

Bonnie Mustoe-Whitehill

How is physical and visual touch important, in relation to sculptural objects and mental well-being?

BA (Hons) 3D Design Crafts
2021 - 2022

Submission Declaration

**How is physical and visual touch important, in relation to
sculptural objects and mental well-being?**

*Submitted by **Bonnie Mustoe-Whitehill** to Plymouth College of Art as a research project towards the degree of BA (Hons) **3D Design Crafts** 2020-2021. I certify that all material in this research project which is not my own work has been identified and that the final word count from introduction through to conclusion is 6209 words.*

..... **Bonnie Mustoe-Whitehill**.....

Abstract

Touch, whether physical or visual, is a highly integral part of how we explore curiosities within the world around us, including sculptural objects. The creative sector doesn't appear to value the importance of touch and how it may potentially benefit our mental well-being. Research highlights that by practising mindfulness, a technique for training attention, you can improve your emotional state and ease feelings of anxiety. Mindfulness can also be used when touching and playing with different types of tactile objects to focus attention and reduce anxiety, which suggests that physical interactions with other objects, such as sculpture, could imply similar responses.

The work and thought processes of artists Bonnie Kemske, Barbara Hepworth and Michael Dean will be explored, along with examples of the feelings of comfort and connectedness that people have experienced through touching their work and others. Generally, the display of sculptural artwork often lacks inclusivity by restricting physical touch between the sculpture and the viewer. By highlighting public responses to cases where there are no restrictions, a general theme emerges of the importance of touch and the impact that touching sculptural artwork has on the viewer.

There are limitations for people who want to explore sculpture physically, as well as many artists not wanting to consider it as a form of exploration for the viewer. Often, visual exploration is what the artist intends most for the viewer and their work, which can provoke physical sensations on the skin. This can be seen most obviously in digital formats such as Visual ASMR, which can also benefit the viewer positively. Alternative ways artists could incorporate physical touch into their work are suggested, such as assessing perceived textures to subvert the material qualities of pre-existing work. By highlighting the importance of touch and the possible benefits it can have on our mental well-being, it offers the reader the opportunity to realise the value of this form of exploration and utilise it when interacting with sculptural objects in the future.

List of Contents

Abstract	3
List of Contents	4
Acknowledgements	5
Introduction	6
1. Defining touch.	8
1.1 The Physical sensation of touch.	8
1.2 Visual perception of touch.	9
2. The argument of ‘do not touch’.	12
2.1 Bonnie Kemske	15
2.2 Inclusivity	15
3. Therapeutic practises.	19
4. Encouraging audience interaction.	23
4.1 Barbara Hepworth	23
4.2 Michael Dean	24
4.3 Connection, communication and comfort.	26
5. Limitations of allowing physical interactions with sculpture.	28
Conclusion	31
Reference List	31
List of Figures	34

Acknowledgements

With special thanks to Sophie Davis for being there from the start, and Jack Everatt, for his continual support, motivation and endless supply of Twinings Earl Grey Tea.

Introduction

Touch, whether physical or visual, is a highly integral part of how we explore curiosities within the world around us. Interacting with sculptural objects through physical and visual touch, combined with the use of mindfulness could be considered potentially beneficial to our mental wellbeing. Physical touch allows us to touch and feel the sensation of different materials of objects and surfaces that make up our world, due to the complex engineering of our skin. Visual touch allows us to make visual judgements of the material properties of objects or surfaces without the necessity of coming into physical contact with them. Mindfulness is an ancient meditation technique used to train your attention towards your internal thoughts, with the aim to alter how you relate to your own feelings and the world around you. When referring to sculptural objects within the text, variations such as sculpture and artworks may be used as well, but the general theme surrounds three-dimensional pieces of art.

The aim of this essay is to explore the reasons why touching sculptural work can be such a challenge, how touch has previously been explored amongst sculptural artists and makers, and the possible benefits it can have on our mental well-being. By taking all of these points into consideration, it gives you, the reader, the opportunity to judge the importance of touch, generally as well as in relation to sculpture.

Chapter one will focus on defining physical and visual touch, how we already use these tactile senses all the time subconsciously, and how we can employ them when interacting with sculpture. The Second chapter will address reasons why, in most cases, we are unable to explore work physically, such as protecting work from damage or degradation. On the other hand, it addresses how people can often feel excluded and detached when unable to interact with work, using Bonnie Kemske's work and the Tactual Explorations Project to demonstrate the importance of physical contact with sculpture. Chapter three informs us of the benefits mindfulness can have on our mental well-being, in conjunction with interactions with sculpture. Providing examples of tactile objects, or 'focus tools', that have been commonly known to decrease mild levels of stress and anxiety, supporting the idea that touching sculptural objects can potentially benefit mental well-being. Chapter four will continue to illustrate examples of artists who encourage visual and physical audience interaction, including Barbara Hepworth and Michael Dean. Then taking inspiration from the Citizens of Craft podcast in describing the comfort and connection people often feel when experiencing handmade work tactilely. The final chapter will look at the limitations

artists and makers may face when making their work more available to touch, along with alternative methods that could be explored in an attempt to make their work more inclusive, such as assessing perceived textures to subvert the material qualities of pre-existing work.

1. Defining touch.

1.1 The Physical sensation of touch.

Touch is highly important in our daily lives, whether we do so consciously or subconsciously, it allows us to interact with the world around us. Without it 'we would be unable to do such things as make coordinated movements or feel pain' (Kreifeldt et al., 2011). There are different ways in which our brains process tactile information and external cues, and we categorise them into two main sub-modalities, 'cutaneous' sensory inputs from receptors embedded in the skin and 'kinesthetic' sensory inputs from receptors within muscles, tendons and joints, or when both senses convey significant information, they may be generalised as 'haptic senses' (Dahiya and Valle, 2013).

To expand mainly on the cutaneous sense and how this allows us to feel objects and surfaces, we must appreciate the complexity of our skins' design. When we come into contact with an external stimulus, the flexible surface of the skin is indented or stretched and therefore mirrors the contours of the object (Gardner, 2010). Sensory receptors within the skin provide information to the brain about the object's size and shape which also allows us to perceive surface texture, temperature and decide on whether the overall sensation produces pain or pleasure (Johnson and Hsiao, 1992, cited in Gardner, 2010). Kinesthetic sense comes into play when 'mechanoreceptors inform the brain about the weight, motion, vibration and hand posture that define each object' (Gardner, 2010).

The most receptive areas on the human body are those which lack hair, e.g. skin of the lips, soles of the feet, palms of the hands and fingertips (Gardner, 2010). Above all, the fingertips are the most 'richly endowed' (Johansson and Vallbo, 1983, cited in Gardner, 2010), with the highest density of sensory receptors on the fingertips at around 2,500 per cm² (Gardner, 2010). This incredible engineering allows us to discriminate fine details of surface textures that enable technical interactions, such as reading Braille (Gardner, 2010).

To elaborate on the importance of touch, and its critical role in how our bodies function, we must draw our attention towards Mr Ian Waterman. He lost the sensation of touch below his neck due to a rare neurological illness, which left him unable to perceive the world at all, giving him the terrifying sensation of floating (Dahiya and Valle, 2013). Although extreme, this example demonstrates how phenomenal and complex our sense of touch

really is, and without it, we would have no control over our bodies movements or be able to gather an accurate perception of the physical world.

1.2 Visual perception of touch.

Most people don't realise that touch is directly linked to sight. 'Vision precedes the urge to touch and tactilely explore an object, suggesting that there is an imagined "feel" we want to confirm or enjoy' (Kreifeldt et al., 2011). Interestingly, we often describe what something looks like by how we imagine it would feel, but we don't describe how something feels by how it looks. It seems that in a general sense, the hand informs the eye rather than vice versa (Fleming, 2014).

'Being able to visually distinguish between materials and infer their properties by sight, is invaluable for many tasks' (Fleming, 2014). Through 'learning curiosity', we gain information about how different forms and surfaces feel by touching them. We log the experiences gained from previous interactions and use this mental archive of material knowledge to identify and pre-empt how new and potentially unfamiliar objects may feel, in turn determining our interactions with them (Kreifeldt et al., 2011).

When visually touching objects and surfaces a person may experience 'virtual haptic sensations' (Fleming, 2014). This is a possible type of synesthesia when you encounter a sensation produced in one modality (smell, sight, taste, touch, hearing) when a stimulus is applied to another modality (Cytowic and Wood, 1982), e.g. visualising colour when hearing a certain sound, or in this case experiencing tactile sensations when looking at a three-dimensional surface. 'In general, without actually touching an object, we usually have a clear idea of what it would feel like if we were to reach out and handle it. Even with unfamiliar materials, we seem to be acutely aware of their specific visual and physical characteristics' (Fleming, 2014). Most people are likely to experience this subconsciously, especially in a museum or art gallery setting, where an object you're interested in has been placed behind glass, and there's no way for you to physically feel it. Instead, you 'concentrate on the virtual haptic sensations you receive by mentally running your hands and fingers over their surfaces' (Fleming, 2014). Although frustrating in many cases, this type of virtual experience could be perceived as equally as satisfying (or repulsive) as if it were carried out physically.

People may be more aware of visual touch than they realise, through the volume of visual content they are exposed to every day. On many social media platforms, the desire for 'visuotactile' (Szubielska and Niestorowicz, 2020) content is continual. A trend that gained popularity in recent years called ASMR (Autonomous Sensory Meridian Response) (Smith and Snider, 2019), is known for sensory-stimulating videos which include auditory, visual and tactile triggers (Smith and Snider, 2019). ASMR videos are said to provoke a 'subjective experience of euphoria characterised by a combination of positive feelings and a distinct static-like tingling sensation on the skin' (Vesnin, 2020) - a clear example of 'virtual haptic sensations' (Fleming, 2014).

Onesal, a Japanese art studio specialising in animation and motion graphics, created a collection of content named 'Visual ASMR: An Exploration of Tactile Textures in Nature'. These short videos and images (Fig.1.1 - 1.4) delve into textural, tactile elements which morph and interact with each other in surreal environments, inspired by elements in nature, architecture and timelapse photography (Vesnin, 2020). It could be argued that although these creations are digital, they could still be classed as forms of sculpture, especially as they obtain similar visual qualities and provoke similar feelings to three-dimensional sculpture. Anni Albers, a textile artist from the Bauhaus movement, stated that we've 'grown increasingly insensitive in our perception by touch, the tactile sense' (Albers, 1993). Implying the possible negative impact that the lack of touch may have on our well-being, as we use it 'to assure ourselves of reality' (Albers, 1993). This is true on many levels, however, alternative forms of exploring touch and tactility such as ASMR, described above, can 'often elicit a calm and positive emotional state' (Vesnin, 2020) which can be closely compared to characteristics of mindfulness.



Fig.1.1 Onesal. (2020) *'Earth'*, still from short computer-generated animation.

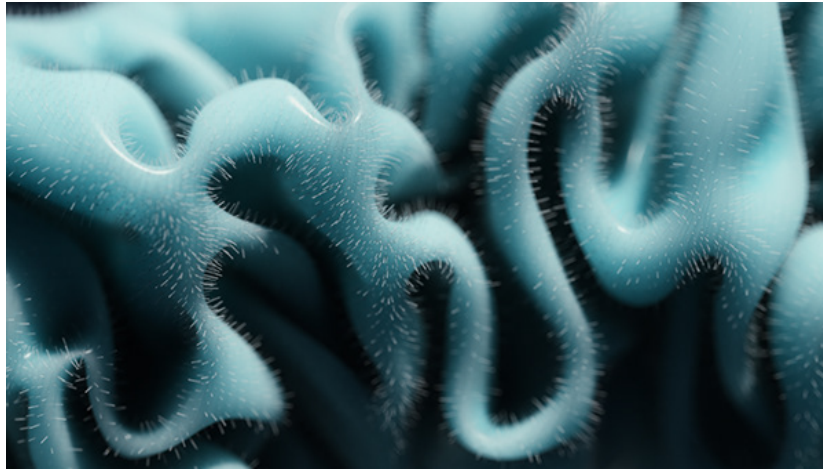


Fig.1.2 Onesal. (2020) '*Fungi*', still from short computer-generated animation.

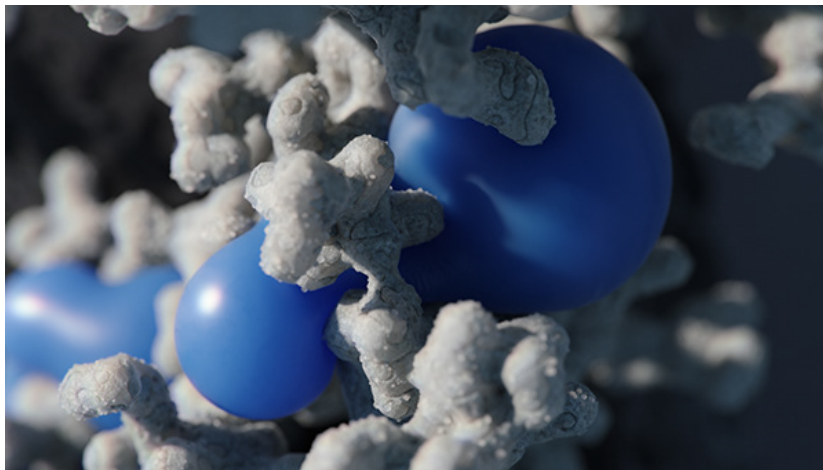


Fig.1.3 Onesal. (2020) '*Air*', still from short computer-generated animation.

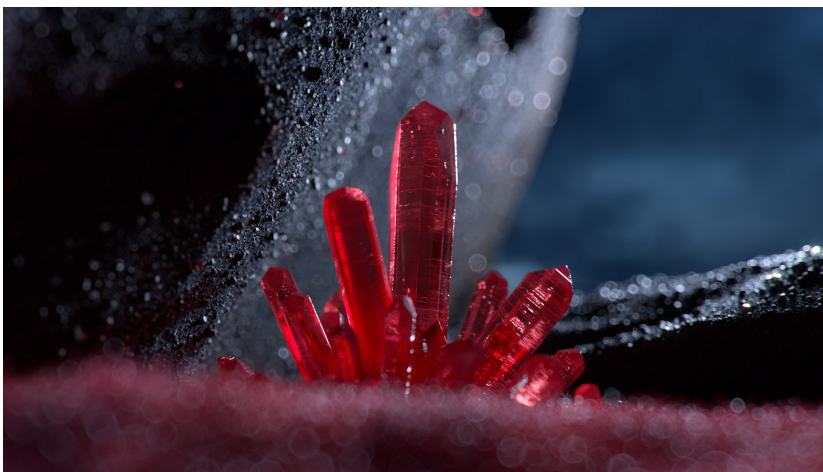


Fig.1.4 Onesal. (2020) '*Rock*', still from short computer-generated animation.

2. The argument of 'do not touch'.

Touching artworks can be considered as a kind of guilty pleasure (Chatterjee, 2008), the presence of 'do not touch' signs in museums and galleries suggests that we have a desire for haptic contact with art, but mustn't do so for fear of a telling off, or worse, damaging the piece. Of course, there are other reasons to not touch sculptures such as potential breakage, theft and injury (Kreifeldt et al., 2011), and most importantly to preserve them in order for future generations to study and enjoy. Although this essay addresses the fact that touching sculpture is important, it's critical to note that one mustn't take this as a point of action to touch everything regardless of rules and regulations, and must respect the wishes of the creator of the artwork and their intentions of how they want their work to be explored. Examples of historical artefacts and sculptures that have been damaged from years of physical contact include '*Greyfriars Bobby*' in Edinburgh, Scotland (Fig.2), '*Victor Noir*' in Paris, France (Fig.3) and '*Juliet*' in Verona, Italy (Fig.4). These examples are all cast bronzes and have been subject to made-up traditions said to bring the bronze-rubbers some form of 'luck', but instead, they are slowly polishing concentrated areas of the sculptures, wearing away details from the surface which damages the overall look of the piece.



Fig.2 William Brodie. (1873) '*Greyfriars Bobby*', bronze statue.

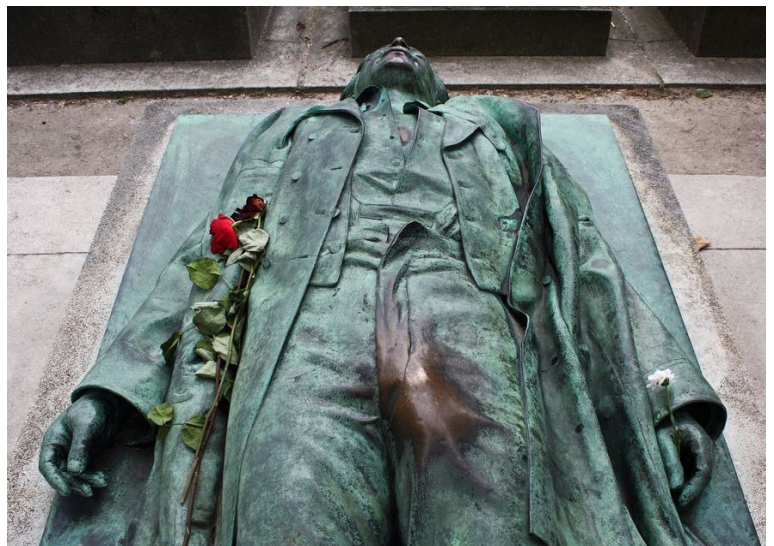


Fig.3 Jules Dalou. (1891) '*Victor Noir*', patinated bronze statue.



Fig.4 Nereo Costantini. (1969) '*Juliet*', bronze statue.



Fig.5 Jeff Koons. (1994-2000) '*Balloon Dog*', mirror-polished stainless steel with transparent colour coating.

Despite being unable to touch most sculptures physically, they all encourage visual touch through their three-dimensionality, which naturally ignites our instinctual urge to physically touch. For example, when viewing Jeff Koons' work '*Balloon Dog*' (Fig.5) you want nothing more than to reach out and squeeze what looks like a giant version of that shiny balloon you got for your birthday as a child, and reinforce your expectations for it to feel taut, squeaky and hollow, warming to your touch and wrinkling at the seams. But we all know in the back of our minds that it's in fact made from stainless steel and will obtain none of the expected qualities described above. Maybe the whole point of not being allowed to touch

the sculpture is to avoid crushing your expectations and keep tickling our 'visuotactile' (Szubielska and Niestorowicz, 2020) desires?

In relation to sculpture and the ever-changing experimental world of material development, you could ask how the viewer would process and experience 'virtual haptic sensations' (Fleming, 2014), for an object or surface, if they have never physically touched or felt anything like it before? This question seems to lead back to the idea of learning through curiosity (Kreifeldt et al., 2011), yes we could probably refer back to our mental archive of material properties, but that would be far less exciting than acting on our innate urge to physically explore. Karel Thein, rather poetically, suggests that we need both sight and touch in order to fully satisfy our need to gain information and knowledge about the world around us, "touch pairs with truth whereas sight offers only illusion" (Thein, 2018).

It has been argued, however, that 'seeing seems to impede the tactile processing of artworks' (Szubielska and Niestorowicz, 2020). In a study where subjects physically interacted with artworks in a gallery, higher levels of haptic pleasure were experienced when blindfolded than when they could see (Szubielska and Niestorowicz, 2020). This evidence suggests that despite whether we can see or not, touch is an undeniably valuable factor when interacting with sculpture.

2.1 Bonnie Kemske

When a person isn't fully able to interact with artworks, they can sometimes feel detached, as though their experience is incomplete. Ceramicist Bonnie Kemske explains that her sculptures '*Cast Hugs*' (Fig.6.1 - 6.2) aren't complete until a person engages with them physically, generally by hugging them. Made 'for the body by the body', the artwork resides in the experience of the sculptures rather than the pieces alone (Kemske, 2021). The perspective of a sculpture needing to be touched in order to be complete seems to carry a level of irony and reflects our own wants and needs of touching and being touched.



Fig.6.1 Bonnie Kemske. (2007) '*Cast hugs*', textured ceramic sculpture being held.



Fig.6.2 Bonnie Kemske. (2007) '*Cast Hugs*', textured ceramic sculpture.

After being displayed as part of an interactive performance within Kemske's exhibition, it was found that the physical qualities of the ceramic objects positively engaged with the audience's haptic senses, and when they were fully stimulated, emotions, memories and associations were strongly evoked (Kemske, 2010). Kemske calls this reaction 'grounded sensuality, a moment when a consonance of physical and emotional centredness occurs' (Kemske, 2021).

2.2 Inclusivity

There is the timeless rule of 'do not touch' throughout galleries and museums globally, it leaves less opportunity for some people, especially those with vision impairments, to connect with sculpture. Despite this, some large-scale museums, such as Tate Modern and the V&A in London, have offered 'Touch Tours' (Fig.7) in the past. The tours consist of

a trained guide leading people with visual impairments through a series of selected objects from the museums' collection, along with 'visuotactile' (Szubielska and Niestorowicz, 2020) descriptions. The tour would allow them to imagine the object as a whole by matching what they can feel (its physical properties) to how it might look (its visual properties). A great opportunity to explore and learn about artefacts and sculptures in a more inclusive way, however, these experiences have limited availability, frequency and can be expensive to book.



Fig.7 Victoria & Albert Museum. (2018) Example of people interacting with ceramic work on a touch tour.

A more successful example of inclusivity is the '*Tactual Explorations Project*'. In 2006, the project realised an event (as a pilot study for potential future exhibitions) which included "relevant workshops, talks and a tactile exhibition (Fig.8) that interpreted the bronze bust of Sophocles (Fig.9) from the British Museum's Greek and Roman Antiquities collection. Ten commissioned artists represented this selected museum object tactually with one haptic simulation and twelve supporting artworks (Fig.10.1 - 10.2) to enhance the physical information available to the viewer (Onol, cited in Chatterjee, 2008). They explained that 'one of the first problems we encounter in common 'inclusive' solutions in the design sector is that they tend to exclude part of their audience in order to include another part' (Onol, cited in Chatterjee, 2008). As well as some people being unable to see, there are also people who cannot feel or have other impairments, so allowing the chance to visually feel and explore the artistic interpretations, as well as the element of physical exploration, is equally as interesting and inclusive. This realisation is refreshing in the sense that they take into account "all visitors regardless of their backgrounds and needs' (Onol, cited in Chatterjee 2008).



Fig.8 Isil Onol. (2008) *'Tactual Explorations Project'*, image of the exhibition full of visitors.



Fig.9 (2000 BC) *'The Arundel Head'*, bronze, also known as the bronze bust of Sophocles, from the Hellenistic period, height 29.21cm.



Fig.10.1 Lynn Cox. (2008) *'The Wiry Old Man'*, stainless steel wire, two visitors feeling the sculpture.

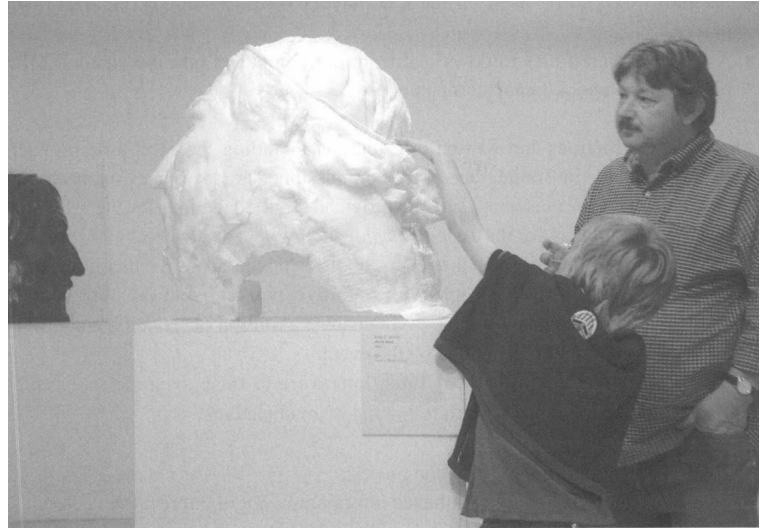


Fig.10.2 Deborah Gardner (2008) *'Viscid Head'*, wax cast of the bronze bust of Sophocles, child feeling the sculpture.

3. Therapeutic practises.

There is evidence that suggests touch between people can be beneficial for our mental health regarding stress, anxiety and early cognitive development (Field, 2004). Despite this, there seems to be a lack of research surrounding the topic of people interacting with objects through touch to aid therapeutic practice. There are instances where various designers have produced tactile objects to be used as tools alongside different forms of therapy, such as Nicolette Bodowes and Paula Lorence. These designers play with the idea of using tactile objects to aid in communicating ideas and emotions whilst processing trauma, for both children and adults.



Fig.11.1 Nicolette Bodowes. (2016) '*Conversation Pieces*', 12-piece toolkit, each made of different materials, ranging from wood to brass to rubber.



Fig.11.2 Nicolette Bodowes. (2016) '*Tools for Therapy*', a series of painted wooden blank cubes and cylinders, and a round drawing board.

Bodowes' project's '*Conversation Pieces*' and '*Tools for Therapy*' are designed to be used alongside each other within therapy sessions. One consists of a 12-piece toolkit (Fig.11.1) where every piece is different and obtains individual material qualities to act as open-ended talking points which bridge the gap between reason and emotion. The other consists of a series of blank cubes and cylinders, along with a drawing board (Fig.11.2), in order to 'untangle complex thoughts, feelings and situations' (Bodowes, n.d.). Lorence's project '*Taktil*' (Fig.12), on the other hand, 'features 12 objects made from eight types of materials that are designed to produce different tactile sensations' (Yalcinkaya, 2018) with the aim of helping children with autism spectrum disorders overcome sensory sensitivities and soothe anxiety (Yalcinkaya, 2018). Although these are great examples for supporting the idea that touching objects can be beneficial to us mentally, it isn't relevant for instances

in everyday life, where mental health concerns are more focused on wellbeing. One approach that has stood out throughout researching this area is the practice of mindfulness.



Fig.12 Paula Lorence. (2018) '*Taktil*', four tactile objects from the group of 12, made from a variety of materials.

Mindfulness is an ancient meditation technique that dates back to 500 BC. Some of the oldest forms of meditation come from Hinduism, however, Buddhists developed their own meditation technique called Satipatthana, which is known as the traditional form of mindfulness meditation. Satipatthana means 'to keep your attention inside' (Rinpoche, cited in Cole, 2021), the idea behind it is to focus your attention towards your present self whilst using breathing techniques. It is supposed to alter how you relate to your own feelings, and in turn change how you relate to the world around you (Cole, 2021), transforming your emotional experiences (Arch and Landy, 2015). Although this method seems to be more directed towards exercising your mind, it is also encouraged to be practised whilst carrying out everyday tasks, allowing you to be fully focused on your present self, what you are doing and the emotions you are feeling (Cole, 2021).

Interacting with sculpture through touch strongly allows itself to be used in harmony with mindfulness training. This can be through directly focusing one's attention toward something specific, be it internal (thoughts, emotions, or body sensations) or external (sensory perceptions), it consequently creates a relationship between the observer and the object of attention' (Greco and Hayes, 2008). Barbara Hepworth seems to closely follow this concept, saying that they should 'move with their bodies' (Hepworth, cited in Tate,

2015), 'walk around it, bend toward it, touch it, and walk away from it (Hepworth, cited in British Pathé, 2014). Many of us may already take this approach, but it appears she wanted to remind everyone to experience her work in a more explorative, immersive and mindful way.

As well as the audience benefitting from interacting with sculpture tactilely, the artist creating the work will most likely also benefit. Many artists (as well as many others who use their brains creatively) can access a trance-like state of 'flow' where they experience 'total absorption and effortless concentration' (Robb, 2019). 'Flow' is 'associated with subjective well-being, satisfaction and general happiness' (Robb, 2019), and although not everyone can enter this state, mindfulness (the apparent 'more accessible cousin of flow') (Robb, 2019) can be used instead.



Fig.13.1 'Worry Stones', Various rocks and gemstones, around the size of a thumbprint.



Fig.13.2 'Komboloi', also known as 'worry beads', painted wooden beads on string, meant to fit very loosely over the wrist.

Often when looking at ways in reducing stress and anxiety through sensory stimulation, the attention is largely aimed at people with autism spectrum disorders. However, neurotypicals (individuals with typical neurological development or functioning) (Brusie, 2021) also partake in self-stimulatory behaviours such as 'fidgeting' to soothe themselves (Biel, 2017). A range of informal tactile items have been used for many years to help soothe feelings of stress and anxiety such as worry stones (Fig.13.1), Komboloi or 'worry beads' (Fig.13.2) and Baoding balls (Fig.13.3). In recent years there has been an increase in population for 'fidget toys', such as the fidget spinner shown in Fig.13.4, which seem to develop on those themes. These objects have been known to 'manage sensory issues,

anxiety, and attention challenges by redirecting [the users'] physical and emotional energy into an object' (Biel, 2017).



Fig.13.3 'Baoding Balls', jade, hand demonstrating how the Baoding balls would be held.



Fig.13.4 'Fidget Spinner', stainless steel with shiny purple coating, hand size.

The use of these techniques isn't to suggest a cure for mental health illnesses. Studies have highlighted the importance and effectiveness of medication and therapy in the treatment of mental health issues, however, the use of meditative practices such as mindfulness may also be a beneficial treatment for those who are worried about side effects of medication. (Goyal *et al.*, 2014).

4. Encouraging audience interaction.

4.1 Barbara Hepworth

Barbara Hepworth believed that 'every sculpture should be touched' (Hepworth, cited in British Pathé, 2014). She described touch as 'our first sensibility' (Hepworth, cited in British Pathé, 2014), and that we must use it when interacting with her work, 'everything I make is to touch and people usually do, which pleases me' (Hepworth, cited in Tate, 2015).



Fig.14 Barbara Hepworth Museum, St Ives. (n.d.) the upstairs gallery within Barbara Hepworth Museum, featuring various sculptures on plinths.



Fig.15 Barbara Hepworth Museum, St Ives. (2021) museum visitors interact with a sculpture in the gardens.

When visiting the Barbara Hepworth Museum and Gardens in St Ives (which used to be Hepworth's home and studio), there is a distinct divide between the sculptures placed inside and outside, in a visual way, as well as an interactive way. The pieces in her studio are curated in a way that is typical of a gallery setting (Fig.14). In a silent, well-lit room, you may hear the cries of gulls nearby or people clunking around the small museum room downstairs, all very calm and full of prestige and value, where you must look but not touch. However, when you venture outside into her gardens, you almost experience a wash of relief, where you feel like you won't be told off for breathing too loudly. You can unleash your inner child in an explorative manner, being allowed to go up to the sculptures, touch them and move in between and around them (Fig.15), just as she described previously. This juxtaposition of experiential possibilities all in one collective space seems rather unusual.

It is interesting to note that Hepworth's outdoor sculptures are made of bronze, a highly durable material that is permanently open to the salty Cornish air, which allows the audience to interact with the work more freely, as it isn't likely to be damaged as easily. Of course, there are cases where bronzes have been severely damaged through physical interactions such as 'Greyfriars Bobby' (Fig.2), as mentioned previously. Traditions of luck seem to have overthrown the true appreciation of sculptures that are utilised as tourist spots and commemorative landmarks, rather than explorative forms. However, it can't be dismissed that these interactions could be benefitting the bronze-rubber's mental

well-being too, as to some this may be a way of connecting with and appreciating the work.

4.2 Michael Dean

Rather provocatively, Michael Dean seems to incorporate touch into his exhibitions in a way that is inescapable for visitors. In the 2012 exhibition 'Government' he thought about ways in which people unconsciously make contact with surfaces. Dean incorporated forearm-length door handles (Fig.16.1 - 16.2) within the exhibition, matching their texture to the wall pieces propped up in the exhibition space (Fig.16.2 - 16.3), willingly inviting the visitors to interact with the work. The floor was carpeted, to alter the way sound travelled within the space, as well as feeling soft underfoot, maybe to imply feelings of informality. 'Tactility is an essential sculptural quality for Dean - he wishes us to first "touch with the eyes, and then allow ourselves to touch with the hand"' (Henry Moore Foundation, 2012). Tactile sculptural pieces were placed throughout the space without any barriers to inhibit interaction, unlike how you might see in a regular exhibition setting.



Fig.16.1 Michael Dean. (2012) 'Government', image of visitor touching textured concrete door handle on entry to exhibition.



Fig.16.2 Michael Dean. (2012) 'Education (working title)', textured concrete, view of entrance to exhibition, including concrete door handles.



Fig.16.3 Michael Dean. (2012) *'Health (working title)'*, image of visitor touching textured concrete panels propped against gallery walls with a coverless book placed in front.

Dean's material choice of cast concrete may have also increased the likelihood for visitors to touch the work, as people recognise it for being durable and long-lasting, often used in industrial settings. Interestingly, the concrete was deliberately left untreated, 'their patina changing as the raw, unsealed surfaces pick up traces of each person's hand' (Henry Moore Foundation, 2012). He used the concept of deliberate degradation intuitively, in order to juxtapose his political views regarding the government and 'how impersonal systems rapidly become personal when their direct impact rubs up against everyday experience' (Henry Moore Foundation, 2012). Cleverly, Dean has found touch to be an impactful form of communication to get people to experience his concept through an alternative perspective.

People generally tend to consider touchable sculpture as 'less valuable (because precious works of art cannot be touched)' (Szubielska and Niestorowicz, 2020). Maybe this mindset needs to be overridden by more modern concepts, where the solution is for artists to create sculptural work with the intention of letting audiences interact with it, physically as well as visually. For pre-existing sculpture that is considered more valuable, perhaps more readily available replicas could be created, or take inspiration from the 'Tactual Explorations Project' (Fig.8) in producing tactile interpretations of pieces for the sole purpose of being touched, bridging the gap between 'do not touch' and 'do touch'.

Hepworth explained that ‘part of the way you make [sculpture]’ (Hepworth, cited in British Pathé, 2014), is by touching and feeling it, which makes it all the more important for the audience to touch and feel because they can connect with it in a more intimate way, and possibly gather a more in-depth understanding of the maker, the piece and the process in which it was made.

4.3 Connection, communication and comfort.

‘Makers marks’ have often been referred to as admirable traits within handmade items, from homeware to sculpture. Handmade work tends to obtain visual and physical evidence which indicates that it’s been created by hand and not been mass-produced, which often entails a lack of uniqueness. In the Citizens of Craft podcast episode ‘Objects Should Inhabit, Not Intrude’, Natali Rodrigues (glass artist) explains that handmade objects are ‘an expression of someone’s hand’ (Rodrigues, cited in Black, 2018) and that the personal connection she feels between herself and another person is most significant; ‘I get to use something that someone else has made, and the objects that I’ve made inhabit someone else’s hands’ (Rodrigues, cited in Black, 2018). Maegan Black (host of ‘Citizens of Craft, The Podcast’) added that ‘these objects are the primary connecting point between us all’ (Black, 2018). These feelings of connectedness directly relate to Kemske’s series ‘Cast Hugs’ as described previously, where exhibition visitors who interacted with the ceramic sculptures felt an ‘emotional energy’ connecting to ‘all the people who have hugged [the pieces] before’ (Kemske, 2021).



Fig.17.1 Lisa Merk. (2017) ‘*Tactile Mini Urns*’, wooden urn and pebbles.



Fig.17.2 Lisa Merk. (2017) ‘*Tactile Mini Urns*’, wooden pebbles, inside view before they are filled.

Adding to the theme of comfort through personal experiences, designer Lisa Merk's project 'Tactile Mini Urns' (Fig.17.1) addresses the idea of satisfying our need for comfort by holding tactile objects. Merk's pebble-shaped urns (Fig.17.2), made from polished wood, have been designed to be held at funerals to 'reduce the anxieties of bereavement' (Jones, 2017). It seems prevalent that even if engaging with an object through physical or visual touch, just in a tactilely explorative manner, there will always be an emotional response evoked. This concept seems to be the perfect example of how practising mindfulness 'creates a relationship between the observer and the object of attention' (Greco and Hayes, 2008).

As well as the physical and emotional relatability between the maker and the holder, there is also the aspect of communication through touch. Other than comparing experiences verbally, there is no other way of comparing your own physical experience of how something feels to someone else's than if you interact with the same object as another person, in the same way. 'When we describe and communicate texture with each other via our senses and perception, texture becomes a "perceived texture"' (Zuo et al., 2014). This can be interesting as descriptions of feelings are often subjective as they are individual 'perceptions', however, when you remove the ability to verbally compare, it connects people in a deeper way that only they have experienced.

5. Limitations of allowing physical interactions with sculpture.

Understandably, not every artist is able to produce tactile work for people to explore physically, either through the nature of what they make or the materials they choose to work with. For example, if Maria Bartusová allowed people to handle her plaster sculptures, they would no longer be pristine white and would likely have parts chipped off or crushed in no time. Works such as *'Untitled 1970'* (Fig.18.1) and *'Untitled 1985-87'* (Fig.18.2) seem irresistible for a person to explore with their hands, however, the 'imagined feel' (Kreifeldt et al., 2011) or 'virtual haptic sensations' (Fleming, 2014) which precede this physical urge, must only be satisfied visually. Kemkse, Hepworth and Dean, on the other hand, all encourage audience interaction with their work, as they all use materials that allow for this, such as ceramic, stone, bronze, and concrete.



Fig.18.1 Maria Bartusová. (1970) *'Untitled (1970)'*, plaster.



Fig.18.2 Maria Bartusová. (1985-87) *'Untitled (1985-87)'*, plaster, string, 29.8 x 32.0 x 25.2cm.

Many of Bartusová's sculptures take on the 'perceived texture' (Zuo et al., 2014) of other objects, such as *'Untitled (1985)'* (Fig.18.3) resembling a broken eggshell. If the viewer had never before experienced the feel of crunching thin, fragile layers of plaster with their hands, but have experienced crunching an egg-shell with their hands, it's possible that they would assume the same level of sensory stimulation. In a 2020 study where levels of haptic pleasure were measured amongst participants who felt different artworks, it was found that 'seeing impeded the tactile processing of artworks' (Szubielska and Niestorowicz, 2020). They suggested 'exposing artworks illuminated with muffled light or unlighted may increase the likelihood of experiencing haptic aesthetic pleasure when touching art' (Szubielska and Niestorowicz, 2020), which opens up many opportunities for subverting material qualities to allow for audience interaction.



Fig.18.3 Maria Bartusová. (1985) *'Untitled (1985)'*, plaster.

Within the design sector, when advertising products, it has been realised that if the consumer is able to feel a product before buying it, their level of satisfaction is generally higher (Zuo et al., 2014). So with this in mind, shops often supply 'duds' (a cheaper version of the product on sale) to satisfy the buyers' tactile needs. This concept could be translated into the world of sculpture for artists to marry up the audience's 'visuotactile' (Szubielska and Niestorowicz, 2020) tendencies. An idea relating to this could be to have a sculptural object such as *'Untitled 1985'* (Fig.18.3) displayed as normal, then separate replicas that imitate the 'perceived texture' (Zuo et al., 2014) of the piece displayed below, such as eggshells (also low-cost), with low illumination. This would allow the audience to experience touching the work, without ruining the physical integrity of the piece itself. Additionally, it may alter the audience's perspective or emotional response to Bartusová's work, by bringing back an endearing memory from their childhood when learning to cook, or fulfilling the strange urge they have to crush the delicate object, to gain a kind of sensory satisfaction.

If artists feel that using both physical and visual interactions with the audience are important ways to communicate the tactile qualities of their work, then they could experiment with alternative ways in which the material qualities are sensed, interpreted and understood (Mills, 2009). Of course, there are artists like Michael Dean who deliberately choose for the aesthetic properties of the sculpture to change through the intentional and repeated touching of the work. Ultimately, it is up to the artist to consider whether they want to incorporate the element of touch into the experience of their

sculptures. Those that don't, still have other alternatives to consider to enable the audience to get the most from their sculptures.

Conclusion

It is clear that in many contexts, physically touching sculptural objects will always be an issue, due to differing artists' concepts and desires, and the endless need for preservation and protection (of the work and the people around it). There will always be three-dimensional work that is untouchable to the hand, although this does not prohibit the eyes from touching, likewise with digital work such as Onesal's 'Visual ASMR' (Fig.1.1 - 1.4), which may also evoke unexpected physical responses in the form of 'virtual haptic sensations' (Fleming, 2014).

From looking at examples of tactile, anxiety-reducing objects, and how they can be used as 'focus tools' (Biel, 2017) in aiding mindfulness, it is apparent that interactions with sculpture could be utilised in a similar format. As mentioned previously, the text isn't suggesting using these techniques as a substitute for therapy or medication in treating mental illnesses. It is exploring alternative practises that could possibly benefit a person's mental wellbeing.

There are promising examples of artists who clearly value the importance of touch, such as Barbara Hepworth, Bonnie Kemske and Michael Dean, and express this within their work in innovative ways. However, the distinct lack of readily available work addressing similar matters, particularly physical touch, was profound. Being such an integral part of our daily lives and how we function as human beings, one would think that the sense of touch would be less overlooked. If a larger quantity of artists and makers appreciated the value of physical touch, the more inclined they would potentially be to develop interesting work surrounding the area. Similarly, if people interested in sculptural work were exposed to different experiences of touch more, like how the Tactual Exploration Project addressed the idea, the realisation of its importance may gather momentum and it may become more valued.

To overcome the intimidating social construct within the creative sector to 'not touch' sculptural objects, people need to be told why those measures are in place and be given alternative ways of interacting with the work, to be as inclusive as possible. By giving the reader the opportunity to realise the importance of their sense of touch, it would enable them to maximise the use of their senses and forms of exploration that come naturally to us all.

Reference List

- Albers, A. (1993) 'Eight: Tactile Sensibility', in *Anni Albers On Weaving*. Dover Publications Ltd., pp. 62–65.
- Arch, J.J. and Landy, L.N. (2015) 'Emotional benefits of mindfulness', in Brown, K.W. (ed.) *Handbook of mindfulness: Theory, research, and practice*, (pp. New York, NY, US: The Guilford Press, xiii, pp. 208–224. Available at: <https://psycnet.apa.org/fulltext/2015-10563-012.pdf>.
- Biel, L. (2017) 'Fidget Toys or Focus Tools?', *Autism File* [Preprint]. Available at: sensorysmarts.com.
- Black, M., West, H. and Rodrigues, N. (2018) *Objects Should Inhabit, Not Intrude, Citizens of Craft*. voiceEd Radio. Available at: <https://citizensofcraft.ca/podcast> (Accessed: 8 January 2022).
- Bodowes, N. (no date) *Conversation Pieces, Cargo Collective*. Available at: <https://cargocollective.com/nicolettebodowes/CONVERSATION-PIECES> (Accessed: 7 January 2022).
- British Pathé (2014) *Barbara Hepworth Sculptress (1972)*. Youtube. Available at: <https://www.youtube.com/watch?v=2qLDOcUIEhE> (Accessed: 7 January 2022).
- Brusie, C. (2021) *Neurotypical: All you need to know and more*, *Healthline*. Available at: <https://www.healthline.com/health/neurotypical> (Accessed: 12 January 2022).
- Cole, A. (2021) *The Mind, Explained: Mindfulness*. Vox, Netflix Worldwide Entertainment. Available at: https://www.netflix.com/watch/81062191?trackId=14170289&tctx=2%2C0%2C00ca23e1-b41e-477e-bd09-6d7c7f394e91-45380346%2C464260a0-d2b8-43a5-86f7-b97a60a3a44b_28739224X3XX1641551563067%2C464260a0-d2b8-43a5-86f7-b97a60a3a44b_ROOT%2C%2C%2C.
- Chatterjee, H. et al. (eds) (2008) *Tactual Explorations: A Tactile Interpretation of a Museum Exhibit through Tactile Art Works and Augmented Reality*. Berg. doi:9781000325522.
- Cytowic, R.E. and Wood, F.B. (1982) 'Synesthesia', *Brain and cognition*, 1(1), pp. 36–49. doi:10.1016/0278-2626(82)90005-7.
- Dahiya, R.S. and Valle, M. (2013) *Robotic Tactile Sensing: Technologies and System*. Springer, Dordrecht. doi:10.1007/978-94-007-0579-1.
- Field, T. (2004) 'The importance of touch', *Karger Gazette*, (67 Skin), pp. 10–12. Available at: https://misc.karger.com/gazette/67/Field/art_4.htm.
- Fleming, R.W. (2014) 'Visual perception of materials and their properties', *Vision research*, 94, pp. 62–75. Available at: <https://www.sciencedirect.com/science/article/pii/S0042698913002782?via%3Dihub>.
- Gardner, E.P. (2010) 'Touch', eLS. Chichester, UK: John Wiley & Sons, Ltd. doi:10.1002/9780470015902.a0000219.pub2.
- Goyal, M. et al. (2014) 'Meditation programs for psychological stress and well-being: a systematic review and meta-analysis', *JAMA internal medicine*, 174(3), pp. 357–368. doi:10.1001/jamainternmed.2013.13018.
- Greco, L. and Hayes, S. (2008) *Acceptance and Mindfulness Treatments for Children and Adolescents. A Practitioners Guide*. New Harbinger Publications.
- Henry Moore Foundation (2012) *Michael Dean: Government*. Available at: <https://www.henry-moore.org/whats-on/2012/04/12/michael-dean-government> (Accessed: 11 November 2021).
- Johansson, R.S. and Vallbo, Å.B. (1983) 'Tactile sensory coding in the glabrous skin of the human hand', *Trends in neurosciences*, 6, pp. 27–32. doi:10.1016/0166-2236(83)90011-5.
- Johnson, K.O. and Hsiao, S.S. (1992) 'Neural mechanisms of tactual form and texture perception', *Annual review of neuroscience*, 15, pp. 227–250. doi:10.1146/annurev.ne.15.030192.001303.
- Jones, J. (2017) *Lisa Merk's tactile mini urns give mourners one-on-one time to say goodbye*. Available at: <https://www.dezeen.com/2017/03/01/lisa-merk-tactile-mini-urn-design-products-death-stockholm-furniture-fair-2017/> (Accessed: 9 January 2022).
- Kemske, B. (2010) 'Understanding the Haptic Experience through Bodily Engagement with Sculptural Ceramics', in *Haptics: Generating and Perceiving Tangible Sensations*. Springer Berlin Heidelberg, pp. 303–308. doi:10.1007/978-3-642-14075-4_44.
- Kemske, B. (2021) *CAST HUGS*, *Bonnie Kemske*. Available at: <https://www.bonniekemske.com/cast-hugs> (Accessed: 10 June 2021).

- Kreifeldt, J., Lin, R. and Chuang, M.-C. (2011) 'The Importance of "Feel" in Product Design Feel, the Neglected Aesthetic "DO NOT TOUCH"', *Planning perspectives: PP*, 312, p. 321.
- Mills, C.M. (2009) *Materiality as the Basis for the Aesthetic Experience in Contemporary Art*. Art History/Criticism. The University of Montana . Available at: <https://scholarworks.umt.edu/etd>.
- Onol, I. (2008) 'Tactual Explorations: A Tactile Interpretation of a Museum Exhibit through Tactile Art Works and Augmented Reality', in Chatterjee, H. et al. (eds) *Touch in museums: policy and practice in object handling*. Berg, pp. 91–106. doi:9781000325522.
- Robb, A. (2019) 'The "flow state": Where creative work thrives', *BBC*, February. Available at: <https://www.bbc.com/worklife/article/20190204-how-to-find-your-flow-state-to-be-peak-creative> (Accessed: 11 January 2022).
- Smith, N. and Snider, A.-M. (2019) 'ASMR, affect and digitally-mediated intimacy', *Emotion, Space and Society*, 30, pp. 41–48. doi:10.1016/j.emospa.2018.11.002.
- Szubielska, M. and Niestorowicz, E. (2020) 'Seeing Suppresses Haptic Pleasure While Perceiving Contemporary Art', *i-Perception*, 11(3), p. 2041669520932948. doi:10.1177/2041669520932948.
- Tate (2015) *Barbara Hepworth – 'A New Form for Sculpture' | TateShots*. Youtube. Available at: <https://www.youtube.com/watch?v=yv77WKiUxm8> (Accessed: 7 January 2022).
- Thein, K. (2018) 'Tactility, detail and scale in the photography of sculpture', *ČLÁNKY ARTICLES, UMĚNÍ ART*, LXVI(5), pp. 350–367.
- Vesnin, A. (2020) *Visual ASMR* —, *Designcollector*. Available at: <https://designcollector.xyz/likes/onesal-visual-asmr> (Accessed: 14 January 2022).
- Yalcinkaya, G. (2018) *Paula Lorence designs Taktil objects for children with autism*, *Dezeen*. Available at: <https://www.dezeen.com/2018/10/15/paula-lorence-tactile-objects-children-autism-london-design-festival/> (Accessed: 7 January 2022).
- Zuo, H., Hope, T. and Jones, M. (2014) 'Chapter 3 - Tactile Aesthetics of Materials and Design', in Karana, E., Pedgley, O., and Rognoli, V. (eds) *Materials Experience*. Boston: Butterworth-Heinemann, pp. 27–37. doi:10.1016/B978-0-08-099359-1.00003-5.

List of Figures

Fig.1.1-1.4 *Visual ASMR: an exploration of tactile textures in nature* (2020) Onesal. Available at: <https://www.onesal.com/work/visual-asmr> (Accessed: 15 January 2022).

Fig.2 McEwen, A. (2020) *Build your own Greyfriars Bobby as historic kirk launches online tutorials with renowned sculptor*, *Daily Record*. Available at: <https://www.dailyrecord.co.uk/lifestyle/things-to-do/build-your-greyfriars-bobby-historic-22251045> (Accessed: 15 January 2022).

Fig.3 Patowary, K. (2017) 'Victor Noir's Mysterious Erection'. Blogger, 24 July. Available at: <https://www.amusingplanet.com/2017/07/victor-noirs-mysterious-erection.html> (Accessed: 15 January 2022).

Fig.4 Insidecom Staff (2017) *Juliet Statue in Verona*, *venetoinside.com*. Available at: <https://www.venetoinside.com/hidden-treasures/post/juliet-statue-in-verona/> (Accessed: 16 January 2022).

Fig.5 Archer, M. (2011) *Jeff koons: One ball total equilibrium tank*. London, England: Afterall Publishing (Afterall Books / One Work). Available at: <http://www.jeffkoons.com/artwork/celebration/balloon-dog-0> (Accessed: 16 January 2022).

Fig.6.1 Kemske, B. (2021) *Sculptural Ceramics, Bonnie Kemske*. Available at: <https://www.bonniekemske.com/artwork> (Accessed: 16 January 2022).

Fig.6.2 Barker, X. (no date) *A curious calling: Bonnie kemske, London Confidential*. Available at: <http://old.londonconfidential.co.uk/News-and-Features/A-Curious-Calling-Bonnie-Kemske> (Accessed: 16 January 2022).

Fig.7 *How to create touch tours for visually impaired visitors* (2018). Available at: <https://www.vam.ac.uk/event/l5MAve5X/how-to-create-touch-tours-march-2018> (Accessed: 3 November 2021).

Fig.8 Onol, I. (2008) 'Tactual Explorations: A Tactile Interpretation of a Museum Exhibit through Tactile Art Works and Augmented Reality', in Chatterjee, H. et al. (eds) *Touch in museums: policy and practice in object handling*. Berg, pp. 91–106. Doi:9781000325522.

Fig.9 Statue (no date) *The British Museum*. Available at: https://www.britishmuseum.org/collection/object/G_1760-0919-1 (Accessed: 16 January 2022).

Fig.10.1-10.2 Onol, I. (2008) 'Tactual Explorations: A Tactile Interpretation of a Museum Exhibit through Tactile Art Works and Augmented Reality', in Chatterjee, H. et al. (eds) *Touch in museums: policy and practice in object handling*. Berg, pp. 91–106. Doi:9781000325522.

Fig.11.1 Bodowes, N. (no date) *Conversation Pieces, Cargo Collective*. Available at: <https://cargocollective.com/nicolettebodowes/CONVERSATION-PIECES> (Accessed: 7 January 2022).

Fig.11.2 *TOOLS FOR THERAPY - nicolettebodowes.Com* (no date). Available at: <https://cargocollective.com/nicolettebodowes/TOOLS-FOR-THERAPY> (Accessed: 17 January 2022).

Fig.12 Yalcinkaya, G. (2018) *Paula Lorence designs Taktil objects for children with autism, Dezeen*. Available at: <https://www.dezeen.com/2018/10/15/paula-lorence-tactile-objects-children-autism-london-design-festival/> (Accessed: 7 January 2022).

Fig.13.1 The Moonlight Shop (no date) *What are worry stones and how can they help me?, The Moonlight Shop*. Available at: <https://themoonlightshop.com/blogs/news/what-are-worry-stones-and-how-can-they-help-me> (Accessed: 17 January 2022).

Fig.13.2 *Wooden komboloi worry beads – turquoise* (no date). Available at: <https://www.greekgiftshop.com/product/wooden-komboloi-worry-beads-turquoise/> (Accessed: 17 January 2022).

Fig.13.3 *Chinese meditation ball, Baoding balls, Zen balls, stress relieve balls* (no date) *Etsy*. Available at: https://www.etsy.com/uk/listing/1037902794/chinese-meditation-ball-baoding-balls?gpla=1&gao=1&utm_source=google&utm_medium=cpc&utm_campaign=shopping_uk_en_gb_b-home_and_living-spirituality_and_religion-altars_shrines_and_tools&utm_custom1=_k_CjwKCAiAxJSPBhAoEiwAeO_fPyY2tF-cKsC4hJ8t8QS_0XRhgbZB9X-mazolH7HzenCOEODUyGwTdBoCdEgQAvD_BwE_k_&utm_content=go_12603394001_116673138141_508773095671_aud-1183050945816:pla-302897470696_c_1037902794engb_472327197&utm_custom2=12603394001&gclid=CjwKCAiAxJSPBhAoEiwAeO_fPyY2tF-cKsC4hJ8t8QS_0XRhgbZB9X-mazolH7HzenCOEODUyGwTdBoCdEgQAvD_BwE (Accessed: 17 January 2022).

Fig.13.4 *Christmas Concepts® Exclusive 3 Sided Special Fidget Spinner - Stress Reducer, Stress Relief, Autism, ADHD (Purple)* (no date) *Amazon*. Available at: <https://www.amazon.co.uk/Christmas-Concepts%C2%AE-Exclusive-Spinner-METALLIC/dp/B06Y1NSP3W> (Accessed: 17 January 2022).

Fig.14 *Barbara Hepworth Museum and Sculpture Garden* (no date). Available at: <https://www.visitcornwall.com/things-to-do/arts-and-heritage/west-cornwall/st-ives/barbara-hepworth-museum-and-sculpture-garden> (Accessed: 17 January 2022).

Fig.15 Burns, C. (2020) *Google Doodle is featuring St Ives-based sculptor Barbara Hepworth, Great British Life*. Available at: <https://www.greatbritishlife.co.uk/the-home-and-work-of-google-doodle-star-barbara-hepworth-7062226> (Accessed: 17 January 2022).

Fig.16.1-16.3 Henry Moore Foundation (2012) *Michael Dean: Government*. Available at: <https://www.henry-moore.org/whats-on/2012/04/12/michael-dean-government> (Accessed: 11 November 2021).

Fig. 17.1-17.2 Jones, J. (2017) *Lisa Merk's tactile mini urns give mourners one-on-one time to say goodbye*. Available at: <https://www.dezeen.com/2017/03/01/lisa-merk-tactile-mini-urn-design-products-death-stockholm-furniture-fair-2017/> (Accessed: 9 January 2022).

Fig.18.1 Garlatyova, J.G.B. (ed.) (2020) *Maria Bartuszo*. London, England: Tate Publishing. Available at: <https://www.artbasel.com/catalog/artwork/56563/Maria-Bartuszov%C3%A1-Untitled> (Accessed: 17 January 2022).

Fig.18.2 *Maria Bartuszo*, *Birgit Jürgenssen*, *Michelle Stuart*, *Dorothea Tanning* & *Hannah Wilke* (no date) *Alison Jacques*. Available at: <https://alisonjacques.com/news/548> (Accessed: 17 January 2022).

Fig.18.3 Garlatyova, J.G.B. (ed.) (2020) *Maria Bartuszo*. London, England: Tate Publishing. Available at: <https://www.artbasel.com/catalog/artwork/46593/Maria-Bartuszov%C3%A1-Untitled> (Accessed: 17 January 2022).