



Let's give Nature a voice.

ISSUE 01.

**MATERIALS, INNOVATION, SCIENCE,
TECHNOLOGY + FASHION**

AMANDA PARKES | PANGAIA

DAVID BRESLAUER | BOLT THREADS

NINA MARENZI | THE SUSTAINABLE ANGLE

VOICE FOR NATURE



WHY HUG NATURE? ... FRESH AIR. WE LOVE IT. THANKS FOR THE OXYGEN. EXTRA LOVE TO PLANTS, ALGAE, AND CYANOBACTERIA, THE ROCKSTARS WHO FILL OUR LUNGS.

SKINNY DIPPING IN THE BIG BLUE... NO OTHER PLANET COMES CLOSE.



VOICE is dedicated to amplifying the voices of those speaking up, or taking action on behalf of Nature. We celebrate and dive deeper into the work and passions of those helping to make tangible changes that will directly benefit Nature.

Together with you, our readers and the leaders within these pages, we're daring to imagine... Daring to create... Daring to rediscover the path towards a thriving Natural World. Join the adventure. We are Nature and Nature is us.

VOICE E-MAG IS FOREVER FREE, LIKE FRESH AIR* AND SKINNY DIPPING.

TO SUPPORT THOSE WHO SUPPORT NATURE, VISIT [VOICE FOR NATURE](#) OR GET IN TOUCH.

*AIR: LESS FUNKY — KEEP IT FRESH... EVERYONE HAS A RIGHT TO A FRESH SERVE.

images overleaf: Unsplash



Dear Nature Lovers,

Here we are, poised delightfully between a few notable moments in time... The day a person first devoured a fungi pizza (yum!), and a possible future, when half of the human population walks around in mushroom shoes. It's a day on Earth — the best rock in space — and we're excited to bring you this first edition of **VOICE** e-mag.

VOICE FOR NATURE exists to share knowledge, celebrate solutions and inspire a reconnection between humans and the natural world... **VOICE** is one piece of that puzzle.

ISSUE ONE delves into the ever evolving world of fashion and textiles, and we're joined by some of the biggest change makers in the industry. Take a peek into the marvellous minds of these dynamic individuals — who remind us of what's possible when we dream and collaborate with Nature front of mind.

The conversations in **ISSUE ONE** explore questions relating to the use of new materials vs reusing existing fabrics; dive into the underground world of mushrooms; and unpack greenwashing and transparency.

Park yourself under a tree, hang your feet in a stream, or plant your derriere in the sand, then sink your eyeballs into this delicious brain fodder...

A big thanks to Amanda, David and Nina for allowing us into their world.

As always, stay curious.

x VFN

THANK YOU

Amanda Parkes, PANGAIA

David Breslauer, BOLT THREADS

Nina Marenzi, THE SUSTAINABLE ANGLE

SIKANDA, OAXACA

THE LOST EXPLORER MEZCAL

VOICE FOR NATURE FOUNDATION

VOICE: ISSUE ONE

PUBLISHED *(in the DIGITAL realm)* BY VOICE FOR NATURE

PRODUCED BY VOICE FOR NATURE

EDITOR: Catherine Carragher

COPYWRITING: Catherine Carragher

ADDITIONAL COPYWRITING + COPYEDIT:

David Urry, Jessica Leitmanis, Nathalie Barona March

All images © and courtesy of contributors unless noted.

COVER IMAGE: The Sustainable Angle

IMAGES: Pangaia, Bolt Threads, The Sustainable Angle,

SiKanda, The Lost Explorer Mezcal, Unsplash, iStock.

INTERVIEWS: Catherine Carragher

DESIGN: Voice for Nature

ART DIRECTION: Jessica Leitmanis

CONNECTIONS, WISDOM AND GLUE:

Katie McLaurin, David de Rothschild

© 2023 VOICE FOR NATURE LTD

Images © relevant contributors unless noted.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, copying, recording or otherwise, without the consent of the publisher. Errors or omissions will be corrected, and updated online, as well as noted in subsequent issues.

If, however, you are super psyched on Nature and inspired by these articles, we're actually pretty chilled... Feel free to share some love, hoot about Nature or these conversations via the old socials; tag and follow along; or word us up on any Nature related ideas or questions that are floating your boat of late.

voicefornature.com [instagram](#)

8 Amanda Parkes *in conversation*

Amanda Parkes is not only Chief Innovation Officer for Pangaia, she holds a PhD in both material science and computer science, a degree including art history and recently started as a lecturer at Harvard.

20 The Mystical World of Mycelium

24 David Breslauer *in conversation*

David Breslauer is the co-founder of science and innovation company Bolt Threads. As UC Berkeley graduate student fascinated by biomimicry, he studied spider silk production.

34 Embracing Nature's Hues

The rise of natural dyes in sustainable fashion.

36 Nina Marenzi *in conversation*

Nina Marenzi, founder of The Sustainable Angle, is leading the way to a more sustainable fashion industry and celebrated 12 years of the Future Fabrics Expo in 2023.

46 SiKanda & Voice for Nature Foundation

SiKanda initiatives supported together in partnership with The Lost Explorer Mezcal and Voice for Nature Foundation.

Amanda Parkes

New York based Amanda Parkes is not only Chief Innovation Officer for Pangaia, she holds a PhD in both material science and computer science, a degree including art history and recently started as a lecturer at Harvard.

If there's anyone to talk to about material sustainability, it's Amanda.



© Amanda Parkes

We stole a few minutes of her time to talk about her career journey, thoughts on industry greenwashing and Pangaia's 'anti marketing' campaigns:

CAT: How did you become interested in innovation and sustainability, and how does it align with your personal passions?

AMANDA: I'm a fashion scientist, which wasn't a term when I started my undergraduate studies 20 years ago. With a background in mechanical engineering, product design, and art history, I became fascinated by the fusion of the digital and physical worlds. I explored applying emerging information technology to physical materials and studying organism behavior, particularly optimising photosynthesis with light technology.



Image © Pangaia



image: Unsplash

CAT: How did your work with electronics and photosynthesis connect with the fashion industry?

AMANDA: I delved into biofeedback algorithms, controlling organism growth and developing new materials. This work involved robotic systems as well. Over time, my focus shifted to textiles, materials, and fashion. I was captivated by the potential for interactivity and innovation around the body.

When did you join Pangaia?

I joined Pangaia as the scientific director after meeting its founding team during the setup of a fund for sustainable materials. Recognising the underinvestment in this ecosystem, we aimed to establish a brand that could demonstrate our observations from major fashion brands.

Why weren't big fashion brands actively involved in developing sustainable materials?

Big fashion brands and scientific startups faced a communication gap due to speaking different languages. It didn't make sense for scientists to become fashion designers, or vice versa.

Pangaia aimed to bridge this gap, creating responsible, beautiful, and sustainable products while building a cool brand. This resonated with people, and Pangaia gained momentum.

“Technology doesn't have to be at odds with sustainability”

Does Pangaia extensively explore biomimicry and technology inspired by Nature?

Yes, at Pangaia, we refer to it as biofabrication. We utilise science, chemistry, and biology to upgrade waste materials, leveraging abundant resources found in Nature. Our material philosophy, “high tech naturalism,” combines low-tech and high-tech strategies to drive sustainability goals.

CAT: How does biomimicry integrate into your work at Pangaia?

AMANDA: Biomimicry encompasses various technical approaches. We extract DNA from different sources and introduce them into bacteria for growth. This falls under synthetic biology and helps develop dyes and other materials.

Can sustainable materials become more affordable in the future?

Our most innovative products from Pangaia Lab tend to be more expensive and limited in volume initially. However, our commitment to purchasing a certain amount of material from innovators allows them to secure longer-term purchase orders, enabling upfront investment in sourcing and growing materials. This commitment helps negotiate price drops earlier.

“Transitioning cotton fields to become regenerative takes time, and we are creating a collective commitment to purchase ‘in transition’ cotton.”

Will cotton remain a viable material?

We are working with regenerative cotton, but there is a lack of commitment from stakeholders. Transitioning cotton fields to become regenerative takes time, and we are creating a collective commitment to purchase “in transition” cotton. Educating people about the benefits of transitioning is essential.

Can this technology extend to other sectors beyond fashion?

Certainly. There is significant crossover between fashion, food, and other industries. Understanding material properties and biology has broad implications for multiple sectors, including interior design and automotive.



image: Unsplash



CAT: Pangaia emphasises transparency by printing carbon emissions on clothes. Can you elaborate on that approach?

AMANDA: Our trademark transparency replaces a prominent logo with information about the carbon footprint. This sparks curiosity and encourages consumers to question the garment's production process, promoting awareness and conscious consumption.

“This sparks curiosity and encourages consumers to question the garment’s production process, promoting awareness and conscious consumption.”

Which brands excel in sustainability, considering the prevalence of greenwashing?

Greenwashing exists in various forms, intentional or unintentional. At Pangaia, we invest time and resources in obtaining true transparency. We block suppliers if reliable information is inaccessible. Many brands struggle to gather accurate data due to complex supply chains. Education and commitment to science, along with guidelines, would be beneficial in this space.

Would tighter legislation and education help address these sustainability issues?

Tighter legislation combined with education is crucial. However, education and a commitment to science are equally important. Striking a balance and focusing on informed decision-making through education and guidelines should be prioritised over creating an environment of fear. Lawsuits should be a last resort.

CAT: Pangaia's letter earlier this year was impressive, acknowledging their imperfections and commitment to trying. Do you have any insights into the conversations and stories behind it?

AMANDA: My role involves working closely with the communications team. We prioritise the fusion of science and communication.

I represent Pangaia as a scientist in press interviews and on stage to demonstrate the presence of real scientists within the brand. Although I didn't contribute to the letter's wording, I believe it accurately reflects our brand values. Interestingly, when I first read it, I didn't realise that some readers interpreted it as a sign of shutting down.

It did seem that way to some. I found it intriguing how it initially focused on problems but eventually came back to the brand's purpose.

Part of the letter's tone was influenced by the challenging year of 2022, encompassing economic difficulties, the Ukrainian war, energy crisis, and inflation. It felt like we experienced the double impact of COVID-19 and a new war, particularly in Europe during the last six months of 2022. Despite these challenges, we remain committed to our long-term goals. We acknowledged that the industry's sales were down, including ours, and conveyed a sense of unity. It was a reminder to prioritise essential expenses over unnecessary purchases.

I appreciated the introspection in the letter, as if it were written by a pen pal. It's refreshing when people communicate honestly and directly.

Sharing the brand's backstory and feelings through communication is valuable. Pangaia is a technologically advanced brand with dedicated individuals behind it. It may seem faceless without these communications.





image: Unsplash

CAT: We thought the letter was fantastic, and we're fans. How is your relationship with the press?

AMANDA: Our relationship with the press was shaped by a pivotal Instagram post in mid-2021. During interviews, I noticed a tendency for journalists to overemphasise and exaggerate our achievements, creating misleading claims.

To address this, we published a post listing the headlines that went too far, expressing our gratitude for positive press but also highlighting what we haven't accomplished. This anti-marketing approach was well-received, as it demonstrated our commitment to avoiding greenwashing and not remaining complicit through silence.

“We said, we really appreciate all the positive press, but here's all the things we haven't done ... If we're silent on this, maybe that means we're complicit.”

Indeed, social media allows direct communication with fans and clients, enabling us to set the record straight. Press releases might still perpetuate misconceptions.

Finally, tell us a little about you? What's your connection to Nature?

I love spending my downtime in Nature, particularly on the beach. I grew up on the beach in Runo Beach, California, and I enjoy spending time on islands like Aruba. Scuba diving, surfing, and sailing are some of my favorite activities. Scuba diving, in particular, is incredibly peaceful and helps with my mental health. Being underwater provides a sense of peace and tranquility. It's a whole different state of mind. I also find inspiration in the ocean's architecture and underwater environments.

You're a water baby.

Absolutely. I find tropical vacations to be very inspiring. Even when I'm at the beach, I can still work effectively and efficiently. It's a great environment for sparking ideas.



WATCH

In conversation with
Amanda Parkes



EXPLORE MORE

[Pangaia](#)

[Pangaia Instagram](#)

The Mystical World of Mycelium

An invisible kingdom quietly thrives at the heart of our vast and wondrous natural world – an ethereal network of delicate threads, bustling with secrets, feeding on death and, by doing so, creating life... Welcome to the realm of mycelium.

Beneath our feet, minuscule threads called hyphae extend and intertwine to form vast underground networks, connecting trees, plants, and ecosystems. Fungi hyphae form mycelium that connects trees and plants in an underground fungal highway – sometimes called the wood-wide web – transporting nutrients and signals. Fungi's extraordinary ability to decompose organic matter makes it a crucial player in the cycle of life, recycling nutrients and revitalising ecosystems. Without fungi to aid in decomposition, all life in the forest would soon be buried under a mountain of dead plant matter.

Fungi are not an animal, and not a plant; they are classified as their own kingdom entirely. Kingdom Fungi is one of the oldest and largest groups of living organisms. Scientists estimate that there are over 5,000,000 species of fungi on Earth, but we've only discovered about one percent of them.

The unique properties of mycelial networks have captivated the imagination of scientists and innovators, who harness its power to create sustainable materials, medicinal breakthroughs,

alternative energy sources, and even potential solutions to environmental challenges.

Mycelium-based materials have been used to craft everything from biodegradable packaging to architectural marvels, opening up a world of possibilities while minimising our impact on the Earth.

Mycelium can be grown into a leather-like material that can be used as a substitute for animal leather. The mycelium is grown on a substrate such as agricultural waste or sawdust, forming a dense network that can be processed and treated to create a durable and versatile material. Mycelium leather can be used in various applications, including fashion, accessories, and upholstery.

By combining mycelium with other natural fibers or bio-based polymers, mycelium can also be used as a binding agent in the production of composite fabrics, used in a wide range of industries including fashion, construction, automotive, and interior design. Specifically for fabrics, it can also be used as a natural dyeing agent. The pigments produced by certain fungi can be extracted and used to dye textiles without the need for synthetic or harmful chemicals.

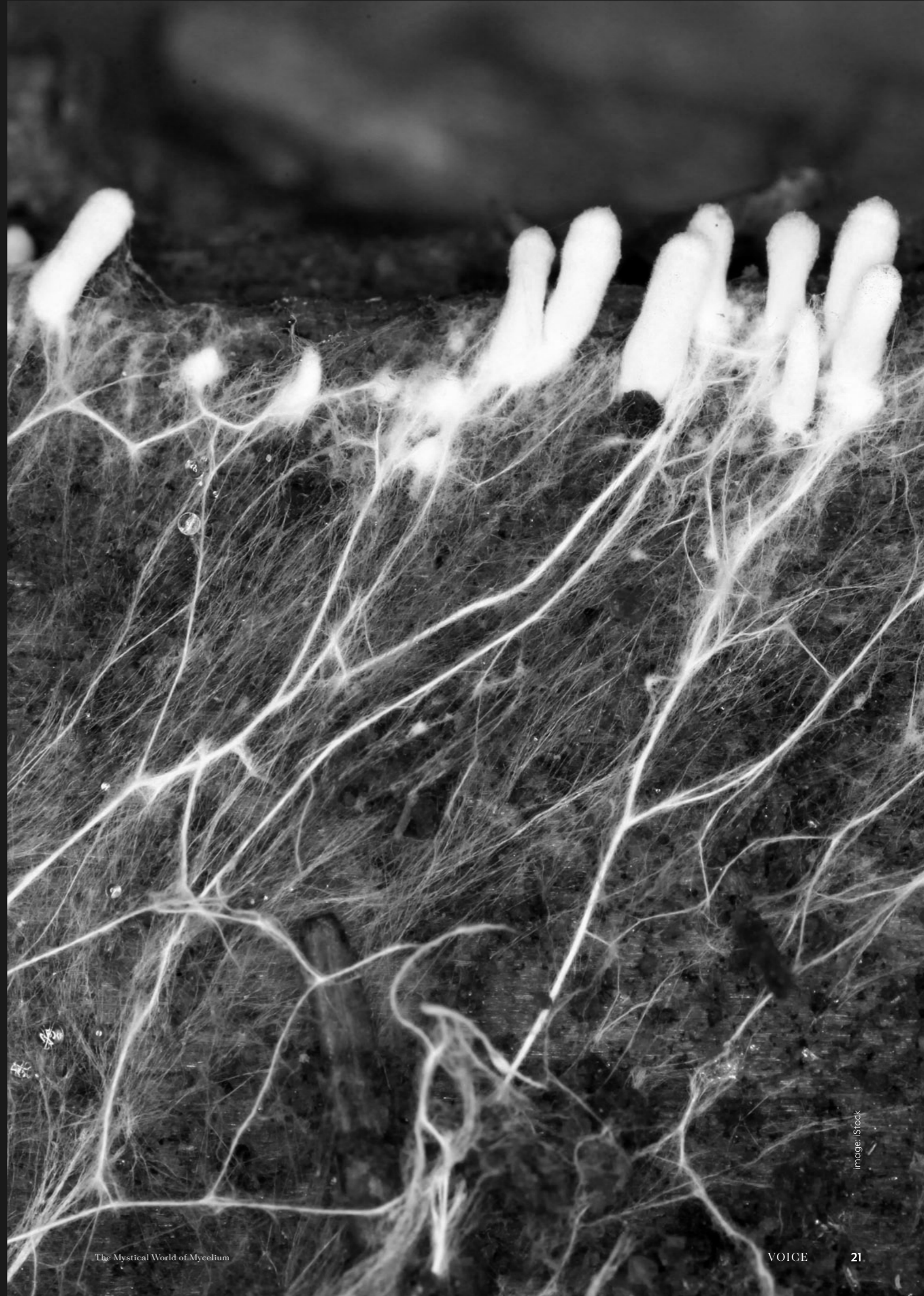




image: Unsplash

As the world's population and temperature continue to rise, we're turning to fungi for help with sustainability solutions, medical healing and to understand a deeper connection with the natural world.

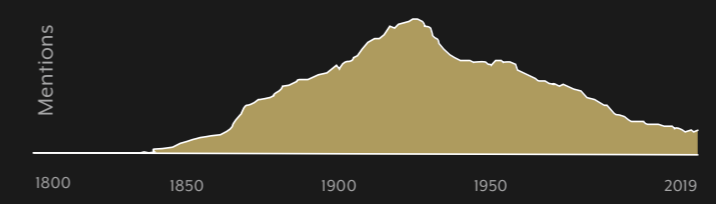
In the enchanted realm of mycelium, magic seems to

intertwine with science, and beauty dances with functionality. Through their silent symphony of interconnectedness, mycelium and mushrooms showcase the profound wonders of Nature, urging us to embrace the secrets of this underground world.

origin



use over time for: Mycelium



MYCELIUM

noun: The vegetative part of a fungus, consisting of a network of fine white filaments (hyphae).

origin: Mid 19th century: Modern Latin, from Greek mukēs 'fungus' on the pattern of epithelium.



EXPLORE MORE

- [How most life on Earth is dependent on fungi – including you](#)
- [The earth's secret miracle worker is not a plant or an animal: it's fungi](#)
- [Fungi Are Responsible For Life On Land As We Know It](#)
- [The future is fungi](#)
- [British Mycological Society](#)

David Breslauer



David is the co-founder of science and innovation company Bolt Threads. As UC Berkeley graduate student fascinated by biomimicry, he studied spider silk production. Dan, his co-founder, a UC San Francisco graduate student, engineered a microbe for silk protein.

They united through their shared passion and a chance email from Stella McCartney shifted their focus to luxury fashion. Seeking a sustainable leather alternative, they explored mycelium.

David chatted to us about Bolt Threads journey so far and what the future holds for sustainable materials:

CAT: Hi, David! It's great to have you here. So, let's jump right into it. Can you share with us how you got into the space you're in now?

DAVID: Absolutely! It's a serendipitous and circuitous journey, to say the least. Back when I was in graduate school at UC Berkeley, biomimicry was all the rage, and although I wasn't directly involved, I found it fascinating. At the time, I was working on lab-on-a-chip devices, but I didn't have a clear direction for my research. Then, someone asked me how spiders make silk, and that got me curious.

I started diving into research on spider silk and stumbled upon the idea of mimicking it using microfabrication techniques. As luck would have it, I found out that there was someone at UC San Francisco working on engineering microbes to produce spider silk protein. That someone turned out to be Dan, my co-founder. Long story short, we met, bonded over spider silk, and decided to start a company.





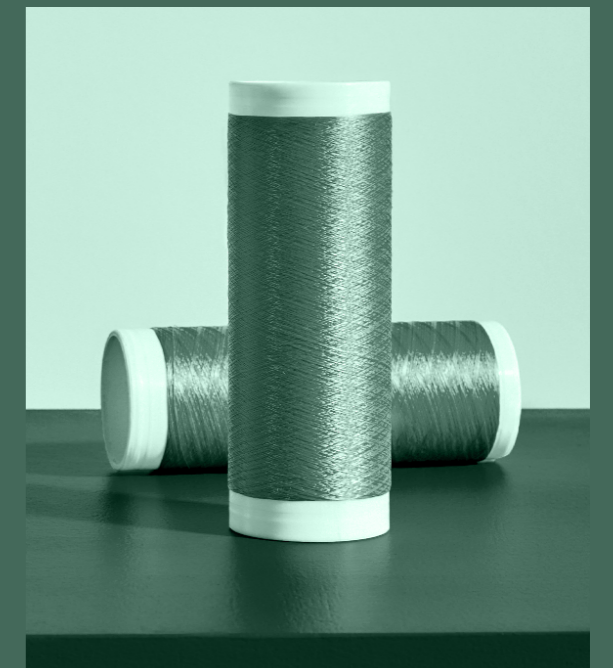
DAVID: We didn't know one another, but at the time, biomimicry was a very hot topic. It wasn't that I had anything to do with it, I just thought it was cool. The field I was in was lab-on-a-chip making micro devices that did lab work for you. I learned all these microfabrication techniques to make very tiny systems, but I didn't know what I wanted to do with it. Given the hotness of biomimicry, I was talking to someone, and they said, "How do spiders make silk? Like how do they do that?"

I started looking into it, and there was a lot of publications from biologists over the decades who had looked and studied spiders in every way, shape, or form, both spiders and silk, trying to understand how these little organisms make these cool threads.

It looked kind of like a micro-system, and I thought, in the spirit of just graduate youthful hubris, "What if I try to make a micro-system to mimic this? Maybe I can then replicate how spiders make silk." I was not on an industrial path at all. It was purely an academic exercise.

"I was not on an industrial path at all. It was purely an academic intellectual exercise."

"Suddenly she made technology beautiful and cool with her outfits."



CAT: How did your collaboration with Stella McCartney come about?

DAVID: It all started with a cold email from Stella's head of sustainability. Stella was interested in our approach to using Nature to create materials, and she visited our labs with her assistant. We connected over the idea of making natural materials using biomimicry and biological engineering. Working with Stella opened doors in the luxury industry and helped us bring technology and sustainability together in a beautiful and cool way. This led us trying to tackle the problem of leather.

We realised that the fashion industry had a strong demand for leather alternatives, but existing options like vegan leather didn't meet the standards of aesthetics and sustainability. We were drawn to the complexity and unique properties of leather and knew there had to be a better solution. That's when we stumbled upon mycelium, which showed promise as a material that could mimic certain aspects of leather. It looks like leather, it feels like leather, it's got the texture and everything. We presented a mycelium sample to Stella. He [Dan] said, "What do you think this is?" And of all things she could say, ... "My next handbag".



“Everybody wanted an actual leather solution. So Dan and I went to the drawing board and this was a big... almost crisis moment.”

Wow! It's impressive how you've bridged technical development with textile product development. Can you tell us more about your focus on consumer products?

Our approach was a bit unconventional. Instead of starting with a problem to solve, we were fixated on creating materials for specific applications. We wanted to engineer materials that were not only technically advanced but also aesthetically pleasing. This focus on consumer products set us apart from traditional materials companies and helped us build a brand and a reputation for creating beautiful and sustainable materials.

images overleaf © Bolt Threads





Image © Bolt Threads

CAT: How did you find the right fungi for Milo?

DAVID: It's actually been a long journey of finding the right mushroom, because it turns out that mycelium is different from different mushrooms and can make very different materials. There are some companies working on seeking and prospecting mushrooms for novel mycelium properties, which is cool in and of itself.

What does that mean?

Meaning: can you find species that make mycelium, that make a better foam? Or maybe other companies in the food space finding species of mushroom whose mycelium make unique chemicals that would make an alternative to meat.

For us, we found the species that makes the root structure that is most similar to collagen, to most similarly make leather.

“The future right now is scale, scale, scale, scale.”

So what's next for Bolt Threads?

Now, the future is all about scalability. We need to break through the current limitations in our field, where we only achieve incremental progress through occasional launches of small batches. Our goal is to reach a point where you can simply walk into a store and purchase products made with our material, such as Mylo. Only then can we truly make a significant impact, not just in terms of mindshare but in terms of tangible results.

“How to make a material that's also sexy to the consumer and the brands?”

CAT: You've done an excellent job on the creative marketing and visual side of things. Are you a large team?

DAVID: It's not an easy task for a team of scientists like us to handle all the marketing and make the material appealing to consumers. We have managed to overcome many obstacles along the way, but it has come at a considerable cost.

This journey has been both lengthy and demanding for us as well as our investors. I don't think anyone fully anticipated the magnitude of the challenges we would face. Nevertheless, we have done an exceptional job, and it's important to convey to others that this path is far from straightforward.

“I don't think anyone fully anticipated the magnitude of the challenges we would face.”

Are there any companies you think are doing great things in this space at the moment?

Another company that has made significant strides in a similar field, although they work with a less glamorous material than leather, is Huue (*disclaimer: I am an advisor to the company*). They are focused on producing indigo industrially using microbes instead of plants, which allows for a cleaner indigo production process. By directly deriving the necessary components from the microbe, they eliminate the need for synthetic chemistry and agricultural practices.

It's worth checking out Huue's work as well. They have a strong marketing presence and their imagery is truly captivating. You can find them at [Huue.bio](https://huue.bio). Michelle Masek is the creative mind behind their beautiful visuals. I'm sure you'll appreciate their photography as much as I do.

A NOTE FROM BOLT THREADS

Whilst trying to secure funding to upscale our revolutionary material Mylo, we have currently paused production. We are, for now, focusing on another emerging technology material, B-Silk, which is touched upon at the beginning of this article. Find out more [here](#).

image overleaf © Bolt Threads



WATCH

In conversation with
David Breslauer



EXPLORE MORE

[Bolt Threads](#)

[Bolt Threads Instagram](#)



image: Unsplash

Embracing Nature's Hues:

The Rise of Natural Dyes in Sustainable Fashion

Natural colours used on cloth are derived from leaves (*such as indigo and henna*), barks and woods (*logwood, osage*), roots (*madder, alkanet*), flowers (*chamomile, marigold, safflower*), fruits and nuts (*walnut, myrobalan, pomegranate*), minerals (*alum, iron*), and insects (*cochineal, lac*).

Natural dyes have been used for thousands of years, yet these ancient practices are perhaps more important than ever. Harnessing the power of plants, minerals, and even insects, natural dyes leave a significantly smaller ecological footprint, offering a gentle alternative to their synthetic counterparts. Using natural dyes maintains harmony with the environment. They are biodegradable, non-toxic, and free from harmful chemicals, ensuring a healthier and more sustainable future for both our planet and those who wear the garments.

From the vibrant yellow of turmeric to the rich blue of indigo and the delicate pink of madder root, every shade tells a tale of connection, culture, and appreciation for Nature.

Across the fashion industry, visionary brands are leading the charge towards a more sustainable future, placing natural dyes at the heart of their creations. Honouring traditional indigenous craftsmanship, some fabric producers work closely with communities to incorporate natural dye techniques, preserving cultural heritage while championing sustainability.

Natural dyes are reemerging as a bridge between style and environmental consciousness. They remind us that fashion need not come at the cost of the Earth's resources, but can be a harmonious partnership with Nature.



EXPLORE MORE

[Sustainability of the use of natural dyes in the textile industry](#)

[Natural dyes v synthetic: which is more sustainable?](#)

[The true cost of colour: The impact of textile dyes on water systems](#)

[Natural Dyes](#)

[To Dye For](#)

[Insight into the Progress on Natural Dyes](#)

Nina Marenzi

Nina Marenzi is leading the way to a more sustainable fashion industry and celebrated 12 years of the Future Fabrics Expo in 2023.

With a deep passion for helping to solve environmental issues, Nina founded The Sustainable Angle in 2010 and has focused her studies and career to reducing waste, pollution and impact on the environment through educating and offering alternatives in materials to fashion houses across the world.

Nina generously spent time with us to discuss the ethos of The Sustainable Angle and Future Fabrics Expo:

CAT: Nina, thanks for joining us! Your expertise in material sustainability is impressive.

NINA: Thank you! There's still much to learn, but we've made significant progress. A shift in people's attitudes towards sustainability gives us hope us hope, together with an emerging regulatory framework in Europe.

Tell us about your educational background and how it led to your career in sustainability.

I studied political science, followed by a masters degree in sustainable agriculture and rural development. This sparked my interest in the climate crisis and inequality and how it connects to agriculture, forestry and soil.

How has sustainability in the fashion industry evolved since you started?

In the late 90s, there was growing awareness that the fashion industry's impact on the environment was significant. However, lack of regulations and predominantly voluntary agreements meant reductions were too slow and too few. Uptake of more sustainable materials weren't widely adopted despite their availability.



Future Fabrics Expo

images © The Sustainable Angle and Nina Marenzi



Nina Marenzi

“It wasn't a surprise for me to land in fashion, because I was always surrounded by designers and artists.”



Future Fabrics Expo

“Polyester can be very cheap because of that connection to the fossil fuel industry.”



images © The Sustainable Angle

CAT: Were designers initially interested in eco-friendly materials?

NINA: Initially, designers were simply not aware. Setting up the Future Fabrics Expo made it possible for them to experience the high quality and they realised the potential of creating fashion that wasn't costing the planet. They became advocates for more sustainable materials once they understood the connection between high environmental impact and polluting fashion materials they were choosing in the past for their creations.

How did you contribute to mainstreaming sustainability in fabrics?

I researched sustainability in materials, textile innovators and companies working in this space and pulled them together, curating the first Future Fabrics Expo in 2011, showcasing sustainable materials supported with background information throughout. The expo has grown massively over the years, covering now over 3,200 square meters, presenting a wide range of sustainable solutions and over 10,000 materials displayed.

“Platforms like the Future Fabrics Expo play a significant role in providing access to information and solutions for SMEs and individual designers who are looking to make more responsible choices.”

How do you make sustainable fabrics accessible to everyone?

Affordability and accessibility are essential factors in making sustainable fabrics widely available. It's crucial to create a level playing field by incentivising sustainable practices and penalising companies that use polluting fabrics: which is why a regulatory framework is necessary.

Pioneering companies in the industry have helped drive sustainability, making it more mainstream and making sustainable fibers more affordable. Large fashion brands that have sustainability teams and substantial budgets should support initiatives and organisations like ours, as it is a way for smaller companies to benefit who otherwise lack the resources and teams dedicated to sustainability. Platforms like the Future Fabrics Expo play a significant role in providing access to information and solutions for SMEs [small to medium enterprises] and individual designers who are looking to make more responsible choices.

CAT: How do you address the issue of greenwashing in the fashion industry?

NINA: Greenwashing is a concern in the industry, but it can be addressed through proper documentation and transparency. Some brands may have conscious collections that incorporate sustainable fibres, but if their overall business model encourages overconsumption, overproduction and rapid disposal of garments, the environmental impact is still hugely damaging.

Citizens and customers however, are becoming more informed and discerning. They are questioning brands and looking for reliable information to make more responsible choices. There are more traceability tools than ever that brands can use to prove they are not greenwashing. More transparency is key.

Should we focus on developing future fabrics or encourage people to buy used clothing?

The issue of overconsumption and overproduction in the fashion industry is undoubtedly the elephant in the room. While developing future fabrics is important, we must also encourage the reuse of clothing. However, the presence of synthetic fibers, such as polyester, in garments poses a problem. Washing these clothes releases microfibers that can harm our environment. Whether a garment is reused or newly purchased and is made from poly is contributing to this issue for example.

In general, from a customer's perspective, first look in your wardrobe before buying anything new. Always. And only if a new one is really needed then look for a brand with integrity that has sustainability at its core and uses materials that are sustainably and responsibly produced, plus a scheme in place for repair and reuse and is transparent about its supply chain including labour practices.

The Future Fabrics Expo happens in June, how do you use this to bring to mind sustainability in the fashion industry?

When entering the Future Fabrics Expo, the first thing you'll see is a triangle-shaped pyramid, representing a customer's perspective. It encourages rediscovering and repairing items in your wardrobe before considering anything else. The next steps involve exploring resale options and adopting circular approaches to shopping. When making a purchase, prioritise fibres with low environmental impact and the potential for a positive influence.



Image © The Sustainable Angle

“Unless the polluting practices are penalised, and the alternative solutions are being given tax incentives and tax breaks... We won't have a playing field and therefore it's not really going to shift at speed and scale needed to reach the climate targets by 2030.”



“Sustainability goes beyond the product itself; it requires a cultural, social, and educational shift.”



images © The Sustainable Angle

CAT: How can we promote longer lasting, planet friendly materials when they cost much more?

NINA: Ultimately fashion doesn't need to mean new clothing. Consider your clothing as part of a wardrobe that can be reinvented, altered, improved: you should think about having a wardrobe like it was in the old days, only adding new things when necessary and always try mending something you loved, first. The rise of repair schemes in shops and financial support from the government as comes out in France this year are the way forward.

You mean like a capsule wardrobe, as they call it, right?

Exactly. Very thoughtful and conscious of the things that you're buying. Sustainability goes beyond the product itself; it requires a cultural, social, and educational shift. The UK "Fixing Fashion" report by the Environmental Audit Committee in 2019 highlighted the need for education, including teaching primary school children about fabrics, their origins, and the importance of repairing and making things.

This knowledge has been lost in the education system, emphasising the necessity of instigating a societal change through education.

“There is so much more happening than ever and I think there's a collective consciousness that has risen. So, that's kind of what gets us up in the morning.”

A rewilding of ourselves, you might say. Do you work with anyone on rewilding?

We recently supported the publication of a book called Rewilding Textiles, which was a collaboration between us and Central Saint Martins. It focuses on the textiles showcased in our expo and explores topics such as natural dyes and herbal dyeing techniques. The book highlights innovations in these areas, including the use of wild-grown materials and sustainable harvesting practices. Dyeing methods play a significant role in the book's content. It was a fantastic publication for our last expo in 2022.

CAT: How can we use premium materials with a lesser impact to the environment?

NINA: In Bolivia and Peru, traditional herding communities rely on alpaca farming for their livelihoods. An initiative is working with these communities to preserve the natural colours of alpacas. They educate them on breeding techniques and preventing interbreeding, which preserves the natural colours and reduces the need for dyeing. This approach empowers the communities and provides sustainable alternatives to cashmere production.

Does this work have a positive impact socially and environmentally?

Absolutely. Supporting and valuing indigenous communities is crucial. For example with the alpaca: By preserving natural colours, there is no need for dyeing, and the fibres are more sustainable. This allows for environmentally friendly products and marketing of it, increased income for the communities and benefiting everyone involved.

“This approach empowers the communities and provides sustainable alternatives to cashmere production.”

What can we learn from these communities?

The key lesson is recognising our role as part of Nature and our dependence on it. When we understand our place in the ecosystem, value Nature and respect it we will care more for and protect it. This perspective leads to better environmental stewardship.

That's a powerful insight. Lastly, what is your favorite sustainable fabric?

Currently, my favorite is flax fur. It may not feel exactly as soft as traditional fur, but it has a unique and attractive appearance and is lovely to touch. Flax, derived from the plant that produces linen, gives the fabric its funky look. It's a sexy alternative to fake fur which is mainly made from plastic.

Alpaca in Bolivia. Image: Unsplash



“The key lesson is recognising our role as part of Nature and our dependence on it. When we understand our place in the ecosystem and value Nature, we will care for and protect it.”



WATCH

In conversation with
Nina Marenzi



EXPLORE MORE

[The Sustainable Angle](#)

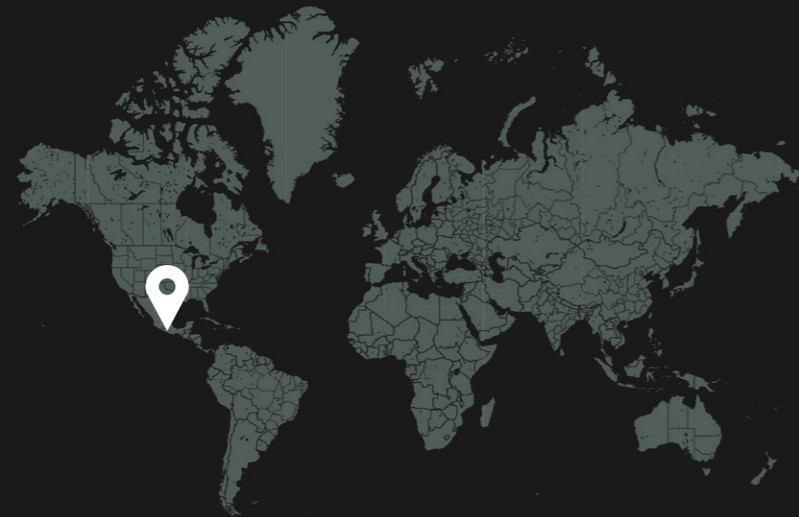
[The Sustainable Angle
Instagram](#)

SiKanda

Together in partnership with The Lost Explorer Mezcal, Voice for Nature Foundation worked with SiKanda;

SiKanda is a non-profit organisation in Oaxaca, Mexico, that promotes sustainable development within marginalised communities, with gender equity as one of its key areas of focus. Since October 2021, the Foundation – via The Lost Explorer Mezcal Fund – has supported SiKanda’s WEAVE (Women in Entrepreneurship) programme,

by providing seed capital funding to its ‘Make Your Business Grow’ towards essential supplies and equipment to women-led businesses. The program is also providing female entrepreneurs with training, tailored coaching, and activities that promote wellbeing, health and self-confidence.



EXPLORE MORE

[SiKanda](#)

[SiKanda Instagram](#)

[The Lost Explorer Mezcal](#)

[The Lost Explorer Mezcal Instagram](#)

Voice for Nature Foundation

The Foundation was established in 2006 to promote positive environmental change.

Through small grants, Voice for Nature Foundation provide financial support to creative, innovative and sustainable initiatives around the world. Their commitment to supporting our natural world means

they focus on supporting youth-driven, grassroots, small organisations. Those whose bold ideas push beyond the confines of conventional thinking to have real and measurable impact to their community.



EXPLORE MORE

[Voice for Nature Foundation](#)



image © SiKanda / The Lost Explorer Mezcal

“Our mission is to facilitate and support participatory processes for harmonious and sustainable development, in order to improve the quality of life of people in Mexico and other countries, with the conviction that through awareness and collaboration of different sectors of national and international society, a just and equitable world can be achieved.”

~ SiKanda



image © SiKanda / The Lost Explorer Mezcal

Nature needs to become something we appreciate, celebrate and elevate, not something we fear and forget. We believe that, like in Nature itself, abundance, diversity, cooperation, and exchange is what leads to innovation and evolution.

Together, let's give
Nature a voice.

