

Lauren Evans
1703142
Research Methods
M7X02233

A Library of my approach to materials

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Introduction

I am a material led individual who loves to experiment on a variety of substrates. I enjoy working with modular forms and creating samples out of paper. Using the laser cutting machine I then transfer that knowledge into harder materials such as, wood and recently biomaterials. I don't want to be confined to one design field, because I like taking an exploratory approach to my practice, as I thrive best when I'm continually engaging with new processes and new ways of working. This keeps my practice feeling relevant and new which is what excites me as a designer. Challenging myself and working between different methods meaning that I don't want to be narrowed down into one specific field of design work. I believe it is important to highlight the fact I have experience in different processes which can be transferred across many areas in the design sector, such as laser cutting and engraving, working successfully with modular systems and creating biomaterials which I have recently ran workshops and presentations about. The great thing about surface pattern is the ability to apply my knowledge to a variety of surfaces and the infinity of possibilities that surface design allows.

I want to work on myself, pushing my practical skills and design ability, building and developing my existing practical skills but also encouraging my playful side, and enjoy the experimental side of making and creating. Over the years I have learnt that I am an experiential learner as I learn best by doing. I believe this allows me to be experimental with materials to understand their properties and how I can interact with them. When I'm experimenting with materials this is part of my main research, I'm understanding the material qualities and thinking about how I can use the material to my advantage, but also how I can adapt and change the material through various processes often deconstructing the material and seeing how far I can push it. This is time consuming but a key element of the process as this is where I am testing the possibilities of the material. I spend time working out specific recipes, pushing the material to its limits and taking detailed notes about my findings. These findings then support the making of the product or work and are the backbone to my research.

My strongest attribute as a creative is, I always want to learn I love pushing the boundaries and properties of materials and looking to new trends to create new ways of working, this is what excites me. Trends allow me to engage in forward thinking which is what I take pride in. This allows me to be forward

thinking and inventive without having any expectations for a final product. I wouldn't say I always follow trends, but I do look to them to find gaps or new ways of working. By producing my own material library, I am able to understand these biomaterials and their potential. Meaning I can interact fully with the material and create something new from it be that a surface, an object or an everyday essential place like a worktop. When creating my own materials, I know everything from where it has come from, what ingredients are in it, and most importantly to me, what environmental impact it will have on the planet. "Design in this objective sense is everyone's concern" (Buchanan and Margolin, 1995, p. 13). After working with Orangebox, I learnt so much about sustainable design. This really influenced me as a young designer. I now care more about the world and learnt that designers and manufacturers have sometimes negatively impacted the planet. As I look to the future and think about my practice and employment, I realise my values and strengths as a person. I want to actively make a positive impact on the planet throughout my career and hope to take steps necessary to be a more sustainable designer. Using systems like metadesign allows designers to change or create behavioural paradigms. It is inspired by living systems and aims to improve existing ones within design, combining ideas that form a framework. When these systems work well, we see a kind of harmony in their functioning.

My goal is to keep pushing boundaries and myself to become a successful designer and find employment in an ever-changing design role as I feel I have a variety of skills to offer. I am a commercial thinker but like to challenge and not conform too much to traditional ways of thinking. If I can come up with a more sustainable way to do something that doesn't affect the quality or finish, I'd happily explore those options and lead with that mindset. As a young designer I feel now more than ever we need to challenge the system and work as a team to do this.

Material Interaction

The physicality of touching things in order to engage is fascinating to me. I believe this is because of its ability to create a connection with the senses. I use this to my advantage as a designer. I often find myself wanting to touch, to feel, to hold to really understand the material and its properties. My hands are an important tool in my practice. 'They serve us. They are the instruments of executive actions, our tools. They allow us to manipulate the world so that our wishes can be fulfilled.' (Leader, D. 2017, p3) They allow me to feel textures when choosing a material to work with, at the beginning of a project, before using digital processes to draw and create my designs. Using a combination of both digital and hand methods allows me to create work that is completely unique, whilst showcasing my technical skills and creativity. I would argue that the body also plays a role in understanding materials. I was totally immersed at the Olafur Eliasson exhibition at the Tate Modern in London. It was a bodily experience of materials, space, light, shadows, all of my senses were heightened. I want to use this experience of feeling within my own practice.



Figure 1, Olafur Eliasson, In Real Life (2019)

Everyone learns in different ways and I process information best through multi-sensory experiences, which is why I had a strong sensory experience at the Olafur Eliasson exhibition which I found interesting as I hadn't experienced

an exhibition like this before. Learning through physical actions, activities or kinaesthetic learning. A kinesthetic-tactile learning style requires that you manipulate or touch material to learn. Kinesthetic-tactile techniques are used in combination with visual and/or auditory study techniques, producing multi-sensory learning. (Houghton College, 2020) I work best when I am hands on, playing with materials and pushing them to their limits. This fuels my research, which is like my personal investigation of materials. The research allows me to create a library of materials that is sustainably sourced and carefully considered. The material choices we choose can be crafted to better our experience.

Playful design can encourage learning through entertainment and curiosity. Through the exploration of play and kinaesthetic learning we as humans build a connection with the world and the things within in it. This highlights the importance of material interaction. 2020 was like no year before, the disconnect with the world has been felt by everyone due to the limitations from the government. When communication is difficult, it can be simplified through physical demonstration. This creates an understanding of a subject or situation. Without the ability to touch, I lose interest. When visiting galleries and museums, the majority of the artwork cannot be touched, to protect it from the public. This is completely understandable but sometimes this frustrates me, because I am intrigued by the materiality that can only be seen through the ability of touch. When I create my major project work, I want it to have that tactile aspect, as for me that is where the enjoyment and understanding comes from.

This has been highlighted during the months of isolating due to the corona virus. 'Touch, touching and being touched are essential aspects for human existence' (Dent, 2014 p.32) I have found not being able to get out into the world and explore really difficult as for me this is usually where my ideas start from. Not being able to touch everything or anything unless I plan on buying it. This really emphasises the connections we have towards objects, materials and surfaces. 'The physical act of touching things in order to engage with a subject is compelling' (Thompson, L, 2016) Objects can act as powerful communication tools. An example of this would be a model that communicates a complex problem in a simple form, making it understandable through physical demonstrations.



Figure 2, Cassie Suche, *International Avenue* (2021)

Cassie Suche uses objects to communicate her work with clients, to demonstrate the outcomes in the space. Starting with samples and maquettes which is something I also use as a tool to see how they'd work physically in an environment. This is a low tech but very understandable and powerful communication tool. By making and creating small scale samples it allows me to think of the end product and I question myself again about the material choice, the scale and the usability of the piece. I personally do not want to make a conscious divide between physical and digital interaction. I want to try and blend between the two, creating more meaning in the work I do and actively encourage an audience to interact and be involved with the work. Touch is an important sensory experience and is enhanced with interactive design.

'I propose that a material-centered approach to interaction design follow something I call "the interaction 1st principle' (Wiberg, M. 2018) This is something I go by as a designer. All of my previous design projects have been material led, due to the tangible appeal of them. He suggests that a design challenge is how you bring different materials into composition which enables a particular form of interaction. I believe my strong composition skills will bring the whole range of materials together, when building my tactile library. This

principle is known as visceral design. Using design which is aesthetically pleasing and interesting will initially draw the audience in, but the tangible aspect will keep them fully engaged through the sense of touch.

Emotional Design

“Everything has a personality: everything sends an emotional signal. Even where this was not the intention of the designer, the people who view the website infer personalities and experience emotions.” Norman, D — *Don Norman, Grand Old Man of User Experience*

Through the use of materials, we build a connection within a design sometimes this goes unrealised until a further date. When you think back to an experience and you remember the colour of the place or the smell, it connects emotionally with you, without even knowing. “Remembering touch, smell, taste and sound can reconnect us with some of the fundamental aspects of what it means to be human.” (Murray, 2015, p.115) Emotions play a significant role in the human potential of understanding and learning the world. Our minds are stimulated when we get to touch and feel a surface, textures and everyday objects. This creates an emotional connection and builds up engagement. Emotional design is the concept of how to create designs that evoke emotions, which result in positive user experiences. ‘A large body of research demonstrates that tactile contact can have a positive effect on our emotional and cognitive processes and our general well-being’ (Dent, P. 2014, p115). This emphasises my point, that the ability to touch, and feel surfaces creates a connection between the materials and the users.

This ethos will underpin my material exploration during my creative venture. I am particularly interested in creating work that can have a positive impact on general wellbeing and the environment. It is important to me that my designs are giving something back and not adding to the ever-growing pile of unneeded stuff. My material library will be carefully considered. Using waste to generate visually beautiful designs but introducing a tactile element through digital processes such as laser cutting.

Emotional design is a design approach to create products that deliver positive experiences for users. It is possible to identify two main approaches to applied emotional design. The first is based on the modification of object's aesthetic appearance or interface, the latter focuses on promoting fluent and engaging interactions.

Don Norman explains emotional design using three levels that are largely interconnected and have a great influence on design. These three levels are visceral design, behavioural design and reflective design. I have established that

emotions play a significant part in human lives through my research, therefore I believe design should excite and create positive emotions for the users.

When creating projects, I always consider the initial appearance, this is known as visceral design. 'Visceral design is a subconscious level of reaction when users encounter a product.' YUJ Designs (2019) The reaction to a visceral design is induced by the initial sensory scan of the experience. This is why I believe the material choices we choose can be crafted to better our experience. Through the materials and textures, I produce, I will try and make the users feel a certain way that compliments the final outcome.

Conclusion

My creative venture hasn't been as in depth as I hoped because of the current global pandemic but I believe I have taken advantage of the resources available to me and used the university facilities when they've been available. The limitations of not being able to access galleries and museums, and even everyday experiences with being limited to an hour of exercising a day has been difficult. Visiting virtual exhibitions and taking part in online conversations has helped, bringing together designers and thinkers from across the world, gathering and sharing information. Although this is not same as physically being immersed in gallery spaces. In previous projects I have taken trips to London, Venice and Seville, I like learning about cultures and bringing these aspects into my work. With limited travel I have started paying more attention to my local surroundings which has been positive bringing in my local heritage and using my local landscape to inform my practice. In some ways the locality of drawing from Wales connects me to my work and has brought up memories and emotions I have attached to being Welsh.

The physical outcomes of my creative venture will be narrated through materiality, tactility and play, to form substrates that create a positive connection with the users. I will consider how the locality can play its part in supporting my work, as there is strong evidence that the outdoors has a positive effect on people's well-being. The diverse body of work will be carefully considered, as I want to show that I'm a strong designer who can put my hand to anything and work across different media successfully. Ultimately, considering how this body of work will look and add value to my existing portfolio to find employment in a design sector in the near future. I will create a collection of samples, demonstrating my multidisciplinary skills and my broad forward-thinking nature. I want this project to highlight truly who I am as a designer and leave some emotional connection between my work and the audience.

Bibliography

Buchanan, R & Margolin V (1995) *Discovering Design: Explorations in Design Studies*. Chicago: The University of Chicago Press.

Dent, P. (2014). *Sculpture and touch*. Aldershot: Gower Publishing Co. Ltd.

Houghton College. (2020) *Kinesthetics Learning Style*.

Available at: <https://www.houghton.edu/students/center-for-student-success/center-for-academic-success-and-advising/study-advisement/general-study-information/kinesthetic-learning-style/> (Accessed on 21st November, 2020)

Leader, D. (2017) *Hands: What we do with them and why*. London: Penguin

Murray, A (2015) *Patternity A New Way Of Seeing*. London. Octopus books

Norman, D. (2018) *Grand Old Man of User Experience*.

Available at: <https://www.interaction-design.org/literature/topics/emotional-design> (Accessed on 18th November, 2020)

Thompson, L (2016). *Tangibility, Tactility & Texture*. Kin.

Available at: <http://kin-design.com/blog/blog/tangibility-tactility-texture/> (Accessed on 20th November, 2020)

Wiberg, M. (2018) *The Materiality of Interaction: Notes on the Materials of Interaction Design*. London: MIT Press

YUJ Designs (2019) *What is emotional design?* Medium.

Available at: <https://medium.com/@yujsocial/what-is-emotional-design-d091c383c6ee> (Accessed on 23rd November 2020)