Knowing Hands: Using Tactile Research Methods in Researching and Writing the History of Design

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This chapter invites design historians and interested others to put set aside aspects of their training which have encouraged them to discount their subjective responses to their research materials and use their senses – specifically touch – in their research and writing. The method examined here involves capturing those responses and harnessing them to the historical project of understanding the past and communicating that understanding in a written form which that recalibrates academic writing norms. Tactile research methods offer historians, and their readers, direct insights into the history of design of the past and into new ways of doing design history by imaginatively accessing the positions of designers, manufacturers, consumers and others. This has implications for the processes of both historical research and writing in design history and more broadly. The chapter is divided into three parts. It begins by reviewing some of the relevant literature which derives from a number of fields including design history, archaeology, material culture studies, history, and sensory history. Next, a case study is introduced centred upon my own research for *The Hand Book*, a design history of hands. The third section examines some implications arising from the research for writing.

Much of the world is designed, from the objects and spaces which surround us to the behaviours, logistics, codes of practice, etc., that we perform. Some design is the work of professionals, and some is the product of amateur designers fashioning of our environments and ourselves. Since much of the world is designed, so it follows that many academic fields should have sought to understand and explain design.

Design historians have been examining the history of design to understand the past, and using the past to understand design, for almost half a century. It might reasonably be supposed that design historians use embodied research methods such as object handling, but in fact this has not been the case. (Aan exception is Jeffrey L. Meikle's candid accounts of how he punctured a design historical myth by dismantling a clock (Meikle 1998, 2012)). Learning through doing is fundamental to design education (Huppatz and Lees-Maffei 2013) and some educators have reflected on the use of object-based learning (Ulrich 2003; Banning and Gam 2020; Carter 2016) including historical precedents (Carter 2018), but design history students cannot assume that they will encounter similarly hands-on approaches. One reason for this may arise from the fact that design historians associate handling with the fetishization of expertise, taste, and discernment seen in connoisseurship of the fine and decorative arts, rather that socio-economic contextual approaches to everyday objects that they prioritize (Walker 1990, 62; Adamson 2013, 33). So, design historians wishing to engage with object handling must look for precedents elsewhere.

Archaeologists, for instance, examine material remains to understand the societies and cultures which produced them from the deep past to more recent times. As well as unearthing objects in digs, archaeologists work with objects held in archives, with communities in inclusive projects that can throw up new perspectives (Renfrew and Bahn 2020, 549), and experimental archaeologists engage in hands-on learning, such as stone-tool manufacture, in order to understand the material record. Yet, archaeologists Robert Chapman and Alison Wylie observe that 'a recurrent theme in the literature valorizing objects as subject and source is that there has been too little attention to things themselves'; and that 'text-based analysis of the social and symbolic significance of objects continues to dominate the study of material culture' (Chapman and Wylie 2015, 6, 7).

The US field of material cultural studies developed from and alongside folklore studies over the past forty-five years, a period coterminous with that of design history, in exhorting the use of material culture to understand the past.³ Leading US folk historian Henry Glassie wrote, without intended irony, of the importance of capturing the 'wordless experience of all people' which is omitted 'when we restrict historical research to verbal documents' (Glassie 1999, 44).⁴ Jules Prown's method of material culture analysis, based on successive steps of description, deduction and speculation, includes object handling:

The first step in deduction is sensory experience of the object. If possible, one touches it to feel its texture and lifts it to know its heft. Where appropriate, consideration should be given to the physical adjustments a user would have to make to its size, weight, configuration, and texture. (Prown 1982, 9)-

British material culture studies is distinct from its US cousin (Buchli 2002) partly due to its roots in British anthropology, which foregrounds social relations, and ethnography (see Douglas and Isherwood 1979). Judy Attfield has argued that a 'material culture approach' to the history of design can focus on 'what it can reveal about the social meaning of things, rather [than] from the more usual judgemental, functional or aesthetic standpoint' (Attfield 1999, 373; also Garvey and Drazin 2016). The younger field of design anthropology recognises affinities between participant observation and interventions to bring about positive change seen in anthropology, ethnography, and design practice (Clarke 2010; Gunn & Donovan 2012; Gunn, Otto and Smith et al. 2013; Murphy 2016).

The past five decades have seen not only the development of design history and material culture studies in its US and UK incarnations, but also a steady stream of books lamenting mainstream history's reliance on textual sources and proposing material culture as source

material and analytical method (Harvey 2009, 1). Yet, a pervasive hierarchy regards words as more serious conveyors of knowledge than images or objects. Just as 'thing theory' (Brown 2001) engages with material only at the level of artistic and literary representation, so 'historians are not much interested in things or their thingness for their own sake, but as routes to past experience' (Harvey 2009, 7). Anne Gerritsen and Giorgio Riello cite four problems with material culture as historical evidence: not everything survives; contexts which that make objects meaningful can be lost; material cultural collapses time; and there are practical limitations on access to objects (Gerritsen and Riello 2021, 10, 14).

Part of the larger interdisciplinary field of sensory studies (Smith, 2007, 7), sensory history developed in the 1980s and 1990s with the aim of showing the senses as 'historically and culturally generated ways of knowing and understanding' (Smith 2007, 3) by moving 'beyond simply conveying historical "experience" to capturing "historical sensation" (Smith 2021, 9).⁵

Design and technology are important factors in this: sensory historians recognise the historical significance not only of the external appearance of clothes, for instance, but also 'the quality and feel of the clothing on the inside' (Smith 2007, 107). While some sensory historians have cautioned against technological determinism (Tullett 2021, 7-8), 'Automobiles, electricity, radio, television and the widespread use of plastics all changed what people saw, heard, and felt' (Smith 2021, 43). Given its focus, sensory history is, like design history, more limited methodologically than might be expected. One of the field's foundational figures, Dutch historian Johan Huizinga, recognised the problematic role of language in translating sensory experience, but as recently as 1994 George H. Roeder Jr maintained that 'sensory histories required no new or innovative techniques — sensory meaning could be culled from the written word' (Smith 2021, 10, 34). Recently, Tullett has argued for putting 'the senses back into

sensory history' through 'diverse ways of sensing and knowing, rather than forcing their translation into the pre-existing epistemologies of western academic practice' (Tullett 2021, 16, 17). I propose that we can use material culture to access Glassie's 'wordless experience' by reengaging with aesthetics, understood not as taste judgments and discrimination, but rather as sensory experience (Folkmann 2013) as in embodied research, to which I will now turn.

Embodied Research and Object Handling as Historical Research Method Although embodied research methods have not been used by design historians in any sustained way if at all, they have much to offer to the understanding of design. Like material culture studies, embodied research extends across disciplines (Tantia 2021a, xxx). All research is embodied research (or 'embodied inquiry'; Leigh and Brown 2021, 8; Johnson and Tucker 2021). Historians travel with their bodies to physical archives and museums, and even desk research is conducted by people with bodies. Mind-body dualism is discredited as an artificial construct, as neuroscience and medical science demonstrate more and more the inextricability of the human mind and body (Damasio 1994). But not all research is recognised as embodied research. Academic research has developed and been conducted in the West in an intellectual tradition extending back at least two millennia to the ideas of Plato and Aristotle, whose sensorium placed sight uppermost and touch at the bottom of an intellectual hierarchy (Smith 2007, 93). This 'is deeply ingrained in Western cultures and hence within conventional research methodologies' and, influenced by Descartes' philosophy, rationality requires that 'the (higher) mind-self should seek to control its body-property, preferably to the point of rendering it absent, or at least irrelevant to any knowledge project' (Ellingson 2017, 5). This situation, of the body being crucial and yet unrecognised, is described by Chris Shilling (2012, 21) as 'absent presence'.

Embodied research can take many forms. Following Maurice Merleau-Ponty, Helena Dahlberg (2021, 20) notes that the 'human body is both an object that we investigate, measure and handle like other objects in the world', and 'the vehicle of our existence, as a medium through which we interact with the world'. Embodied research can focus on the body as a research subject, whether in medical research or poetry about bodies. It can focus on research subjects' bodies - how do research subjects feel and experience the world in the situations under analysis? But, 'Whatever the subject or framing, Embodied Inquiry will ask the researcher to be aware of their own experiences and positionality' (Leigh & and Brown 2021, 3). Introducing embodied research methods in the social sciences, Torkild Thanem and David Knights (2019) recommend ethnographic approaches such as immersion, participant observation, 'shadowing', interviews in which the researcher pays attention to non-verbal communication, such as gesture and facial expression of the interviewees (see Tantia 2021b), the use of video and photography for capturing bodies in action (visual sociology), and a combination of these. Embodied research is also conducted under different names. When Gaskell and Carter (2020, 6) recognise that 'material culture for historians is not confined to actual traces of the past, but also to understandings of the processes and craft skills that may survive into the present'; they reference "experimental archaeology" and "re-enactment" in making history'. But the examples they give ______, of '(f)ashioning a hand axe by napping flint can promote at least some understanding of materials and skills, while wearing stays or corsetry recently made from old patterns with appropriate materials can aid in the acquisition of an appreciation of the contingency of bodily deportment' point to embodied research.

Ann Weiser Cornell and Barbara McGavin argue that that 'Embodiment has even greater power as a concept and a basis for research when "the body" is not seen merely as a set of

physiological processes or an object but primarily as an emergent lived experience' (Cornell & McGavin 2021, 38). They refer to Eugene Gendlin's concept of the 'felt sense'. In Gendlin's words, 'Experiencing is felt, rather than thought, known, or verbalized'; 'It is [...] what a person feels here and now, in this moment' (Gendlin 1961, 234—235). Cornell and McGavin elaborate that as well as being 'freshly forming' and 'emergent', felt sense is '2" more than words can say'' (2021, 33). Jennifer Frank Tantia (2021c, 41) suggests that embodied data, as 'points of unconscious information', emerge into consciousness through Gendlin's (1981) process of 'Focusing' on 'subtle visceral sensations, posture, or movement' in an 'attention/feeling/naming/attention loop process until enough clarity forms to make meaning of the experience'.

Embodied research is particularly helpful in studying gender. Leigh and Brown (2021, 3) cite Karen Barad's work as exemplary of feminist and post-humanist theoretical perspectives that emphasise 'embodied and sensory experiences' (for instance, Barad 2015). Michael Changaris recognises that our 'experiences of how the world interacts with us are related to our gender, skin tone, culture, nation of origin, mental status, ability/disability status, etc. (Changaris 2021, 7). Because embodiment is 'situated,' it 'requires researchers to stop simply attempting to control away and eliminate the impacts of context, culture, history, and environment and to consider how these factors affect a studied phenomenon in a systematic way' (2021, 4). Dahlberg concurs: 'when positivistic scientists thought they were being fully objective, they were instead operating from the invisible norm of being white, male, able, etc.' (2021, 26).

Just as all research is embodied, notwithstanding a tradition of disembodied research methods and outputs, so all research and writing in the arts and humanities and qualitative work in the social sciences is arguably subjective, even where objectivity is prized. The most objective

stance is to recognise and acknowledge one's subjectivity. Ellingson points out that 'positivist assumptions about researcher neutrality and objectivity have been decentered or (in some venues) eschewed in favor of realistic positioning of scholars as imperfect social actors' (2006, p. 299). Kjetil Fallan and I (2015, 13, 21) have proposed that design historians should pursue 'rigorous subjectivity', recognising that 'a self-reflexive and critical appraisal [...] is a necessary foundation for a *more rational* approach'. The 'personal is political', feminist Carol Hanisch ([1969]1970) proclaimed, and so is the reverse. In that spirit, I will now reflect on my own experience of embodied research in design history.

After a career spent examining how design is mediated to various audiences through various channels, my current research project concerns the role and significance of hands in the history of design and in design history. *The Hand Book* combines archival research and object handling informed by the larger practice of embodied research. Embodied research may be understood as a philosophical attitude to research which emphasises the researcher's consciousness of their positionality, their use of the body and senses in conducting research, and materiality (Barad 2015). My study using on object handling is not a phenomenological meditation on embodiment; embodiment and handling are different, and not only in terms of scale. But it is consistent with the core question of embodied research '2' What can bodies do?" (Spatz 2017, 5), and within that my work engages with questions such as 'Wwhat can the hands of the researcher bring to the knowledge and understanding of design?' and; 'Wwhat can object handling contribute as a method in design history?' My project self-reflexively examines interaction between the body of the researcher; and the research object.

Like embodied research, object handling exists in different forms for different groups: it forms part of curatorial training, in which the focus is the safety of the object; it is a practice used

in museums and elsewhere to engage the public of lay visitors with objects by enabling them to get closer to collections; and it is a research method used by researchers in a variety of fields. My focus here is on the latter. In embarking upon object handling as part of my research, the first barrier I encountered was the difficulty of securing direct access to the focal objects I had identified. If the objects of study do not sit within already-specified handling collections, then it is necessary to negotiate access in archives and museum collections. Access can mean many things, depending on the policies of the target collections, and museums allow different levels of access to different users. For instance, designers, artists, craftspeople and fabricators whose work enters museum collections are not allowed to handle their own works following accession, but although some museums, such as the University of Cambridge's Museum of Anthropology and Archaeology, allow indigenous groups to use their objects as needed (University of Cambridge 2022).

My research at the Victoria and Albert Museum required appointments with curators who assisted, and monitored, my engagement with the objects. I was required to wear latex gloves, a membrane that protected museum objects from the oils and dirt on my hands. I drew on my training and experience working in several museums to handle the objects appropriately, but even so I felt self-conscious under the eyes of helpful curators, for instance, when struggling to put on the too-small latex gloves.

When I visited the museum to view the Liberator 3D-printed hand gun (CD.40:1 to 2-2014 and CD.41-2014), I was able to hold it but not to aim it or pull the trigger (I asked curators Corinna Gardner and Alice Power, but I was denied with good humour). I handled both the pristine gun and the first fired prototype, which had shattered on firing, so I saw the effects of the expected use of the object, even if I was myself unable to use it as intended. (Fig. 1). I learned,

through handling the Liberator guns, how heavy and unwieldy they are. This is potentially dangerous because the Liberator wouldn't handle as well as <u>a gun with</u> a more refined design. The gun was designed by a law student inexperienced in ergonomics. Handling the gun made clear its purpose as a legal argument or position rather than a commodity.

Visiting the Metalwork department to view a gold Claddagh ring (M.12-1961), I was able to hold it, and many others that curator Rachel Church and I discussed, but not to put any of them on my fingers. (Fig. 2). Just like the clothes in the V&A's Department of Textiles and Dress where I worked as an intern three decades ago, the jewellery at the V&A is never worn again once it joins the collections. I could handle the rings and the gun, but not in the way intended so I had to imagine how using these objects would feel. The access I did have was nevertheless instructive. The Claddagh ring that I had made an appointment to view was eclipsed in my affections by Gimmell rings with their intriguing moving parts that I was able to interact with directly, and so my research shifted (Lees-Maffei 2019a).

The designs for the HMP Wandsworth Quilt (E.2719-2016 and E.2720-2016) held other challenges. They are one-to-one scale, so in order to view them, the curator and I needed a great expanse of tabletop in the V&A Prints and Drawings Study Room. The large sheets of paper, which had been rolled for storage, required all of the study room's paperweights and book snakes to pin them down (prompting more self-consciousness on my part about using more than my share of space and resources). One design was spread over many sheets of paper, so some detective work was required to arrange them correctly, using documentary information I had brought with me. Because the work was large-scale, I needed to use my whole body to wrestle the papers into flat submission, to get a good view of the designs, and to walk around the table to see the designs from different angles. I therefore understood its scale through and in relation to

my body, as appropriate for an artefact which takes the form of a quilt, an item for the bed, a whole-body human scale object. This intellectually- and physically-challenging process was a way of getting to know the designs that could not have been replicated by any other means. When I visited the finished quilt (T.27-2010) at the V&A's Clothworkers. Centre for the Study and Conservation of Textiles and Fashion at Blythe House, it had been rolled out onto a table for me and I was able to inspect it at extremely close range (much closer than I would have been able to in a gallery), but not to turn it over to inspect the reverse – only a corner was turned over for me, on the basis that the pattern was the same across the backing. (Frig. 3).

Not all of my object interactions at the V&A required an appointment. Like most museums, the V&A engages visitors through an extensive events programme. Two museum events, aimed at distinct audiences, informed my research. In 2019, the Research Department hosted 'Encounters on the Shop Floor', a conference reporting on a project which had brought together fields as diverse as surgery and embroidery, surgical instrument manufacture and magic, pedagogy and studio ceramics, music and design history. Three days of talks were punctuated by workshops in which I was able to use a prosthetic hand, and handle instruments for keyhole surgery (Lees-Maffei 2019b). 'In the Palm of Your Hand' was one of the Museum's 'Friday Late' series of events for the general public which bring 'audiences together with leading and emerging artists and designers through live performance, film, installation, debate, DJs and more' (Victoria and Albert Museum 2022a). The evening included a variety of talks, for instance about a hand-shaped reliquary dating from 1250 to 1300 in the Medieval and Renaissance Gallery 10, and workshops including the opportunity to create a hamsa (a protective amulet in the shape of a palm) and another about the handshake and—of other forms of greeting. I was able to handle Klemmens Schillinger's 'Substitute Phone' (FFig. 4)] and use Lara Chapman's

augmented reality installation to superimpose emoji onto the paintings in one of the V&A's galleries. An evening of almost carnivalesque positivity was punctured very briefly when I was reprimanded for unwittingly inappropriate handling in an interactive display about prosthetic hands, 'Hands of X'.⁸ Just as my appointments were made to view and handle irreplaceable original objects in the museum's main collections, whereas the objects I handled at the conference and Friday late workshops were novel prototypes or contemporary tools, equipment and processes, so the appointments required me to wear gloves, whereas the handling workshops did not.

Two of my research visits in the U.S. were conducted without gloves. At the stores of the Cooper Hewitt National Design Museum, as a special concession based on my area of research interest, curator Emily Orr allowed me to hold a fork designed by Don Wallance in order to gauge it's-its feel, weight and handling- (Fig. 5). I didn't eat with it, or put it in my mouth, though, so my sense of its utility is partial. At the Hagley Museum and Library in Wilmington, Delaware, I rummaged through boxes of loose handles in the Thomas Lamb Collection. Some were collected by Lamb for his research collection, and others were prototypes made by Lamb (Figs. 6 and 7). The unfettered access I had to these objects resulted in insights about into the difference between Lamb's hands and my own, which enabled me to critically question the project of Universal Design (Lees-Maffei, forthcoming).

In all of these instances, the conversations that I had with curators who facilitated my hands-on research were illuminating. This is consistent with what I learned when I participated in a workshop for curators learning how to deliver object handling in their gallery, library, and museum (GLAM) settings, ¹⁰ which is that object—handling sessions are essentially occasions for talk (Lees-Maffei 2018a). This echoes anthropologist Janet Hoskins's reflection on the role of

objects in her research practice. While accepting that 'People and the things they valued were so complexly intertwined they could not be disentangled', Hoskins explains that she 'obtained more introspective, intimate, and "personal" accounts of many peoples' lives when I asked them about objects, and traced the path of many objects interviews supposedly focused on persons' (Hoskins 1998, 2). For Hoskins, objects are ultimately conversation starters, but for a design historian the talk which accompanies object handling sheds light on the objects in question.

I hope to have characterised the benefits of embodied research, and object handling in particular, for those researching objects. What I learned about the objects through direct handling could not have been learned any other way. The impressions which come thick and fast during this process need to be captured using notes, photographs, audio-visual recording, or a combination thereof (cf. Prown 1982), reviewed soon afterwards, and written up with initial reflections, in preparation for subsequent writing sessions. Notwithstanding these preparations, writing about research conducted using embodied methods is not straightforward, as I shall now discuss.

Writing Embodied Research

Following the problem of gaining hands-on access to the focal objects for my *Hand Book*, a further problem emerged, of writing about my findings. I have argued that the whole project of design history is one of 'writing design', of translating designed objects, places, and processes into words (Lees-Maffei 2012). More recently I have suggested that writing about design can achieve literary and aesthetic value beyond its association with the designed world, and also that design might be mediated without words (Lees-Maffei 2019c). Writing about embodied research needs to recognise its personal and subjective nature, and that presents a challenge to academic writing standards such as apparent objectivity and a third-person register, to name just two

characteristics of this genre. Existing challenges to academic writing are relevant here. Half a century of work in anthropology and ethnography has been influenced by structuralist and post-structuralist literary theory, symbolic anthropology, Clifford Geertz's 'thick description' (1973) and James Clifford's 'serious fictions' (Clifford &and Marcus 1986; Clifford 1988). Work in history spearheaded by Hayden White's *Metahistory* (1973), and continued in the journal *Rethinking History* (f. 1997), has recognised that history writing is creative and conforms to literary genres. Yet, material culturalists and historians who promote engagement with material culture are remarkably reticent about what Sarah Barber and Corinna Peniston-Bird call: 'the challenge of translating these sources into prose, a process which risks flattening the distinction between these sources and textual ones' (2009, 11).

Leonie Hannan and Sarah Longair are an exception: they caution against simply seeing 'material culture as a "new" primary source that can be slotted neatly into the super-structure of historical scholarship' (2017, 162) and recommend that engagement with material culture should be discussed in a methodological account. They point out that 'the reader is unlikely to be in the presence of the object itself' (141) and recommend illustrations, including close-up detail photographs (142), sketching to enhance an understanding of materiality, surface texture, and how an object 'fits together and balances' (143), and maps and diagrams to convey the placement of focal objects in a setting; and in relation to other objects. They advocate verbal description using technical terms 'to enhance the specificity of your writing' (143), comparisons, 'for example, relating the weight of an object to an everyday activity, the texture on touch, or the awkwardness of moving it' to make an object 'more present to the reader' and to demonstrate 'a rigorous approach to studying material culture' (144). They caution that 'it is important not to shift into speculation' but; rather to; focus 'on the factual evidence before you' and '[a]lways

ensure that the object descriptions remain source-based' (Hannan & Longair 2017, 144). This advice relies on the notion of an external reality separate from the historian observing, and writing, about that reality. Where does 'the factual evidence' begin and end? If a historian finds the surface texture of a fjord sealskin kayak glove¹¹ to be both appealing and strongly reminiscent of an unfortunate encounter with a rabbit poacher, how does she then write about it?

Again, embodied research is useful here. Ellingson (2006, 304) points out that writing is a physical activity 'done with fingers and arms and eyes: It is an embodied act, not mental conjuring, and we should reflect on the experience of writing our research just as we reflect on our experience of being at a research site.' Thanem and Knights (2019, 123) concur, with referenced reference to feminist writing from/with the body, *L'écriture feminine féminine* (Cixous 1976). Trinh (1999, 263) recognises that 'In the passage from the heard, seen, smelled, tasted, and touched to the told and the written, language has taken place', after which Ellingson (2006, 302) elaborates that 'meaning is created, assigned, even imposed on the body, and we need to acknowledge that our languaging of experience and ideas can be thought of neither as somehow reporting pure bodily experience nor as purely disembodied knowledge'. Rosemarie Anderson suggests that 'Embodied Writing' aims for readers to experience 'sympathetic resonance with the texts as they read', 'inviting the readers' perceptual, visceral, sensorimotor, kinesthetic, and imaginal senses to quicken the words and images as though the experience described were their own' (Anderson 2021, 176-7). I will now share three of my own experiences of writing about embodied research findings.

Generative Academic Norms: The Faculty Writing Group

The first issue I encountered in writing about my object handling relates to the iterative development of research writing, through sharing draft texts with colleagues, as a way of

reproducing norms in academic writing. I set up my School's writing group many years ago for colleagues to share their work-in-progress and benefit from one another's constructive comments. As the sole design historian in the School, my work is read in this context by people working in different fields with various norms, biases, and views about the significance, or otherwise, of design. Their feedback on early drafts of *The Hand Book* was not only marked by these now-expected disciplinary differences but also by concerns about with my references to my own subjective impressions: the They were concerned to see me depart from the norms of academic writing. Colleagues suggested that my statements about what I had learned from object handling were merely anecdotal. I was repeatedly asked who the reader was for this material, and whether I had cast my net too wide. Their responses were at odds with what I had to report from my research and what I wanted to achieve.

In another context, after having delivered a keynote lecture to the British Association of Victorian Studies (Lees-Maffei 2018b), I was asked to explain the special powers I must have to yield research findings from handling objects, as though I were a gifted medium with a crystal ball. But, it is 'disembodied prose' that 'appears to come from nowhere, implying a disembodied author' (Ellingson 2017, 62 citing Haraway 1988). Even though academic writing across the humanities began to diversify epistemologically and stylistically during the last century, as I have indicated, and even though mind-body dualism has been discredited, it still seems as though "facts" come out of our heads, and "fictions" out of our bodies' (Simmonds 1999, 52).

Researching and writing as though your body does not matter is a privileged position unavailable to people with protected characteristics of race and ethnicity, gender and sexuality, and non-Western and disabled people. A failure to problematize bodies results in essentializing them, a point I will return to below.

It has long been my view that because all academic writing in the arts and humanities, and even some of the social sciences, is based on subjective experiences and impressions, the most academically rigorous approach is not to deny this in pursuit of an illusory objectivity, but rather to admit and accept subjectivity on the part of the author. My first forays into writing about my hands-on research were built on the foundation of the aforementioned 'rigorous subjectivity' (Fallan &and Lees-Maffei 2015). I did not expect to be challenged by the practice of integrating the subjective experiences of handing objects into academic writing in a field, design history, in which subjectivity is systematically erased through academic training, and nor did I expect to receive challenges from colleagues about this same practice. This experience has provided me with first-hand experience of the ways in which the iterative sharing of writing in research contexts functions to reinscribe norms of academic writing.

Creative Non-Fiction Strategies for Writing the Sensory Self

Searching for another writing community, outside my School and outside academia, and another mode of expression, and partly because the Covid-19 pandemic curtailed my access to the museums and archives where I had planned to carry out more embodied research and lead object_handling workshops, in April 2020 I enrolled ion the UK's National Centre for Writing course 'Start Writing Creative Non-Fiction'. We read rich exemplars, such as Janet Malcolm's (1994) essay about her difficulty in writing about artist David Salle, and John Jeremiah Sullivan's (2014) article about compulsive music collector Robert 'Mack' McCormick's role in the mystery surrounding musicians Elvie Thomas and Geeshie Wiley. We reflected on our reasons for wanting to write creative non-fiction. Structuring a creative non-fiction book was like constructing a bridge, albeit one with a three3-act narrative arc of problem, confrontation, and resolution, we were told. We were advised to begin our writing in media medias res, at the most

dramatic or emotionally intense moment in the story, to pique readers' interest in questions they wanted answered. The class was directed to follow Anton Chekhov's principle of 'show, don't tell' (Yarmonlinsky 1954, 14), by writing about small details to paint a picture for the reader. We were encouraged to use dialogue and direct quotations. We examined research strategies, interview techniques, considered the benefits and drawbacks of memories, and the ethics attendant upon researching and writing about real people. In the context of biography, it was suggested that we should note our feelings towards our subject, and any changes during the research process. 'Footstepping', retracing the steps of our research subjects, was recommended, as well as archival research. We looked at the development of character through dialogue, and the narrative importance of place and location, and we considered voice and story.

We also wrote many of our own short texts. Mine included discussions of public information about hand hygiene during the Covid-19 pandemic, Rembrandt's painting -The Anatomy Lesson of Dr Nicolaes Tulp-, a significant event in my own mother's life, a significant event in my own life, the significance of place in the life and work of artist Rob Ryan, and the aforementioned HMP Wandsworth quilt. My focus was on creative non-fiction approaches to authoritative evidence-based writing which is able to communicate mood, atmosphere, motivation, and many other aspects of subjectivity as context for sharing the research findings of my object handling. The course loosened my own adherence to academic writing norms and helped me to feel comfortable writing about my own experiences. It also helped me to use my imagination to understand what it would feel like to use the object I had handled. Arguably, the subjective and aesthetic impressions that embodied research yields are better communicated using creative non-fiction techniques rather than the academic writing standards that persist in a mainstream history which remains committed to external verifiable facts.

First Hand, First Person?

Returning to academic writing, we need to consider the role of language in communicating about embodied research. Ellingson (2006, 302) laments the fact that 'language conventions make it difficult to include the body as the self rather than the wholly owned subsidiary of the self.' The term 'My body' communicates ownership of the body by a self located elsewhere, in what she terms the 'mind-self' (Ellingson 2006, 306, 302). Academic writing favours 'illeism', the third-person register, and the passive voice, as in "The data were collected" (Ellingson 2006, 301). Even when the first-person register is used in academic writing, it usually takes the form of a 'sanitized "I," who reports having taken actions without describing any details of the body through which the actions were taken' (2006, 301). This is problematic because it doesn't recognised recognise that 'certain aspects of the identity of this "I" (such as being white, woman, or cancer survivor) might have influenced the researched performed' (Dahlberg 2021, 21). Ellingson also laments bemoans the fact that 'even with the embracing of qualitative methods and the broadening of academic writing conventions (e.g., permitting or requiring use of first person rather than passive voice) [...] consideration of the body of the researcher remains largely absent from accounts of such research' (2006, 299). She recommends, with reference to Geertz (1973), that researchers 'pay more careful attention to all of their senses as they conduct research and include relevant details in the "thick description" of their qualitative findings (Ellingson 2006, 304). First-person narration lends authority of emotion and intimacy to writing, and 'you lose the suggestion of omniscience that a detached third-person voice can provide. This is no bad thing – it is more honest to admit that you are not all-knowing' (Pim 2020). Here biographer and creative non-fiction tutor Keiron Pim echoes the 'rigorous subjectivity' position. However, for Pim, first-person narratives also render other characters as

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secondary, distant, obscured, whereas a third-person narrative asks that people be assessed 'on their own merits, rather than in relation to the "I" character who describes them' (Pim 2020). If academic writing prefers the third person, and offers only the 'sanitised I' as an alternative, creative non-fiction provides authors with a choice between first person and third person, albeit one made with an awareness of the with advantages and drawbacks of both.

For the research I had conducted using object handling, being open about my research methods and my consequent relationship to the research findings necessitated a first-person account. However, the editors of an edited collection told me to revise my text without using 'I' because the first person is inconsistent with the conventions of academic writing (Lees-Maffei, forthcoming). A fundamental objection to subjectivity is that it is personal and not replicable as scientific enquiry should be; 'sensorial language can lure even careful historians into collapsing the distance between past and present' (Smith 2021, 13).- I was concerned because the account of object handling in my draft chapter was fundamental to my suggestion, based on my own handling of Thomas Lamb's prototypes for his Wedge-Lock handle, that so-called 'universal design' does not suit everyone. Rewriting the first-person account in the third person risked seeming to extrapolate from my own experience to claim broader applicability. This would be undesirable under any circumstance, but given the argument I was making, it was undermining. Rather than universalising my own experiences, I wanted to recognise them as my own by using the first person. By integrating embodied research, specifically object handling, into design historical methodology, I have had to negotiate the fact that standard academic modes of writing are inadequate to communicate findings arising from this method. The method explored in this chapter therefore has implications for writing, as well as research.

Conclusion

This chapter has made a case for object handling as a research method in ways that reflect current approaches to epistemology and interdisciplinary academic writing and knowledge production. It has done so in three parts. I began by tracing some contexts for the historical value of engaging with material culture through half a century of work in a variety of fields including material culture studies, design history, and history. The most productive contexts for this research have been sensory history, which focuses on the senses without usually being methodologically innovative otherwise, and embodied research, focussed on the body and embodiment and embracing experimental methods of research and writing. In the central part of the chapter, I introduced my own research-in-progress for The Hand Book as a case study of using object handling as embodied research for a single-sense study on touch. I reported on the difficulties of securing access to objects in museums and archives, and the constrained ways in which researchers are permitted to handle these objects as well as the benefits of doing so. Finally Lastly, the chapter considers the challenges of writing about research findings gathered through embodied research, and specifically object handling, in academic contexts where restrictive academic writing standards efface subjectivity. Researchers who wantwishing to better understand the designed world through embodied research methods such as object handling may need to develop new modes of writing to communicate their findings.

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¹ The field was formalized at a meeting of the Association of Art Historians in 1977, when what would become the Design History Society was founded. Subsequently, discrete undergraduate and postgraduate programmes and academic journals were launched (Lees-Maffei 2009; Huppatz <u>&and</u> Lees-Maffei 2013).

² Museum-based Masters programmes in design history at London's Victoria & Albert Museum, and New York's Cooper Hewitt National Design Museum, teach object handling.

³ See, for instance, Quimby 1978 for an early shapshot snapshot of the field.

⁴ For a demonstration of Glassie's use of the ethnographic technique of participant observation, as he watches artisans performing their wordless crafts, see Collins 2019.

⁵ Overarching claims made by sensory historians for the primacy of one sense or another at certain times have not aged well (Tullett 2021, 8), but among recent calls for intersensorial work (Howes 2019), 'the relatively understudied senses of touch and taste' are still seen to merit single-sense studies (Tullett 2021, 6).

⁷ 31 ⁴ January 2020. The 'Friday Late' series has been running for more than twenty years, at the rate of ca. ten events each year, bringing thousands of visitors into the museum for an after-hours experience. During the Covid-19 pandemic of 2020 and onwards, Friday Late moved online. (Victoria and Albert Museum 2022b).

⁸ Based on work by by Andrew Cook and Graham Pullin for an exhibition at V&A Dundee, 'Hands of X: Design Meets Disability'.

⁹ Another example of what we can learn only from direct handling is artist Alana Jelinek's research into 'cannibal forks'. Unfettered access to the objects enabled her to enact eating with them, and to thereby determine that they were not designed for use as eating utensils (Jelinek 2022, 2014, 2012).

¹⁰ Touring Exhibition Group (TEG) workshop 'Tactile Access to Collections: Maximising and Managing Public Object Handling Opportunities', 28 to November 2018.

¹¹ University of Cambridge, Museum of Archaeology and Anthropology, 1933.697.

¹² I have written elsewhere about the hierarchies of art and design; see: Lees-Maffei 2004 and; Lees-Maffei 2019d.