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CREATING FAUX FUR FROM WASTE TEXTILE

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Karlie Morrow

In 2023 Mindful Fashion NZ put out a competition call (Mindful Fashion Circular Design Award) to New Zealand designers and creators to re-think textile waste by searching for and creating a new and innovative approach to dealing with textile waste streams. Mindful Fashion New Zealand (MFNZ) is a not-for-profit organisation established in 2019 to strengthen the NZ fashion and textile industry.

Whilst traditional design process is linear i.e. brief, design, revise, produce; and then the product is no longer in the designer purview, many in the design and sustainability realm agree we now need to think of design as circular; in that from concept to final product and beyond, the designer needs to think of every aspect of their product's lifespan, and where it goes when it is no-longer of its original intended use. (Battesini Teixeira et al, 2023, Cleveland, 2019).

Defining circular design isn't succinct; The Sustainable Fashion Forum definition states "A Circular Economy (CE) is an economic model, rooted in Indigenous principles, designed to minimize waste and make the most of resources." (Sustainable Fashion Forum, nd). However, when expounding upon this phrase and applying it to the fashion system you can be left confounded by possibilities and pathways, 'the fashion system lacks a holistic vision that can support and guide this sustainable transformation toward CE.' (D'Itria, Aus, 2023). For the purposes of this article as it relates to the Mindful Fashion NZ competition I shall define it as "creating a garment(s) using waste textiles in an innovative manner, with a pathway to either continued re-use via reselling, sharing or upcycling, and including the possibility of returning to the earth once it is no-longer fit for its original purpose, or able to be cycled back into the fashion system."

The competition was searching for circular solutions that were fully resolved (as much as possible in terms of a one-off garment/ensemble) and these garments were to be showcased in the inaugural Mindful Fashion Circular Design Awards.



Figures 1 and 2. The source fabrics were jeans destined for landfill.

Jacinta Fitzgerald CE of Mindful Fashion NZ approached me and suggested I enter as she knew I had been doing work in this space in the form of my children's wear label Cirkel Life; creating garments entirely from textile waste streams, op-shop cast-offs, sampling fabrics from local fashion companies, and off-cuts from the manufacturing processes. This was timely as I was sitting in a headspace where I was not sure of my direction; whilst I was creating from waste and had considered my full circular business model, I was still struggling with the issue of left over scraps, particularly denim. I had been part of working groups looking into textile waste streams and was aware we had no ability to recirculate fashion textile waste back into the fashion system in New Zealand. As my main source of textile were denim jeans the op-shop didn't deem saleable and therefore were headed for landfill; many of the jeans I had been given did not have a lot of usable fabric left to them, the denim had become threadbare or was already full of 'designer' holes. However, in my mind this brought value to the denim as I loved it for my children's wear due to its softness from many washes and wears and as anyone can contest old jeans are the comfiest!

From my research into post-consumer waste textile streams I knew existing processes in New Zealand created either an inferior product, one of a similar value but not within the Fashion Textile framework, or were still within a pilot or trial phase (See Usedfully and Scions collab on roading made from recycled textiles, cotton, polyester and a blend of the two). I wanted to introduce to the conversation the question of how can we create a new valued fabric from this 'waste'? Instead of 'downcycling,' whereby the value of the textile is degraded (i.e. rags) or 'cross cycling,' in which there is value added but the resulting textile doesn't stay within its own industry (i.e. fluff for insulation or the pilot roading previously mentioned).

I was looking for the value in those 'designer' holey parts and realised, though the weft would often have given out, the warp still had potential as those fibres were intact. I had been considering felting after seeing a process Eileen Fisher (an American sustainably focused fashion designer) had done some years prior with her denim scraps and seconds (Velasquez, 2020). But it was while listening to a podcast episode of *The Wardrobe Crisis* by Clare Press in which she was discussing reinventing faux fur from a bio rather than oil source, that I started to consider the further potential in denim scraps. I had been fraying the denim on the bucket hats I was producing and noted the 'fluff' potential of frayed denim especially once re-washed and dried. From there I considered developing an entire jacket from the 'frayed fluff.' And so, I veered away from just cutting up old jeans and tried to look at what we could do with the worn-out knees and ripped/stained denim, de-constructing this to create a faux fur/feather with texture and warmth.



Figure 3 and 4. Stripped and frayed denim to create the Denifur and crochet fibre.

As part of my entry criteria, I also considered fashion's role in kaitiakitanga. The Te Ara online encyclopedia states 'Kaitiakitanga allows Māori today to feel they are meeting the responsibilities and hopes of their ancestors. It also allows non-Māori to reflect on the notion of kinship with nature, and how this idea might be useful in an environmentally threatened world.' (Te Ara).

As a non-Māori I reflected on how we as an industry could protect our whenua (land/environment) and prevent future pollution by utilising our existing resources and valuing what we already have in circulation. I had informal conversations with Māori environmentalists Tāme Malcom, (Ngāti Tarāwhai, Ngāti Pikiao, Ngāti Ngārarānui Tapuika, Ngāti Ruanui Iwi) and Riki Nelson. Tāme Malcom is Deputy Director-General Treaty Partnerships for the Department of Conservation and Riki Nelson is Director of Kaimai Kauri, kaitiaki of our local kauri; a Tangata Whenua led, kauri advocacy group, that is composed from hapu of Ngai Tamawhariua, Tauwhao ki Otawhiwhi and Te Whanau o Tuapiro. They both gave me further insight and they each expanded on the traditional meaning of kaitiakitanga and how they believe it works in a modern framework. Malcom told tales of his kuia (grandmother) and whaea (mother) and how they would, with other wāhine (women) use their traditional waiata (songs/singing) to entice rats to traps by sounding like bird song. Malcom extended that into modern practise by using recordings of native birds particular to the areas where he was setting traps, to entice the rats and thereby protect our native manu (birds). Nelson discussed the common values between a sustainable, holistic world view in the Euro-centric sense and the te ao Māori world view.

Nelson says, "Everything is connected, affected/effectuated and impacted in the material world and must be afforded recognition which is why we mihi to everything...and when we do that, we consider the consequences of our actions in the world...using Mātauranga Māori practices and methodologies we can apply practical solutions to everyday issues; in relation to fashion/textiles, I suppose renewable textiles are important, making sure the Whakapapa of the plant is local...keeping within the principles (cradle to grave), local grown, local employed (all along the chain.)"

As stated above, current methods of up-cycling and recycling often end with waste product. Cotton that is recycled is mixed with virgin resources for strength and fibre durability, polyesters are recycled but at what cost, plastic on our skin or micro plastics in our food chain? I proposed we need to find a way forward without virgin fibres either natural or synthetic; considering also current recycling of polycottons restores the polyester to a re-spinnable form but leaves the cotton as a slush type waste product. As I learnt from the Blocktexx Australia website, Polyester stream, "The polyester is largely untouched by the process, but the sunlight and many machine washes do degrade the quality of the material, so this is enriched to bring the intrinsic viscosity back up and then pelletized. At this point it is effectively a fresh raw material source for RPET that can be spun into new garments. The Cellulose stream ends up as a viscous paste, a little like playdough. This is a rich source of organic material and used for land reclamation and soil enrichment processes. Unlike PET, the economics of spinning this material back into yarn are just not viable for the foreseeable future, so it can't be put back into the textile supply chain" (Sustainable Ecommerce).

My competition design was inspired by the upcoming Summer festival season and included a crochet top, breezy summer pants and hat for the heat of the day, whilst my hero 'fur' vest was included for the cooler evening and post-gig walk home; a bag for sunblock, a water bottle and snacks completed the look. Wanting to ensure as little wastage as possible, I saved all the intact weft fibres from the deconstruction process for future use in crocheting or knitting a garment to work together with my denim fur or Denifur/Indifur (TM pending), as I had taken to calling it. Those weft fibres were collected, sorted by colour and twisted together in varying plys for different weights within the crochet garment. I enlisted a local craftsperson to help me with the design and execution and together we created a 'festival top' that was sturdy and dense around the bust but became light and airy at the hem; we used the existing colour of the weft thread that had been sorted to create an ombre effect in the skirt of the top, effectively creating colour variation without the need for dyes. Without the weft the frayed denim was laid up and stitched to create the basis for the 'fur' which was then transformed into a vest fully lined with the same fabric scraps used to create the pants. The hat was made from the same linen off-cuts with a denim lining created from jeans that contained more usable denim. The final garments/accessories were made from approximately 98% waste product (I had to buy new thread), any trims were from recycled sources, the pants were created mindfully to incorporate the design brief point of longevity and were fully adjustable with a tie waist that fits sizes NZ Women 6-12. Fabric pieces of cotton or linen from discarded shirts and manufacturing offcuts were laid upon

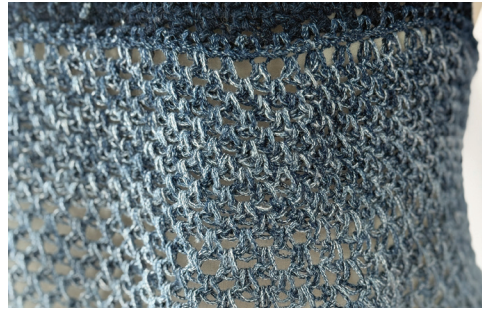
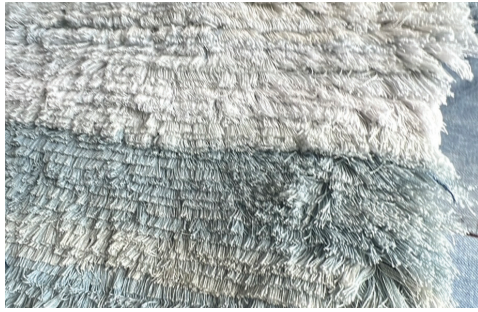


Figure 5 and 6. Close up Denifur before washing and crocheting into garment.

the pattern I created, then cut and sewn to make full pieces. Accessories were designed and made to use up waste from cutting – note the shape of the ‘fur’ on the bag is the same as the vest armhole, utilising zero waste techniques in the cutting of the ‘fur’. All thread used was 100% cotton to ensure biodegradability.

Below is the blurb that accompanied my Mindful Fashion Circular Design competition entry, describing the thought process behind the designs.

“Fast fashion is a misnomer; fashion comes from innovation and creation, and fast fashion is a copycat, a cheap imitation, a churn and burn philosophy of same-ness. Sustainable fashion is also a misnomer; creating new from virgin resources on a finite planet is inherently unsustainable.

My garment inspiration has evolved from a single question regarding fake fur’s place in our world to something inspired by re-visiting the optimism of youth. It celebrates the creativity of a teenager finishing that top right before the party, or the teen that doodles their optimism on their school bag, the twenty something that adores festivals, sunshine and the whimsy of Goldie Hawn in her early movies. It references the subversiveness of punk, think 70s/80s Vivienne Westwood and 90s Alexander McQueen; the free spirit of the flower power movement, with a nod to both the Māori korowai (feather cloak) and the symbols for growth and togetherness (applied by the ancient art of graffiti to the bag).

‘No Virgins Allowed’ is the PUNK, that controversial slogan that garners attention; in this case we mean virgin resources, and using fabrics made from plastics, derivatives of oil that become our second skin yet cause harm both to us and our planet. Or the beautiful virgin natural fibres that use so much water to produce and are dyed using products that unintentionally cause harm. We have decorated our bag with the slogans of “now,” “no dinosaurs” (oil), “no virgin” (materials), “break the rules and go off grain” (references to breaking the traditional rules of pattern making to make different fabrics and grains work together).

This ensemble represents a coming together of cultures, ideals and philosophies past and present to symbolise how we need to think about fashion’s future. In my conversation with Nelson, he used his current application and understanding of Mātauranga Māori practices, defined here by Sir Hirini Moko Mead,

“Mātauranga Māori refers to Māori knowledge in its widest and broadest terms, and Mātauranga Māori is inclusive and allows for innovative ideas and practices” (Mead 2012)...to add a fashion view point by concluding, also another view with textiles, we have a 110 year old kiwi cloak we use for tangihana (funerals and the rituals of mourning)...may be to steer away from consumerism and disposability and invest in quality, making each item a Taonga to be past (sic) down to each generation. (Nelson)

‘Denifur’s’ application is that of a boutique fabric, a special textile that gives us feelings of warmth and comfort and reflects the inherent value we once revered for the animals whose pelts we wore, a textile to create future taonga.

‘He tino āhuru tēnei pūeru’ (This textile is very cosy/comfortable/warm/safe)”

Karlie Morrow has worked in the fashion industry as a designer, patternmaker, workroom manager and photographer, in New Zealand and overseas. She won the Creative Excellence award at the Mindful Fashion Circular Design Awards for her denim fur project. She is currently studying for a Master of Design, focused on recycling textile waste.



Figure 7. Denim vest, crochet top and pants as styled for Viva Magazine (accessories, bag and hat not pictured).

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