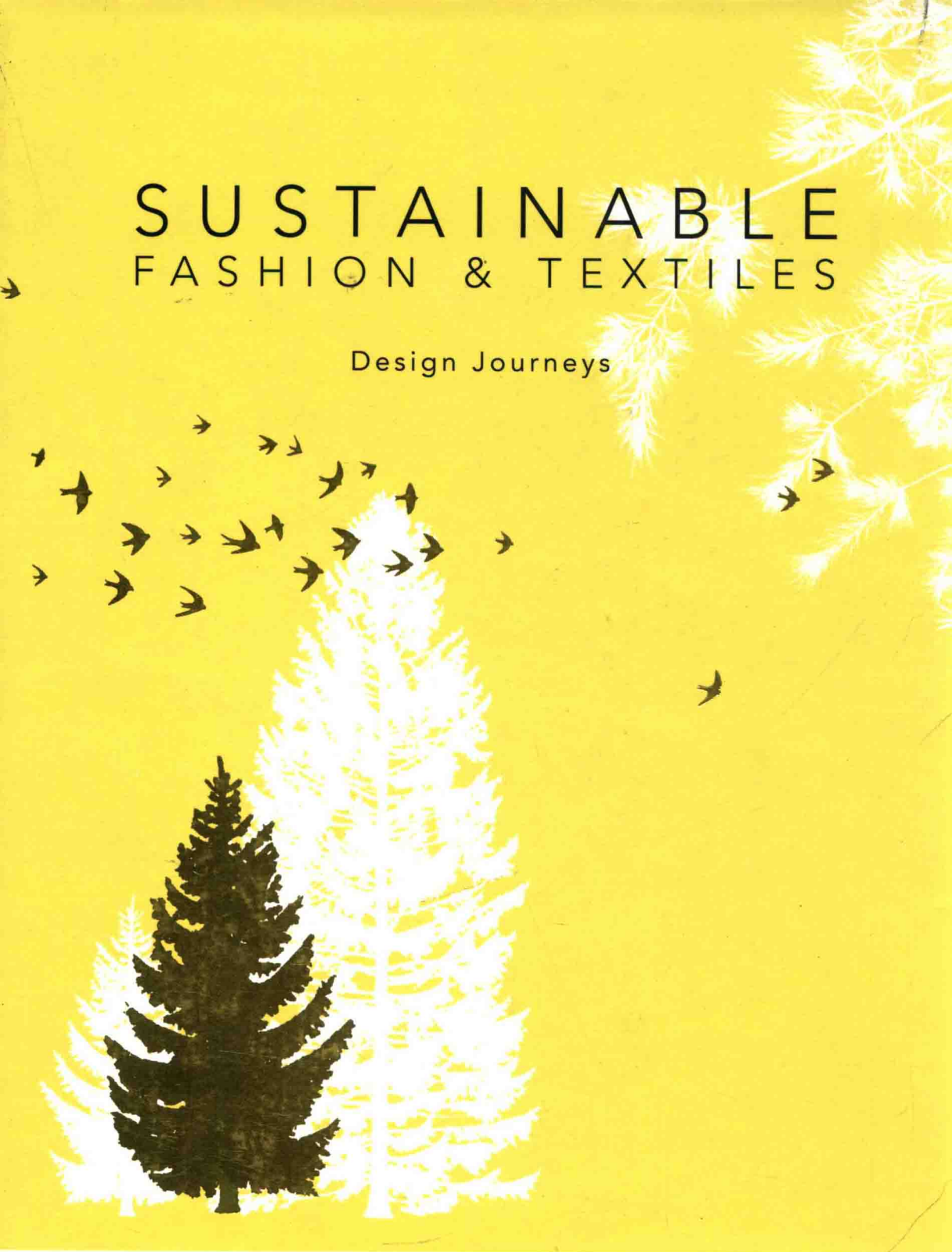


# SUSTAINABLE FASHION & TEXTILES

Design Journeys



KATE FLETCHER

# **Sustainable Fashion and Textiles**

Design Journeys

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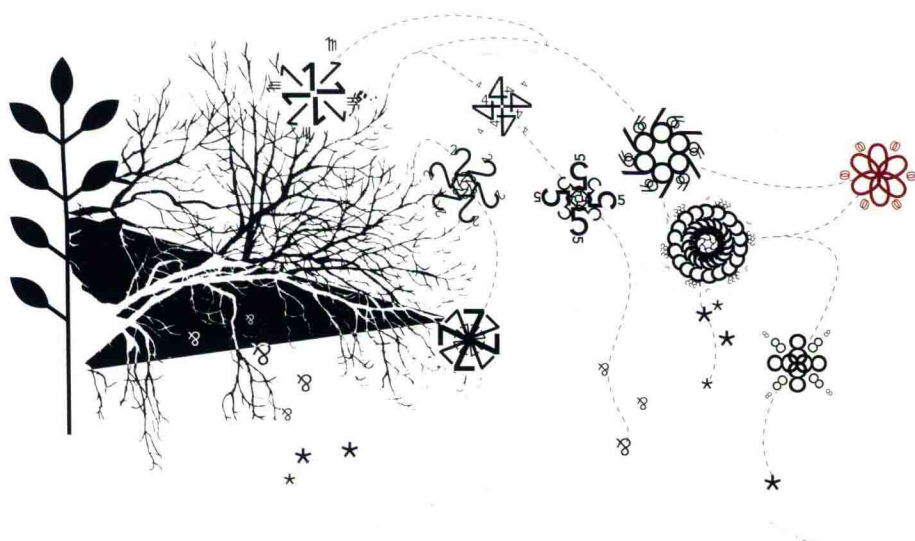
Design Journeys

For Mark, Jude and Cole

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## Introduction

This book explores sustainability issues in fashion and textiles. It does this from the perspective of design. Here design is used in its broadest sense, not just as a stylist or shaper of things (though this too has an important role), but also as a promoter of social change. Thus, while this book is about design, it is not just for designers. It is relevant to anyone who is interested in taking action and cultivating change towards sustainability. *Sustainable Fashion and Textiles: Design Journeys* explores this action and change through the complex, creative and consumerism-dominated world of fashion and textiles.

The aim of this book is to promote a broad, pluralistic view of sustainability ideas, issues and opportunities in the fashion and textile sector. The goal is to show that there is a wealth of different ways in which we can go about building long-lasting environmental and social quality through the design, production and use of fashion and textiles that go beyond traditional ideas or expectations. After all, the challenge of sustainability – that is, of integrating human well-being and natural integrity – is such that we can't go on as before. Business as usual or, more to the point, fashion as usual, is not an option. So what should we do instead? The answer, described in the pages that follow, can be found in embracing a multiplicity of starting points, involving many different people, operating across a range of different time scales. The effect is to produce an array of more diverse, engaging and resourceful fashion and textiles that secures employment for millions of workers, gives manufacturing industry an opportunity to trial and develop cutting-edge technologies and approaches that dramatically reduce resource use, and uses the catalytic potential of design to bring change.

This book offers eight different starting points or 'design journeys' from which we can begin to explore these opportunities. Each journey is explored in a separate chapter and covers different, though interrelated, sustainability ground. The journeys described in this book evoke a sense of a landscape. As an analogy, the world of sustainable textiles and fashion is a place of mountains, valleys, plateaus and swampy ground. The mountains rise up like beacons or navigation points and show us ideals, values and direction (where do we want to head?). The valleys in between represent where we are now – at the beginnings of our journey, in the rich, fertile and enthusiastic soil of ideas and possibilities, and still perhaps a little unsure of how the landscape will unfold. The swamps and plateaus represent the difficult terrain where progress is slow. Perhaps it is uncharted territory, a dead end or the start of a potentially exciting new area of investigation. Yet no matter how bogged down we become or whichever vantage point we climb to, we have a sense that no part of this world exists in isolation from the rest. The landscape is a whole and it unfolds before us, changing, eroding and rising up over time.

The design journeys in this book begin in Chapter 1 by navigating the complexities of sustainability impacts of materials, and conclude in Chapter 8 with a voyage into participatory design and open-source initiatives relevant to fashion and textiles. None of them deals with entirely new or futuristic ideas. All of them, or at least almost all of them, already exist to a greater or lesser extent in the fashion and textile sector today. This book draws them together into a holistic, multilayered and more sustainable



vision for the sector. This is a radical vision, but not an extreme one. Such a vision, in the words of industrial ecologist John Ehrenfeld, 'brings us back to our roots – the meaning at the very origin of "radical" – and is the natural way to go'.<sup>1</sup> This roots-based, nature-inspired and interconnected vision is developed throughout the book.

There are commonly thought to be two different value systems or world-views that influence the approach we take to sustainability.<sup>2</sup> Crudely simplifying things, the first can be described as 'more of the same, but more efficient' and involves making incremental changes to our present-day institutions and practices to bring about improvements. The second sees sustainability as necessitating 'something different'. That is, something different to greater efficiency, also involving fundamental personal, social and institutional change. This book is a blend of these two views. It is structured around ideas from the 'something different' paradigm but infuses this structure with many of the pragmatic, resourceful techniques and experience that have been developed from incremental change in today's fashion and textile sector. The result is a collection of long-term and short-term solutions that help us ground our work in inter-generational sustainability values and yet still be able to make decisions today that are simple, practical and insightful.

*Sustainable Fashion and Textiles: Design Journeys* is thus part handbook, part vision. It brings together information about lifecycle sustainability impacts of fashion and textiles, practical alternatives, ecological concepts and social innovation. The book defines the key relationships between sustainability and the fashion and textile sector and it also challenges the sector to change. Arranged in two parts, the first four chapters of this book represent key phases of the textile product lifecycle. Chapter 1 explores the impacts of cultivating or extracting textile fibres; Chapter 2 focuses on the production phase of the lifecycle; Chapter 3, the use phase; and Chapter 4, issues associated with end of life. Each of these chapters explores opportunities to improve the sustainability of that lifecycle phase supported by data and case studies, and reframes the issues in a holistic context. The remaining four chapters focus on the sustainability of fashion and textiles at the systems level, and explore opportunities to influence the root cause of many sustainability problems. Chapter 5 considers the relationship between fashion and consumption and reviews the ideas of designing for fundamental human needs. Chapter 6 explores the possibility of developing local products and those that are more resource efficient (i.e. light). Chapter 7 investigates issues associated with speed and in particular describes slow fashion. And finally Chapter 8 surveys participatory design and examines its potential for promoting sustainability.



While each of the chapters in this book is complete in and of itself, they are not autonomous or separate from each other. The first four lifecycle-focused chapters clearly relate to each other in a dynamic way, and the final four seek to influence the overall system of which the first four are a part. Thus the chapters' real value comes from what they represent together: innovative ways of thinking about fabrics and garments based on sustainability values and a broad, interconnected view of design. This broad view of design has been described by the scientist Herb Simon: 'Everyone designs who devises courses of action aimed at changing existing situations into preferred ones'.<sup>3</sup> So in the context of this book, any actions or ideas that help facilitate change towards sustainability are embraced as design. This is a broad category and includes the work of community groups, big companies and individual consumers, as well as professional designers. What the authors of these actions and ideas have in common is that they are using practical skills and creative thinking to innovate (normally with a group of other people) to produce products, ways of working or visions compatible with sustainability. Giving form to sustainability in any or all of these ways is vital if it is to become a reality. As the Nobel prize-winning economist Amartya Sen said 'it is difficult to desire what one cannot imagine as a possibility'. The hope is that this book can help us both desire and imagine sustainability better.

▲ The sustainability landscape

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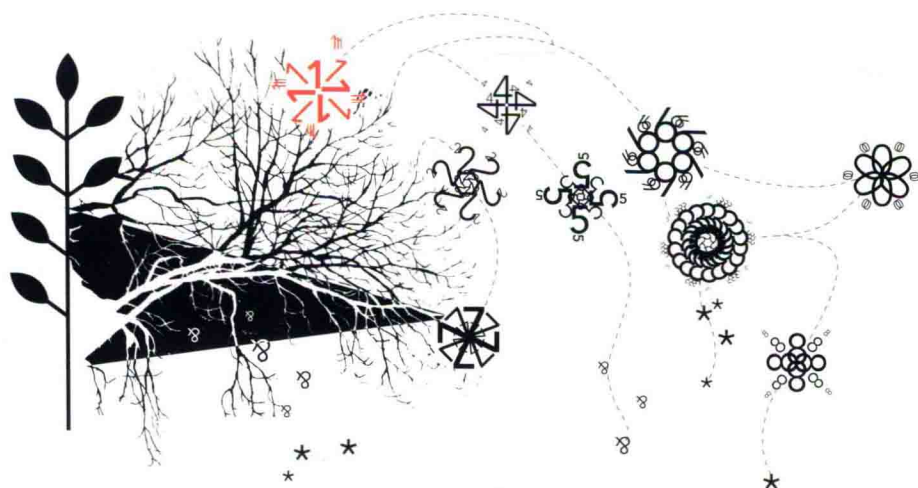
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## **PART ONE** Sustainable Fashion and Textile Products









## CHAPTER ONE Material Diversity

Materials play an emphatic role in our current understanding of what makes fashion and textiles sustainable. They are, more often than not, our starting point for change and a key commodity for farmer, designer, manufacturing industry, consumer and recycler. Indeed materials have been at the centre of both recent waves of interest in sustainable fashion and textiles. In the first, in the early 1990s, natural and recycled fibres dominated trade shows, trend predictions and industry journals. In the second, in the mid part of the 2000s, organic, Fair Trade and rapidly renewable fibres have led design innovation, with many companies basing their collections on choice of 'alternative' materials. The fact that materials seem to dominate our ideas