

A person with blonde hair, wearing a black short-sleeved shirt and black pants, is posing against a light grey wall. They are holding a long, blue fringed scarf that is draped around their neck and extends outwards. The person's arms are outstretched, and they are looking towards the camera. The background is a plain, light grey wall with a vertical seam on the left side.

# **SENSORY NOURISHMENT**

crafting clothing design to support  
diverse sensory experiences

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## Bio

I am a fashion and product designer, currently in the 3rd year of a practice-based PhD at NTNU in Norway. I collaborate with neurodivergent individuals to who can become overwhelmed by clothing sensations. Together we examine how the dialogue between clothing and moving bodies affects the wearer's well-being, through my design practice.

My work is informed by 3 years in the London fashion industry as a tailor on Savile Row and at Alexander McQueen menswear, 5 years developing medical wearable technology in my native Ireland and a short stint in the Netherlands, interlaced with masters studies in product design engineering in Norway.

## PhD Project Overview

Clothes are the most intimate artefacts that touch our skin. Every day our moving bodies are shaping and being shaped by what we wear. Existing fashion design practices do not always consciously consider the sensations that unfold during this dynamic mutual shaping and their influence on how the wearer feels, both physically and emotionally (van Dongen, 2019). Such considerations are particularly pertinent for many neurodivergent individuals for whom the sensations in their environment can be experienced at unbearable levels (Gaudion, 2015). The participants in my research can become overwhelmed by problematic clothing sensations. This causes undue stress on the body as it responds by fight or flight; resulting in distraction, anxiety and mood swings that disable the person's interactions.

My practice-based PhD research asks: how can fashion designers consciously craft sensations for, and with, wearers with diverse sensory needs?

The research actively includes 20 people with heightened sensory responses that are in full-time employment or mainstream education in Norway, the UK and US. They are either on the autism spectrum or have been diagnosed with ADHD. The research takes a phenomenological approach to arrive at the essence of their perceived felt experiences. The first phase adopted sensory ethnography which Sarah Pink

(2009) describes as “not so much to study other people's sensory values and behaviours, but to collaborate with them to explore and identify these.” I employed a series of 12 wardrobe interviews that examined the relationship between participants, their existing clothing and clothing aspirations. A brief synopsis of the first half of the project is captured in this [video](#)

I entered the interviews with a focus on the material properties of clothing, however, as the extracts below illustrate, the complexity of lived experiences emerged:

*Lalia pulled the snowsuit up over her legs and let it rest at her waist. She put her right arm inside a padded sleeve, and then her left. She shrugged it up over her shoulders. Ever so slowly and with great attention she pulled up the zipper with her tiny hands. She then pulled the hood over her head and sighed. As she blocked out the room the crying stopped, the incessant movement subsided, the screaming ceased. Then Lalia reversed these actions. The snowsuit was around her ankles once again. She repeated the dressing actions, then the undressing again, again and again.*

*Celia anticipated some knee and hip flexing as we shovelled the ground so some stretch in the trousers was essential. She also anticipated that the ground might be abrasive. Toughness was therefore an equally important characteristic to ease of movement. She had settled on a pair of jeans with a little elastic content. However, she now regretted that decision as the hardware from the waistband was digging into her abdomen as she loaded stones from the ground into a wheelbarrow. Celia despises the sensation of anything touching her abdomen. The pressure can be so overwhelming that she cannot concentrate on anything else. This affects her ability to focus on her job. She shares an office with a colleague. Some days her colleague works from home and she changes into a pair of sweatpants. But she would never venture outside the confines of her office door dressed in sweatpants.*

*Tom was wearing a graphic print t -shirt under a smart suit jacket. He could not find any suitable professional shirts on his shopping trip. The fabrics on offer were stiff. Everything was*

*displayed to show-off the outside. He had to turn everything inside out to detect the potential sensory discords. They would be touching the back of his neck, which was his most problematic region. On the verge of tears he explained “I have no interest in being normal, but I want what is normal to me to be accepted. I had zero choices. Fashion claims to be all about self-expression but you can only express yourself as long as you fit into their determined box and get over your sensory issues.”*

Dominant fashion design practices are traditionally visual and static in their conception of clothing (Skjold, 2018). They rarely examine the practice of wearing. The wardrobe interviews allowed me to see clothing as an act of dressing, an act of wearing, a series of dynamic actions. Furthermore, movement is an important part of self-regulation; a release of energy that improves focus and concentration. When questioning participants on physical comfort, movement was always embedded in their reflections. For example, “I want to be able to climb trees. I'm not necessarily going to climb a tree, but I'd like to feel that it's a possibility.”

Unpacking this relationship between physical comfort and movement further, there was agreement that clothes should provide the freedom to move through their day free from distractions, free from restrictions. Physical freedom and emotional freedom are inextricably linked. Likewise, comfort is more than simply soft materials or a lack of constraint. It is being able to comfort yourself at times of great discomfort. It is being comfortable with how you are socially presented: “the embedded meanings so implied, can be a source of ease and calm – or its reverse” (Twigg, 2010). This was exemplified by a participant who bought denim print jogging trousers to fit-in with his classmates whilst appeasing his sensory needs.

The first phase concluded that neurodivergent individuals may have very individual physical sensory needs but they desire access to universal emotional experiences. In addition, the insights shifted the moving body to the forefront of the design process to explore how it crafts sensations when in dialogue with materials.

The second phase of the research takes a

design-driven approach. Currently I am working with four participants to design a garment each that finds the balance between their physical and emotional needs. The anticipated outcome is a series of iterative prototypes whose contribution is less about the final product and more about a way of working. As we begin to test the prototypes in context we see clothes as an interface between us and our external environment. They can connect, protect, but also disconnect us from our environment. Consider how the calming soundscape and landscape of nature transforms through the act of dressing and the act of wearing plastic rainwear. The kinaesthetic, tactile and sonic sensations of the plastic fabric as you walk, layered with the velcro, the zips, the toogles. The act of putting up the hood blocks out the environment and intensifies the sound of the rain. For some this can be overwhelming, unsettling. For others, it is an invitation to go inwards, reconnect with themselves. The rhythmical pitter-patter is soothing. The comfort, or discomfort, might change depending on the mood of the wearer, the social encounter and context of use. This composition of the melody of the clothing details and choreography of the moving fabric must be in harmony with both the wearer's external environment and their internal emotional state.

As I begin the final year of my PhD, I am approaching clothes as instruments that my participants can play, tuning the intensity of the sensory experiences that will support their emotional needs in that particular moment. The design is never finished; the wearer needs to shape their own improvisation with the clothing.

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Skjold, E. (2018) Making sense of dress: On sensory perspectives of wardrobe research. *Artifact: Journal of Design Practice*, 5(1), pp. 4.1-4.15.

Twigg, J. (2010) Clothing and dementia: A neglected dimension? *Journal of Aging Studies*, 24(4), pp. 223-230.

Van Dongen, P. (2019) *A Designer's Material-Aesthetics Reflections on Fashion and Technology*. Artez Press.