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**TRANSFORMING  
WASTE**

**TEXTILE DESIGN PROCESS  
INTERVENTION: ADDING VALUE  
TO WOOL WASTE.**



**STACEY ELLIS**





**TRANSFORMING  
WASTE**

Transforming waste.  
Textile design process intervention: adding  
value to wool waste.

Stacey Ellis

An exegesis presented in partial fulfilment of  
the requirement for the degree of Master of Design.  
Massey University, Wellington.  
2013

Issue- An investigation into textile waste to propose  
alternative applications for reclaimed industry fibre  
through the creation of textiles.

Research Question- How can value be added to  
reclaimed industry fibre through the application of  
textile knowledge, traditional craftsmanship, recent  
technology and design?

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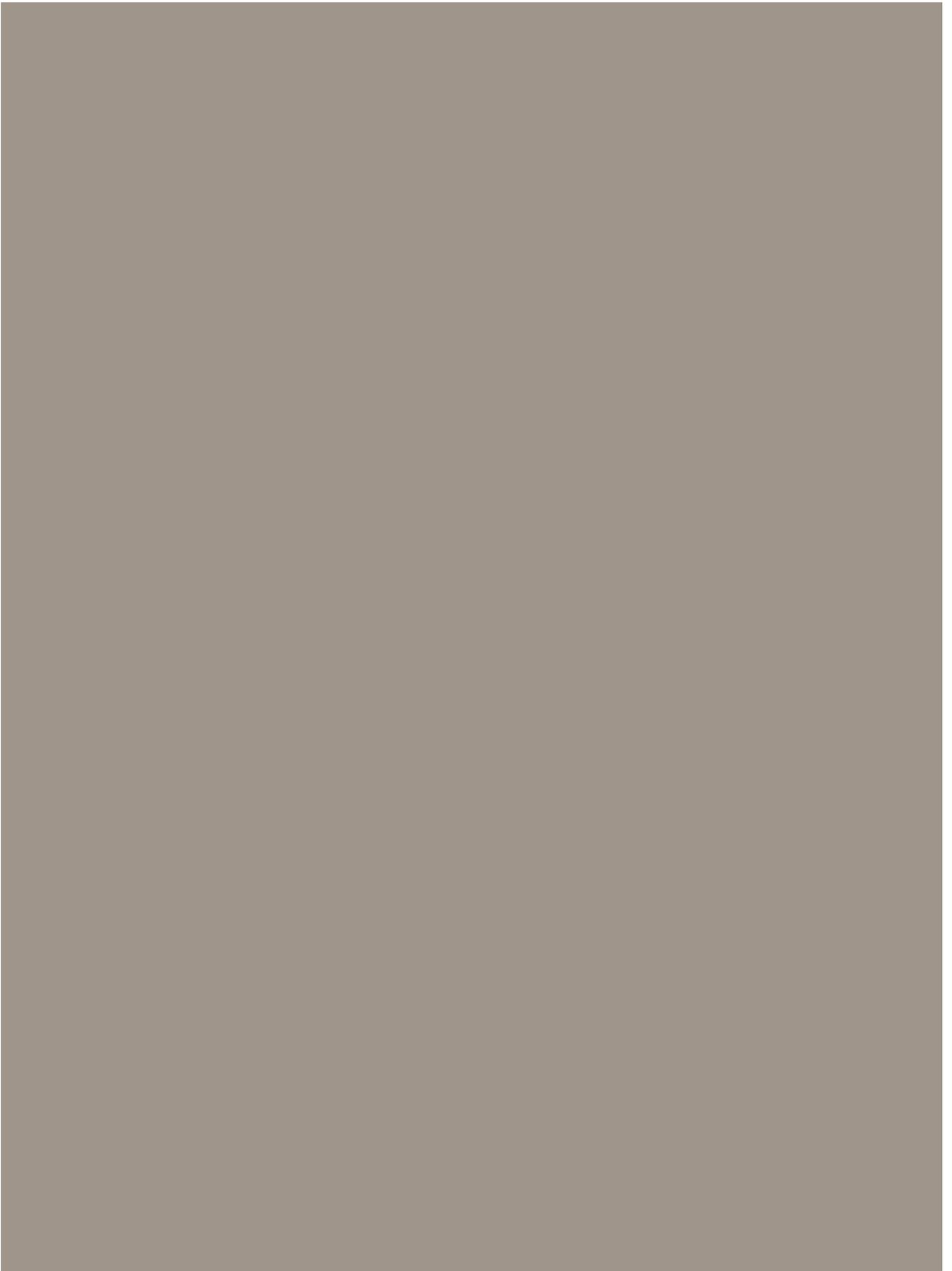


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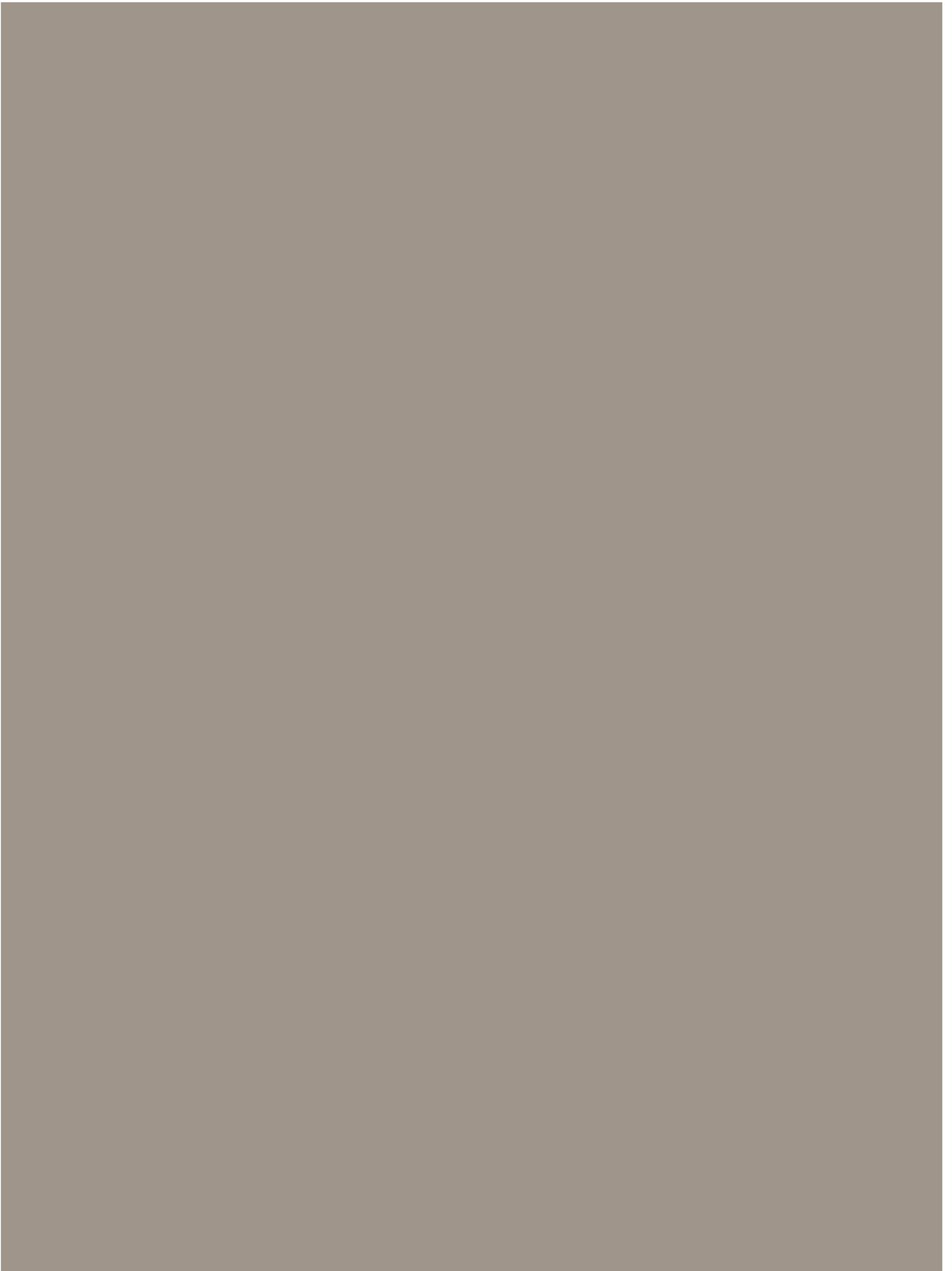
**STACEY ELLIS**



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## ABSTRACT

A design shift has moved towards a more honest materialization of design thinking, which is process. To that end, I use a material responsive, iterative design led process to explore the underdeveloped potential of reclaimed industry fibre from Woolyarns Limited (Wingate), Summit Wool Spinners (Oamaru) and Radford Yarn Technologies Limited (Christchurch). Reclaimed fibre is of high quality but low value compared to the original virgin fibre. Typically a New Zealand wool spinning company will sell the reclaimed fibre at a cost price (\$3/kg) to Auckland insulation manufacturers. In this research the potential of the fibre is explored using modern reinterpretations of traditional textile construction techniques and new non-woven and digital technologies. These processes have assisted to embrace the natural qualities of the fibre whilst adding value with the intention of producing innovative, high quality, high valued niche products as alternatives to the current 'downcycled' textiles produced in industry (insulation). To be completely sustainable is very difficult; but to eliminate and reduce waste to create value, minimize consumption and help prevent the premature disposal of this valuable natural resource offers another opportunity for design to support sustainable practice.





## ACKNOWLEDGEMENTS

I would like to thank everyone who helped, supported and encouraged me.

My supervisors: Dr Sandy Heffernan for her continued encouragement, support, knowledge and expertise; Dr Jessica Payne for her knowledge, guidance and expertise. Dr Julieanna Preston for always having a listening ear. Your encouragement and insightful feedback was invaluable.

Amy Sio- Atoa and Kristy Johnstone of Massey Textiles for their continuous help and support.

To Hannah Milner for her graphic design help with the construction of this book.

Ryan Christie for his photographic help.

To Neil Mackie and John Hubbard, Woolyarns, for their generous scholarship and willingness to contribute to the project in any way possible.

Summit Wool Spinners for their generosity, and willingness to contribute to the project.

And to my family and friends who have continuously supported and encouraged me throughout my study.

Thank you.

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