

THE FOUR ELEMENTS OF FASHION

Edited by
Anneke Smelik and Alessandra Vaccari

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The *Four Elements of Fashion* brings together international scholars to rethink fashion through the prism of the archetypal elements of earth, water, air, and fire. Emerging from a conference held at the Università Iuav di Venezia and curated by Anneke Smelik and Alessandra Vaccari, the volume offers a new perspective on fashion studies at a time of profound ecological and cultural change. The Book aims to investigate new paradigms of fashion cultures through those elements of matter as they are intertwined in the clothes we wear. The research papers shift the attention towards the material and sensory aspects of fashion. This approach fits in with the 'material turn', inspired by a re-centring of matter and the materiality of things, objects, technologies, and bodies. In readdressing fashion and its histories through the lens of new materialism, the authors envision possible future fashions in multiple ways: from contributing to an environmentally and socially aware fashion to disseminating good practices in the field of fashion design.

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The Four Elements of Fashion

Edited by *Anneke Smelik*

and *Alessandra Vaccari*

Editorial support *Greta Bosello*

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time and constructive comments, helping to improve the manuscript.

2 INTRODUCTION

THE FOUR ELEMENTS OF FASHION

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I. THE SUBSTANCE OF FASHION ①

The four elements—earth, water, air, and fire—can be found in most of the clothes we wear. Cotton, linen, and even synthetic fibres, need all four elements to grow and blossom. Without them no cotton or polyester—and no clothes. This insight makes us literally appreciate how everything is made up of the four elements. It also reveals more-than-human connections that we are usually not aware of. This is not only a spiritual way of thinking in the sense of an awareness of inter-relationality, but it is also a highly materialist way of thinking.

In the era of ecological crisis, the papers in *The Four Elements of Fashion* aim to investigate the new paradigms of fashion cultures through the four archetypal elements of matter. By doing so, the authors shift the attention towards the material and sensory aspects of fashion—features that have been largely neglected by fashion studies over the past forty years. This approach fits in the current debate on the material turn inspired by de-centring of the human and a re-centring of matter and the materiality of things, objects, technologies, and bodies (Latour, 2007; Rocamora and Smelik, 2025; Smelik, 2018). The book intends to analyse this ontological shift through the redefinition of the substance of fashion and its histories.

The four elements typically refer to earth, water, air, fire, to explain the nature and complexity of matter. In Western and non-Western cultures, matter is conceived as a coexistence of multiple elements following a tradition that includes, among others, the cosmological treatise of Aristotle, the Hinduist and Buddhist meditations on the primary material elements (*mahabhutas*), and Jābir ibn Hayyān's alchemy. Ancient cultures in India and Tibet worked with the four elements, for example in Buddhism,

which developed a four-element meditation, where earth is grounding, water is going with the flow, fire is warming up to impermanence, and air is breathing with all beings (Selassie, 2020).

In the West, the idea of the four elements dates from pre-Socratic times and persisted from Greek antiquity throughout the Middle Ages and into the Renaissance, deeply influencing European thought and culture. The four elements of the cosmos at large were taken to mirror the microcosmos of inner life. For example, Leonardo da Vinci wrote: “as man is composed of earth, water, air and fire, his body resembles that of the earth; ... as man has in him a pool of blood in which the lungs rise and fall in breathing, so the body of the earth has its ocean tide which likewise rises and falls” (Da Vinci, 2005, p. 71). Humans were understood to be made up of earth (flesh), water (blood and other fluids), air (oxygen), and fire (energy, the heat). Recently, Astrida Neimanis has argued that we are predominantly “bodies of water”. As she writes: we are “made mostly of wet matter” (Neimanis, 2017, p. 1).

Western medieval thought and medicine not only postulated four elements, but also four qualities—hot, wet, cold and dry; four humours—sanguine, phlegmatic, choleric, or melancholic; and of course, there are the four seasons—often represented in art and music, like *Le Quattro Stagioni* written by Antonio Vivaldi, born in Venice in 1678. It is important to note that modern science does not support the classical theory of the four elements—earth, air, water, and fire—as the fundamental constituents of the physical world. Contemporary understanding recognizes that matter is composed of atoms and molecules, and over a hundred chemical elements, which combine in countless ways and exist in different states depending on conditions. For instance, water can appear as steam when boiled or as ice when frozen, illustrating the dynamic nature of matter far beyond the classical framework.

Interestingly, in *The Posthuman Glossary*, Gary Genosko (2018) gives a new reading of the four elements as earth that he understands as dust; water as blood; air as lethal fog; and fire as flammables. Translated into the era of the present climate crisis he argues that the earth today means electronics—which are made of rare-earth elements; water is now bottled in plastic; air refers to greenhouse gases; and fire has become seasonal wildfires.

2. NEW MATERIALISM

We conceived the theme of the four elements for this book within the framework of new materialism. To take the four elements seriously is to take matter seriously. It invites us to attend to the non-human—or more-than-human—forces that are deeply embedded in the world of textiles and fashion. New materialism not only legitimizes this elemental focus but also offers a framework for understanding the human as always already entangled with the wider material world. Through this lens, the four elements are not just symbolic; they are active participants in the ongoing processes that shape both fashion and the environment.

One of the foundational insights of new materialism is that subject and object are not distinct or oppositional categories, but are deeply implicated in one another. Rather than privileging human agency over material reality, this perspective emphasizes the mutual constitution of humans and the material world. People and clothes are not separate entities but “hybrid agencies” writes Tim Ingold (2016, p. 69), that constitute one another in a process of what he calls this the “meshwork of things” (Ingold, 2012. p. 437). Ingold observes that in discussions around materiality there is often a lack of attention to actual materials. As he reminds us, “to know materials, we have to follow them” (p. 437); and this is precisely what so many papers in this book attempt

to do. To know the materiality of our clothes—of cotton, of polyester, of the dress or jeans that we wear—we must follow its trajectory from beginning to end.

Fashion studies is not alien to such an approach, as it has produced quite a lot of hands-on research, not necessarily inspired by new materialism, but definitely taking the materiality of fashion and the clothing industry very seriously. For instance, the book that traces the travels of a T-shirt in the global economy by Pietra Rivoli (2005), or several recent non-academic books on the textile industry, unravelling the material conditions of the clothing we wear. Victoria Finlay (2022), Maxine Bédard (2021), Virginia Postrel (2020), Kassia St. Clair (2019), and Sofi Thanhauser (2023) all wrote critical histories of textiles in the last few years, arguing that the material conditions of fabric demand serious attention—especially given that we live in a world surrounded by cloth. Across these works, a shared recognition emerges: textiles have been fundamental to human history and culture, shaping everything from daily life to global economies.

These authors also express surprise—and at times dismay—at how little awareness there is of the immense effort that has gone into the invention and refinement of techniques for producing yarn and textiles from plants, animal fleece, or insects. Understanding the history and technology of fabric-making is especially urgent today, in an era dominated by *fast fashion* and *ultra-fast fashion*, where clothing has become a disposable commodity. When we lose sight of the labour, knowledge, and resources involved in making—or discarding—a garment, we risk becoming careless consumers. This casual attitude stands in stark contrast to the reverence our ancestors, and even our grandparents or parents, once held for cloth, which remained a valuable and often cherished resource well into the mid-twentieth century. As Postrel (2020, p. 248) puts it: “We suffer textile amnesia because we enjoy textile abundance”. That amnesia comes at a cost—not only because it obscures vital

aspects of our human heritage, but also because the over-production and devaluation of garments have contributed to making fashion one of the most unsustainable industries today. The urgent message, then, is clear: if we hope to build a sustainable future for fashion, we must take the material culture of textiles—and the elemental forces that compose them—seriously.

There has been a significant reshaping of knowledge production within the humanities and social sciences, and the field of fashion studies has not remained untouched. A renewed interest in materialism—particularly through the lens of new materialist theory—has gained considerable traction. In recent years, we have seen a growing body of scholarship in fashion studies that re-engages with materiality, emphasizing the tangible, sensory, and elemental aspects of fashion as critical sites of inquiry. To name just a few: Heike Jenss and Viola Hofmann (2019), Ulrich Lehmann (2019), Sophie Woodward (2020), Susanne Kuchler and Daniel Miller (2005), and Caroline Evans and Jussi Parikka (2020). Focusing solely on materials and materiality is, however, insufficient. It is essential to incorporate considerations of economics and inequality into the dynamic flow of materials—particularly in the context of fashion, which has a profound impact on both the environment and the labour conditions of workers within the industry. This represents an epistemic shift inspired by new materialism, and specifically by Karen Barad's (2003) inquiry into how objects—such as the textiles and garments we wear against our skin—'come to matter'. New materialism goes further than just taking materiality seriously. New materialism bypasses dualistic oppositions and thus empowers new ways of thinking. It allows bridging divides, such as between the human and non-human, and think more affirmatively about the continuum between these different plateaus. In that sense new materialism helps create crossover connections

that are so important for the social and ecological challenges of today (Colman & van der Tuin, 2024).

New materialism marks a turn—or perhaps a return—to matter and materiality. From this perspective, matter is not inert or passive but must be understood as an active and meaningful force in the world. Materials possess agency—not in an anthropomorphic sense, but as part of an emergent, dynamic flow. As Ingold (2010) describes, things are not static objects but gatherings of forces and movements. Similarly, Jane Bennett (2010, p. viii) speaks of the "vitality" of things, of non-human matter, which she terms "vibrant materiality." Matter, in this view, is not 'brute' or inert; rather, it is in constant flux. Drawing on Bergson, Bennett argues that materiality is a flow (p. 92), describing it as "wonderfully vibrant, dangerously vibrant" (p. 13). Recognizing this vitality, she contends, allows us to fully acknowledge "the force of things" and to grant matter its due significance (p. viii).

This is what the reader can expect from the contributions to this volume: a critical engagement with the four elements within the field of fashion. The central question is, why does it matter to pay attention to matter? Why focus on the four elements? We argue that it is because the pressing issue we face is sustainability—both ecological and social. Addressing this challenge requires scholars to reconsider the material foundations of fashion, not only in terms of environmental impact but also in relation to the social inequalities embedded in its production and consumption. As Jane Bennett (2010, p. ix) writes, the idea that matter is vital and has some kind of agency, may help to achieve "more ecological and more materially sustainable modes of production and consumption".

3. GENERATION ANTHROPOCENE

Venice provided the setting for our first reflections on fashion and the four elements. The city emerged from water through a process of significant anthropization, and its life rhythms and movements historically coexisted with, and depended upon, a critically changing environment. Venice has long experienced phenomena such as high tide (*acqua alta*) and the gradual submersion of the land over time. The city also suffers from air, water and land pollution due to the nearby petrochemical hub of Porto Marghera and the cruise ships traffic, although in recent years the large ships can no longer enter the historic lagoon.

While we were drafting this introduction, the Venice Sustainable Fashion Forum (24-25 October 2024) was taking place in the city.② The forum described itself as an opportunity to “work jointly towards a concrete objective of sustainable transition, bringing together the companies all along the supply chains from materials to brands” (Venice Sustainable Fashion Forum 2024). We certainly align with this purpose, even if in the forum’s case it was motivated primarily by industrial and economic interests rather than research objectives. However, some speeches were less *concrete* than promised. A case in point is the address delivered by Peter Pernot-Day, head of strategic and corporate affairs for North America and Europe for the ultra-fast fashion giant Shein. Pernot-Day focused on *on-demand fashion*, presenting it as a promising way to lead to a more sustainable production model based on AI and data analysis.

This model delegates the main responsibility for the development of fashion production to the consumers, reaffirming the well-studied notion of fashion as an abstract mechanism shaping Western societies (McKendrick et al., 1982). Indeed, much of the discourses on fashion history stems from the Western paradigm of consumer capitalism, which turns matter into commodity through a process

of abstraction. Karl Marx considered fashion as a metaphor for the capitalist system (Leslie 2018), the consequences of which are tangible and can be observed in the deadly impact on both the environment and the workers' lives.

The fast fashion system is increasingly showing signs of strain: depletion of natural resources, the use of chemicals in bleaching and dyeing, pollution of land and water, and the exploitation of garment workers are all well documented (Fletcher, 2016; Fletcher & Tham, 2014). Moreover, waste generated by overproduction and overconsumption creates growing challenges for recycling used textiles, which end up in landfills or, worse, are improperly disposed of. In short, fast fashion represents a profound problem. Bédard (2021, p. 116) observes: "The current system is destroying the planet, ignoring the losers, and creating precarious jobs with precarious futures". The fashion industry has spearheaded a "race to the bottom".

If the human is decentred and we recognise the interdependence of the human and non-human worlds, sustainability becomes not a luxury but a necessity. This awareness begins with taking the non-human world seriously — the objects, the things, the four elements — and assuming responsibility for them. We need the four elements for our survival, and we need them to be clean—clean earth, clean air, clean water.

As long as capitalist system prioritises on profit and growth without addressing overproduction and overconsumption, —thus perpetuating the prevailing *throw-away* mentality in consumer culture, sustainability remains unattainable. To counter that *buy-fast and throw-away mentality*, it is urgent to cultivate a society in which materials matter. Kate Fletcher defines "true materialism" as "a switch from an idea of a consumer society where materials matter little, to a truly material society, where materials—and the world they rely on—are cherished" (Fletcher 2016, p. 188). A new materialist perspective emphasises the environmental

grounding of the fashion system and the material conditions necessary for a sustainable practice.

If we have learned from new materialism that humans inevitably form assemblages with the non-human, it follows that we must cultivate meaningful alliances. If we recognise that the non-human world, including animals, objects, a dress, or a pair of jeans, is rich and complex, we are called not only to take it seriously, but also to assume responsibility for it—*response-able* as Donna Haraway terms it. This notion of response-ability includes our capacity, as storytellers, of “conjugating” (Haraway 2012, p. 307) multi-species encounters, potentially contributing to new narratives about how we coexist on this earth. In this way, *The Four Elements of Fashion* seeks to reinforce our historical awareness as members of the “generation Anthropocene” (Macfarlane, 2016; Braidotti & Hlavajova, 2018). Addressing the unsustainability of human impact is crucial to confronting the current ecological crisis, compelling us to view the landscape, including its ruins, with critical awareness. Through this book, we also aim to fill the gap in historical analysis regarding how the capitalist process of commodification has contributed to a widespread devaluation of matter.

4. ORGANISATION OF THE BOOK

This book presents the outcomes of the fashion international conference *Earth, Air, Water, and Fire: the Four Elements of Fashion*, we co-organised and co-hosted at Iuav University of Venice (Italy) on 16-17 March 2023. The concept of the four elements as an engaging analytical framework emerged during Anneke Smelik’s visiting professorship at Iuav in 2021, where she was invited by Alessandra Vaccari to deliver a lecture series on sustainability, posthumanism and new materialism in the field of fashion (Vaccari, 2022). The title of the conference reflects the enduring presence of these elements in our imaginaries. It also aims to envision

possible futures shaped by an environmentally and socially aware fashion culture and industry (Vaccari & Vanni, 2021).

The conference gave voice to scholars, educators, researchers and designers from five continents, fostering interdisciplinary dialogue. Across two days of parallel sessions, participants explored the four elements in connection to the fashion industry, circularity, processes, im/materiality, design, activism, time, history, media, and ecosystems. When we first conceived the four-elements framework, we were uncertain whether it would resonate with the scholarly community, but the response exceeded our expectations. We received over a hundred abstracts, demonstrating that fashion scholars are eager to examine the four elements as a lens for researching dress, clothing, and fashion. The papers included in *The Four Elements of Fashion* provide a fertile ground for interdisciplinary and transnational dialogue, responding to the sustainable fashion challenges posed by the Anthropocene (Payne, 2019).

The Four Elements of Fashion features short papers based on the presentations at the conference, covering fashion theory, history, and design. Each abstract underwent double-blind peer review prior to the conference, and each full paper was again double-blind peer reviewed after the event, for this publication. We organized the book – predictably – along the four elements.

EARTH evokes a sense of being grounded, connecting the material impact of clothes to its lifecycle – between *hyperobjectivity* (Morton, 2013), recycling and biodegradation. Earth is the site where millions of tons of garments are disposed of annually in landfills, particularly in developing countries. It recalls the history of extractivism and overexploitation of natural resources [Magdalena Germek and Kristina Pranjić; Kayla Owen; Wajiha Pervez], but it is also provides the foundation for biomaterials. Bacteria, mushrooms, plants and agricultural by-products actively contribute to technologically advanced efforts to reconfigure

the boundaries between nature and artificiality [*Dorothea Burato; Clizia Moradei*]. The notion of *earthbound* (Latour, 2019) carries implications for hybridised and symbiotic life forms. Current disruptive anthropogenic impacts make vital the reassessment of fashion studies' and design's role [*Eleonora Campana and Giovanni Maria Conti; Erminia D'Itria and Federica Vacca*] in shaping increasingly entangled, queered and multispecies existence on the planet (Barad, 2011; Tsing, 2015). It also *reconfigures* the designer's role "positioning them as collaborators who work with the natural capacities of materials" (Cho & Joo, 2024, p. 7) [*Beata Hamalwa*]. Finally, this session addresses the intersection of earth as both land—a geographical place—and as a space of cultural meaning [*Giulia Rossi*].

WATER constitutes most of the human body, and thus highlights the close bond with corporeality, life and liquid imaginaries in fashion studies and fashion design [*Marie Schiele*]. The attraction to glimmering surfaces might reflect our primordial need for water [*Silvia Vacirca*]. Marine Serre's *Marée Noire* fashion film (2019) evokes a silhouette emerging from a black petroleum sea, while today's dispersion of microplastics makes coexisting with contamination inevitable. Water-related themes span the toxic and fashionable aniline dyes of the Nineteenth century (Matthews David, 2015) leather industry [*Ori Topaz*], the water footprint across cotton production chains [*Susan B. Kaiser*], and the forgotten histories of weathered garments, worn by workers in inhospitable climates, [*Elizabeth Kutesko*]. The section also encompasses underwater sea histories, fashion archaeologies, and conservation policies [*Sandra Biondo; Sandra Coppola; Elisa Palomino*], as well as emerging the concept of blue fashion, which unites fashion and water, in line with the blue economy. In other words, fashion history should not focus solely on human activities, but should also recognise the agency of both animate and inanimate entities.

AIR is an element closely linked to the issue of environmental pollution [*Isabella Alevato, Stefan Lie, Timo Rissanen and Alexandra Crosby*]. Atmospheric residues leave textured patina [*Rachael Cassar*] on objects, reminiscent of the moulds and microbes infestation on Margiela garments at the Museum Boijmans in 1997. The interplay of air and clothing is further illustrated by historical practices, such as the use of scented garments to counter foul air and disease in Sixteenth and Seventeenth centuries [*Pauline Devriese*]; the relics of the atomic bombing of Hiroshima and Nagasaki—as photographed by Ishiuchi Miyako (2008); and the post-Chernobyl fashion of the anti-contamination protective clothing. Albeit its negative impact, air pollution can also inspire alternative creative and social practices in fashion. As with music, fashion is always in the air [*Ailsa Weaver*].

FIRE is the only element not commonly available in nature and is therefore considered a human prerogative. It represents a process of energy exchange essential to human survival and possesses, through the calories, transformative power over the body (Vince, 2020). In fashion and cultural industries, fire enables exploration of different sources of energy for production. It is both a powerful and dangerous force, responsible for turning overconsumption and overproduction textile waste from overproduction and overconsumption into pollution and dust. Fire is also associated with solar energy and alchemical processes, which can be interpreted as the vibrating force of matter and fashion regeneration [*Paolo Franzo*]. It combines vital and psychic energy, bridging embodiment [*Pamela Flanagan*] with a renewed spiritual experience. Finally, two papers address the four elements simultaneously, investigating curatorial practices and the discourse of fashion museums [*Virginia Spadaccini*]. The interconnection of the four elements also provides framework to interpret the fashion dynamics between overconsumption and underconsumption;

non-conformity and conformity; and the reduction of ecological footprints versus clothing as a mean of self-expression [Anna Keszeg; Judith Brachem].

We hope that *The Four Elements of Fashion* offers an innovative perspective for fashion studies, focusing on this new prism of the four elements. The research papers in this volume envision multiple possible futures for fashion: from contributing to environmentally and socially aware practices to disseminating good practices in fashion design. Moreover, they generously test the conceptual framework, helping us helping us re-examine fashion and its histories through the lens of new materialism.

NOTES

①: The authors have contributed equally to the conception, design, and manuscript preparation of the Introduction. “The Substance of Fashion” and “New Materialism” were written by Anneke Smelik; “Generation Anthropocene” and “Organisation of the Book” were written by Alessandra Vaccari.

②: The forum is conceived and organised, since 2022, by leading organisations in the field of industrial and economic policies: Sistema Moda Italia and Confindustria Veneto Est, together with the think tank and management consulting TEHA The European House-Ambrosetti.

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