



INTERSECTIONS

A CONFERENCE EXPLORING
COLLABORATION IN TEXTILE
DESIGN RESEARCH

13 SEPT 2017

Loughborough University
London

Crafting Sensations: Exploring Textile Process Through Film

Kevin J. Hunt¹ & Fiona Hamblin²

1. Senior Lecturer, Nottingham Trent University
2. Senior Lecturer, Nottingham Trent University

This item was submitted to the proceedings of the Loughborough University Textile Design Research Group INTERSECTIONS Conference 2017 by Kevin J. Hunt and Fiona Hamblin.

Citation: Hunt, K.J. & Hamblin, F. (2017) *Crafting Sensations: Exploring Textile Process Through Film*. In Proceedings of Intersections: Collaborations in Textile Design Research Conference, 13 September 2017, Loughborough University London, U.K. Available from www.lboro.ac.uk/textile-research/intersections.

Additional Information:

Publisher: Loughborough University (© Kevin J. Hunt and Fiona Hamblin)

Rights: This work is made available according to the conditions of the Creative Commons Attribution 4.0 International (CC BY-NC 4.0) licence. Full details of this licence are available at: <https://creativecommons.org/licenses/by-nc/4.0/>

PLEASE CITE THE PUBLISHED VERSION.

Abstract: This paper explores a series of intersections between theory and practice, film and textiles, making and writing, and between ourselves: a textiles studio tutor and contextual studies tutor. These intersections are part of a three-stage project. Stage one involves an open-ended creative and analytical dialogue to identify common ground and conceptual interests shared between theory/practice. Stage two involves making a film as a collaborative project reflective of our ongoing dialogue. Our intention is to explore sensory and tactile responses communicated through film where the sense of touch/tactility (rather than sight) is engaged as the predominant sense. Stage three involves presenting this film (or films) to our textile design students as an example of integrated theory and practice. Our film (or films) would then become the basis for a studio project exploring design process and conceptual development through film, with a core focus upon texture, tactility and other sensory responses.

Keywords: Film; Process; Tactility; Bodiliness; Perception

Introduction

Our paper explores a series of intersections between theory and practice, film and textiles, making and writing, and between ourselves: a studio tutor/maker (Fiona 'Fo' Hamblin) and contextual studies tutor (Kevin Hunt) who both teach textile design students. At the core of these intersections, we are exploring the relationship between the senses (initially focusing upon touch, sound and sight) and ways to develop textile practice and engagement with tactility/texture through film. Our approach is organized around studio-practice but draws purposefully upon theoretical ideas to guide our project, both instinctively (through the exploration of theory-led concepts) and as an underlying framework for the dialogue(s) taking place in our research. Core theory is drawn from phenomenology and the developing field of sensory studies, which is inspired by the anthropology of the senses established by David Howes, Constance Classen, and Kathryn Guerts (amongst others), as well as neurological research in relation to the senses and perception (including work by Charles Spence, Ophelia Deroy and Beau Lotto). Key theorists central to our ongoing dialogue include influences from sensory studies, as well as Maurice Merleau-Ponty, Tim Ingold, Juhani Pallasmaa and Michel Serres. In terms of film theory, we draw upon the notion of 'haptic perception' through film and the 'bodiliness' of film advanced by Vivian Sobchack, Laura Marks and Jennifer Barker.

Our co-authored paper is structured in three parts. The first section provides a selective overview of Fo Hamblin's art practice using film, including discussion of a film made with R&A Collaborations: *Choreography of Making* (2015). *Choreography of Making* (2015) prompted the development of this project because it purposefully generates a range of sensory responses, including a strong sense of tactility and materiality, which Kevin Hunt had been researching independently in relation to film. This recognition of shared interests led to detailed discussions and the sharing of research ideas, studio practice, theoretical concepts and writing as an ongoing set of intersections. The second section of this paper provides a selective overview of Hunt's research into cross-sensory perception, tactility, and film. The third section outlines how far we have progressed, to date, on what we envision as a three-stage collaborative research project and how the dialogue between ourselves, and our evolving project theme(s), has been developing over time. The third section of our paper is presented differently to the Introduction and the first two sections, which are fairly conventional and linear: instead, it reflects the dialogue of our intersecting perspectives and is arranged as commentary about the main intersections experienced so far.

A shorthand way of conceptualizing our initial aim would be to say we want to make a film (or films) where the sense of touch/tactility – rather than vision – is engaged as the predominant sense. Or perhaps, where the visual and audio experience is understood as inherently tactile, as argued by Pallasmaa in his book, *The Eyes of the Skin*: 'Even the eye touches; the gaze implies an unconscious

touch...Our eyes stroke distant surfaces, contours and edges, and the unconscious tactile sensation determines the agreeableness or unpleasantness of the experience.' (2005:42). We want to explore how the audio-visual qualities of film communicate the haptic, so that an audience might respond primarily in terms of how the film 'feels' rather than how it looks. Our students will then be encouraged to explore and expand upon these same concepts within their own work and we will continue to evolve our own research alongside theirs. In relation to this three-stage project, outlined in the abstract for this paper, we are currently between stages one and two.

Studio Practice and Choreography of Making (Fo Hamblin)

Hamblin's research is practice based, exploring materiality and embodied knowledge through making. Her work centers around the body, focusing on the performative, spacial, tactile experience of making *with* materials, connecting with their own forces and resonances. Ingold's concept of making 'as a process of growth...' where the maker "joins forces" with [materials], bringing them together or splitting them apart, synthesising and distilling, in anticipation of what might emerge' (2013, 21) describes the centrality of process and the maker's bodily actions as a catalyst for new material forms. With a background in Textiles and Jewelry, Hamblin's practice has been concerned with exploring hard and soft materials, both on and off the body, and she is fascinated by exploring differing or changing states of material, from barely seen strands of thread to crystals of dense black charcoal, coagulated plaster, pins that ping, golden syrup that drips, gold leaf that flutters.

The integration of digital forms of making, through film and sound has become more prominent, and the concept of choreography is central in framing intentionality, the role of the body, and motion, and drawing out what Deleuze and Guattari call 'the immanent power of corporeality in all matter' (2004, 454). Drawing on phenomenological perspectives and theories of material engagement (Merleau-Ponty 1962; Pallasmaa 2009; Malafouris 2013; and Hodder 2012), *Choreography of Making* was a film and installation, created for the *Crafting Anatomies*' exhibition Bonington Gallery, Nottingham, 2015 (see: <http://www.racollaborations.co.uk/choreography-of-making/4588003552>). The aim of the work was to expose the performative act of making, and the presence of the body in the made thing, projecting film back into the work. Rather than documenting the making process, filming became another layer of making, with its own rhythms, movements and relationships between body and material. It was important to capture moments of 'in between'...not simply making as *doing*, but thinking with and through the body. Sound became an important aspect of the process – the whole piece became a kind of musical instrument, where sounds and resonances could be drawn out through material play.

Theory-Based Research about the Senses and Film (Kevin J. Hunt)

My research engages with eyes, sight and the senses, with a particular interest in damaged or limited sight, the heightened acuity of other senses (in response to lost sight), and crosstalk between the senses. My work draws upon the rise of sensory studies at the start of the twenty-first century, as progressed by David Howes (1991; 2005) and Constance Classen (2002; 2012; with Howes 2014), amongst others (such as Guerts 2003; 2005). Despite the inherent qualities of sensory engagement that are central to art and design, certain areas of theory relevant to sensory studies are comparatively undervalued when discussing art and design processes and analyzing the outcomes.

One such overlooked area is crossmodality between the senses, also known as crossmodal correspondence. The term crossmodal correspondence is used within neurology and experimental psychology to describe the effect whereby perception in (at least) one sense interacts with and generates a response in another (Spence 2011; Deroy and Spence 2016). Such responses are similar to synaesthesia, in fact crossmodality is sometimes called 'weak synaesthesia'; however, rather than being distinct to an individual (as occurs within cases of clinical synaesthesia), crossmodal responses tend to be widely and consistently shared within cultures. For example, we know what it means to say that lemons taste 'sharp' (attributing a shape to taste) and how certain smells (such as the smell of wine) can have 'low' notes or 'high' notes (attributing height or depth). We know when someone is wearing a

'loud' shirt or dress. We talk of feeling 'high' or 'low', and factors such as environment and music, or even typography, have been proven to impact upon how we taste food or drink (Smith 2013, 185-186; Smith and Ryan 2017).

I have been exploring examples of cross-sensory perception within art and design (Jones 2006; Fabian et al. 2014; Hyndman 2016) as well as specific studies relating to the tactile qualities of film. Issues such as 'haptic perception' (Marks 2000); the 'cine-aesthetic subject' (Sobchack 2004); the bodiliness of film (Barker 2009); and how sensorial empathy and crossmodality potentially inform creative practice inspired by film (Hunt 2017) suggest the potential to develop new or alternate approaches to textile design practice informed by theory but focusing upon projects based in studio.

'In-Betweenness': Experimenting with Film, Sound, Materials and the Senses

'The senses are nothing but the mixing of the body, the principle means whereby the body mingles with the world and with itself, overflows its borders' (Connor in Serres 2016, 3)

As our intersections of different ideas and approaches developed it became clear that one of the core issues was 'in-betweenness'. In biology such areas are called 'ecotones' and they are spaces of transition and possibility 'in-between' otherwise quite clearly defined areas (Lotto 2017, 291). We recognised that whilst a written account and structured explanation of what we were investigating would, almost by definition, have to follow a linear narrative, the actual experience of thinking, making, and writing was much more 'messy' and non-linear. We spent a lot of time dealing with the in-betweenness of things and realised that we both share a fascination with this aspect of sensory perception and creative process. 'In-betweenness' can be seen as moments of transition between one thing and another, including the reactive and reflective moments in-between actions, when decisions are being pondered and the next action is evolving. This is a core element of perception – from a neurological perspective how we interpret the world is based upon a constant and changeable flow of information (Lotto, 2017: 60). In relation to creative process, we could also think of these moments as gaps or 'asides' to the main event: an integral part of the decision-making process that produces a work of design. This links with the concept of tacit knowledge described by Polanyi, where both the 'subsidiary and the focal' (1966:3) are essential for knowledge to become embedded in a unified way. In a broader sense, this self-aware approach to sensory experience also reflects Serres' work about the senses as 'a philosophy of mingled bodies' (2016).

If we give value to these intersections, we recognize the importance of an ongoing *process* of creation and recognize that *things* are constantly in flux.

To convey some of this 'in-betweenness', this (third) section of our paper is split into a further series of five sub-headings and includes reflective commentary from each of us about the main intersections experienced so far: Writing and Making; Images and Sound; One and Many; Layers and Layers; and Structure and Play.

Writing and Making

Our respective backgrounds and academic positions highlight our relationships with making and writing, and indicate tendencies or drivers that became apparent in the initial stages of the project. After initial discussions, we had a plan to each set out our grounding for the project, before meeting for a 'writing and making' day. What actually happened was that neither of us did any writing, but we shared ideas and reference points, and then came together with the understanding that we would do some filming. The focus on open possibilities and uncertainty was apparent, itself an important grounding for development.

Hamblin: My instinct was to explore making as a way of testing and drawing out key themes from our initial discussions. I was aware of actively resisting formal writing in the early stages, which seemed somehow tying, and I felt my writing would lack direction without a material voice. I was keen to bring 'stage two' forward in order that making could further shape our aims, allowing writing to develop as a result. Since tactile and sensory experience is at the core of this work, the vitality of matter and bodily experience should surely take the lead role? In practice, writing played an important part within the development process, whether mapping rough ideas across a page by hand or typing snippets of conversation into a rough document as a way of gathering, capturing, and exploring perspectives and connections. In itself these processes are based on spatial, kinetic and visual practices, which are essentially embodied in nature; though for me these processes are often more covert in developing languages, gestures or dialogues around making.

Hunt: My initial instinct was to write and explore theoretical ideas on paper, a sort of literature review of our discussions and the different areas we had identified as providing context for our collaboration. This includes ideas about crossmodality, the breadth of the senses, neurological research and academic perspectives, phenomenology and bodiliness, a whole range of filmic and other creative reference points, as well as the desire to set a comparatively clear goal for the practice-based sessions. In reality, this is too distanced an approach towards a studio-based project. The discussions are purposeful and we both kept notes on key ideas or possibilities – a written sketch of key words, reference points, and phrases tracing the intersections being explored – but the need to take action in order to move towards making a film became a necessity to keep the dialogue progressing.

At the same time, the process of playing around with ideas through discussion, trading perspectives and knowledge, throwing out suggestions without knowing how relevant or useful they might be, is a similar process to exploring materials in the studio (albeit conceptual rather than physical). I think of this type of exchange as an exploration of in-betweenness that gives you a better sense of the landscape of ideas as well as helping to appreciate another person's perspective. These initial (and ongoing) discussions and actions are about moving beyond invisible boundaries – limits that we perhaps unknowingly impose by instinctively returning to processes that are the most familiar.

Images and Sound

What should come first? How could we frame what we were doing? We started to think about sensory concepts such as tension; resistance; balance; pressure; speed; considering possible materials and actions that might evoke certain sensations. This led to thinking about possible categories such as coarse, gloopy, silky, crunchy, crinkly, fluffy...at once realizing the vast possibilities and the need to steer away from categorizing or quantifying too soon. A key part of our aim was to promote the idea of exchanges, sensory overlaps and crosstalk, and the potential to create a film where there is a dissonance between image and sound, by a mix and match approach to editing. The main starting point, then, became broadly about texture, about exploring haptic, textural qualities of material interactions through the film making process.

Hamblin: Starting with what we had to hand - a go pro camera, iPhone and Zoom sound recorder, we gathered materials and tools together, mainly from a box of materials I had used before, and some that we found in the office. We collected flour, charcoal, golden syrup, plastic sheet, cardboard tube, old video tape, a slate block, a bowl, pebbles, plastic trays, a hammer, knitting needles, a craft knife, polystyrene blocks and more. We decided to focus more on sound initially, in order to follow the rhythms and textures of material engagement in a way that might re-focus our attention away from sight as the dominant sense. However, vision still played a role in deciding what to collect, considering materials that not only had differing tactile and audio possibilities, but also had sensual, evocative, visual qualities and therefore integrated sensory modalities. According to Merleau-Ponty, '[t]he senses

intercommunicate by opening onto the structure of the thing' (1962, 229), so you could say that materials drive their own inherent qualities into the narrative of experience.

Hunt: The process of making a film (particularly one about sensory responses, tactility and materiality) includes various paradoxes – most notably that film is inherently multisensory as an audio-visual experience, but in order to gain the raw footage and sound recordings you often have to separate out the different material you are collating. Sound is recorded by one device, images by another, but you always need much more content than the final edit will require so there is a range of choices to work from. Recording both sound and image at once is too messy and we wanted the choice of mixing up sounds and to play around with juxtaposed content. However, we also wanted the option of having sounds that matched the actions.

We took turns setting up and recording different actions and interactions with a polystyrene block, listening to the sound recording through headphones whilst scratching, tapping, scraping, breaking, smashing, dropping and generally deconstructing the block in different ways. The descriptive language used to capture a sense of different experiences has similarities to Serres' use of 'variegated lists' (Connor in Serres 2016, 5), because there is never just one word to capture experience in its multitudes. The listening process adds an intensity to the imagined film footage because you can hear the enhanced sound of your actions, recorded through a device targeted specifically at the area you are working on. The images, in a certain sense, come later, because we cannot see what the camera sees even though we can hear what the microphone hears. In a subtle way, this foregrounds the tactile element of the filmmaking process. It also became clear how important sound is to generating a sense of materiality and tactility. The simple act of amplifying the sound of a given action elevates its sense of importance. It becomes more 'present' as part of the experience.

Recognizing the importance of sound brings to mind the 'Barber's Shop Illusion' (Lotto 2017, 33) whereby incremental increases in the sound of scissors snipping creates the illusion that they are moving closer (or retreating) even though the origin of the sound remains fixed. So sound can generate movement, which also includes a sense of density, mass and volume. It can also indicate something of the type of space the actions are taking place in, as well as being evocative of physical actions and the texture of the surfaces involved.

Hamblin: The experience of wearing headphones to listen to the amplified sounds of material interactions (through the zoom recorder) was rather private and immersive. The sound making process drew our attention to the way in which the material (a polystyrene block) *felt*, the way we could stroke, tweak, tap, flick, sweep, crush, stab, jab, drop, wrench, pummel...it, using our hands and a variety of tools to play with resistances and breaking points. At first, Hunt was rather tentative, exploring ideas we had tested and discussed, and our emerging plan was to each try similar things with the block in turn. It immediately became apparent that we simply had to feel and listen our way through the experiment. I started to become absorbed in the nuances of material opportunities, indicated by Hunt's notes on the recordings: 'fingertips on polystyrene, different rhythms; violent fingertips on polystyrene; hands pressing on polystyrene; fingertips patting and bouncing on polystyrene; bumpy side of polystyrene, squeaky fingertips' and so on. So touch and sound were intrinsically linked, and the digital enhancement of our experience provided a way of navigating and zoning in on the possibilities, whilst simultaneously capturing them.

Recorded sounds have the potential to evoke bodily sensations, not least a sense of movement. Recording them allowed us to focus intensely for short periods of time, producing clips each with their own set of nuances. Van Nort states 'Having identified a sonic object, one may examine its morphological properties for traces of perceived action' (2009, 179) so sound is inherently shifting and in flux, leaving traces through which to navigate our bodilyness.

Whilst the focus was initially on sound, image making began to seep into the process. We tended to flip between a focus on sound and on image, responding to the perceived 'givenness' of the material for a film format. We became attracted to the visual possibilities of the experiments, both through use of the go pro camera, which allowed us to record film without too much direction, almost incidental to the process, and focusing more specifically on image making through the recording of sets of stills on the iPhone. Image sequences became more prominent, although with this, came more planning, and expectations which in some cases proved disappointing. It was necessary to develop a selective focus, deciding what to ignore as much as which parts to follow.

One and Many

We had taken a whole range of materials, tools and objects into the studio, based upon the broad aim of wanting to capture (on film and through sound) certain qualities, such as 'coarse', 'gloopy', 'crunchy' and so on. But once we began exploring the polystyrene block we realized how much variation and possibility, and satisfaction, came from just one material. By selecting, fairly arbitrarily, just one material and spending a significant amount of time working on it and with it we realized there was an open-ended but purposeful catalogue of experiences emerging. There was also a sort of loose narrative as the block disintegrated, changing from one solid form into a mass of smaller parts.

Hamblin: The decision to focus on one main material over many, gave us an anchor, and a set of parameters that emerged in practice. Intentionality, as Malafouris states, '...should be understood as a distributed, emergent, and interactive phenomenon rather than as a subjective mental state' (Malafouris 2013, 144) and this was how I believe we approached the experiments, through touching, listening, and visualizing *with* the material. In this way, multiple viewpoints could be explored, both literally and conceptually, whilst the recordings provided a means of fragmentation, dissecting areas of focus through intense bursts of activity. The process of fragmentation was mirrored in the physicality of the material, as it broke apart into smaller and smaller pieces, and through this we come back to the idea of transformation, transition, motion and flux. We might, then, reconsider the emphasis on the five senses, and instead refocus our attention to cross-sensory modes of perception, conceived as weight, distance, velocity, and other possibilities, through which body and material become entwined in perceptual understanding, rather than focusing on sensory experience as essentially input *from* the world.

Hunt: From an initially very open range of possibilities it was interesting how quickly we developed a focus upon just one material. We took notes, one after the other, to describe each other's actions and we often reworked, in our own way, what the other person had just inflicted upon, or taken from, the polystyrene block. This was to see if there were any subjective nuances in approach captured in our actions, as well as in the language used to record what we were doing. In some ways the one block of polystyrene became the initially intended 'many' different interactions and experiences. It also inadvertently put in place a structure, because we limited our experiments to a single material. This meant that we could at least comprehend the range of sensory experiences within one consistent point of focus, rather than making 'crunchy' interactions with six different materials but not really having a sense of why we were doing so. Working on the polystyrene block 'felt right' in terms of exploring the relationship between the senses and the filming process.

In terms of perception the concept of 'many to one' can describe how a whole range of information can potentially lead to confusion because the brain can interpret all sorts of data to mean the same or similar things. For example, a finger held in front of your face to line up with a tall building in the distance tells us both things are the same height; this information needs to be processed, based upon experience, to determine how perspective and distance must be accounted for (Lotto 2017, 59). Our response to that specific information and moment is therefore one of many possible responses. In a perceptual sense, we are constantly moving between one and many to deal with the constant flow of

information that informs us. Interacting with materials, using sound and image, and then editing together a film provides an opportunity to challenge, create, and (to some extent) influence the perceptual responses of an audience, potentially widening out their frame of reference to engage or amplify certain sensory responses, such as the tactile and material through the audio-visual medium of film.

Layers and Layers

Layering is another core theme within our discussions and approaches to ideas, materials, and even writing/communicating our range of sensory and perceptual interests. These layers are not solid and distinct. Where an important layer might appear foundational we both recognize this could change as the project develops and evolves. In a very practical way, we want our films to be layered: layers of image, sound and experience; layers of ideas and approaches; layers of intersecting perspectives and perceptions.

Hamblin: Layering is an important concept from the perspective of making. Literally, the process of film making means piecing together and layering sound, image, effects and transitions, whilst conceptually the trajectory of ideas within my personal body of work plays with revisiting, redeveloping and integrating previous experiments in new contexts. The next stage of transition will be to explore new synergies of movement / sound / language / image and to further translate phases of making and writing into reflecting and observing, which in turn can provoke concept and project development opportunities for our students. Essentially we are developing an entangled approach, as Hodder describes, ‘Humans and things, humans and humans, things and things depend on each other, they rely on each other, produce each other’ (2012, 88).

Hunt: The concept of layers brings to mind a whole range of different theoretical and conceptual reference points. These include: notions of palimpsests and revealing hidden layers, whilst also partially destroying or reinventing previous surface layers; the layering of experiences through sound and image that can become evocative of memory, particularly bringing to mind theory-based analysis of ‘haptic perception’ and intercultural cinema (Marks 2000); and some of the core elements of *Choreography of Making*, which emphasize experience as being continually in flux. There are distinct overlaps between this approach and the notion of ‘haptic perception’ within film, whereby the image and sounds can be discordant and indistinct. Haptic perception encourages an audience to move beyond iconic engagement with a distinct and immediately coherent space, objects and people, which is generally experienced in conventional cinema. Instead, ‘haptic perception’ encourages engagement with film based upon memory, association, and the desire to ‘feel’ the experience through the screen (Marks 2000). As Barker (2009) also suggests, film itself has a type of ‘bodiliness’ to it: so images can be ‘thin’ or ‘viscous’; there are internal rhythms and pulses; and the physical process of making the film leaves its traces on the final version that is created at any given time.

As a concept, the layering also felt appropriate to the complex web of different ideas our project plays around with. Some of these layers will probably have to be overlooked when explaining a final version of the film (or films) we are making, but the films themselves will contain the layers that cannot be described in words.

Structure and Play

We are both fascinated by the importance of structure and play or, perhaps more appropriately, ‘structured play’ as a process. This is based upon practice-based experiences as well as areas of theoretical investigation and research. For both of us this is closely related to the concept of in-betweenness and the way in which perception and interaction with the world is constantly changing in necessary and unavoidable ways.

Hamblin: When starting to explore the polystyrene block, we began to ‘follow the material’ (Ingold 2013; Deleuze and Guattari 2004) and tune in to the tactile, auditory and visual interactions at play. There was a level of discovery, whilst travelling between directed and open directions. Following ideas and imaginings meant that results were sometimes unyielding, yet unexpected findings revealed themselves, most notably, when the observing and recording were more simultaneous and exploratory, where we focused more on the experience than the expectation.

Hunt: Armin Lindauer and Betina Muller’s book *Experimental Design* (2015) includes a selective overview of the relationship between structure and play across art and science, stating that genuine experimental process follows a similar pattern whether the end goal is, for example, a medical diagnosis, a feat of engineering, a new artwork or a creative performance. The creator has to determine a direction for their experiments, whether a conceptual investigation or a distinct hypothesis to test; they then have to experiment with that idea, keeping various parameters fixed at different times (often including just having one variable element) in order to test what is working/happening and to make sense of it. When new information has been uncovered and, to some extent, understood, the parameters can be expanded again so that more experimentation can take place.

Nobel Prize winning physicist Richard Feynman often started his research with open-ended play. Something would capture his interest; he would then explore and play with a concept or idea, undertaking experiments and imposing tight boundaries to confirm select pieces of knowledge, before then returning to a more playful approach with a different direction; the overall purpose, and eventually a distinct conclusion, would emerge over time. An important point about experimental process – as research and development of ideas through interaction with materials and the world – is recognizing that scientists are inherently creative in their approaches and that artists and designers are inherently structured in their approaches, because even within the most open-ended type of practice there will probably be some form of self-imposed boundary. Our experience with the polystyrene block, our interest in ‘in-betweenness’, and the general way in which our project has been evolving feels very much like a self-aware process of structure and play.

Conclusion

Our paper provides a selective overview of how our project has developed, indicating the successful (ongoing) dialogue we have developed by drawing upon theory and practice, film and textiles, and the series of intersections that define our film making process to date.

Hunt: We recognize that this process is one of negotiation and exchange, and that the five sub-themes (Writing and Making; Images and Sound; One and Many; Layers and Layers; and Structure and Play) are all concerned with the mingling of sensory experiences between interior and exterior worlds – different ways and forms of communicating experiences and intentions so they can be perceived by other people. As Serres has suggested, it is the sense of touch that links the exterior and the interior in an immediate and knowing way (Connor in Serres 2016, 4). It therefore seems appropriate for our research project to be based around tactility and the senses.

Hamblin: The essence of negotiation and exchange brings separations and distinctions into view, whilst providing juxtapositions, overlapping boundaries and ‘in-between’ thinking. Touch is a force that integrates, and here we may return to Pallasmaa, ‘All the senses, including vision, can be regarded as extensions of the sense of touch – as specialisations of the skin. They define the interface between the skin and the environment.’ (Pallasmaa, 2005:42)

Hunt: Our current findings suggest that whilst delivering a filmic experience that might prompt tactile responses from an audience is not easy to generate, without providing the theoretical and conceptual context within which the film was made, there is clearly a developing field of study relating to cross-transfer of sensory experiences that textile design is ideally placed to explore in detail.

Hamblin: This project will allow us to challenge the dominance of representation in validating creative work. We might consider creative work ‘not in terms of representation, but in terms of their function--a function of incarnation.’ (O’Sullivan, in Andrews and O’Sullivan, 2013:19). And perhaps, function in textile design might be considered less in a straightforward utilitarian and aesthetic role, but having the potential to further engage our bodiliness, to engage with and exploit our ability for cross-sensory, cross-modal experiences. If we can shift to a nature of design which foregrounds experience and ‘pushing forward the boundaries of what can be experienced.’ (O’Sullivan, 2013:20), we might also challenge the drive towards using more resources.

Hunt: Much of our research feels strongly associated with the theoretical explorations of the senses proposed within phenomenology and sensory studies, with the emphasis upon bridging between the philosophical and the physical; taking action to make something as well as to write or think about it. In other words, the theories that we are familiar with when used to explain or analyze existing experiences or artworks are now being used to generate experiences and artworks.

Hamblin: The project has initiated playful, open-ended ways of generating concepts through integrated theoretical / practical approaches, and perhaps also posits writing as a generative act, that positions language(s) as an integrating, rather than binding force. Considering some students’ relationship with writing, this has the potential to be a powerful tool.

Our intention is to keep developing this open-ended dialogue through stage two in order to share a completed film (or films) with our students. This will also provide us with an outside perspective upon how effective, or ineffective, our attempts to communicate and promote tactility, touch and haptic perception have been; as well as indicating which areas have worked, failed or produced some form of interesting (but perhaps unpredicted) response. Our aim is to develop our research into cross-transfer between the senses, using touch, film and textiles as an ongoing case study. At the same time, we hope to use the integration of theory and practice as a live teaching tool to encourage and inspire students – ideally, we want to see our students combine contextual research and creative practice more effectively as a meeting point between philosophical and physical concept development. This project is therefore a case study whereby we are sharing our experiences with the intention of leading through example.

Whilst the initial focus of this project is to explore tactility through the audio-visual qualities of film, we are also keen to move away from the definition of the senses based around the five-senses model of sight, sound, touch, smell and taste towards the exploration of alternate and emerging sensory models. As Barry Smith explains, on Radio 4’s *The Uncommon Senses*, neurological research suggests that humans have between twenty-two and thirty-three senses, due to the cross-sensory perceptions produced through our five sense organs (Smith and Ryan 2017). These include the sense of balance, sense of direction, and senses such as proprioception (the awareness of one’s own body and movement of the limbs). We will be encouraging our students to explore these areas of cross-sensory and alternate sensory engagement through film, using the outcomes as the basis for concept development within their textile design practice and within contextual studies projects engaging with the senses and design.

We are also keen to make use of the different sensory engagements captured on film by our students, and any other willing collaborators, with the future aim of developing a digital database of sensory experiences. This would make use of evocative language to categorize concepts such as ‘heavy’, ‘viscous’, ‘gloopy’, ‘off-kilter’, ‘lightweight’ and so on – an expansive range of terms that promote the idea of a sensory map of different experiences and qualities. Searching the database might use sensory wayfinding as a concept central to an enquiry. The database would be a repository of sounds and images recording interactions with a wide range of materials catalogued to cross-reference between a wide range of qualities – adding significantly to our initial (and ongoing) exploration of tactility. As such, we see this project as one that engages in a constant flow of possibilities, within which we use structured

play to focus upon core ideas at particular moments before then layering, re-layering and developing research ideas into fresh directions. This is not a process that will end, it is an ongoing series of intersections that we hope will become expansive and inclusive – to involve our students as well as other practitioners, theorists, writers, filmmakers, and designers.

References

- Andrews, J and O’Sullivan, S. 2013. *Visual Cultures as Objects and Affects*. London: Sternberg.
- Barker, J.M. 2009. *The Tactile Eye: Touch and the Cinematic Experience*. Berkeley: University of California Press.
- Classen, C. 2012. *The Deepest Sense: A Cultural History of Touch*. Chicago: University of Illinois Press.
- Classen, C. 2002. *The Color of Angels: Cosmology, Gender, and the Aesthetic Imagination*. London: Routledge.
- Deleuze and Guattari, 2004. *A Thousand Plateaus: Capitalism and Schizophrenia*. London: Continuum
- Deroy, O. and Spence, C. 2016 “Crossmodal Correspondences: Four Challenges.’ *Multisensory Research* 29: 29-48.
- Geurts, K. 2005. “Consciousness as ‘Feeling in the Body’: A West African Theory of Embodiment, Emotion and the Making of Mind” in David Howes (ed.) *Empire of the Senses: The Sensual Culture Reader*. Oxford: Berg: 164-178.
- Geurts, K. 2003. *Culture and the Senses: Bodily Ways of Knowing in an African Community*. Berkeley: University of California Press.
- Hamblin, F. with A&R Collaborations. 2015. *Choreography of Making*. Available at: <http://www.racollaborations.co.uk/choreography-of-making/4588003552> (Accessed 16 May 2017)
- Hodder, I. 2012. *Entangled: An Archaeology of the Relationships Between Humans and Things*. West Sussex: Wiley-Blackwell.
- Howes, D. (ed). 2005. *Empire of the Senses: The Sensual Culture Reader*. Oxford: Berg.
- Howes, D. (ed). 1991. *The Varieties of Sensory Experience: A Sourcebook in the Anthropology of the Senses*. Toronto: University of Toronto Press.
- Howes, D. and Classen, C. 2014. *Ways of Sensing: Understanding the Senses in Society*. London: Routledge.
- Hunt, K.J. 2017. ‘Eyes, Sight and the Senses on Film and in Fashion.’ *Fashion Theory*. Available at: <http://www.tandfonline.com/doi/full/10.1080/1362704X.2017.1313571>
- Hyndman, S. 2016. *Why Fonts Matter*. London: Virgin Books.
- Ingold, T. 2007. *Lines: A Brief History*. London: Routledge.

- Ingold, T. 2013. *Making: Anthropology, Archaeology Art and Architecture*. London: Routledge.
- Jones, C. (ed.) 2006. *Sensorium: Embodied Experience, Technology, and Contemporary Art*. Cambridge, Mass.: MIT Press.
- Lotto, B. 2017. *Deviate: The Science of Seeing Differently*. London: Weidenfeld and Nicholson.
- Lindauer, A. and Muller, B. 2015. *Experimental Design: Visual Methods and Systematic Play*. Salinstein, Switzerland: Braun Publish.
- Malafouris, L. 2013. *How Things Shape the Mind: A Theory of Material Engagement*. London: The MIT Press.
- Marks, L.U. 2000. *The Skin of the Film: Intercultural Cinema, Embodiment, and the Senses*. Durham and London: Duke UP.
- Merleau-Ponty, M. 1962. *Phenomenology of Perception*. London: Routledge and Kegan Paul.
- Polanyi, M. 1966. 'The Logic of Tacit Inference', *Philosophy* vol. 41, No. 155: 1-18.
- Pallasmaa, J. 2005. *The Eyes of the Skin. Architecture and the Senses*. West Sussex: Wiley.
- Pallasmaa, J. 2009. *The Thinking Hand. Existential and Embodied Wisdom in Architecture*. West Sussex: Wiley.
- Serres, M. 2016. *The Five Senses: A Philosophy of Mingled Bodies*. Trans. by Margaret Sankey and Peter Cowley. London: Bloomsbury.
- Smith, B.C. 2013. "Lemons are Fast", in John Brockman (ed.) *This Explains Everything: Deep, Beautiful, and Elegant Theories of How the World Works*. New York: Harper Perennial: 184-186.
- Smith, B.C. and Ryan, N. 2017. *The Uncommon Senses*. BBC Radio 4. Available at: <http://www.bbc.co.uk/programmes/b08km812> (Accessed 21 March 2017).
- Sobchack, V. (2004) *Carnal Thoughts: Embodiment and Moving Image Culture*. Berkeley: University of California Press.
- Spence, C. 2011. "Crossmodal Correspondences: A Tutorial Review." *Attention, Perception and Psychophysics* 73: 971-995.
- Van Nort, D. 2009. 'Instrumental Listening: Sonic Gesture as Design Principle.' *Organised Sound*, vol 14, 02: 177-187.

Fo Hamblin is Senior lecturer in Textile Design at Nottingham Trent University, Maker and Researcher. Practice is centred around the body, where materials play a central role in exploring performative, spatial, tactile experiences of making work. Her research explores phenomenological perspectives and theories of material engagement, including the integration of digital practices. Cross-disciplinary dialogue and collaboration is key, for example, projects have incorporated film, sound, dance, jewellery

and anthropology, with textiles based approaches. She is a member of the Digital Craft and Embodied Knowledge Research Group in the School of Art & Design, NTU. fiona.hamblin@ntu.ac.uk

Dr Kevin J. Hunt is Senior Lecturer in Design, Culture and Context at Nottingham Trent University, teaching contextual studies to Fashion, Textile, and Knitwear students. His research relates to sensory perception and sensorial empathy, particularly focusing upon eyes, sight and the senses. Kevin has written for numerous publications, including a chapter for the 'body' section of *Enchanting David Bowie: Space/Time/Body/Memory*, an article on crossmodality and sensorial empathy in *Fashion Theory*, and articles and reviews for *Critical Studies in Fashion and Beauty* (with Alison Goodrum), *The Senses and Society*, *Afterimage*, *Journal of American Studies*, *Flow Journal*, *Eye Magazine*, *Material Culture*, *Huffington Post* and *The Conversation*. kevin.hunt@ntu.ac.uk