 'speak' by placing them in a historical context and linking them to written sources.[49] These biographical approaches to the study of objects are particularly anthropological because they tend to concentrate on 'the act' in the context of 'the life' -or a particular stage of 'the life' – and so the life cycle of the individual agent. This biographical depth works best in the spaces traversed by actors in the course of their own biographies, focusing on relations of the persons who produce and circulate objects. The emphasis on the individual actor and stages of life cycles remains important and is a trademark of multi-sited fieldwork (and Actor Network Theory as explicated in Chapter 2). Seeing conservation practice as moments within object biographies as well as moments within conservator's biographies enables other forms of knowing to be elucidated from the practice. Documenting such embodied and multisensory engagements with objects can help build cultural archives and render museums as sites that trace sensory engagement through time. This opens channels to imagine and document objects as alive and engaged in ongoing interactions and relationship with people, other objects and their environments (James and Ashton 2007; James 2007; Matthews 2016; Krmpotich 2019; Henderson 2020).

If accessing the sensorial, experiential potential of collections is one way to advance the museum, this begs the question of how such reservoirs are documented and integrated as part of each object's biography as expressed in its internal and public records. Krmpotich (2019) calls for curatorial/museum records to include sensorial experiences of the objects they document. She considers how including the stories, memories and physical interactions of Cree and Anishinaabe seniors with a dog sled carving into catalogue records can change the ways we know this object and produce knowledge through it (Krmpotich 2019:100). As aforementioned, this doctorate began with an interrogation of conservation records and so it is apt that its most important contribution to knowledge be dependent on data acquired through and via conservation records. After explaining what a conservation record could be (readdressing the concepts introduced in section 6.3.3.1), this chapter will move onto a discussion of incorporating the lived experience of the practitioner within conservation records. For it is within our need for validation that records shine -they can be combined and

[49] Find similar work with museum collections in Errington 1998 and Kirshenblatt-Gimblett 1998.

tabulated and configured and tested to show us immense understanding of what is it to be a conservator – and what it is to be a conservation object.

7.1.2 Phenomenology and Conservation Documentation

As covered in section 6.3.3, conservation records can have various functions. Their importance beyond functions such as recording conservation practice or providing surrogates for objects can be seen when interrogated for the social processes their creation depends on. For example, the goal of Eastop and Simila's (2007) workshop was to exemplify how views of objects vary and why it is important to recognize this variation. The recording exercise conducted is linked to the broader theme of understanding and documenting the 'life cycle' of objects and their various uses in the past and present. Eastop and Simila add that the way in which objects are viewed will also affect how they are documented. They conclude that the recording process is an actively contested, social process and therefore variable depending on:

-the physiology of perception
-the physical point of view
-the professional point of view
-how the aims of documentation are understood
-the system of classification
-and the styles of graphic representation

(Eastop & Simila 2007:117).

Eastop and Simila argue that recording often reflects broader social, political and economic contexts. For example, they explain that cultural diversity among documenters can include differences in profession, institution and perceived status as well as ethnicity and nationality (e.g., conservation practitioners as volunteers to professionals within the UK). Therefore, understanding the often-unstated rationale behind documentation choices and recognizing that there are different points of view, can be an important step in sharing conservation decisions and more widely, aiding in further diversifying professional practitioners and conservation practice within museums.

Documentary inscriptions informed by abstract principles, policies and classificatory categories are creatively adapted to the complex biographies of specific, messy objects; requiring the actors involved to engage in what Schön (1994) has called "the art of the specific case" (Jones and Yarrow 2022:138). Eastop and Simila state that classification

systems used for recording have provenance and 'life cycles' just as objects do. This is a social process conservation records can provide evidence for as the records will have been created in the physical and social contexts as well as a place in time that determined the type of classification system used. In an early example, Drysdale's (1999) objective was to suggest that conservators look to the arts and humanities to enable use of language within documentation that is unashamedly subjective and can express the passion they feel for their work. Conservation is a subjective practice based on the ideas and beliefs of the individual conservator and the larger groups in which they trained, practice, and share ideas on the specific case often referred to as 'an object-to-object basis'. As Eastop & Simila (2007) pointed out, records will be biased by the subjective point of view of the documenters (i.e., physiology of perception) and the social and physical contexts in which they were recording. Conservators deal with cultural material in its specificity. The documents they produce about this cultural material in the form of records will then also be cultural and symbolic. Drysdale is correct in pointing out that conservator's 'unique selling point' is their intimate knowledge of the value of objects (e.g., how they are constructed, behave, articulate human history and, perhaps most importantly, how they are experienced).

Conservation records are a reflection of social processes and varying viewpoints. They are created by the subjective conservator who rationalizes decisions based on experience. If we were to critically analyse records, we could find the rise in use of a specific material or technique, and we could find the social implications which led to such a rise. We could see how the heritage community within a country or region classified objects over time. We could see how and why curators and conservators view and document heritage distinctly, with different goals, or similar outcomes. We can see what has been lost, why, and how it is now viewed. We can also relate context with material, viewpoints with method, and dig deeper into our understanding of what cultural heritage has to offer society now and in the future. Simply put, conservation records are important pieces of history with a lot of potential (Krmpotich 2019).

Section 7.2 will explore this potential by phenomenologically explicating the multisensorial practice of condition assessing within conservation. Condition assessing an object is the precursor to intervention and treatment but is also the main way contemporary professional conservators are interacting with objects within heritage institutions (i.e., as 'condition-checkers' Ashley-Smith 2016). By examining the phenomenological embodiment involved in condition assessing, the interaction of the physical and emotional elements of

practice will further evidence all which is not presently recorded. This will lead to the call for experiential, autoethnographic inputs to be part of conservation practice via its documentation as a way to include and reveal the biographical role of the conservator. And as a way to enable study for diversifying and expanding the discipline. The chapter and thesis will conclude with a summary of the thesis, including this exploration into the further study of conservation records.

7.2 Embodiment and Narrative

Robin Boylorn (2016), one of the editors of *Critical Autoethnography: Intersecting Cultural Identities in Everyday Life,* came to autoethnography in much the same way this thesis has been composed. Writing narratives where she was a main character and from her particular raced, classed, gendered, sexed positionality. The aim of autoethnography is to relay the distinctions between how and why one views the world through their lens and what makes that different from others (Boylorn and Orbe 2016:13). This intersectional definition of autoethnography clarifies further the purpose it could have within conservation practice. The premise of adapting and evolving approaches to conservation is in attempting to widen the lens by which conservation practitioners and other museum professionals view material culture. Whilst attempts have been made to include varying perspectives, the work of introspection has not been at the forefront of these discussions. We see museums in the UK reaching towards diversity and inclusion, but as previously noted, we do not see a diverse conservation community- the 'carer' or 'changer' stakeholder. An ameliorating start is to have practitioners assess positionality as a viewer of the object and ultimate decider for its change alongside their phenomenological experiences of the object (Henderson 2022). Conservators can practice this privilege and complexity of viewership through autoethnographic authorship within their recordkeeping to exemplify their better understanding of the 'values' an object may and can have.

From the phenomenological perspective, I will draw out the sensorial experience of objects conservators have when condition assessing objects. These experiences can be recorded to aid the history of practice, the understanding of the practice, what is it is to be conservator, what it is to be the conservation object, and to aid in programs of diversity and inclusion by incorporating other forms of knowing. Here the conservator is no longer expert but instead a human acting with their body and senses to try and understand a heritage object -albeit sometimes with the skilled-vision training in conservation, craft, or trade can offer.

What section 7.2.1.2 will exemplify is that sometimes what is found in multisensorial experiences with objects is a human experience. This creation of memory has less to do with the practitioner's conservation approach or skilled-vision of the object, but more so as a moment of imprinting – they to the object and the object to them.

Mark Orbe (2016), the other editor of *Critical Autoethnography*, was in the position many contemporary conservators find themselves. He found that most traditional intercultural research using quantitative methods is aimed at discovering correlations for particular cultural groups and associated behavior/material heritage. The goals are to produce statistics and show how scientific practice can yield generalizable results. These processes can simply (re)produce cultural stereotypes (Boylorn and Orbe 2016:14). In conversation with contemporary museum practice and its goals, we can see (and as shown in Chapter 5) how scientism is neither aiding care of collections, nor establishing the basis by which to progress the museum out from its colonial, white male gaze. What Orbe's experiences also teach us is that phenomenology can serve as a strong base from which to apply and adapt autoethnography. The area where conservation practice can, at this time, most clearly represent phenomenological potential is within the condition assessment phase.

These final sections of the thesis will explore the possibility of making meaning and enacting social change through recordkeeping. Condition assessing an object is the main way contemporary professional conservators are interacting with and documenting objects within heritage institutions (i.e., 'condition-checkers' Ashley-Smith 2016). By examining the phenomenological embodiment involved in condition assessing, the interaction of the physical and emotional elements of practice will further evidence all which is not presently recorded. This will lead to the call for autoethnographic inputs to be part of conservation records as a way to include and reveal the forms of knowing and potential knowledge production from the conservation practitioner. And as a way to enable study for diversifying and expanding the discipline by adding to the narrative of the object rather than owning the in-depth information about it or claiming an 'expert', authorised understanding of it. Instead, conservation records that show the next chapter of the object's life through the lens of those who have the privilege to experience it, are predicated on the basis that the object is of human experience and not a convolution of 'a collection' from those that know (Krmpotich 2019).

7.2.1 Background: condition assessing objects

The first step within a general conservation methodology is condition assessing an

object. We know that this takes up a large bulk of the contemporary practitioner's workday when it comes to interaction with objects. This is where the conservator inspects the object closely, verifies its composition and the materials involved, and determines the structural condition the object is in. Condition-checking an object is the first step in investigating and understanding the unknowns of heritage material (as seen in section 6.2.2). This process is also heavily tied to the body. The environment plays an important role for both the stability of the object and for what the conservator can do for the object:

> "For the skilled practitioner, making is not so much about imposing as relating to or engaging with the constituents of an environment in a particular way. Thus, meanings are discovered, coming out of this particular kind of engagement, and places come into being through being involved with the activity itself" (Gunn 2007:108).

Indeed, to work with an object is to use one's body, one's environment, and in doing so, learn. As Downey (2004) exemplified with intangible heritage, the world and its objects look different once one has spent enough time closely inspecting heritage material in particular contexts (i.e., 'in the roda' of being a capoeirista or Afro-Brazilian martial artist who combines elements of dance, acrobatics, music and spirituality in their practice).

Until 'condition assessed', the conservator cannot determine their course of action regarding the preservation of the object. In many cases, and as is the majority of the work of the contemporary conservator, a condition assessment is all that is required for the object to go on loan to another institution or to be put on display (i.e., where the conservator's care often ends until the object returns from another institution or comes off display). We can see from Jones and Yarrow's (2022) work with buildings conservators that the condition assessment extracts elaborately carved elements from a building as a whole and objectifies them through systematic observation and description. In these contexts, observation and documentation is manifested as an important element of achieving the kinds of oversight, regulation and consent enacted by the architects and heritage managers, as does the report produced afterwards in documenting this work in some detail (Jones and Yarrow 2022:170). For both buildings and conservation objects, structural stability is the minimal requirement; therefore, the conservator focuses on fragility and decay. According to the conservation standard *BS EN 16095:2012 Condition Recording for Moveable Cultural Heritage*:

> "The purpose of making a condition report is to record the condition of cultural heritage following an inspection and assessment. The contents of a condition report can provide not only technical data but also knowledge and understanding about an object or collection, information produced by monitoring its change over

> time and information that will assist with future planning. Changes in the condition of cultural heritage may diminish its significance and reduce its potential benefits to present and future generations…A condition report will therefore be completed under a variety of circumstances that reflect its purpose" (British Standard Institution 2012:5-6).

Below is the British Standard table (**Figure 51**) which describes the various reasons why a heritage object may be assessed for its condition with three main purposes highlighted: knowledge and understanding, monitoring, and planning. **Table 3** below outlines the UK Institute of Conservation (ICON) Standards for condition assessing. I have added some notes next to these points for simplification and clarification. All these standards are focused on the physical condition of the object as observed by the conservation practitioner. As Bracker and Richmond (2011) point out, approaches to deterioration vary according to different kinds of objects (paintings, artefacts, books, monuments) and different contexts (collections, archaeological sites, buildings, ruins). However, material fabric and its transformation became a dominant concern at the heart of the Western conservation movement during the twentieth century and is reinforced by the rise of heritage science. Furthermore, despite recent attention to perspectivalism, material transformation remains a central preoccupation (Jones and Yarrow 2022:166).

Purpose		
Knowledge and understanding	Scientific and historical research, documentation Processing an acquisition file, or transferring archives Processing a deposit Processing a legal protection measure Drawing up an inventory or listing for an object or a collection Examining an object in order to supplement a documentation file Evaluating the ability to be transported, stored and exhibited Studying the environment surrounding the object, which may include the building that houses this object Education	
Monitoring	Movements within or outside the institution	Temporary change of location within the responsible organisation/institution Movement from one organisation to another for the purposes of a temporary loan for an exhibition or deposit Movement for conservation-restoration elsewhere
	Temporary change of building use	Functions, concerts, filming, work inside the building, etc.
	Change of assignment	Change of controlling authority Change of owner
	Stocktaking, occasional or regular inspection, microorganism and pest control	
Planning	Emergency planning	
	Planning and executing preventive conservation work, or servicing and maintenance work EXAMPLE Arrangement of storerooms and storage areas.	
	Planning and executing remedial conservation work, or servicing and maintenance work EXAMPLE - pest treatment or disinfection treatment of buildings; - reinforcements, etc.; - repairs.	
	Management of outcomes of claims, e.g. after fire, natural disaster	In the short term following damage In the medium term
	Planning of movement	
	Planning and executing investigation, restoration measures, presentation, promotion and development measures	

Figure 51. Condition assessing categorised into knowledge and understanding, monitoring, and planning (British Standard Institution 2012:10).

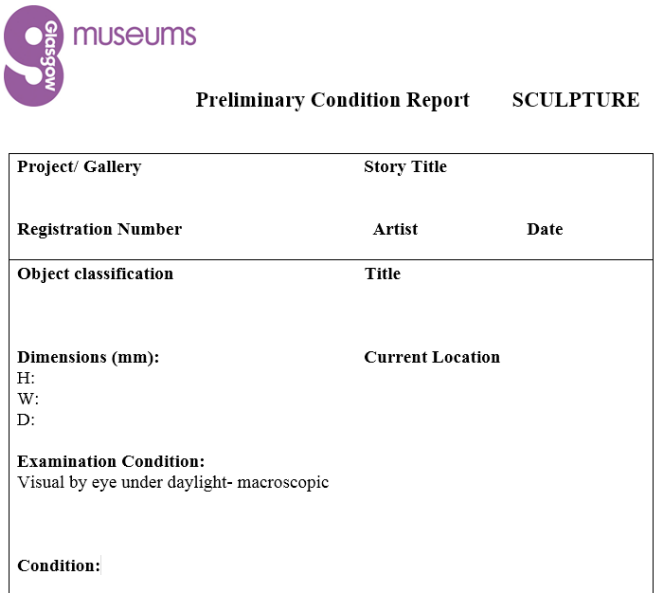
Within the categories of knowledge, monitoring and planning in **Figure 51**, we can see a mixture of purposes which relate to an important element of achieving the kinds of oversight, regulation and consent required by other stakeholders, as well as providing not only technical data but also knowledge and understanding about an object or collection. The information produced by monitoring its change over time will assist with future planning as changes in the condition of cultural heritage may diminish its significance and reduce its potential benefits to present and future generations. **Table 3** outlines ICON's Standards for condition assessing where through these various aims, the practical steps of condition assessment are made clearer.

Table 3 UK Institute of Conservation Condition Assessment Standards Simplified

The UK Institute of Conservation's Professional Standards state: "A conservator has the ability to assess cultural heritage that presents complex conservation problems. A conservator:	My simplification of these points as they relate to everyday practice:
1a. Understands the significance and context of the heritage to be assessed, along with any implication for potential conservation measures.	1a. The practitioner understands the value of the object to the institution and why it is being called for assessment.
1b. Assesses the physical nature and condition of the heritage.	1b. Is the object structurally stable? Are there signs of decay or fragility?
1c. Assesses the impact of the environment and potential changes on the heritage.	1c. What will the object be used for? Is the environment or planned care appropriate based on 1b?
1d. Assesses the implication of taking no further action.	1d. If 1b and 1c have determined that the object is stable and will remain so for the reasons it has been called, then do nothing. It is likely the object will at least be given a light clean.
1e. Records or reports the findings of the assessment."	1e. Record all the above.
(Institute of Conservation 2014:1)	*[and to add, many other organisations setting standards for conservation practice ask that you substantiate your decisions (e.g.,* AIC 2001:20-21)].

Table 3 above exemplifies how the condition assessments of the conservator is focused on the documentation of the object, the intended uses for the object, and the environment of the object. Sometimes recording templates will ask for the conditions of the location of where the practitioner conducted the assessment (**Figure 52**). This is both to remind the assessor to consider lighting, temperature, etc., as well as to record the effects of these variables on what

is visible and detectable within that environment. For example, assessing an object microscopically will reveal different types and forms of information than if done by eye (**Figure 5**).



Glasgow museums

Preliminary Condition Report SCULPTURE

Project/ Gallery	**Story Title**	
Registration Number	**Artist**	**Date**
Object classification	**Title**	
Dimensions (mm): H: W: D:	**Current Location**	
Examination Condition: Visual by eye under daylight- macroscopic		
Condition:		

Figure 52. Glasgow Museums blank condition report for sculpture.
Note: Examination Condition: Visual by eye under daylight – macroscopic.

7.2.1.1 Assessing the impact of the environment

For the aspect of conservators' work which includes condition assessing, understanding the impacts of the environment are particularly useful because making determinations about the condition of an object is as much about value and logistical aims as it is about the physical properties of the object and the space in which it is being assessed. The conservator, over time, tunes in to what certain sights, sounds, smells and textures can indicate on the various materials they encounter. Drawing on the senses via the field excerpts below exemplifies some of the ways of knowing wherein conservation practice becomes embodied and enacted phenomenologically. During these forums I was both ethnographer and conservator as access to this field site and its staff was in exchange for aid in their conservation programs. Often these conversations were para-ethnographic as participants shared what they thought of as most importance in the understanding of conservation practice. Ashley-Smith (2018) made controversial yet poignant points when he asked the question: 'Is conservation practice like riding a bike?'. That is to say, is conservation something one learns how to do and never forgets the basics of despite long periods of time without practicing? My interlocutors responded and showed how the space and body are

intertwined in work on heritage objects:

Tim: I think it's more complex than riding the bike thing. And I actually can compare it because I learnt to ride a bike as a child and rode a bike as a child, and then didn't ride a bike for years and years because I didn't have one and then got back on the bike and thought hmmm (high pitched, implying difficulty).

***Laughter in the room

I would say there is a lot of things going on because a lot of it is a particular interest of mine and a thing a lot of people will have heard me bash on about. That as a practical book conservator which involves a lot of intervention, its more on the interventive side, I would argue, um… there is a lot of very fine motor skill going on and that for me is very much linked to musical instruments and practice because if you practice your instrument daily you will have, that knowledge is there, you can still know the notes, your fingers will do those things. If you stop for a while, yeah you can still do it, but the actual muscular, the neurones, the muscles, they're not working the same way. It's like going away for a couple of weeks on holiday, yeah you can be very good before you go, but never ever touch anything very sensitive on the first week back from holiday. Make boxes, get back into the exercise. It is like a muscle; you can go to the gym… If you stop going to the gym it stops, it slips…. That you know that your finger is going to do that (gestures), without actually having to think too much about it.

Chris: And quite a lot of it is feel because in works on paper, um… we quite often will take off the backing material of a degraded board and you're using sort of feel and resistance and angle as you're working your way through a plain. Or you might be cutting mounts, cutting inlays and although its precision work, again you've got to be feeling in that moment for doing it. Apart from having good light and good surface and all that.

Me: So your space comes into as well?

Chris: Oh massively! For me personally, you need to feel like you can spread out a bit.

Tim: And actually, not feeling frustrated with the space because as soon as you're doing that, you're immediately thinking …

Chris: Tired out.

Tim: Mmmm (in agreement).

Chris and Tim are describing a tacit knowledge divided between pre-reflexive and reflexive knowing (e.g., adding to Merleau-Ponty (1973) previously mentioned "measure of being"). They are also hinting at the size and comfort of their workspaces which had a political underlining during my time at this field site as interlocutors from other departments felt Chris had the 'best' workspace (e.g., more space, most natural light, easy access to galleries, etc.) whilst others felt that refurbishment was needed. The bodily interaction between object and conservator is a practice which must be exercised regularly despite the tacit vestiges that remain from ongoing memory and experience (e.g., as covered in Chapter 4). These interactions are imposed on by the environments in which the work is enacted. The place of the heritage institution is the macro-space of the conservation practitioner. Their micro-, more specific, space is the laboratory, the workshop, the studio, the storage facility, and sometimes, the gallery. The distinctions between these locations can be subtle but they are an important reflection of the type of conservation work being conducted within and can have value, logistical, and physical implications reflecting their macro contexts.

For example, a studio is what the paper and paintings conservators I have met call their workplace. This stems from their history as predominantly working on artworks and initially in a very restorative, artistic way rather than the methodological, procedural way of the present. Because of their long histories within established institutions, paper and paintings studios tend to reflect opulence. One such studio rightfully impressed me when I was given a tour: The Hamilton Kerr Institute of the UCM consortium is a conservation studio building, not just a room. In terms of preventive conservation, I was told the age and beauty of the building was not ideal and was especially difficult to manage. Yet the elegance of its façade very much mimics the objects within. The tall ceilings, sky lights, and countryside views invite much needed daylight for the conservator to see and document best.

Grasseni aptly points out that, "the phenomenology of the senses is often associated with a similar distancing from vision, since most arguments for a rediscovery of the body and the senses hinge on a critique of the 'visualism' of our globalized, image-driven, technified society…However, recent literature in the anthropology of the senses has established that vision is cultural, and that different cultures hold radically different metaphors and hierarchy for the senses than the Western, visualist tradition" (Grasseni 2007:2). As Chris and Tim noted, it is the phenomenological experience of objects alongside the functionality of their environment which is fundamental to the condition assessing process within conservation practice. Not only is the lens, physiological and otherwise, by which practitioners assess

important, but could potentially be elucidated via autoethnographical reports. The spaces this work is conducted acts onto what is possible much like the object itself. There is variability in the workspaces of conservation practitioners which exemplify the tangle of these various tangible and intangible properties affecting space, objects, practitioners and their work.

Conservation workshops are tied to the type of objects being treated as well as the type of tools being used. The workshops I have worked in and visited have all been where industrial heritage is often reducing the practitioner to ant-size in comparison to the object weight in the room. This is true bar the space where I intervened on the Tibetan prayer-wheel in Glasgow. This space exemplifies two things: the conservator's needs being valued and therefore when the storage facility was being planned, the heritage organisation included large, well-equipped conservation spaces and not just for the paper and painting studios (although those are still the largest and have the best views and lighting). All these workspaces at Glasgow Museums Resource Centre are associated with the storage area which houses relevant objects based on the type of conservation practice – following, as mentioned in section 5.3.1, a fairly recent model of storage and conservation space in the UK (Spriggs 2014).

Secondly, the workshop had an immense floor loading capacity because the contemporary artworks coming through this object conservator's workshop regularly consisted of heavy, large and difficult to move artworks. Contemporary art generally only requires condition assessment for insurance purposes before it is put on display. Therefore, the tools available for intervention were scarce, unlike the other workshops I had access to which were set up as a trade-based workspaces. In these workshops there is heavy machinery organised by the type of material it can manipulate, there are oil stains on the concrete floors, the walls are made of metal, the ceilings are even higher than the studios, and the sounds produced from work define and ordinarily defy these spaces. When working at Locomotion, The National Railway Museum in Shildon, Tom explains their recent battle with sound pollution as the workshop is within the museum and on display:

> "We've been asked to take our work outside when it requires power tools and that. It's cause there are meetings just the other side of the museum and they can't hear when we're using them. Sometimes the public complains. The thing is, we are always using power tools. I've asked that they tell us when the meetings are on so that we can work around it. They don't always do that of course, but we're working around it. That's what these signs are." [pointing at laminated A4 white pieces of paper with black text reading 'Do you need to be making that much noise?'].

The last kind of workshop I have been exposed to is that of conservation technicians. Much, if not all, the work of a conservation technician can be defined as preventive conservation. Therefore, where they engage with objects are conservation spaces and often mimic the tools and organisation of industrial heritage workshops. Conservation technicians are building mounts for objects to go on display, they are creating storage solutions for objects to be kept properly within and are responsible for the safe handling and movement of objects when called upon to do so by other museum professionals or potentially because the objects require a light clean, for example. Sounds and smells too play a distinct role here as a laser cutter used for mount making both noisily fans away a large amount of heat, as well as divides pieces of plastic to the detriment of anyone whose sensitive nose walks past.

Much like the conversation regarding individual preference and perspective in section 6.2 the conservation laboratory is not only made of the tools within and the sounds it creates, but also is a reflection of the people who use it. In the Arts department at the Fitzwilliam, the senior conservator responsible for the lab is also an avid researcher, a PhD student, and a tremendously busy conservator within the department which contains every type of object, in every type of material so long as it is decorated. Her breath of knowledge is extensive, and her doctoral research is on, yet another type of object based on her early career experience: stained glass. The laboratory is also her office and is often occupied by at least one other conservator (**Figure 53**). As aforementioned in section 5.2.1, the Arts laboratory's capacity does not suit the necessary. In complete opposition is the Antiquities lab (**Figure 53**) located on just the other side of the museum.

Figure 53. Left: The Arts department conservation lab; Right: The Antiquities conservation lab (Fieldwork photographs, Suarez Ferreira 2017-18).

The senior conservator of this lab has a separate office to the laboratory, there is generally more space and there is at most two conservators at work here throughout the day. This senior conservator does not actively treat objects, so she is often in her office leaving the lab empty or in use by her usual UCL intern. She is also conducting research, but not on a particular object or object-type and therefore does not require the laboratory for her research either. The Antiquities lab is always pristine. Its white work benches and neon lights glisten cleanliness. Every tool has its place, and all objects are stored away at the end of the day in designated white cabinets leaving this space feeling cleaner and more peaceful then when arriving. As those responsible for these spaces, the professional careers and duties of these senior object conservators is reflected within their laboratories – the distinctive features of their sphere of activity are their workspaces. The Arts department has a loaded exhibition schedule and a wide remit of collections and acquisition. The Antiquities department was established much earlier in time and has a renowned collection, changing seldom and therefore work is comparatively more leisurely than that of those working for the Arts department. Any condition assessment done of objects will be affected by these spaces. The physicality of the environment, but also the ways in which they are created and used by the practitioners. In their study of anthropology collections, Bennett *et al*. (2017) argue that laboratories and museums are not identical but are both examples of Latour's 'centres of calculation' as loci for ordering practices for materials that are brought together from diverse locations (Bennett *et al*. 2017:25). In these spaces the borderlines of professionalism extend past visual knowledge.

Ocularcentric learning and its correlative forms of professionalism and expertise have been predicated upon the separation of sight from a broader sensory-conceptual matrix, but this does not mean that the other senses have ceased to operate in the context. Within the condition assessment of objects, conservation practitioners cut across the apparently optic circuits of knowledge, responding to and counter-balancing visual cues. By developing bodily skills in relation to sensorial experience with objects, the borders of what constitutes expert knowledge within the museum and heritage sector recedes authorised, expert knowing of material culture into the background (Candlin 2007:103).

7.2.1.2 Assessing the physical nature and condition of objects (via senses)

Sound

Condition assessment and its requirement of close inspection via handling, taping, listening to the material makeup and its potential loose fragments and voids brings touch and vision and hearing together in a multi-sensory exploration. The pushing and prodding by conservation practitioners are the kind of tactile knowing involving the use of the hands in skilled, sensory ways much like the clinical settings described by Pink *et al*. (2014) in their research with nurses and physiotherapists (Pink *et al*. 2014:438; Pink and Morgan 2013:356). Just as sensitive, responsive touch plays a role in patient care and treatment, sound is also integral in assessing and caring for heritage objects (and stone of buildings as seen with Jones and Yarrow 2022 interlocutors). Touching an object to produce a sound can be informative; for example, gently tapping the surface of a ceramic vessel can indicate how dense and high-fired it is (porcelain 'rings' whereas more-porous pottery fired at lower temperatures produce a duller sound) (Pye 2007:123). The multi-sensory elements of conservation practice are what complements it to a phenomenological autoethnographical response by its practitioners. Even the sense of taste plays a role and exemplifies the various materials and modes of distinctive skilled vision involved (Jones and Yarrow 2022:170).

Taste

The way an object tastes is not necessarily going to generate useful information for the conservator, but saliva is a commonly used solvent in the cleaning of objects. Saliva is oftentimes a surprisingly useful and accessible solvent whose enzymes break up dirt without removing patina, adhesives, sometimes pigment, etc. Once used well, the experience of its workability is known and can therefore be challenged in future contexts -allowing the conservator to learn and act on experience. It is frequent that one's own saliva might be used at archaeological sites due to lack of resources and time pressures, for example. I remember seeing my field supervisor lick many a sherd to identify its type, too impatient to wait for end-of-day processing. Unbeknownst to most, and often hidden by those who do, saliva is a common solvent in conservation (**Figure 54**). When used, a part of the conservator becomes part of the object, microscopically after rinsing, but a part of it, nonetheless. And the object becomes a part of them, as covered in Chapter 6.

Figure 54. Image of saliva swabs used to clean a painting (Migdol 2021:1).

Phenomenologically this exchange is what can initiate and embed experiential knowledge. Taste can be through smell (e.g., an object with fire damage often smells smoky but also tastes smoky if the damage is substantial). Smell and taste are a sensory pairing long recognized as interconnected physiologically, but also mnemonically and psychologically. The way a type of material smells, the way its decay has a particular scent and the combination therein, is also learned via experience within the physical interaction of object and conservation practitioner.

Smell

For this discussion on the condition assessing stage of practice, smell is used as an identification tool as some materials have characteristic smells (e.g., rubber, early plastics such as Bakelite, leather). Additionally, conservation materials are often chemicals. This is why a background in chemistry is required when applying to train in conservation in the UK. One needs to understand the chemical decay of materials encountered in heritage objects, and how chemicals function when applied to these objects. Chemical use requires extraction units in labs because they can be toxic and are not ideal for inhalation over prolonged periods. There are many conservation treatments and activities which one can only undertake for limited time intervals, for protection from harsh conservation solvents is advised. A conservator's olfactory tool can be used to identify decay (e.g., mould/damp) and is also indicative of preference within practice. For example, a common grievance is the smell of Groomstick, a sticky rubber used for surface-cleaning.

> "I remember in the lab everyone hated Groomstick. It really smells and stinks up the whole room".
>
> -Rose, Object Conservation Intern

It is reasonable to do less efficient work when uncomfortable, even if triggered by something as innocuous as a smell.[50] To handle an object and use one's senses so that a thorough condition assessment can be made, is learning as best as one can with the body being your most accessible, and potentially, most important tool.

Within preventive conservation, entering a damp store is often a sign of risk. But the smell of an object requires fairly close proximity. This is where all the other senses begin to play a role. One might smell a type of wood, vinegar[51], rot, smoke, or resin (potentially 'tasting' its potency). In each of those moments one will learn what to do next. The mind will create a powerful memory of the scent, its identification, and of how/what needs to be investigated to a make a correct inference for treatment -subjectivity becomes a kind of objectivity (as in Shapin 2016 wine tasting example). There is an anecdotal posturing I use when explaining the work of the conservator: 'Hunched over, mere centimetres from the surface of an object, umming and ahhing, and then eventually nodding, lies the conservator when first asked to look at the artefact'. One might assume this is to have a closer look and indeed it is, but that is also why the microscope or magnifying glass will be turned to next. I think this posturing, whether consciously or not, is also very much about smell (**Figure 55**).

Figure 55. Left: Rose & Mary condition asses the vessel. Right: A textile conservator assesses a cloak made of feathers (Fieldwork photographs, Suarez Ferreira 2018).

[50] I think of Maslow's Hierarchy of needs here (Maslow 1954). The two first basic needs: physiological and security. Being uncomfortable due to a smell and knowing the chemical can cause one harm disallows for the conservator to fully learn from the objects on their bench. Having a conducive work environment, being comfortable and enjoying the objects and practice are all at play. Tay and Diener (2011) furthered Maslow's argument by stating: "Although the most basic needs might get the most attention when you don't have them," Diener explains, "you don't need to fulfil them in order to get benefits [from the others] … They're like vitamins, we need them all" (Tay and Diener 2011:354-356).

[51] The smell of vinegar is indicative of acetic acid.

Like smell, feeling an object during the condition assessment, its surface, its weight, its fragility will help identify the condition of said object as well as establish memory for the conservator. By using their hands to manipulate an object, information is gained (e.g., opening a book to test flexibility). The resistance or vibration encountered by encircling, lifting, and/or moving objects aids conservators to assess the weight and density of the object (e.g., solid gold weighs more than a less valued metal with a gilded surface). Handling is limited by size, where very large objects cannot be moved with hands or tiny objects such as beads require the aid of tools. After or whilst looking, touch is used to verify (or not) what has been detected by the other senses (Pye 2007:122-124). To exemplify, one can look to handling sessions.

Touch

Handling sessions are often done in museums for other museum professionals, as well as students, volunteers, and even the public so they can understand how touching an object embodies particular information. It is one of the first skills a conservator is taught. The basis of these sessions for training is also to establish the notions of fragility, risk, and hazard – an emphasis on what can physically be controlled, much like the condition assessment in total. Below is an excerpt from my observations of a handling session. Here my positionality was predominately as ethnographer as I observed the taught practices of object handling:

> There are two groups of about 12 students participating in the object handling training. I walk into the first room which is very well lit and has been arranged with one large table in the center of the room. The students are already sat down with an object in front of them, the table covered with bubble wrap and three layers of Tyvek.[52] The instructor begins with emphasizing how important this training is:
>
> > "object handling is essential for your role with a museum and essential for keeping your job!"
>
> She says this with a laugh but emphasizes the point throughout the training. She then begins by asking if anyone has museum experience and if they have ever witnessed the mishandling of an object which went badly.

[52] Tyvek is a white, water resistant, difficult to tare, inert sheeting often used to cover objects, package objects, or as table clothes with handling/working within objects.

Five of the students have previous museum experience, four have witnessed objects breaking from poor handling. One student offered her testimony: a fossil 'slip-up' within a store. Another noted working with a handling collection and children who often experimented on the strength of objects by banging them on surfaces. A more 'shocking' tale of a curator attempting to remove adhesive from an object with a scalpel and damaging the object in the process.

The instructor goes around the room so she can face each individual when they are sharing. She gives examples of how these situations could have been handled better. For the fossil slip up, she suggested that one's body position is key and something to always be aware of. For the handling collection and children example, she notes that these are normally deemed as 'low risk' and that an option might be to do a handling session with children beforehand and when doing so, try and keep the session to a maximum of four individuals. Preparing a surface as she has done for the students is always advisable so that the objects at least encounter some support when handled. The situation with the curator is a 'no-brainer':

> 'consult a conservator, do not attempt to remove adhesive or foreign substances from objects, this is the role of a conservator'.

The instructor then begins a more formal lecture structure by addressing the key points of object handling before asking if there are any questions for engaging with the objects on the table. Exemplified is how handling is a case of the entire body, not only the use of hands as clothing plays a key role in managing risk.

The first thing said is that humans pose the largest risks to objects. One might think it would be a leaking pipe or something similar, but in fact, these types of disasters are rare and human interaction with objects causing damage is common. 'Keep your job by handling things properly' she reiterates. The next key thing is dress:

- Wear appropriate shoes; ones that lace up are sure to be on properly.
- Your clothing should not have tags, buttons, ribbons that could catch on the object.

No belts, especially with open, large buckles; the middle section of your front body should be clear of hazards, especially when working with large objects.

- When it comes to jewelry, ‘bare below elbow’ is a good rule-of-thumb: no rings, bracelets, watches, etc. No necklaces without a short chain or ones that have ‘jabby bits’, etc.

The next key aspect of object handling is wearing gloves. She asks that the students take a pair that is the appropriate size.

These are plastic which are generally used by most museums in the majority of circumstances. An exception at this museum is when handling furniture, cotton gloves are used. Cotton gloves need to be laundered regularly and do not provide the dexterity required to handle most objects.

The last aspect is one already mentioned: the prepared surface (the environment).

She emphasizes the cost of Tyvek pointing out that there are £40 worth on the table, so reuse is vital. Tyvek does not catch and is durable. Along with a prepared surface is the prepared space. Handling objects in private, away from the public is key. The curiosity of the public can be a hazard.

As Fiona Candlin notes in her chapter as part of Pye’s (2007) book on touch, handling an object is emphasised in training as a sign of status and should therefore be acknowledged as a privilege. “Touch is hierarchical and proprietorial. We touch what we have relative power over and, conversely, in touching we establish our rights to that person or thing” (Candlin 2007:96). Conservators ‘rights’ over an object are connected in part to expertise but also status where conservators do not necessarily touch objects because of what they know, but because being a conservator entitles them to do so. Conversely, as the handling session emphasized, nobody disputes that some objects would be damaged by handling but what is at stake is not only the vulnerability of the collections but also the professionalism and standing of the conservators. Additionally, much like the conversation about access to conservation records, the public is seen as having ‘grubby’ hands and so the privilege of touch is left to museum professionals such as curators and conservators. Yet conservators can be seen as having slightly more ‘rights’ as with the exchange of DNA via saliva swabs -conservators exchange power with, and have the power to change the object, both through touch (Candlin 2007:95; Henderson 2022). And conservation is not a ‘one-off’ act of exchange, but a continuing process revealed through its continual documentation (Pye 2007:122; Waterton 2010).

Then comes the gloves. Interestingly, in object conservation one's sense of touch needs to be learned through protective nitrile gloves. Even though conservators may not touch an object the hundreds of times required to advance decay (as emphasized in the training session), their awareness of the effect on such a large-scale means gloves are almost always used by objects conservators no matter the type of object. There are exceptions but also specialisms within conservation who almost never wear gloves. I was able to work with paper, textile and ceramic conservators who rely on their dexterity to produce their best work. Paper and textile conservators learn about the condition of the fibers from which the object is made by touching them. The barrier of the glove can be restrictive but one's body learns how to feel through the elasticity and cling of a sweaty hand. Perhaps the analogy often made to surgeons and surgery is apt here – for both the general approach to stabilization and repair as well as the tools involved: gloves and a scalpel are both present (Spaarschuh and Kempton 2022:371; Jones and Yarrow 2022:140).

The sense of touch can also encompass one's entire body. The interview excerpts below were acquired when my positionality was predominately as an ethnographer as I was not a participant in these recollections as a conservator or otherwise. Heavy objects that take effort to move as well as objects which require one's body to be positioned uncomfortably, may be objects one cannot work with to the best of their ability. Here is an interlocutor's experience of using her entire body to conserve:

> "To explain about being upside down. So, the grave is like here (pointing down and making a rectangle on the table), it's really big, it's really wide. If you're trying to reach into the middle without disturbing the bones directly here (pointing to an edge near the middle), I was rigged up 'very safely'. Really (a facial expression indicating *not good*). Like some guy on a rope, kind of tied on the ladder, like a pully. Leaning over the ledge. I had one foot *jusssst* about on the floor and leaning over like that. Like it was fine, but we definitely did that for like maybe 20 minutes and I was like: A. I'm super uncomfortable. B. I feel really faint. And its terrible health and safety, my back is killing me. This is not a sustainable position, so yeah." -Leslie, Conservation Student

Or maybe suffering for the conservation of that object has imprinted that experience onto the practitioner. Bill, an early-career conservator, once commented about the patterns inscribed onto this meter-wide Burmese drum which caused him physical, mental and perhaps, emotional ailment. The conservator examines the object whilst condition assessing, and at this point the preliminary recording of the object begins. One's body records the object, employing senses and experience. Bill spent eight hours a day with the Burmese drum (**Figure 56**) on the floor as he patiently removed dirt with a bamboo skewer (surprisingly, the

only method which would actually clean this massive object and therefore took a very long time). As seen in **Table 3**, a light clean can be part of the condition assessment. For Bill, this light clean took a long time because of the size of the object. The patterns on its surface were engrained into his mind's eye: he would only see these patterns; he only dreamt of these patterns, until, finally, the object was assessed, ready for display and in his conception of it, it was not just a Burmese drum but also an object of patterns (**Figure 50**). It is such experiences that determine a need for experiential recording of objects as the privilege of embedded patterns is solely within Bills memory. The digital images shared do not do justice to the detailed patterns present on the drum, they cannot be seen from where it is displayed (**Figure 57**) and have been sketched by Bill for his conservation approach but otherwise have no record. With an accessible, phenomenologically described record of the drum, the viewer could be prompted to feel patterns as the maker who chiseled them into creation, or as the conservator assessed and cleaned into memory.

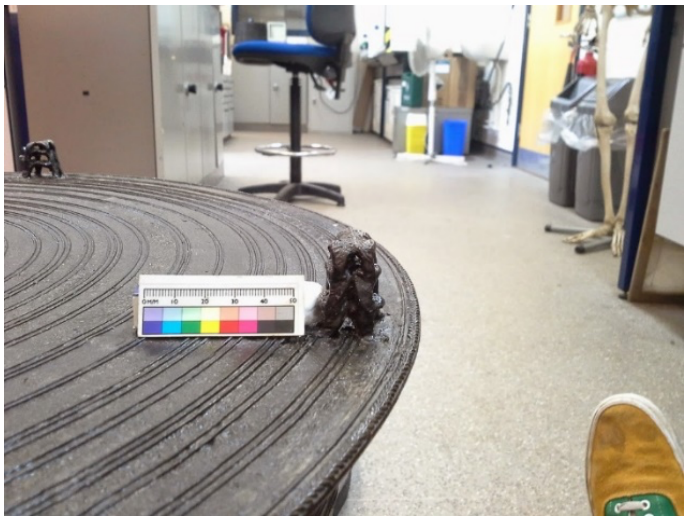


Figure 56. Bill's foot can be seen on the bottom right corner of this image, showcasing his bodies contortion to work on this object (Interlocutor's conservation image 2013).

Figure 57. The Burmese drum on display. The patterns on the top and sides of the drum are not very visible (Suarez Ferreira 2015).

Understanding through touch begins with examining the object and can be extensive. One of the most important investigative skills a conservator is trained into is the skill of not just looking, but of seeing an object, a searching examination. This is achieved by careful and systematic exploration of the surface, using focused light, perhaps a magnifier or microscope and reflecting on what is seen. There comes a point when a conservator touches the surface of an object to check what has been seen (Pye 2007:122).

At a meeting with the head of conservation of one of the participating institutions, she noted:

> "I will never forget the basics: how to hold a scalpel, how to use a microscope, how to make up B72[53], but there are aspects that you lose along the way. Like your sight!"
>
> -Hilary, Senior Conservator, Conservation Manager

Sight

The skilled vision of the conservation practitioner has been explicated throughout this thesis. It is a complex combination of training, experience, exposure to materials and objects, as well as influenced by the practitioner themselves and their knowledge, preferences, and

[53] Hilary meant Paraloid B-72, a thermoplastic resin used frequently as an adhesive or coating within conservation treatments.

capabilities. When speaking on the physicality of vision to non-conservators, I tend to explain how, after training, the experience of a museum is never the same. Now, instead of walking into a heritage institution and seeing the material culture, the conservator also sees the relative humidity monitors within the display cases, the areas of an object which have been previously treated, the light damage on the textile used for display, the lack of acknowledgement to conservation practitioners within the message boards at the beginning or end of the exhibition. The eye is now tuned to detail that was largely invisible before training and in that way, the experience of a museum gallery can feel less enchanting. The visuals under the microscope are now the ones committed to memory and reignite the 'magic' (Gell 1998). Despite meticulous documentation as prescribed by present guidelines and codes, conservators' can see their interventions on all the objects they have treated better than anyone else and that is why experience of the object is an invaluable resource towards its overall understanding.

One of the most striking tales from an interlocutor was of how she now saw an object:

> "My first ever job was at the Pitt-Rivers, and I thought it was such a big deal. I had total imposter syndrome, still in disbelief that I had been given the job, waiting for them to find me out. And I had committed to the job without thinking about the other bits in my life. My boyfriend was in London, and I was trying to keep things going with him and move myself to this new place I'd never been and where I knew no one. And I was *just* managing to take care of myself. It was a stressful time even though it was exciting too, of course. One of the first things I was given was this golden lion. The thing must have cost a fortune and then of course it was, probably is, the only one of its kind. And they give it to me, I'm the conservator, I'm responsible now. It took an age to conserve, and all this stuff was happening in my life through that time. It is still on display, I think, but now thinking on it and any time I've seen it since. My life has obviously moved on a while ago. I do not see the lion or the treatment or anything like that. I see that lion and I see my life in that moment. Everything I was going through."
>
> -Hilary, Senior Conservator, Conservation Manager

Similar to Bill's experience of the Burmese drum remembering an object he treated as patterns, Hilary remembers the golden lion not as a heritage object, conservation project, etc. but instead as a time in her life. The object imprinted into to her life-history narrative and the cycle of how and what she did to conserve the lion was contingent on this moment in her life (her skillset, her confidence, the objects effect on her, etc.).

Sight and touch are the essential tools for understanding the composition and condition of an object and are important senses for conservators, but the other senses are also informative. Some materials have characteristic smells (often associated with taste:

'vinegary', 'smoky' etc.), and touching an object to produce a sound can be informative and a quick way to discriminate between different materials. With skill and experience, hands and the body are precisely diagnostic and can be extended with the use of hand tools and through plastic gloves. It is often in conservators' engagements with the material culture through the hands that the personal and the institutional, as well as the informal and formal, intersect (Pink *et al*. 2014). Conservator's actions are not neutral but add another layer to the history of objects. However, many conservators attempt to avoid obtruding themselves, all conservation involves interpretation and causes some change to an object (Henderson 2022). In this sense, conservators make a personal statement and leave their signatures on the objects (even potentially their DNA). The emotional impact of an object does not necessarily require us to handle them, vision is still important. But physical contact and proximity is powerful and unlike the distanced gaze of the public viewer: "Objects can touch us as much as we can touch them. Handling an ancient object such as a flint tool or copper alloy axe-head brings us closer to its prehistoric maker and also sends a powerful message about the maker's skill in manipulating the raw material" (Pye 2007:134). Fragility is not only due to the age or material makeup of an object but also, and maybe more importantly, what these objects represent, imbue, evidence, etc. (even though this was not emphasized during the handling session).

In describing experiences of them, conservators can challenge their own authority to sensorially know and change them – revealing the decidedly non-neutral values and association fore-fronted within all conservation decision-making (Pearlstein 2017:443). Indeed, in an interview with Blackman (2008), Muños Viñas described conservation as being in the service of preferences rather than truths and that conservation 'should maintain as many meanings of that single object as possible: it should not exhaust the ability of an object to transmit different messages' (Blackman 2008:20-28). The messages can come from the conservator themselves, another human enacting change onto the bibliography of the object via experiences of patterns or life-experiences in themselves, for example (Henderson 2022). If significance is to be the precursor to conservation intervention and acknowledge a values-based and/or peoples-based approach to practice, for example, we must first acknowledge the embodied, emotive creations conservators experience of objects as well. Krmpotich (2019) shows with curatorial documentation, this acknowledgement can be within records and aid in knowledge production which is more diverse and inclusive of various ways of knowing.

Hilary's golden lion defines a particular time in her life, an object that is now as much a part of her biography as she is of its.

7.3 Conclusion

These sections on the senses add ethnographic depth to some of the experiences conservators have when performing condition assessments on objects and help further 'an epistemology of practice implicit in the artistic, intuitive processes which some practitioners do bring to situations of uncertainty, instability, uniqueness, and value conflict" (Schön 1994:49). This includes both those who embrace an intimate practice with heritage objects and those who resist or propose no such thing occurs. The initial opportunity to explicate all such experiences is when the individual conservator is condition assessing an object. The complexity of individuals' conservation practice on heritage objects and how that affects the objects' own history shows how conservation records are as diverse as conservators (Eastop & Simila 2007), each individual documenting an object in a way which makes sense to them. Even within standardized recording templates (Appendix V), the conservator will see and experience different things about the object. This could be influenced by their experience as a conservator, both in terms of how they were trained and what kinds of materials they have worked on previously. They can also be influenced by where the object is assessed and by the object itself which can produce a certain attraction or repulsion to certain people. There may be elements of an object which ignite curiosity in one individual and not in the next. Therefore, the observation of that object and its documentation are individualized in a foregrounded multisensory experience (i.e., condition assessing).

Similarly, a conservator's interaction and intervention on an object will be based on their capacity. What one conservator sees and deems fit for conservation treatment another can completely miss. The materials and methods of conservation practice, both in its preventive and interventive forms, are also based on the conservator who oversees the care and conservation of the object or collection. Actions can be made out of objects and conservation can create objects out of action (Jones and Yarrow 2022:211). This perspectival profusion can be of benefit within autoethnographical, sensorial conservation records where what is being recorded about an object, is also a representation of conservation practice over time.

An investigation of the qualities of objects as experienced by practitioners might prove productive in the understanding that the 'subjective' aspects of conservation are not superficial elements constructed on the bedrock of an invariable materiality but are the means

through which the material world reveals itself to us. It is instructive to consider the variable ways in which the culturally constructed moods, attunements and emotional states of conservation practitioners in a variety of contexts disclose their material surroundings and conditions to them (Thomas 2006:56-57). Indeed, as Howes (2006) argues, the implication of 'the sensual' turn in material culture theory has shown that material culture, in addition to materializing social relations, gives expression to a particular set of sensual relations. In sympathy with Buchli's (2002) critique that material culture studies had reduced objects with inarticulate realms of sensual experience into classification and exhibition and that conservation conserves nowhere near as much as it produces a particular order of things, Howes (2006) argued that to truly access the materiality of an object, those qualities which cannot be reproduced in photographs (the feel, weight, the smell, the sound) are essential to consider (Howes 2006:168-169). This model of intersensoriality compels us to interrelate sensory media and objects, to contextualize them within a total sensory and social environment. While all objects may not be conveying the same message, or given the same attention, they are nonetheless all playing on each other in the experience of conservation practitioners. This exploration of sensory relationships and embodied experience pushes conservation into a full-bodied discipline (Howes 2006; Pink 2015).

As seen with my experience of conserving the Tibetan prayer-wheel in Chapter 1, due to the expected norms of present practice, my conservation record only stated the facts of condition and treatment. What was never written was how the project of the prayer-wheel was marred by a stakeholder aesthetic/authenticity conflict the curator and supervisor led me through. The condition assessment did not include how the lack of care was made obvious to me not only when inspecting the object but by my visit to where it had been stored. The ethical quandary the stakeholders led me down was never noted. Throughout treatment, the significance of inscribing a prayer to be placed inside the wheel is something I could only understand by reading about it, but not something I could understand as those who wrote the prayers had. The object felt like it was challenging me, decreeing its own agency when it refused to be cleaned. Which felt like an unjustifiable report I could make. I did have a conversation with the director of my course about the vacuum incident, and he dismissed what had happened and my feelings about it. From his perspective, museum objects lose their originally assigned agency, mysticism, religious intent, etc., as soon as they enter the museum (see Hall 2002 for a similar situation and conclusion). A position which is seemingly in contradiction to both a values- and peoples-based approach if the identity of the object

becomes predominantly one of its current uses, not that which had qualified the object as heritage to be acquired in the first place. As a student novice, I heeded my program director's perspective and cleaned the prayer-wheel, repaired it back to one whole object, and wrote the report without a hint of the emotional turmoil I had faced and still feel from having intervened. At the end of my time with Glasgow Museums, my own life-history narrative had been imprinted by my conservation of the prayer-wheel. This imprinting within conservation practice as discussed in Chapter 6 and above are memories of practice which are also valuable conservation records. It brings the conservator closer to the unauthorised values and/or peoples-based approaches by conceding that the values of the conservator are also of importance as they represent **only** the next human to come into direct and significant contact with the heritage object.

Objects as the subject of biographies have been studied through ethnographic research which tries to render a narrative of how certain objects are perceived by the persons they are linked to and through efforts of interrogating objects via historical and archaeological research making mute objects 'speak' by placing them in a historical context and linking them to written sources.[54] These biographical approaches to the study of objects are particularly anthropological because they tend to concentrate on 'the act' in the context of 'the life' -or a particular stage of 'the life' like when can object is conserved– and so the life cycle of the individual agent. This biographical depth works best in the spaces traversed by actors in the course of their own biographies, focusing on relations of the persons who produce and circulate objects (i.e., conservators in museums are the only humans with this level of access and authority to act onto the objects).

Seeing conservation practice as moments within object biographies as well as moments within conservator's biographies enables other forms of knowing to be elucidated from the practice. Documenting such embodied and multisensory engagements with objects can help build cultural archives and render museums as sites that trace sensory engagement through time. This opens channels to imagine and document objects as alive and engaged in ongoing interactions and relationship with people, other objects and their environments (James and Ashton 2007; James 2007; Matthews 2016; Krmpotich 2019; Henderson 2020). Krmpotich (2019) calls for curatorial/museum records to include sensorial experiences of the objects they document. She concluded that the connection between multisensory museum

[54] Find similar work with museum collections in Errington 1998 and Kirshenblatt-Gimblett 1998.

practice is a form of democratization and inclusivity. If museums are truly invested in these changes, it stands to reason that conservators documenting objects in this way can internalize such a multisensory approach and bring heritage institutions closer to goals of cross-cultural discovery, inspiration and education (Krmpotich 2019:104; Howes 2014; Henderson 2020).

The next and final chapter of the thesis will begin with an overview of how interlocutors wanted an expertise that was valued but not at the expense of its premise, fighting against unjustified, exponential acquisitions and mismanaged resource allocation. As shown in Chapter 6, interlocutors began seeing how transparency of the work, including the widest spectrum from computer work to intervention, could aid the public program of the museum. An opportunity for transparency came with this call for autoethnographic conservation records as a step toward the public need for an unauthorised, diversely represented heritage sector that is both lived and shared.

Chapter 8 Conclusion

Figure 58. The ceramic bowl above has been conserved many times. Its newest and currently, most important, identity is how it showcases the work of the previous conservator. The lead staples used to hold its fragmented body together are evidence of conservation practices in the past when this technique was the norm. Present conservation is not nearly as obvious and therefore we have and could better utilise conservation records to tell us similar stories (Suarez Ferreira 2018)

I end the thesis with a summary of reflections by the practitioners I worked with: many of them feel disillusioned in training and undervalued even when experienced (Chapter 4), disgruntled with the lack of intervention (Chapter 6), unhappy with the continual acquisition of objects where there is no resource to care for it (Chapter 5), and most recently, are waking up to issues of ethics and the colonial, elitist past of many heritage institutions in the UK. I hope narratives such as these bring conservation of material culture heritage closer to reflection as the work slips or maybe even digresses from preserving to negotiating to quantifying for show. As Schon pointed out about the practitioner who does not reflect-in-action:

> "as a practice becomes more repetitive and routine, and as knowing-in-practice becomes increasingly tacit and spontaneous, the practitioner may miss important opportunities to think about what he is doing… And if he learns, as often happens, to be selectively inattentive to phenomena that do not fit the categories of his knowing-inaction, then he may suffer…" (Schön 1994:61).

And so, I structured this thesis with reflection of my own practices beginning with the Preface. An autoethnographical account of my life-history narrative starting from the introduction of artefact studies to the conceptualisation of my doctoral research situated the thesis in reflexivity. This was highlighted in the Preface by my experiences of theory-into-practice conservation pedagogy in comparison to my peers and our varying experiences of professional practice (Henderson 2016). It did so phenomenologically or with deep descriptions of my experiences rather than purely relying only on explanations and causes. Boyer (2008) asks how do we document another expert culture without re-framing their knowledge into one's own analytical categories. As an object conservator, I related to the experiences of object conservation practitioners participating in the study. I learned reflexivity from being both an ethnographer and conservator, allowing for a more nuanced understanding of interactions with interlocutors, institutions, and objects. I avoided a crypto-rationalist orientation, understanding the basis of conservation processes with sensitivity to different realities having experienced them myself. This approach allowed sympathy and experiential understanding to what was shared by interlocutors without unnecessarily abstracting from patterns or happenings observed (Michael 2017:151-152). This positionality influenced my research questions and aims, the perspectives I adopted carrying out the research, my motivations and how I conducted the research, as well as how I analysed the findings. I used ethnography in order to understand conservation practices on their own terms; and this understanding then allowed a position to critically think about the limitations

of these practices and the assumptions that inform them. Critical possibilities arose from the ethnography as part of the role of ethnography is to highlight the structuring assumptions that may be paradoxically invisible to practitioners because they are too familiar and therefore taken for granted. Autoethnography allowed me to be honest and direct about this positionality from the beginning of the thesis onwards. Through this lens and para-ethnographic contribution the thesis contributes significantly to the academic discourse on conservation, challenging existing theories and introducing new insights based on the lived experiences of myself and interlocutors within diverse conservation settings.

The section below encapsulates the essence of the research, emphasizing its contributions to academic knowledge and its relevance to wider societal issues. Through a detailed examination of the conclusions and recommendations, it articulates the significance of the findings and their potential to influence both academic scholarship and practical applications.

8.1 Key Findings and Contributions

This final section of the thesis aims to explicate the main conclusions and recommendations derived from this study. It is structured to underscore the significance of the findings within the broader academic field, highlighting the pivotal contributions to knowledge and their broader implications. My analysis yields several key conclusions that underscore the importance of my research within the academic domain.

First and foremost, the findings offer new insights into previously underexplored areas, filling a critical gap in the literature. Ethnographies of archaeological practice within the UK (Edgeworth 2003; Yarrow 2003) led to ethnographies of conservation practice but thus far, the practitioners studied were engaging in specialised forms of conservation: textile conservation (Malkergeorgou 2010) and buildings conservation (Yarrow 2019; Jones & Yarrow 2003, 2022). Both these specialisms have specific training, training programs, and applications, and although they both apply the theoretical approaches seen throughout heritage conservation practice, they have both traditionally been seen as a separate expertise. For this reason, my study of object conservation has been significant. Following Boyer's (2005) manifesto to the study of expertise, my study not only included practice as applied to a range of heritage material, but it also opened up to a range of conservation practitioners,

showcasing and defining a more representative understanding of heritage conservation within the UK.

Chapter 4, titled "Experience of Expertise," laid the groundwork by delineating the variety of practitioners encountered during fieldwork, ranging from students to seasoned conservators. It critically evaluated pedagogical approaches, spotlighting the disconnect between theoretical knowledge and practical skills. This chapter underscored the foundational role of practical experience in building confidence and expertise, challenging the traditional perception of expertise as solely intuitive or tacit (Montero 2021) and revealing the setbacks of a 'theory into practice' pedagogical approach (Henderson 2016). Through various forms, including focus groups and participant observation, the research also unearthed the undervaluation of skills not rooted in formal academic pathways, highlighting a concerning trend towards socio-economic homogeneity within the profession. This segmentation of knowledge not only underscores the challenges of nurturing diversity and inclusivity within the museum and heritage sector but also points to the broader implications for the cultural heritage landscape. The findings from Chapter 4 illustrate how practical skills, essential for intervention in conservation, can often be side-lined due to institutional and collegial underappreciation. Furthermore, the chapter highlights a looming obstacle for aspiring conservators—the financial burden of gaining necessary experience. These circumstances contribute to the perpetuation of an elitist, Western-centric conservation tradition, fundamentally complicating efforts to diversify the museum and heritage sector.

The thesis also makes other significant contributions and challenges current pedagogical methods, questioning the Eurocentric/Western biases that shape conservation theory and practice as critiqued by numerous scholars, including Winter (2014), Mehr (2019), and Harrison (2013). These critical heritage studies scholars have often critiqued conservation in quite generalised terms, highlighting the underlying assumptions of an authorised discourse. My work questions this, by situating these generalisations ethnographically. From this perspective I shed light on conservation practices by showing their complexity, the tensions that individuals navigate, the complex and difficult work of translating principles into practice, and the importance of interpretation. In doing so I have built on some recent work in the area (Malkergeorgou 2010; Ashley-Smith 2016. 2018; Yarrow 2019; Jones & Yarrow 2003, 2022) but I have applied this to the domain of object conservation to show the specific issues that arise for this wide-spread and varied discipline and its practitioners. The result is a more differentiated understanding than in accounts of the authorised heritage discourse (Smith 2006)

For example, not only does the thesis presents a critical review of the history of interventive conservation theory, arguing for a decentralization of the expert conservator role to diversify heritage discourse and practice. The narrative weaves through personal experiences and observations in the field, juxtaposing them against established conservation theories and guidelines, revealing their limitations and the need for a more adaptable and inclusive approach. The thesis also makes a compelling argument for re-evaluating and expanding the conservation discourse to include more diverse perspectives and methodologies. It underscores the significance of reflexivity in conservation practice, advocating for a model that recognizes and embraces the dynamic interaction between the conservator, the heritage object, and the broader cultural context. The recommendations put forth aim to enrich the academic field of study and practical conservation work, fostering a more inclusive, and nuanced understanding of conservation that is crucial for navigating the complexities of preserving our cultural heritage on a global scale.

Jones and Yarrow's 2013 article *Crafting authenticity: An ethnography of conservation practice* examined buildings conservation at Glasgow Cathedral, using an ethnographic perspective to reveal how conservation actors navigate networks. Jones and Yarrow's ethnography highlights the importance of conservation actors, other actors, the context of the conservation project, and the material object itself in ensuring the authenticity of maintenance, repair, and reconstruction. They argue that authenticity is not a subjective construct but a distributed property that emerges through the interaction between people and things. Their study highlights the subtlety and reflexivity of various actors in addressing problems and self-reflection in their role as buildings conservators. In Yarrow's (2019) further ethnographic research on conservation and renovation practices in England he reveals that buildings are attributed with a 'thing-like character', highlighting the importance of conservation to a diverse range of actors and orientations. Indeed, heritage experts have been encouraged to practice self-critical reflection and emphasize democratic heritage involvement (Hølleland and Skrede 2019:8-9).

At the core of my investigation is the discourse on the roles of interventive and preventive conservation, as discussed by scholars such as Muños Viñas (2005) and Ashley-Smith (2018). This discourse sets the stage for a deeper examination of conservation practice, emphasizing the importance of reflexivity in understanding the impact of intervention on both the object and the conservator. The introduction employs a case study of a prayer-wheel to exemplify this theme, highlighting how standard conservation pedagogy and professional practices often overlook the emotive and sensual connections to heritage objects. The

research traverses theoretical and practical realms, utilizing an autoethnographic and reflexive methodology to scrutinize how conservation activities not only affect the heritage objects but also shape the conservators themselves, adding new ethnographic depth to heritage conservation discourse.

By evidencing the condition assessing recording process as already including phenomenological, multisensorial perspectives the thesis calls for the additional layer of autoethnographic experience to create more holistic, inherently reflexive records (Stigter 2016). The thesis exemplified that sometimes what is found in multisensorial experiences with objects is a human experience. This creation of memory has less to do with the practitioner's conservation approach or skilled-vision of the object (Grasseni 2007), but more so as a moment of imprinting – they to the object and the object to them. It stands to reason that documenting objects in this way can internalize such a multisensory approach and bring heritage conservation closer to goals of reflexivity, cross-cultural discovery, and inclusion (Krmpotich 2019:104; Howes 2014; Henderson 2020). Attending to embodied and multisensory engagements with objects can help build cultural archives in the manner proposed by James and Ashton (2007). In turn, museums-as-cultural-archives can render a collection (including its documentation) into a site that traces how sensory perception and sensory engagement is shaped both by culture and through time. For museums, it opens real channels to not only imagine, but also document objects as alive and engaged in ongoing interactions and relationships with people, other objects and their environment (Matthews 2016).

Jones and Yarrow's (2022) account of built heritage professionals reveal how they re-imagine their role in relation to ideological changes in approach. They highlight how broader challenges to expertise are situated in specific ways, associated with redefinitions of the role and nature of the historic environments they manage. They also highlight how values-based approaches reconfigure intrinsic understandings of heritage without entirely displacing them. These contradictory versions of the aims and remit of conservation are threaded through the working lives of conservation professionals as a range of conflicts and contradictions. Similarly, Spaarschuh and Kempton (2020) saw conservators spread between materials-based and values-based conservation approaches, with the object's individual context, condition, and biography determining what was enacted. In most cases, the welfare of material heritage was set first. Stakeholders' positions and wishes were considered and integrated in the development of conservation concepts, but the welfare of the material heritage was set as the

priority showcasing the difficulties in applying a peoples-based and even in some cases a values-based approach.

Chapter 5, "From Ethnography…", expanded on these findings by engaging with the ethnographic complexities of object conservation. Malkergeorgou's 2010 found that conservation influences management policies and practice by reinforcing the concept of materiality and aesthetics, making safeguarding the intangible accessible only through museum hierarchies (Malkergeorgou 2010:376-385). My work has developed this further with a poignant case study on historic fans shedding light on the financial and ethical dilemmas faced by practitioners, revealing the restrictive nature of existing ethical codes and standards of practice. The chapter critically examined the recent 'peoples-based approach' in conservation, suggesting that such an approach is not often seen nor practiced within UK heritage institutions. Instead, when conservation practice involved a multitude of stakeholders this often serves the interests of a select few—fundraisers, curators, directors—over a community possessing a direct connection to the heritage at stake.

The narrative further reveals conversations with professionals in the field, who express a yearning for 'the bench' - a metaphorical space where the practitioner's intimate engagement with conservation processes is made physically and emotionally manifest. These interlocutors articulate a desire for a practice that retains its core values and expertise without succumbing to the pressures of unjustified acquisitions and poor resource management. This illustrates a widespread concern among conservation professionals about maintaining the integrity and purpose of their work in the face of institutional challenges. It highlighted a significant issue within the heritage sector and conservation field: the accumulation of unconserved, undocumented collections (Tomás-Hernandez 2021), which poses a critical question about the fundamental role and integrity of museums and conservators.

Together, Chapters 4 and 5 illustrated the multifaceted challenges faced by the conservation profession. They underscored the importance of practical experience, the need for a broader socio-economic diversity within the field, and the complex interplay between financial constraints, ethical considerations, and institutional practices. These chapters contribute to the wider academic discourse on conservation by presenting a nuanced understanding of the profession, advocating for a more inclusive, ethically scrupulous, and practical skills-oriented future. Through this research, the study not only enriches the academic field of study but also offers valuable recommendations for evolving conservation practice in a manner that is inclusive, diverse, and aligned with the changing needs of contemporary society.

The addition to academic discourse then extends into the negotiation between conservators and the material heritage they engage with. Chapter 6, titled "The Material Object Negotiates," explores the role of material heritage in conservation practice, emphasizing the agency of matter. Objects are not passive recipients of conservation but are active participants that transform, damage, and form alliances in the world's continuous becoming. This perspective challenges traditional conservation interventions (Hall 2002) as well as contemporary conservation approaches, highlighting the importance of recognizing the material and social lives of objects. Furthermore, the difficulties conservators face in treating or intervening on objects underscore the significance of the material transformation of objects as integral to human existence.

The thesis engages with the concept of language materiality (Shankar and Cavanaugh 2017), investigating how the material world and human interactions with it are mediated through language. This concept offers a lens through which the social and biological lives of objects, as perceived by conservation practitioners, can be understood. It posits that heritage materials demand certain responses from practitioners, from bodily commitments to navigating unknowns and employing conservation as a language to articulate these engagements. The thesis underlines the inherent value of experiential memories within the conservation domain, arguing that these recollections serve as indispensable records of conservation in their own right. This claim situates the discussion within a broader academic contemplation on the importance of personal narratives in enhancing our understanding and practice of heritage conservation.

Central to the thesis is the exploration of condition assessing objects as a means to unravel the sensorial experiences tied to heritage conservation (Chapter 7). This inquiry into the tangible and intangible impacts of interacting with artifacts illuminates the deeply personal and professional significance these encounters hold for conservators. By emphasizing the thematic conclusion on self-reflection, the work underscores how the introspective examination of one’s practice can lead to meaningful insights and reforms in conservation methodologies.

Additionally, the thesis posits that transparency throughout the conservation process, from digital documentation to physical intervention, can significantly enhance the public’s understanding and appreciation of museum programs. This transparency, coupled with the introduction of autoethnographic conservation records, presents an innovative approach to demystifying the conservation process. Further study will require investigation and experimentation as to how this new approach could be implemented, sustained, and impacted,

but the thesis has begun the substantial theoretical discussion as to its need. By doing so, it paves the way for a heritage sector that is representative of diverse narratives and accessible to a broader audience, thus meeting a public demand for a more inclusive and participatory understandings of heritage.

In sum, the thesis offers a compelling argument for the integration of autoethnography into conservation practice. It highlights the dual significance of such an approach in both enriching professional practice and fostering a deeper public connection to heritage. Through its detailed examination of the sensory experiences of conservators, the call for sustained self-reflection, and the advocacy for increased transparency and diversity in the heritage sector, the work contributes significant insights to the wider academic field of study on object conservation in the UK.

Conservation is widely heralded as a beneficial practice, yet its specific value remains a point of debate, especially within the institutions tasked with heritage conservation (Ashley-Smith 2018). The work of conservators is complicated not only by the intricate requirements of conservation itself but also by the broader societal and institutional dynamics, including prejudice among practitioners and the contentious nature of what constitutes a collection versus “treasure hoard" (Hicks 2020). Pendlebury (2008) encapsulated the challenge facing the heritage sector as it navigates sustaining its relevance and practices amidst shifting societal values towards greater inclusivity and away from historical elitism. This study underscores the vital role of ethnographic inquiry in contributing to the understanding and resolution of pertinent, long-standing problems within museums.

The study provides concrete recommendations that aim to guide practitioners and scholars alike. These suggestions are rooted in a comprehensive analysis of data collected during the research and para-ethnographic inclusion, ensuring their relevance and applicability to academic and heritage institutions. The emphasis on pragmatic recommendations reflects my commitment to delivering actionable insights that can have a tangible impact on the heritage sector beyond the confines of academic discourse.

The significance of my arguments extends well beyond the academic sphere, touching upon broader societal and global issues. By drawing connections between the findings and their larger implications, the relevance of the research is highlighted as addressing some of the most pressing challenges facing the heritage sector today. The findings underscore the need for the heritage sector to critically assess its practices and values, advocating for a shift towards pluralism, diversity, and an openness to re-evaluate traditional power dynamics. This approach not only enriches the field of conservation with multiple perspectives and ways of

knowing but also aligns with broader societal movements toward inclusivity and representation.

Appendix I: Consent Form Template

A critical epistemology of object conservation within the UK heritage sector

CONSENT TO BE A RESEARCH SUBJECT

A. PURPOSE AND BACKGROUND

My name is Rebeca Suarez Ferreira, I am a PhD candidate in the Department of Archaeology at Durham University. I am conducting a research study to help understand how the sources of knowledge and forms of knowing by which conservators approach heritage objects affects their conservation practice and recording. You are being asked to participate in this study because you represent one of the three groups I have determined to be within the trajectory to object conservation professionalization: *enter group here*. You are also a member of an institutional network (*enter institution(s) here*) which has agreed to facilitate this research. The anthropological study seeks to identify evidence of how objects are experienced and recorded before, during, and after the conservation process. It will document how life-history narratives and experiences, as well as how working with and documenting heritage objects, affects approaches to conservation.

B. PROCEDURES

If you agree to be in this study the following will occur:

1) I will spend time with you and your colleagues within *enter conservation space here* and talk to you about your work with objects. With your permission you may be photographed whilst working.

2) In a semi-structured interview, I will ask you about which experiences have led to your participation in object conservation and about how you approach the practice. If you agree, this conversation will be recorded.

3) Participation in the study may take from about a month with an hour long semi-structured interview occurring once and with me visiting the conservation space 3-4 times.

4) Today, if you agree, I will be sending you a poll which you can use to schedule the best time for the interview to occur. The interview will take place outside the *enter institution here* in a café or pub. Skype interviews and group interviews are also available.

5) Your participation in this study will remain **anonymous** and you will be updated with the progress of the research over the next few years. I will also provide you with a summary of the project findings.

C. BENEFITS

There will be no direct benefit to you for participating in this study. However, the information that you provide may help develop a better understanding of conservation practice and pedagogy.

D. COSTS

There will be no costs to you as a result of taking part in this study.

E. REIMBURSEMENT FOR YOUR TIME

I will be speaking at multiple seminars at the *enter institution here* which will include information about the progress of the research and will also facilitate a forum for discussion about the project. The seminars will also provide an opportunity for you to ask any questions you may have.

F. QUESTIONS

If you have any further questions, please, always feel free to contact me at any time:

Rebeca Suarez Ferreira
PhD Candidate
Department of Archaeology
Durham University
South Road
Durham
DH1 3LE

r.b.suarez-ferreira@durham.ac.uk

H. CONSENT

You will be given a copy of this consent form to keep.

PARTICIPATION IN THIS RESEARCH IS VOLUNTARY. You are free to decline to be in this study, or to withdraw from it at any point. Your decision as to whether or not to participate in this study will have no influence on your present or future status at enter institution here.

If you agree to participate, please sign below.

_____	_____	_____
Date	Signature of Study Participant	Email

Appendix II: Semistructured Interview Guide

Semistructured Interview Guide

(Part 1) LIFE HISTORY NARRATIVE

Can you tell me about yourself?

Prompt:

- Name
- Where are you from?
- Age

Why have you decided to practice conservation?

Prompt:

- Previous training (degrees/courses/subject)?
- Previous museum experience?
- Previous conservation experience (what types of objects)?
- Interests?
- Most significant reason?

Where would you like your training to take you?

Prompt:

- Museum (care of collections/outreach/lab-based)?
- Commercial archaeology?
- Research?

(Part 2) APPROACH

How would you define approach to object conservation?

Prompt:

- Thoughts on this approach?
- Alternatives or amendments?
- Problems?

Can you walk me through your thought process when conserving an object?

Prompt:

- Documentation?
- Decision-making?
- Purpose?
- Intervention?
- Prevention?
- Value?
- Agency?
- Space?

(Part 3) GENERAL WORK WITH OBJECTS

Tell me about your experiences with heritage objects.

Prompt:

- Have you had any ‘challenging’ objects?
- Is there an object which has made an impression on you?
- Do you prefer a certain material or object-type? Why?
- How does working with objects make you feel? Why?

What do find most significant about your role as a conservator?

Prompt:

- Heritage
- Specific object condition?
- Present and/or future?

- Understanding the past?
- Art?

(Part 4) QUESTIONS?

Is there anything you would like to add?

Do you have any questions that you would like to ask of me?

Thank you for your time.

Appendix III: Participating Museums

Many thanks to the following institutions and their generous staff for participating in this research :

Beamish, the Living Museum of the North
Cambridge Museum of Technology
Department of Anthropology, Durham University
Department of Archaeology, Durham University
Documentation Network, UK Institute of Conservation
Fakenham Museum of Gas and Local History
Glasgow Museum:
Gallery of Modern Art, Glasgow
Glasgow Museums Resource Centre
Hamilton Kerr Institute
Institute of Archaeology, University College London
Kelvingrove Art Gallery and Museum, Glasgow
Locomotion, The National Railway Museum at Shildon
Manchester Museum
Museum of Archaeology and Anthropology, University of Cambridge
Museum of London
National Railway Museum York
Oriental Museum, Durham University
Royal Albert Memorial Museum and Art Gallery
Royal Armouries Museum
Sedgwick Museum of Earth Sciences
The Bowes Museum
The Burrell Collection, Glasgow
The Fitzwilliam Museum
The Shuttleworth Collection
University Museum of Zoology, Cambridge
University of Cambridge Museums
Whipple Museum of the History of Science
York Archaeological Trust
York Castle Museum

Appendix IV: Questionnaire Description

Questionnaire Description

The questionnaire to be used to interview conservators addresses the aims of this research project: to identify the present state of conservation records [55] within public institutions and conservation laboratories throughout the U.K.[56] The cost and benefits of their physical and digital forms will be assessed. The implications of the storage methods used on the preservation of the records will be ascertained. These records will be studied for the level of accessibility[57] they offer to conservators and/or researchers.

1. Please provide the following information.

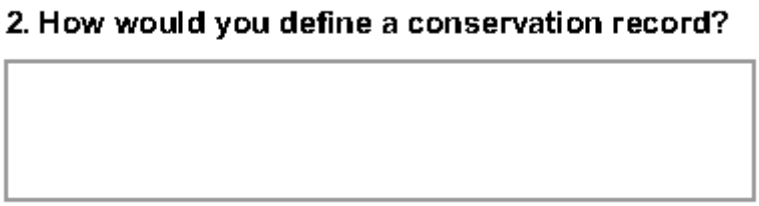
Institution:	
Title: (i.e. Object Conservator, intern)	
Type of Conservator: (i.e. student, working)	
Part-Time or Full-Time?	
Number of Years in Conservation:	

The study includes various types of institutions to assess whether differences and/or similarities reside in the records produced by differing organizations. The questionnaire also begins by asking

[55] The present state of conservation records refers to:
- whether the records are in a physical (paper, cardstock, negatives, etc.) and/or digital format
- the amount of detail provided on the record
- how the record is stored (i.e., filing cabinet to archive, document file on personal computers to networked databases)
- whether preservation measures are in place (i.e., multiple physical copies, emulating/migrating records onto multiple external hard drives)
- who is responsible for the maintenance of the records
- the level of awareness conservator(s) have concerning the preservation of the records
- the level of accessibility of the records

[56] The institutions and laboratories in this study will include the following groups:
- large museum institutions with several conservation departments and laboratories
- museums with one conservation department
- material specific laboratories (i.e., archaeological conservation labs)
- conservation training institutions
- museums and institutions which out-source conservation work
- conservation laboratories that have closed/institutions which inherited their records
- private conservators/owners of cultural heritage objects.

participants to state their title and what type of conservator they classify as. It is important the title and type of conservator is also addressed within this study because it will be important to determine whether different types of conservators use and/or make records distinctly from one another. The participant sample size will include students, working conservators, managers, volunteers, etc. It is important to address any differences experience and work hours have on the use and creation of conservation records. Later in the questionnaire (Questions 48 & 62) it is asked how much time the conservators spend consulting and creating records; this will have to be analysed in proportion to how many hours they work. These questions are left open rather than in a multiple-choice form because it is expected that answers will vary and therefore be easier to categorize once the study has concluded.



Question two prepares the participant for the remainder of the interview. It is important the participants think about what a conservation record is as it is the subject matter of this study. Questions 50-61 ask participants to recall what they included in the latest conservation records they created. There may be a correlation between how they define a conservation record and what they include in a record.

> *For the purposes of this questionnaire a conservation record includes a condition report(s), scientific investigation, substantiated treatment report(s), and preventative conservation measures. The conservation report explains the actions undertaken by describing the procedures, techniques and materials used both with written and graphic forms of documentation.*

After the participants have themselves defined a conservation record, it is important a standardized definition be given so it is clear what this study considers a conservation record to be. The majority of the questions to follow include options that cover all the categories stated in this definition.

3. Describe the last 4 objects you conserved.

1.

2.

3.

4.

Question 3 prompts the participants to recall the last four objects they conserved. It is then asked whether they attempted to consult a conservation record when working on each of these objects. If they did attempt consultation and found the record, it is then asked how the record was stored and how they intended to use the record.

4. Did you attempt to consult a conservation record for [Object 1]?

- [ ] YES
- [ ] NO (please move on to Question 13)

Questions 4 addresses whether there is a prevalent intention in conservators to consult records. Whilst training, conservators will be taught the importance of consulting past conservation records, but it is unclear whether they do so in practice. This question is asked of all four of the objects the participants were asked to recall in Question 3.

5. Did you find the conservation record?

- ◯ YES
- ◯ NO (see Question 6)

6. If not, please explain why and move on to Question 13.

Questions 5-6 address the accessibility of conservation records. It is hypothesized that if much effort is needed to access the record, it will not be done. The participants are asked to explain why the record was inaccessible because it is important this study notes the most common reason. For

example, it is assumed that one of the costs of physical records is their potential lack of accessibility; the answers to Question 6 could address whether this is the case in practice.

7. What type of record was it?

- ☐ A5 Card
- ☐ A4 Card
- ☐ Handwritten Paper Document
- ☐ Printed Paper Document
- ☐ Digital Document File
- ☐ Digital Database Template
- ☐ Other (please specify)

This study would like to categorize all the material and digital forms conservation records are made of. The answers to Question 7 are left as tick boxes to allow participants to choose multiple options if appropriate. A blank space is left for any other forms not given within the question.

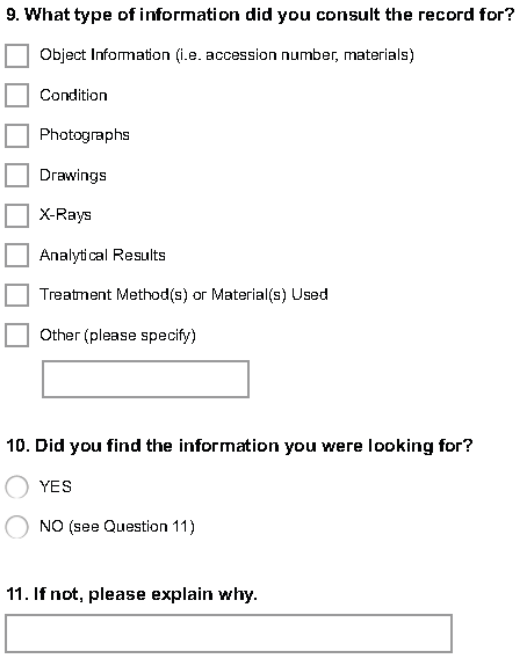
8. How was the record stored?

- ☐ Personal Filing Cabinet
- ☐ Filing Cabinet within Lab
- ☐ Filing Cabinet within Library
- ☐ Filing Cabinet within Archive
- ☐ Personal Computer File
- ☐ Networked Computer File
- ☐ Database
- ☐ Online

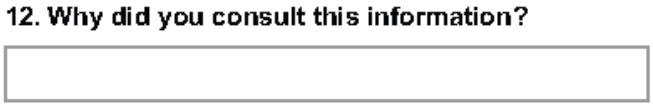
Other (please specify)

The way in which records are stored speaks to their preservation requirements and possibly their accessibility. Another part of this study includes the quantification of conservation records within the

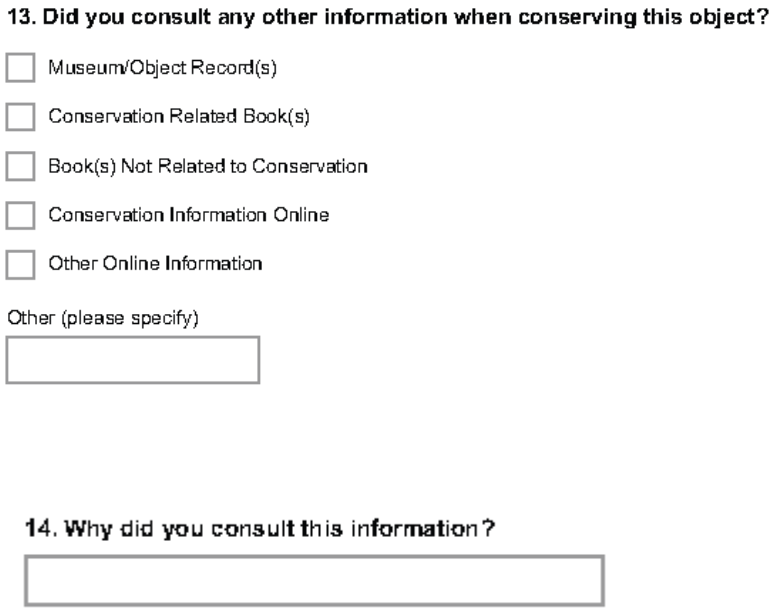
U.K. A simple system has been built to quantify how many records an institution holds according to how may filing cabinets of conservation records they have. It is presumed that networked computers and databases can run totals for their files of records accordingly. Online conservation records are beginning to appear on museum websites; this question might give more insight into how prevalent such a storage system is becoming.



Questions 9-11 address both the content and use of records. The participants are asked what information they were looking for to assist in the conservation of the object and whether that information was actually present on the record. The answers to these questions will give insight into what records are used for and whether past records contain the information conservators now seek.

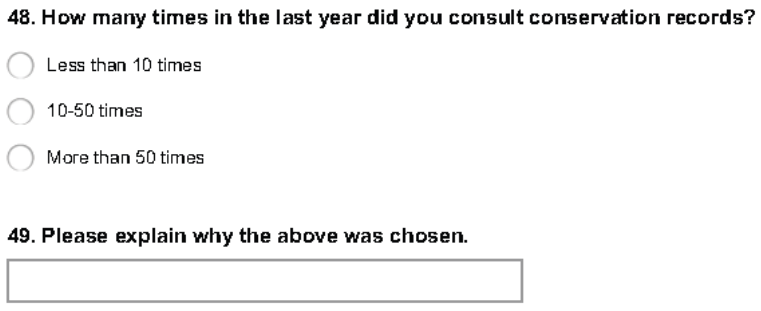


Question 12 prompts the participant to give reason for why they sought to consult the information above and will therefore provide more information about the use of conservation records.

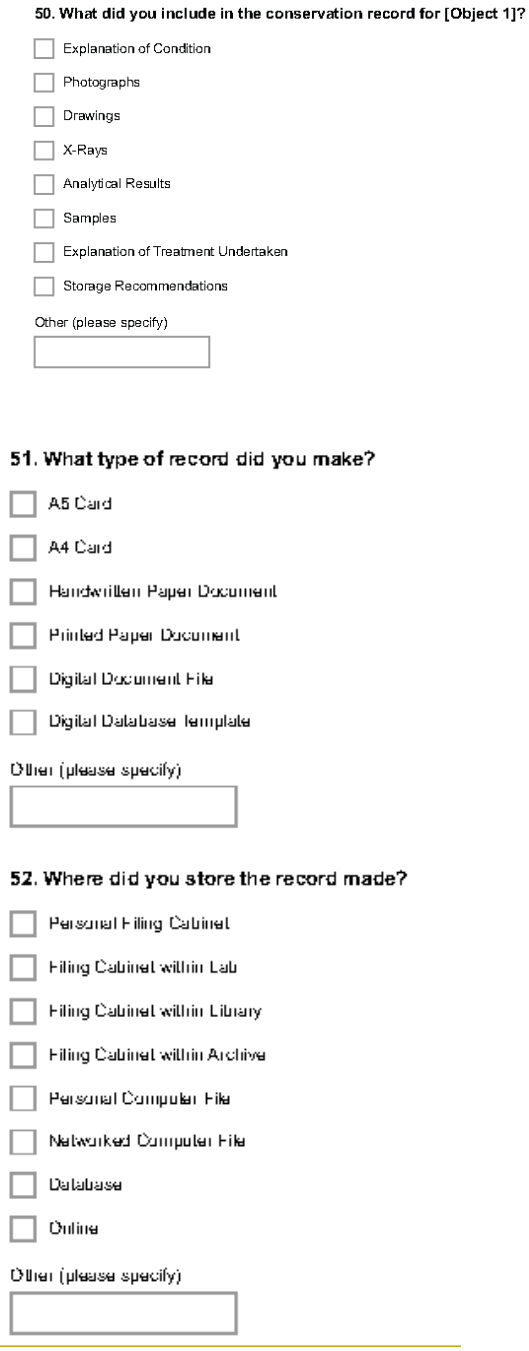


Questions 13-14 ask whether the participant consulted any other information and why they did so. This question is asked of those who consulted conservation records and those who did not (i.e., Question 4&6 prompt the participant to answer Question 13 next). The study questions whether conservation records are being used as they are intended or whether they are being used at all. Is other information more often used or deemed more important for conservators to consult? Why?

The questionnaire asks Questions 4-14 for all four objects participants were asked to recall.



This study wants to know how often records are used, if at all. Questions 48-49 will give an approximation of use and the reasons why this is the case. The average Question 48 will produce will estimate the overall use of past conservation records and quantify the risks records that are unused are in. Records that are not used can potentially be in decay or lost without recognition.


50. What did you include in the conservation record for [Object 1]?

- [ ] Explanation of Condition
- [ ] Photographs
- [ ] Drawings
- [ ] X-Rays
- [ ] Analytical Results
- [ ] Samples
- [ ] Explanation of Treatment Undertaken
- [ ] Storage Recommendations

Other (please specify)

51. What type of record did you make?

- [ ] A5 Card
- [ ] A4 Card
- [ ] Handwritten Paper Document
- [ ] Printed Paper Document
- [ ] Digital Document File
- [ ] Digital Database Template

Other (please specify)

52. Where did you store the record made?

- [ ] Personal Filing Cabinet
- [ ] Filing Cabinet within Lab
- [ ] Filing Cabinet within Library
- [ ] Filing Cabinet within Archive
- [ ] Personal Computer File
- [ ] Networked Computer File
- [ ] Database
- [ ] Online

Other (please specify)

Questions 50-52 asks what type(s) of record is currently being created. This study wants to know the present state of these records as well. The amount of detail provided the form in which they are in and how they are stored determines their use and preservation. Content determines usability. Questions 9-12 (and their repetition for the other three objects) will determine what conservators need from records – it will be interesting to see whether current conservators provide this information for future conservators and whether they abide by their training and the ethical codes which determine the content of a conservation record.

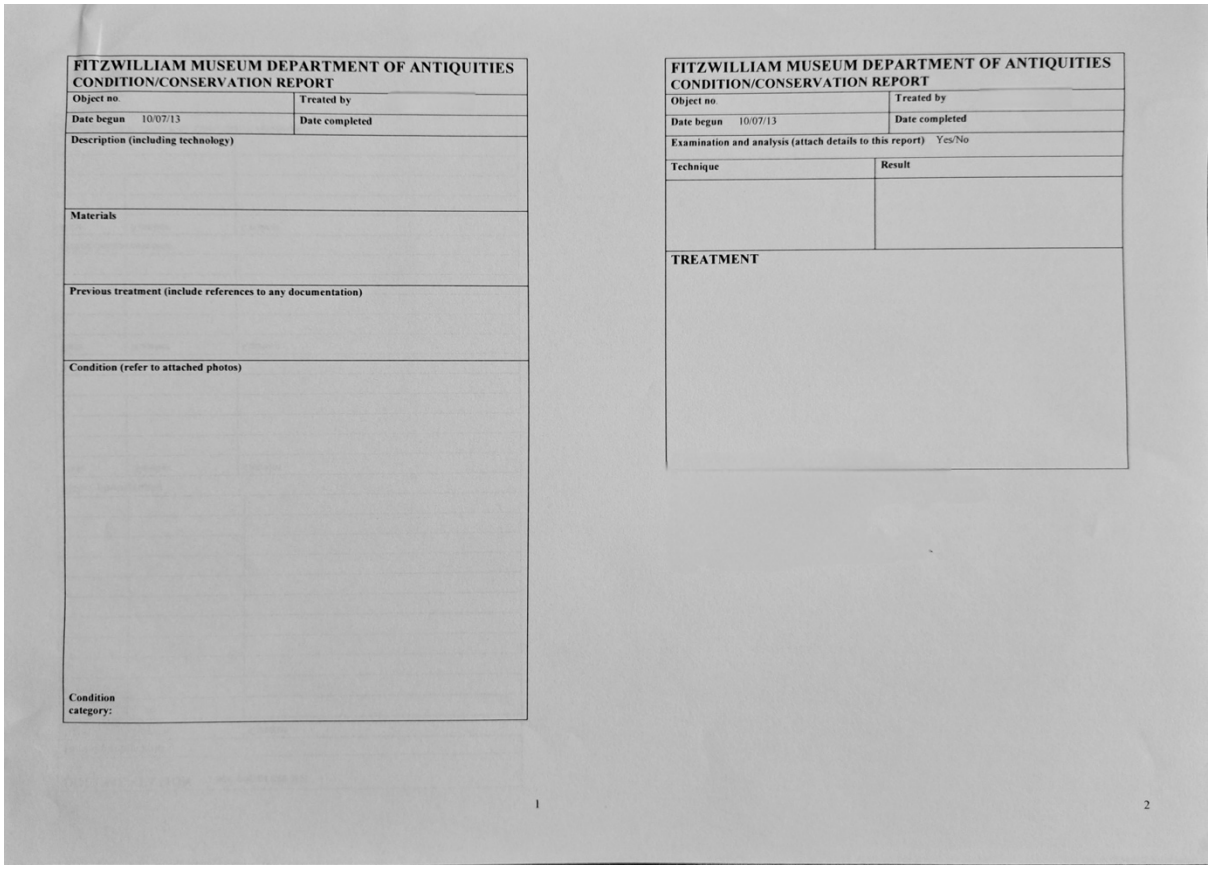
Questions 50-52 are asked of all four objects the participants were asked to recall.

62. How much time do you think you spend creating conservation records a week?

- ◯ Less than half my working hours
- ◯ Around half my working hours
- ◯ The majority of my working hours

This last question is asking whether creating conservation records is a common practice. Again, this is how conservators are trained and the ethical codes demand conservation records to be created for all material cultural heritage. Based on how often the participant works, an estimation of how much of their time is dedicated to conservation records will be calculated. If records are used and created often then their need for preservation can be better justified. If conservators spend the time and use these records, there needs to be an assurance that they are preserved and accessible. This is one amongst other reasons why a resilience measure is to be suggested by this study.

Appendix V : Conservation Record Example



FITZWILLIAM MUSEUM DEPARTMENT OF ANTIQUITIES
CONDITION/CONSERVATION REPORT

Object no.	Treated by
Date begun 10/07/13	Date completed

Description (including technology)

Materials

Previous treatment (include references to any documentation)

Condition (refer to attached photos)

Condition category:

1

FITZWILLIAM MUSEUM DEPARTMENT OF ANTIQUITIES
CONDITION/CONSERVATION REPORT

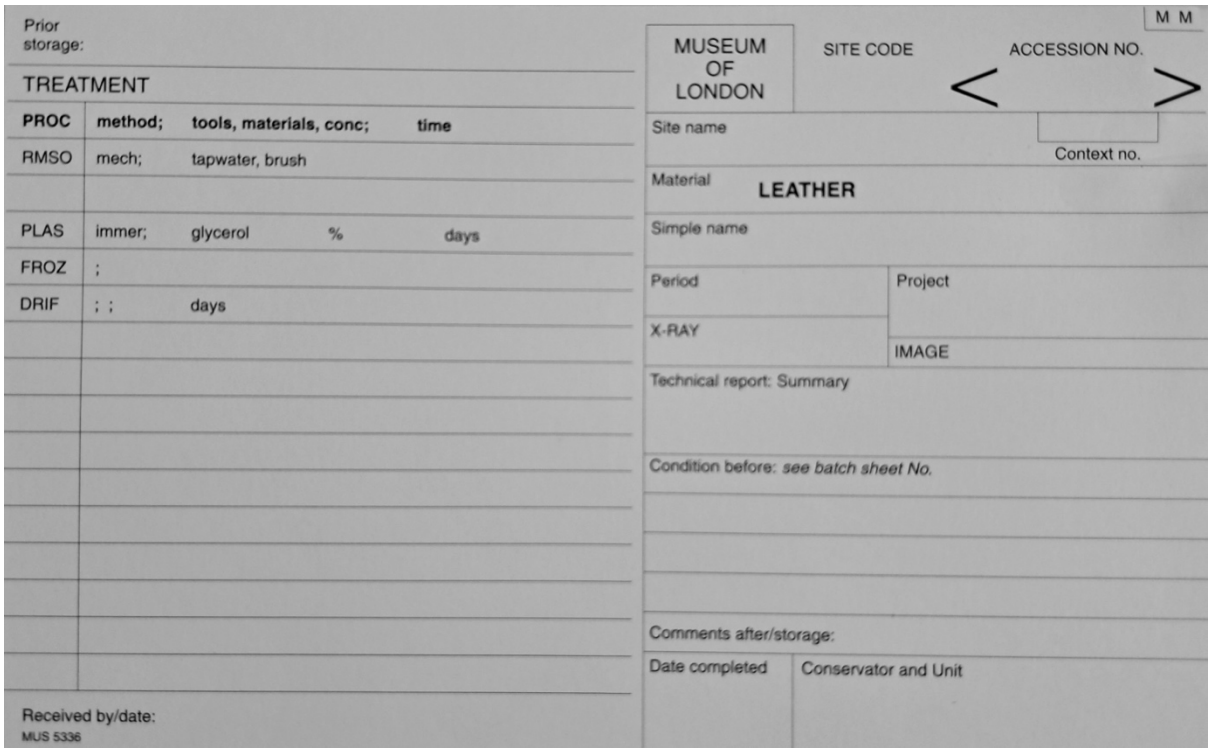
Object no.	Treated by
Date begun 10/07/13	Date completed

Examination and analysis (attach details to this report) Yes/No

Technique	Result

TREATMENT

2



Prior storage:

TREATMENT

PROC	method;	tools, materials, conc;	time
RMSO	mech;	tapwater, brush	
PLAS	immer;	glycerol %	days
FROZ	;		
DRIF	; ;	days	

Received by/date:

MUS 5336

M M

MUSEUM OF LONDON

SITE CODE

ACCESSION NO. < >

Site name

Context no.

Material LEATHER

Simple name

Period

Project

X-RAY

IMAGE

Technical report: Summary

Condition before: *see batch sheet No.*

Comments after/storage:

Date completed

Conservator and Unit

UNIVERSITY OF CAMBRIDGE
MUSEUMS
& BOTANIC GARDEN

maa
museum of archaeology and anthropology

Conservation

Treatment Type | **Conservation ID** | **ID No** | **Curator**

Minutes Worked | **Conservation No** | **Conservator**

Object Inventory

ID No | **CMS CAT ID** | **H** | **W** | **L(mm)** | **W(kg)** | **No of Items**

Brief Description

Conservation Recommendations

Measurement Notes

Hazards

Sharp ☐ Toxic ☐ Respiratory ☐ Asbestos
V. Heavy ☐ Narcotic ☐ Combustible ☐ Radioactive
Pesticide ☐ Poisonous ☐ Explosive

Potential Hazardous Notes

Object Condition

Good ☐ Fair ☐ Poor ☐ Very Poor

Triage

Human Remains

Bone / Soft Tissue ☐ Hair / Nails ☐ Modified ☐ Unmodified ☐ Possible

Record Notes

Materials

Initial Assessment

Painting: In good condition, surface deposits of a fine dust. Localised areas requiring consolidation. Along the edges fibres are fraying and will need securing. Textiles: Heavily soiled Evidence of previous restoration â€“ areas have been stitched closed Areas of defaults in the fabric â€“ missing warps or wefts Deep creases across the blue textile â€“ this is only on the front doesnâ€™t effect the back (these wont be reduced as it may cause further damage to the back or generally cause miss-alignments between the two). Top section â€“ as you look at the object left side the stave has penetrated the cloth. Bottom section â€“ original Cambridge â€˜post-itâ€™ note â€“ this is slightly folded over and will need relaxing. Stave â€“ is in good condition, slightly soiled â€“ no evidence of lifting pigment

Treatment

Conservation Materials Used

MFC, Groom stick, sympatex, cotton wool, de-ionised water, smoke sponge, blotting paper

Notes (For references etc.)

B 1905.303 Thangka - Tibetan Thangka, with 22 deities (figures with colourful halos). Original â€˜Cambridgeâ€™ identifying label, Red bottom pole with bronze/gold decorative flowers, blue textile top and bottom. Wax seals front â€“ top left and back top right. Dimensions: Overall Height: 1405mm Width: 756mm Painting Height: 909mm Width: 634mm Bottom pole/stave Length: 756mm Diameter: 31mm Top Textile section Height: 231mm Width: 689mm Bottom Textile section Height: 236mm Width: 688mm â€˜Post-itâ€™ note Height: 18mm Width: 44mm

Treatment Description

Painting Surface cleaned using Groom stick (natural rubber) in small amount on the end of a cocktail stick. Loose and friable areas of pigment were consolidated using MFC (Lascaux Medium for consolidation) and loose areas were laid back down. Textile The textile areas were lightly brush vacuumed, with the vacuum suction on low and with a soft synthetic brush. Areas with evidence of material (modern man made fibres) which wasnâ€™t removed with vacuuming, were removed using groom stick. This method as also used when cleaning along where the bottom pole joins the textiles. The â€˜post-itâ€™ was humidified using sympatex and blotting paper with de-ionised water to relax the crease in the paper and then weighted and allowed to â€˜setâ€™ in the new position. The torn material at the top left, where the top stave was penetrating the object was supported with silk (dye 10.2) behind and monofilament netting (dye 11.3) on the front secured into place using ultrafine polyester thread. The penetrating stave is now secured back into place. Bottom pole/stave The bottom pole was initially cleaned using Smoke sponge (Vulcanised rubber), the surface was then cleaned with cotton wool swabs charged with de-ionised water. PLEASE NOTE: The blue textile areas may appear â€˜dirtyâ€™ when you first look at them, this is from their time of use â€“ offerings of food and lamp oil would have been thrown at the object. It is not acceptable to remove these offerings from the object.

SPRI

Conservation Treatment Form

Date: 28.11.2013	**Conserved by:**	
Accession number:	**Store Location:**	**Case number:**
Description: A pair of woman's tall leather boots with seal fur stockings. The leather was dyed red with white leather trim and avittat decoration. The boots are from West Greenland from the 1920's.		
Condition: The boots were in generally good condition. There were white accretions on the leather that is believed to be a product of oiling the leather or from the fat in the leather. In some areas the leather was cracking and red paint used in earlier repairs was flaking off especially around the ankles. The fur on the exterior of the stockings had moth damage while the fur on the interior was in good condition.		
Treatment: Dry cleaned the loose dirt, frass and insect remains with a vacuum and soft brush. Wet cleaned the white accretions with White Spirit applied with a cotton swab to reduce the visual impact in the front and feet of the boots. Removed the cloth tape labels from the boots and stockings. Inserted Plastazote covered in Bondina as support.		
Time taken: 2.5 hours	**Acc no on object:**	**Photos:** N.183a-d BT N.183a-d BT detail of decoration N.183a-d AT detail of decoration
Analysis: NO		**Date completed:** 14.11.2013

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