

JOURNAL of
BIOPHILIC DESIGN

ISSN 2976-9078
ISSUE 8 / MARCH 2024

WELLBEING

First published by The Journal of Biophilic Design 2024, London.
No commercial reproduction of all or any part of this publication may be made without prior written permission of the magazine and the relevant contributors. All text is copyright the authors. The Journal of Biophilic Design's concept and design is copyright Vanessa Champion, all rights reserved. Artworking and additional design by Mike Payne. Opinions expressed are those of the authors, not necessarily those of the editor.
Thank you to the photographers from the Unsplash platform, our writers, those credited and Virtual Nature Walls for imagery.

To subscribe to the free newsletter that accompanies this journal please visit www.journalofbiophilicdesign.com OR request a branded wrapped version for your business.

Previous Issues: Issue 1 – The Workplace, Issue 2 – Home, Issue 3 – Healthcare, Issue 4 – Cities, Issue 5 – Creativity, Issue 6 – Blue Mind, Issue 7 – Education, Issue 8 – Wellbeing and are available on our website, Kindle, Amazon and ISSUU. Subscriptions and Memberships available.

Coming up ...

ISSUE 9, May / June 2024 – NEURODIVERSITY

ISSUE 10, July / August 2024 – ENVIRONMENT

ISSUE 11, September / October 2024 – LEISURE/HOTELS

ISSUE 12, November / December 2024 – RETAIL

ISSUE 13, January / February 2025 – CHILDHOOD

ISSUE 14, March / April 2025 – THIRD AGE

ISSUE 15, May / June 2025 – LIGHT

ISSUE 16, July / August 2025 – SOUND

ISSUE 17, September / October 2025 – ARCHITECTURE

ISSUE 18, November / December 2025 – INTERIOR DESIGN

Journal of biophilic design (Print) ISSN 2754-2815

Journal of biophilic design (Online) ISSN 2976-9078

Suggestions for contributions welcome, please contact editor@journalofbiophilicdesign.com for submission guidelines.

For advertising and sponsorship opportunities please contact promotions@journalofbiophilicdesign.com

To support the Journal we would love to see you over on our “Buymeacoffee” page, or listen to our podcast search for Journal of Biophilic Design on Spotify, Audible, iTunes and all the RSS feeds. Thank you for your love.

WELCOME

Welcome to the eighth edition of The Journal of Biophilic Design.

Welcome to this Wellbeing issue of the Journal of Biophilic Design. One of the most beautiful things about Biophilia is that it celebrates just how integral nature is to every aspect of “us”. Without it we are losing out on the most wonderful tonics for life. In many workplaces, hospitals, schools we’ve forgotten just how much we need this connection, which is why we should really celebrate all those wonderful designers, architects, planners and leaders who have recognised and are implementing Biophilic Design to reinvigorate spaces for everyone.

There is a mental health crisis in many countries, there is air pollution causing physical health issues, noise pollution (inside and out of buildings) causing cortisol/stress levels to rise, there are few safe greenspaces to walk or play and keep fit causing a greater rise in physical and mental health issues related to a sedentary lifestyle, and many other health and wellbeing stressors caused by concrete jungles and square white workplace boxes.

Thankfully, Biophilic Design is turning this on its head, and it is exciting to meet so many wonderful people and groups who are lobbying for change and actually doing the implementation too. People are walking the walk not just talking the talk. Biophilic Design is reconnecting people to nature, we are creating beautiful views, parks for people to walk in, tree lined streets

for better air quality and reducing city temperatures, bringing in inspiring wood features into schools as tactile desks and real trees creating natural screening and zones for different types of working, in healthcare we see large scale wall nature photographs of views onto an awe inspiring landscape or quiet brooks nestling among trees to allow the benefits of ART (Attention Restoration Theory) to help calm and give respite encouraging faster recovery for patients and relief for the overworked staff.

In this issue you’ll find case studies, personal stories of how nature supported healing from burn out, inspiring ideas on how to connect to nature through materials, walks, food, plants, sound, smell, views, touch. There is also a sneak peak into The Dreaming retreat, as well as plants for office wellbeing, how to create homes for wellness, what exactly is plant energy, as well as lots of science behind how nature exposure alleviates anxiety and promotes wellbeing.

Plus if you want to learn more about how Biophilic Design can positively impact better health outcomes, take a look at our Healthcare edition too.

I’d love to hear your own personal stories about how nature has inspired your own wellbeing journey.

Vanessa Champion PhD, AMRSPH
Editor and Founder

editor@journalofbiophilicdesign.com
www.journalofbiophilicdesign.com

HIGHLIGHTS

Each edition of The Journal of Biophilic Design has regular sections. We highlight them here so you can navigate your way around the Journal. If you would like to contribute to a future edition, please do contact our editor we would love to feature your research and case studies.

4 Issue 8 theme (Wellbeing)

- 6 Research shows how Exposure to Nature alleviates anxiety
- 12 Harmonizing Biophilia and Wellness – The Hospitality Industry in Japan and the Philippines
- 22 A Success Story for Sustainability, Branding and Biophilia
- 38 Transforming Living Spaces for Holistic Wellbeing
- 48 Workplace wellbeing – delivering inspiring spaces with a seamless connection to nature
- 54 Being Human – Wellbeing in the Workplace
- 66 Wellness and Biophillia in Commercial Hospitality Spaces
- 72 SpaceInvader turns vacant workspace into highly-desirable new concept: ‘Nest’ at Glasshouse, Alderley Park, Cheshire
- 82 The Dreaming Retreat, Wales
- 92 Science Behind Biophilic Design**
- 94 Proof that Biophilic Design enhances Wellbeing
- 100 Biophilic Design and Well-Being
- 106 Finding a moment of calm – hiding in the loo at work
- 112 How a multisensory approach to biophilic design could enhance employee wellbeing and behaviour

118 Plants

- 120 Pioneering Research Reveals the Economic Advantages of Biophilic Workplace Design
- 130 Plants and Office Wellbeing
- 134 Plant energy and how it can change our lives

138 Environment, People, Planet

- 140 Four of the Five Most Severe Global Risks on the Ten-Year Horizon are Environmental
- 144 In search of Belonging and Healing
- 156 In Conversation: Biophilia, Art and the Human Connection
- 160 Biophilic bonobos

166 Wellbeing

- 168 Where hearts become more sincere and filled with love
- 174 The Archetype of Fire: Illumination & Connection
- 179 An Escape to the Country
- 186 How Deep is Your Own Biophilia and How Do You Design for Wellbeing?
- 190 Ayurveda

192 Biophilic Cities

- 194 Wellbeing in the Built Environment
- 206 Human Nature: why ‘urban rewilding’ is good for us
- 218 We need parks that everyone can play in
- 222 Book Reviews
- 224 Final Word
- 226 Will we meet you at The Office?

Details of our contributors can be found on our website.

Each edition of The Journal of Biophilic Design is published every other month. Next issue’s focus is **Neurodiversity**.

Sign up for [our newsletter](#) on [our website](#) to be reminded when the edition is out. Don’t forget you can read this on [your Kindle](#) as well as buy a beautiful full colour printed edition to keep and refer back to, contact us for direct links.

If you would like to sponsor the Journal please contact us.

Future editions will focus on Wellbeing, Neurodiversity, Environment, Leisure, Retail, Childhood, Third Age, Light, Sound.



WELLBEING

Research shows how Exposure to Nature alleviates anxiety

“Nature, even in modest doses, acts as a stress-buster, mood enhancer, and cognitive booster.”

Gagan Bathh

For millions of years, human beings evolved on the savannas of East Africa, surrounded by natural elements; plants and vegetated settings provided shelter, food, and essential resources, while bodies of water offered a perimeter of defence and necessary sustenance. These elements helped develop an innate affiliation between humans and nature, encompassing both survival instincts and psychological well-being. However, the rapid urbanisation since the industrial revolution has drastically limited our accessibility to nature, with people from individualistic societies spending nearly 90 percent of their time indoors. This detachment has significant implications for well-being, particularly for employees. For instance, in the UK only 42% of employees reporting having live plants in the office, with half of all respondents agreeing that they felt stressed or anxious within their workplace. Poor mental health, including anxiety, may cost the global economy up to \$1 trillion per year due to loss of working days.

This problem is further exacerbated by the wake of the COVID-19 pandemic,

wherein the workplace landscape is undergoing a seismic shift, challenging the very essence of our urban cores. As remote work gains momentum, city centres risk losing their vibrant identity, prompting a re-evaluation of how we define business hubs. Beyond the economic ripples of reduced commuting, hovering at a staggering £80 million per day in the UK, lies a profound disruption to the intricate urban business ecosystem. However, with the focus for organisations on encouraging employees to return to offices, there is a danger in heightened anxiety for employees who may have difficulties adjusting to the office environment, social demands and new rules.

To help encourage employees back into the offices, an innovative approach in environmental and organisational psychology of weaving nature into our environments, is being applied. This isn't just about aesthetics; it's a science-backed strategy to evoke positive responses in our mind and body. Nature, even in modest doses, acts as a stressbuster, mood enhancer, and cognitive booster.





For instance, research using samples in the Netherlands and the UK found that employees in green workspaces had significant increase in workplace satisfaction, increased levels of concentration, and perceived air quality (Nieuwenhuis et al., 2014). The therapeutic effects of nature do not require being in direct contact either, as virtual exposure has shown to improve mood levels, attentional ability, and stress recovery (Ch et al., 2023). It is argued that providing a more tranquil setting through incorporating nature, allows for more effortless attention – subsequently restoring our mental capacity (Grinde & Patil, 2009). Recently, Browning et al. (2023) found that daily virtual nature exposure can also reduce anxiety apprehension and arousal – providing an alternative avenue for organisations to explore.

Similarly, my own recent research on **“Biophilic Office Design: Enhancing Creativity and Easing Anxiety through Nature Exposure”** for my MSc in Organisational Psychology at the University of East Anglia, **underscores**

that virtual exposure to nature, particularly through images of natural elements within office spaces, holds potential for reducing anxiety among individuals. A total of 62 individuals participated in the study, split into two groups. One group observed 4 images of office environments with natural elements, while the other group observed images without natural elements. After controlling for demographic differences, **it was found that the group exposed to nature showed significantly lower levels of anxiety** (assessed by a state-trait anxiety scale). This study, with previous research, provides further support for nature, via real or virtual exposure, to alleviate feelings of anxiety. Simple interventions like this one can be effective in supporting the well-being of employees who work in a hybrid-model and who may not have access to experiencing nature in person. It can also act as support for organisations looking to adopt a more biophilic perspective in office design.

<https://www.linkedin.com/in/gagan-bathh>



Harmonizing Biophilia and Wellness – The Hospitality Industry in Japan and the Philippines

“With 15 years in the design industry, my recent focus on hospitality and wellness design has unveiled the pivotal role biophilic design plays in user experience. This revelation matches with the projected \$1.3 Trillion Wellness Tourism industry by 2025 (Mcgroarty, 2022), compelling designers and developers to delve into the essence of wellness sought by the majority.”

IDr. Marivic T. Sambo, PIID

Deliberately infusing natural elements into architectural spaces, blending nature’s tranquility with the built environment is what biophilic design is all about. In hospitality, this philosophy transcends aesthetics, aiming to amplify well-being by nurturing a profound connection with nature, thereby enhancing guest experiences.

Importance of Wellness-centric Services in the Hospitality Sector:

Wellness-centric services in the hospitality industry have evolved beyond

mere amenities; they now stand as a crucial factor in determining guest satisfaction. In an era where guests wield the power to openly critique or praise a hotel or service – prioritizing the overall guest experience becomes imperative. While biophilic design immerses guests in sensory experiences, engaging vision, audition, olfaction, and somatosensation, the emphasis on wellness reflects the evolving expectations of guests. This shift underscores a move towards providing not just accommodation but a holistic experience, fostering physical, mental, and emotional rejuvenation.

Significance of the Topic:

The convergence of biophilic design and wellness in hospitality marks a transformative shift that redefines the traditional guest experience. This symbiotic relationship between nature-inspired design and wellness services signifies a significant evolution in the hospitality landscape, aligning with the rising preference for mindful, holistic travel experiences.

Introduction to the selected hotels in Japan and the Philippines:

The selected properties in Japan and the Philippines showcase excellence in blending biophilic design and wellness within the hospitality sphere. Each establishment, be it the iconic Pearl Farm and San Benito Farm in the Philippines or the breathtaking Izumo The Cliff and Hoshinoya Fuji in Japan, embodies distinct facets of biophilic design and presents a unique approach to wellness-centric offerings. Together, they establish new benchmarks for guest-centric experiences.



PHILIPPINES

Pearl Farm Beach Resort: Biophilic Design Meets Coastal Wellness

Pioneered by architect Bobby Mañosa, the Father of Philippine Neo-Vernacular architecture, the Pearl Farm Beach Resort on Samal Island epitomizes a pre-biophilic architectural approach. This visionary design incorporates bamboo-roofed structures and Samal village-inspired suites, seamlessly blending with the island's contours. By ingeniously integrating bamboo, coconut, and yakal materials, the resort not only honors cultural heritage but also cultivates a serene biophilic

environment. These architectural choices, characteristic of Mañosa's pioneering principles, harmonize seamlessly with the tropical climate, fostering a tranquil ambiance that echoes the charm of the coastal landscape. Conveniently accessible by a short boat ride from Davao City, Pearl Farm invites guests to immerse themselves in this accessible tropical haven, delivering an experience resonating with coastal allure. While being one of the oldest structures on this list, this resort is still known for delivering an unforgettable experience in setting the bar high for making leisure and aquaculture tourism well within reach.



The Farm at San Benito: A Transformative Sanctuary

Nestled amid Batangas' lush expanse, The Farm at San Benito transcends the conventional resort concept by prioritizing holistic health and well-being. This transformative sanctuary sprawls across 52 hectares, offering comprehensive, science-based holistic methods to address modern afflictions. With a team of globally trained integrative medicine doctors and licensed health practitioners, the Farm's guiding principles – Diagnose, Cleanse, Nourish, Repair, and Sustain – form the

cornerstone of personalized wellness odysseys. Awarded “The Best Medical Wellness Resort in the World” by SENSES Germany and meriting over 100 international accolades, San Benito Farm not only serves as an award-winning retreat but also functions as a haven fostering healthy habits and aiding guests in kickstarting healthier lifestyles. Purposefully designed spaces and programs, complemented by delectable cuisine and extensive open surroundings, invite guests to recalibrate toward wellness through mindful engagements and a holistic spectrum of wellness choices.



Nay Palad: Redefining Resilience with Architectural Brilliance

Nay Palad Hideaway 2.0, in its narrative of resilience and innovation, underwent a transformative renovation orchestrated by Architect Daniel Pouzet post-typhoon Odette. Pouzet’s organic architectural style interweaves a whimsical ambiance with the natural surroundings, incorporating unique elements like a treehouse lounge, a floating conversation pit, and an innovative restaurant complex. Within lush gardens, the spa village offers a range of wellness treatments, from après-surf massages to traditional hilot healing sessions, fostering tranquility and rejuvenation. Nay Palad’s dedication to sustainability extends beyond design, evident in its on-site organic farm, community partnerships, and a total ban on single-use plastics, embodying a holistic approach to guest well-being and environmental preservation.

JAPAN

Izumo The Cliff: Harmonizing with Nature’s Architecture

In scenic Izumo City, Shimane Prefecture, Izumo The Cliff champions the fusion of biophilic design and wellness in Japanese hospitality. Its architectural blend of dynamic greenery and natural elements creates an inviting space for guests to deeply connect with nature. Aligned with the “Windy Farm Atmosphere,” it actively addresses regional sustainability challenges by promoting local production and self-sufficiency. The minimalist design, locally sourced materials,

Bamford products, and tea bath salts all underscore its commitment to wellness. Crafted from aromatic cypress, the private sauna offers a serene escape deeply tied to holistic wellness, harnessing stress-relieving properties akin to a forest bath. I recommend experiencing this service in the morning to fully appreciate the expansive views it offers. Restaurant Garb Cliff Terrace Izumo champions Shimane’s traditional ingredients in innovative dishes, reflecting a dedication to sustainability amid captivating natural vistas. Recently opened in May 2023, it’s poised to become a sought-after retreat, attracting both local and international tourists with its exceptional services, amenities, and breathtaking views.

Hoshinoya Fuji: Bridging Wellness and Glamping

Within Mt. Fuji’s breathtaking vistas, Hoshinoya Fuji offers a unique blend of biophilic design and wellness tourism. The resort harmonizes luxury with nature, catering to wellness-focused travelers through curated spaces like yoga decks, tranquil meditation spots, and invigorating spa facilities. Culinary offerings prioritize locally sourced nourishing cuisine catering to diverse dietary preferences, enhancing the overall wellness experience. Sustainability remains central as the resort embraces eco-conscious practices, customizing stays to align with guests’ unique wellness aspirations. Wellness activities like Jyukai lava hiking and early morning canoeing further enhance the well-being experience amidst the beauty and tranquility of the surroundings.



Aman Kyoto: Tranquility in Tradition

Crafted in 2019 under architect Kerry Hill's guidance, Aman Kyoto melds architecture with the surrounding landscape. Effortlessly fusing with serene surroundings, the resort beautifully incorporates existing natural terrain. Stone pathways traverse the forest floor, inviting guests to explore tranquil grounds resting upon moss-adorned stone slabs forming the bedrock. At the heart of its philosophy lies mineral-rich water sourced near Aman Kyoto, central to offerings at the spa, including authentic relaxation and healing in onsen bathing facilities. The resort's wellbeing program takes a holistic approach, offering acupuncture, moxibustion, Shiatsu, and treatments rooted in oriental medicine principles to rejuvenate the body and mind amidst the serene Japanese garden.

Synergy of Biophilia and Wellness-Centric Services

The interplay of biophilic design and wellness-centric services in the hospitality sector underlines an evolution in guest experiences, shaping their well-being. Analyzing the comparative aspects of biophilic design within the

featured properties reveals nuanced connections between architecture and nature, enhancing guest comfort and relaxation. The deliberate integration of biophilic elements impacts guest well-being, fostering a profound connection with nature while elevating their overall experience. These trends are indicative of future expectations in the hospitality industry, projecting a shift towards more holistic, nature-inspired travel experiences.

Conclusion

The transformative role of biophilic design in hospitality emerges as a critical factor in redefining guest experiences. This synergy between biophilia and wellness redefines hotel experiences, transcending mere accommodation and forging a deep-rooted connection with nature. As the relationship between nature-inspired design and wellness services evolves, it promises a paradigm shift in the hospitality landscape, aligning seamlessly with the growing preference for mindful, holistic travel experiences. The symbiotic fusion of biophilia and wellness stands as the cornerstone of a redefined, immersive hospitality experience.



Mcgroarty, B. (2022, January 11). *Industry Research: New Data on Wellness Tourism: Projected to Hit \$817 Billion This Year, \$1.3 Trillion in 2025*. Retrieved October 20, 2023, from <https://globalwellnessinstitute.org/global-wellness-institute-blog/2022/01/11/industry-research-new-data-on-wellness-tourism-projected-to-hit-817-billion-this-year-1-3-trillion-in-2025/>

Photos by IDr. Marivic Sambo, PIID

Photos of The Farm, courtesy of The Farm at San Benito

Izumo The Cliff Photos Courtesy of BALNIBARBI Co.,Ltd.



Author profile:

IDr. Marivic T. Sambo, PIID, known affectionately as Mars, is an accomplished Filipino interior designer and co-founder of ISHIKAWASAMBO – an esteemed architecture and interior design studio thriving across Japan and the Philippines. Beyond her instrumental role at ISHIKAWASAMBO, she co-founded Makers' Day!, a pioneering social entrepreneurship endeavor in Yokohama. This visionary initiative underscores her deep

commitment to using design as a force for positive transformation, enriching communities both locally and beyond. Notably, her collaborative project with Nobuko Kuronoma has unlocked new avenues for imaginative illustrations for community events and beyond. Presently, ISHIKAWASAMBO is spearheading the development of a cutting-edge glamping facility in Tottori Prefecture, tailored for avid sea sports enthusiasts.

<https://en.ishikawasambo.com/about>

A SUCCESS STORY FOR SUSTAINABILITY, BRANDING AND BIOPHILIA

— CASE STUDY —

Project: Skyscanner UK

Address: Ilona Rose House, Manette Street, London, W1D 4AL

Client: Skyscanner

Building Owner: Soho Estates

Occupier: Skyscanner

Project Manager: Storey

Quantity Surveyor: Hennessy Godden

Brief Consultant: MCM UK

Interior Designer: MCM UK

Mechanical/Electrical Engineer: Elementa

Structural Engineer: Parmarbrook

Sustainability Consultant: Max Fordham

Contractor: BW

Developer: Soho Estates

Project size: 30,000sq ft

Completion Date: 24th April 2023



About the project:

Skyscanner's office is a vibrant example of a modern workspace and an outstanding example of the type of environment required for today's workplace. Designed to echo the Golden Age of travel. This space offers tools for connection, focus, celebration, relaxation, and curiosity. Conceptualised as 'multi-use activity lounges', each area reflects the dynamism of travel, accommodating diverse workstyles.

The design prioritises employee wellbeing, featuring an indoor garden for relaxation and yoga, a multifaith room for reflection, and a library for concentrated work and learning. The community lounge is perfect for lively

events and team gatherings, and a games room fosters social interaction. True to Skyscanner's identity as a travel community, the office is dotted with artistic installations that encourage sharing of travel tales and foster colleague connections.

Flexibility is key, with spaces designed to adapt and transform seamlessly. Sustainability is also central, evidenced by the use of low carbon materials, local sourcing, and extensive greenery. Ultimately, Skyscanner's office isn't just a workplace; it's a reflection of the wider world. It's a place where travel motivates work, creating an office environment as diverse and thrilling as the destinations Skyscanner connects.

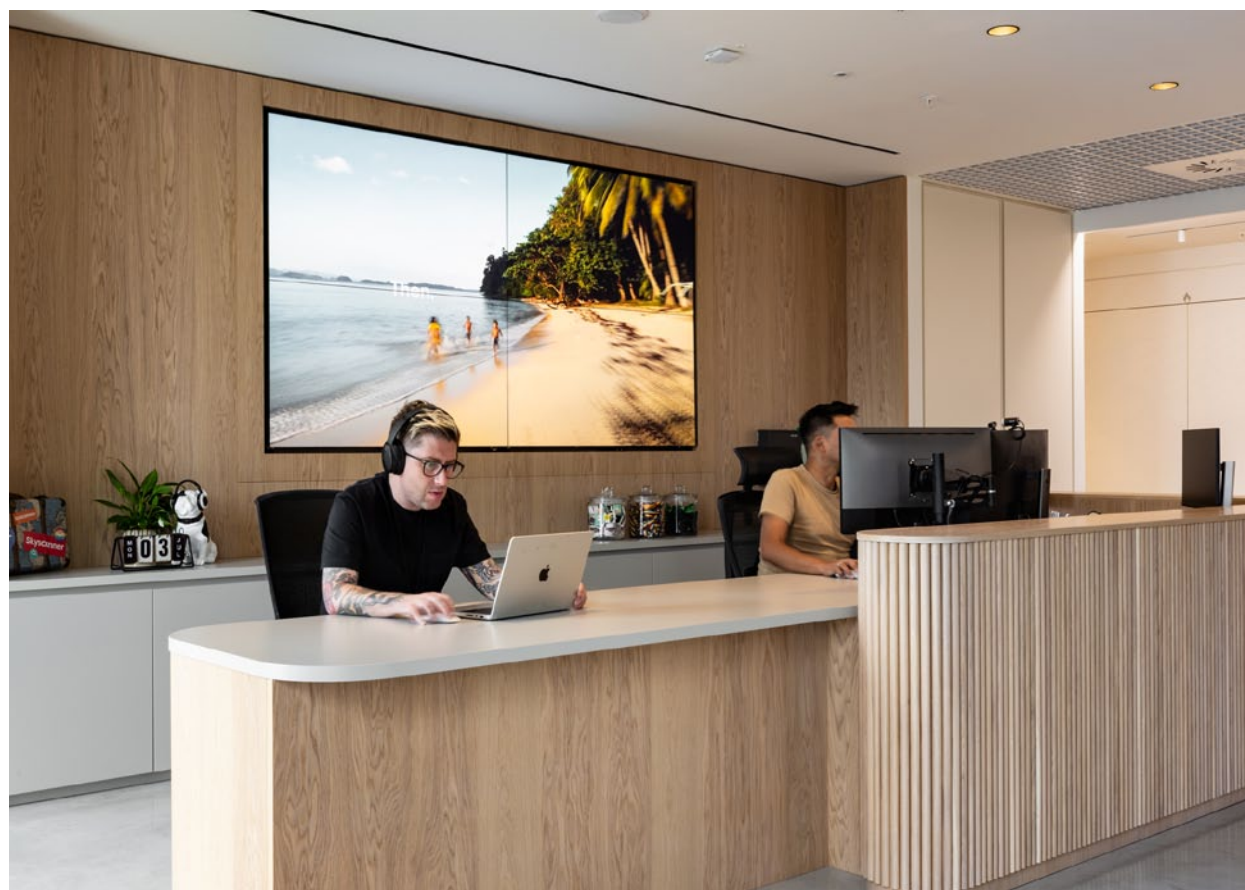
Aim for the project:

The Skyscanner office was driven by a clear purpose: to craft a space that not only supports work but also nurtures the human spirit of community and interaction. This space was envisioned as a tribute to the essence of Skyscanner – a nexus for travel enthusiasts, a place that resonates with the brand's core values of exploration and connectivity. Our aim was to set a new standard, not just for this office, but for all of their future workplaces, where community and wellbeing are at the forefront. Innovation was the project's lifeblood, particularly in design. Recognising that Skyscanner's needs might evolve, flexibility was paramount. We questioned the concept of meeting spaces, opting for a number of modular, demountable pods instead of traditional, fixed rooms. This decision ensured adaptability and longevity, as well as providing an easier solution to disassembly. These

spaces can be reconfigured as needed without compromising the office's aesthetic integrity.

Another pivotal innovation was in embedding the Skyscanner brand into the office's very fabric. We employed bespoke, interactive art installations that invited engagement and personalisation, fostering a sense of ownership among users. This approach allowed the office to be more than just a workplace; it became a canvas for expression and connection, reflecting the dynamic, ever-changing nature of travel.

These innovations were not mere design choices; they were statements of intent, reflecting a deeper understanding of the evolving workplace. The Skyscanner office stands as a testament to the power of thoughtful design in creating spaces that are not only functional but also emotionally resonant, inspiring, and aligned with the brand's adventurous spirit.



"The new office space has a feel good vibe to it. It feels vibrant, spacious and offers a more collaborative and flexible approach for staff. This has enabled employees to increase productivity, creativity, and enjoy being in the office."

Paul Hickey
Workplace Manager – Skyscanner

The Spaces

The Skyscanner office embraces an Activity Based Working model, offering a variety of work settings to suit diverse working styles. Space planning was executed with a democratic ethos, ensuring all workstations benefit from natural light and views of the London skyline. This approach fosters a sense of equality, and as no space is designated to any one individual, allowing employees the flexibility to choose their ideal working spot.

Secondary workspaces include focus rooms, stand-up meeting areas, both formal and informal meeting spaces, and tech-free library spaces. These diverse environments cater to different work requirements, from intense concentration to collaborative sessions.

A key focus of the design was supporting wellbeing. We considered what types of spaces might be lacking in employees' homes and what would facilitate communal connection. The result is a variety of spaces like the internal garden,

bathed in natural daylight and lush with planting.

This space offers an urban oasis, reminiscent of working in a personal garden, enhancing the connection with nature and providing a serene retreat.

The library space offers tranquillity and relaxation, with cozy nooks that frame views of the outside world. The use of natural materials and warm finishes in this area creates a welcoming, calm atmosphere. For more dynamic and social interactions, the office includes a games room and a town hall space, areas designed to foster community spirit and allow employees to forge stronger connections with colleagues. What sets the Skyscanner office apart is its distinct brand-centric design. It's a vibrant space, rich in colour and diverse materials, inspired by the vivid sensory experiences of travel and exposure to new cultures. This design strategy ensures that the office environment offers a unique experience that can't be replicated at home or in a generic setting, aligning perfectly with the Skyscanner ethos.





Sustainability; environmental and social values

Skyscanner demonstrates an unwavering commitment to sustainability through innovative practices and the establishment of ESG standards in design, construction, and social responsibility. Collaborative efforts among designers, contractors, and meticulous specifications have realised ambitious sustainability targets, reflecting a clear ethos of commitment to flexibility, efficiency, and design fit for purpose.

Adhering to a holistic approach; aligned with our MCM Legacy Values that consider environmental but also social criteria; the design team prioritised collaboration, innovation, and realistic sustainability targets. From adhering to a procurement strategy emphasising low environmental impact materials, prioritising products with Environmental Product Declarations (EPDs), low Volatile Organic Compound (VOC), FSC-certified timber, and high recycled content alongside healthy and mindful measures and a positive social handprint within the community. The project underscored high circularity values, incorporating reclaimed raised access floors, worktops made of waste national wood, high recycled-content carpets, and reusing a big percentage of existing furniture across all spaces.

“The new office has a fantastic array of working spaces – for calls, collaboration, quiet thinking and socialising, this makes a huge difference to how we work together and at scale.”

Laura Lindsay
*Director, Consumer PR
& Communications*
Skyscanner



The project was shaped by the aspiration to attain a Net Zero Carbon Verified Standard. Max Fordham assumed the role of the carbon champion for the project, leading the division of the strategy into two key areas: net zero carbon construction and net zero carbon operation. To monitor the environmental footprint, the project utilized Qflow software, a crucial tool for tracking resources, carbon output, and ensuring compliance, such as verifying FSC-certified timber use. Embodied carbon was assessed through a Whole Life Carbon report at RIBA stage 3, with strategic decisions made during construction. Operational carbon reduction was achieved by optimising small power and AV equipment, alongside improved control mechanisms for display screens, hot water, and

white goods, all coordinated with the overall design.

There was an ongoing support during detailed design stages ensuring that material specification decisions aligned with the project's carbon reduction goals. The operational front saw a net-zero carbon design review and a comprehensive TM54 energy model, delving into individual equipment specifications for optimal efficiency. The project's upfront embodied carbon is 150 kgCO₂e/m² [A1-A5], below the LETI 2025 target. However, whole life embodied carbon stands at 760 kgCO₂e/m² [A1-C4, e excl B6, B7], above the RIBA 2030 target. The Energy Use Intensity (EUI) is currently 90 kWh/m²[NIA]/yr, exceeding the UKGBC interim target but is under review for reduction.





“Our new London office is one that we are really proud of – it’s a joyous place to come to, and is a testament to how the right office environment can elevate our work experience, by providing the right spaces for deep work, collaboration and socialising.”

Amy Cronin
Director, Legal
Skyscanner

“The new office space has inspired more collaboration and creativity for me. I love getting in a focused and clear mindset in the Amazon room surrounded by plants, catching up with a colleague on a sunny afternoon on the balcony, meeting new people by the open plan kitchen area, or mingling in the town space during monthly lunch and learn sessions!”

Vanessa Lin
Global Marketing Manager
Skyscanner

**Beyond environmental measures,
mindful and social initiatives were
embedded into all design stages.**

We partnered with Community Wood Recycling, diverting waste wood to support their work with disadvantaged youth. Our team engaged with iCarp, a charity that addresses issues in disadvantaged communities and assists PTSD sufferers. This involvement not only reflected our commitment to social responsibility but also provided valuable experiences for our team members. We also emphasised diversity and inclusivity, with training for all project participants. This initiative was key in creating an inclusive workplace culture. To quantify our project's social impact, we utilised the National TOMs framework. This allowed us to comprehensively record and measure our project's social value.

Delving deeper into the details, the project unveils a tapestry of sensory experiences. An indoor garden, green walls, and carefully selected colour palettes create various sensorial spatial experiences. For example, at the arrival area – a jukebox, allowing individuals to soundtrack their space. Mood lighting distinguishes zones like the library and boardroom, tailoring the ambiance to each area's unique function. The design narrative mirrors Skyscanner's culture – a celebration of curiosity, people, and a love for exploration. The workspace, meticulously crafted around our social values, boosts interaction and collaboration. It's more than a workplace; it's an embodiment of Skyscanner's identity, a holistic design approach that harmonises sustainability, well-being, and social value.

Health & Wellbeing





At Skyscanner, health and wellbeing are at the forefront of workspace design and initiatives. We've implemented a suite of features to support physical, mental, and emotional wellbeing. Their employees have access to extensive cycling facilities in the basement, encouraging active, sustainable commuting. For holistic wellness, they offer on-site yoga and Pilates classes in a dedicated studio, along with masseuse services, promoting relaxation and physical health.

Mental wellbeing is equally prioritised with the creation of serene spaces like the Library, designed for focused work and relaxation. We've also established a Wellbeing Room and a Parents Room, catering to the diverse needs of their workforce. Biophilic elements, including an Indoor Garden and plants interspersed throughout the open-plan seating, foster a connection with nature.

To understand the impact of these facilities, Skyscanner conduct regular post-occupancy evaluations. Feedback indicates a significant positive effect on staff wellbeing, particularly with the introduction of the Town Hall space, which has become a hub for community-building activities.

While we haven't pursued specific wellbeing accreditations like WELL or Fitwell, our focus has been on tangible benefits for staff. The workspace is designed inclusively, with varied environments to suit different workstyles and personal needs, ensuring a welcoming space for all.

Additionally, Skyscanner offers unique incentives to encourage exploration and balance. Employees receive an annual 'Discover Incentive', providing funds for travel and exploration. A homeworking allowance is provided upon joining, with annual top-ups. Staff can work from any country for up to 20 days a year, with extended unpaid leave after three years and paid leave after five years. These initiatives underscore their commitment to offering a workspace and culture that not only caters to diverse needs but also enriches our employees' lives beyond the office.

<https://mcm-uk.com>

Photography by
Roberta Ashley Photography

TRANSFORMING LIVING SPACES FOR HOLISTIC WELLBEING

TRANSFORMING LIVING SPACES FOR HOLISTIC WELLBEING

The founder of the Habitarmonia Ecosystem shares with us key principles for designing for wellbeing, drawing on Biophilic Principles and applying them to sensory design, environmental psychology and Salutogenics.

Nuria Muñoz

Introduction

In our fast-paced modern lives, where we spend the majority of our time indoors, the profound impact of our living spaces on our overall wellbeing cannot be overstated. The recent upheavals caused by the COVID-19 pandemic have intensified our awareness of the essential role our homes play in promoting our health and happiness. This shifting perspective has led us to reassess our priorities, with mental well-being, a healthy diet, and physical fitness emerging as the

top non-financial determinants of our health and wellness. Remarkably, 23% of respondents [in a recent survey](#) (believe that their home directly influences their health, highlighting the intricate connection between our environments and our wellbeing. In response to this paradigm shift, the principles of Wellbeing Design have risen in prominence, offering a holistic and multidisciplinary approach that integrates various tools and techniques to create spaces that enrich our physical, mental, and emotional health.

Wellbeing Design: A Holistic Paradigm

The practice of Wellbeing Interior Design is on a mission to **enhance the quality of life** by fostering health, wellness, and happiness in the spaces where we live, work, learn, heal, and play. It transcends the realm of aesthetics; it encompasses a multifaceted strategy that draws from numerous disciplines and platforms, incorporating research, technology, and innovative design solutions.

At the core of Wellbeing Design lies the recognition that every element within our living spaces significantly contributes to our wellbeing, and the harmony between these elements is paramount. It's a holistic approach that takes into account the **physical, emotional, mental, relational, intellectual, and spiritual dimensions of the human experience**. It acknowledges the interconnectedness of these facets and addresses them comprehensively to create spaces that genuinely support our wellbeing.

Multidisciplinary Foundations

Wellbeing Design does not operate in isolation; it leverages the knowledge of various fields to provide comprehensive solutions. This multidisciplinary approach integrates a wide range of tools and techniques to create spaces where both people and nature can thrive.

• Sensory Design and Beyond

Sensory design is a pivotal tool in Wellbeing Design, enabling us to **engage all our senses to craft a harmonious and nurturing living environment**. It acknowledges that our senses have a profound impact on our perception and experience of a space. This multidisciplinary approach involves the incorporation of elements that stimulate our senses to promote overall wellbeing.

Visual Sensations: The visual aspect of sensory design plays a fundamental role in setting the mood of a space. Through the use of colour psychology, patterns, and lighting, it can evoke desired emotions, such as calmness, joy, or productivity.

Tactile Experience: The textures and materials used in interior design influence our tactile sensations. Incorporating materials that are pleasant to touch can enhance the overall comfort of a space.





Auditory Environment: Noise levels in a space can significantly impact our stress levels and concentration. Sensory design includes considerations for sound management, such as using materials that absorb or reflect sound, to create a peaceful ambiance.

Olfactory Delights: The introduction of pleasant aromas can trigger emotional responses and contribute to relaxation or invigoration. Aromatherapy serves as a prime example of sensory design for wellbeing.

Taste and the Healthy Diet Connection: Sensory design in kitchen spaces extends to supporting healthy eating habits. The use of natural materials and well-designed kitchen spaces can encourage nutritious meal preparation.

- Environmental Psychology and Salutogenics

Environmental psychology plays a crucial role in understanding how our surroundings affect our **behaviour, emotions, and overall mental state**. In the realm of Wellbeing Design, it endeavours to create spaces that foster **positive psychological experiences and promote health**. The field of salutogenics, which concentrates on factors that support and enhance health, emerges as a central aspect of this approach.

By considering the influence of surroundings on individuals, Wellbeing Design addresses both the physical and psychological aspects of people's lives. For instance, a well-designed bedroom can promote restful sleep, while thoughtful office design can

enhance productivity. The introduction of elements like natural light, views of nature, and spaces for relaxation and reflection all contribute to the creation of a nurturing environment.

- Biophilic Design: Connecting with Nature

Biophilic Design lies at the heart of Wellbeing Design, aspiring to establish **a profound connection between humans and nature within the built environment**. The incorporation of natural elements, materials, and patterns is vital to creating a sense of wellbeing and enhancing physical and mental health. This approach paves the way for the creation of sanctuary spaces that promote relaxation, unwinding, and self-care. Elements like plants, water features, and access to outdoor views bring the natural world into our living spaces, fostering a deep connection with nature, and all this with a multidisciplinary approach based on science.

The Holistic Impact

The holistic approach of Wellbeing Design transcends mere aesthetics; it extends to all facets of our lives. Well-designed spaces have the potential to evoke immediate joy, cultivate healthy habits, strengthen family relationships, enhance focus, productivity, and creativity, and establish environments that promote relaxation and restful sleep. In cases of specific challenges like depression, anxiety, stress, ADHD, and mobility issues, **mindful design** can offer a supportive environment that nurtures ease, healing, and recovery.

Innovative Trends in Wellbeing Design

As Wellbeing Design gains traction, innovative trends have emerged, further integrating the natural world into our living spaces:

Biophilic Technology: The pursuit of well-being has led to the convergence of technology and nature in innovative ways. Biophilic technology involves the use of advanced sensors, artificial intelligence, and smart systems to create dynamic, nature-inspired living environments. For instance, walls embedded with sensors can adapt their appearance based on occupants' preferences and changing natural light conditions, mimicking the organic response of the natural world.

Microbiome-Centric Design: The importance of the microbiome in human health is well-established, and interior spaces are no exception. Wellbeing Design now embraces microbiome-centric approaches, which incorporate features that support beneficial microbes. Living walls with carefully selected plants, antimicrobial surfaces, and even **probiotic-infused materials** are some of the innovative solutions aimed at enhancing the microbial diversity within our living spaces.

Biophilic Acoustics: Acoustic design is gaining prominence as a critical element of Wellbeing Design. Innovative acoustic solutions replicate the sounds of nature, such as gentle flowing water or rustling leaves, creating a more tranquil and soothing indoor environment. This trend acknowledges the profound impact of auditory

sensations on our mental well-being.

Nature-Inspired Digital Art: Digital art installations are becoming increasingly sophisticated in mimicking the beauty and tranquility of the natural world. These immersive digital experiences draw inspiration from nature, offering dynamic visuals that change with the time of day, weather, or even the mood of the space's occupants. Such installations provide a multisensory experience that enhances our connection to nature.

Dynamic Lighting Design: In 2023, lighting design transcends static fixtures. Dynamic lighting systems are used to replicate the natural progression of daylight, supporting our circadian rhythms. These systems adjust color temperature and intensity throughout the day, fostering a healthier sleep-wake cycle and enhancing overall well-being.

Nature-Inspired Furniture: The integration of biophilic principles extends to furniture design. Furniture is now crafted with organic, nature-inspired forms and materials. Ergonomic seating solutions draw inspiration from natural shapes and are designed to support the body's natural alignment, contributing to physical well-being.

Smart Greenhouse Integration: Home gardening is evolving with the integration of smart greenhouse systems. These self-contained ecosystems use advanced technology to provide optimal conditions for plant growth, enhancing indoor air quality and bringing the benefits of nature into our homes.



Collaboration, Cocreation, and Communication: The Key to Magical Spaces

Creating magical spaces where both people and nature thrive hinges on collaboration, cocreation, and effective communication among various disciplines. Wellbeing Design, with its multidisciplinary approach, serves as a bridge between different practices, bringing together experts in interior design, environmental psychology, biophilic design, and technology, among others.

The process commences with collaboration, where experts from diverse fields come together to share their knowledge and insights. Interior designers collaborate with environmental psychologists to comprehend the impact of design on human behaviour. Biophilic designers work alongside technology experts to create innovative, nature-inspired solutions. This fusion of knowledge and expertise results in holistic design concepts that consider physical, emotional, mental, and spiritual well-being.

Cocreation is the subsequent step in the journey toward magical spaces. It involves a collective effort to brainstorm and generate ideas that account for all aspects of human life. Architects, designers, and psychologists work in concert to craft environments that are not only aesthetically pleasing but also nurturing to the mind and body. Cocreation ensures that every element in a space, from colour

schemes to furniture choices, aligns with the overarching goal of promoting well-being.

he linchpin that holds the process together. Design experts must convey their ideas and concepts clearly, ensuring that every member of the multidisciplinary team understands the vision. Moreover, they must articulate the importance of Wellbeing Design to clients and stakeholders, illustrating how it contributes to creating spaces that support health, wellness, and happiness.

In the creation of magical spaces, it is essential **to involve clients in the process**. Their needs, preferences, and aspirations play a vital role in shaping the design. Clients become **cocreators**, working alongside the experts to ensure that their living space reflects their individual well-being goals. This collaborative approach results in spaces that are not only beautiful but deeply meaningful to those who inhabit them.

Conclusion

Wellbeing Design represents a multidisciplinary and holistic approach that integrates elements from various fields and tools to create living spaces that promote health, wellness, and happiness. It acknowledges that our surroundings have a profound impact on our physical, mental, and emotional well-being and harnesses this knowledge to create spaces that support all aspects of human life.

Effective communication acts as tIn an age where our indoor spaces play a pivotal role in our overall well-being, the principles of Wellbeing Design offer a comprehensive approach to creating environments where both people and nature thrive. This fosters a harmonious and supportive connection between humans and the natural world. Collaboration, cocreation, and communication among various practices are the keys to crafting magical spaces that enhance the quality of life and nourish the human spirit.

Nuria Muñoz Arce is a Wellbeing and Biophilic Design Expert and Founder of **Habitarmonia Academy & Ecosystem**

The transformational journey into Wellbeing Design takes a leap forward with the launch of the Habitarmonia Ecosystem. This is a global community which is dedicated to advancing the knowledge and practice of Wellbeing Design and making it a norm in the built environment. They invite you to join them as they unite a multidisciplinary global network of professionals with one clear vision: to create spaces for better health and wellbeing. *“Together, we will craft living environments where people and nature thrive, embodying the principles of Wellbeing Design in every corner of the world.”*

Notes

For the Survey mentioned in this article visit [https://www.architecture.com/knowledge-and-resources/knowledge-landing-page/pandemic-reveals-demand-for-uk-home-transformations#:~:text=The%20RIBA's%20research%20sought%20to,and%20sleep%20better%20\(17%25\)](https://www.architecture.com/knowledge-and-resources/knowledge-landing-page/pandemic-reveals-demand-for-uk-home-transformations#:~:text=The%20RIBA's%20research%20sought%20to,and%20sleep%20better%20(17%25))



HABITARMONIA
ECOSYSTEM:
join the wellbeing
design revolution

THE GLOBAL COMMUNITY
ADVANCING WELLBEING-
DRIVEN DESIGN IN THE
LIVING SPACES

as a member you will:

- ✓ Gain access to holistic design expertise with a basic biophilic design course, expert instructors, and extensive digital learning materials.
- ✓ Connect with professionals worldwide, meet industry leaders, and engage in cross-cultural collaborations.
- ✓ Elevate your career with internship and job opportunities, personalized support, and guidance for entrepreneurial ventures.
- ✓ Position yourself as a thought leader, get ongoing mentorship, and access job placement assistance within the holistic design community.

become a member

www.habitarmonia-ecosystem.com

Workplace wellbeing – delivering inspiring spaces with a seamless connection to nature

Ilyas Aslam
Chief Operating Officer at Quadrum

— CASE STUDY —

When we set out to redevelop 11 Belgrave Road from a tired 1950s office building in the heart of central London's bustling Victoria district, we had an ambition to create an amazing new net zero workplace and 'living landmark' that will stand out as not only one of the capital's most sustainable buildings but also one of the most wellbeing focused.

The transformation, due for completion in the first quarter of 2024, will provide 108,000 sq ft of Grade A office space on the lower ground, ground and seven upper floors, along with 14,000 sq ft of communal areas and best-in-class amenities including an on-site café and gym. Seamlessly interwoven throughout will be 13,000 sq ft of green space, including a 2,600 sq ft private walled garden plus an array of terraces, all topped off by a rooftop platform with sweeping panoramic views over London's iconic skyline.

Now nearing the end of construction by BAM, the project was designed by Eric Parry Architects and landscape architects Gillespies, who brought to life the biophilia-inspired vision. We wanted to cultivate an uplifting, natural and healthy environment that is centred around maximising user experience and can stand the test of time by meeting the needs of the modern occupier. The finished space will combine beautiful architecture and a workspace that's at once contemporary, flexible, warm, and welcoming, complemented by ample lush greenery.

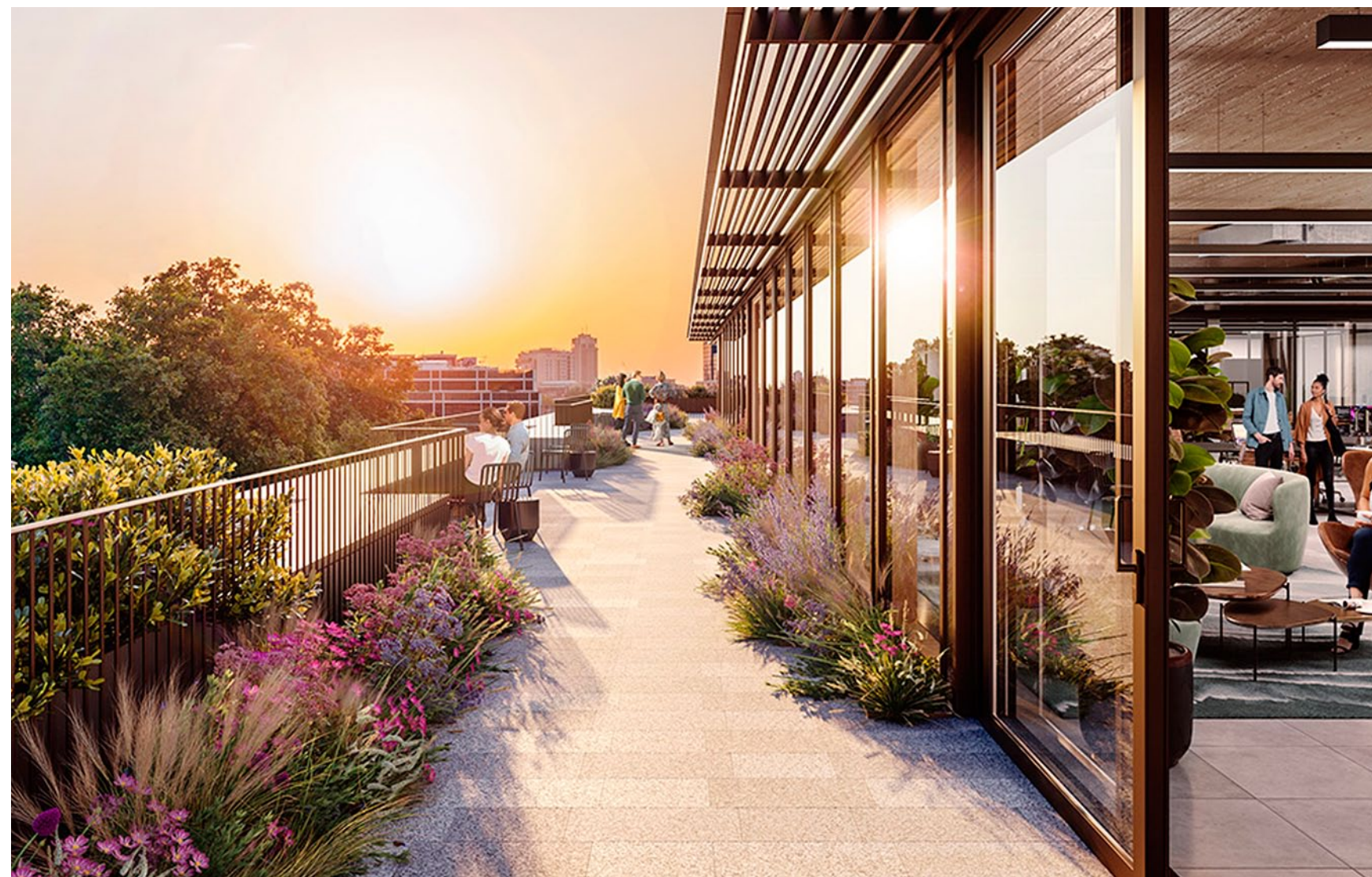
11 Belgrave has already been garnering industry recognition, having become the first in the UK to achieve a NABERS UK design-reviewed 5.5 star rating – with Max Fordham advising on this process – for being net zero not just in design and construction but also in terms of the building's full lifecycle operational performance.

Journal of Biophilic Design
WELLBEING

Additionally, it is just one of six in the country to gain a WELL Building Standard pre-certification, with guidance from consultant Ekkist; we are aiming for a WELL Platinum accreditation for when the scheme is finished, by placing wellbeing firmly at the centre of design decisions with a thoughtful, detail-oriented approach. We did this in multiple ways, from making sure that all internal lighting follows natural human circadian rhythms and colour temperature is aligned to the changing natural light as the day progresses, to carefully considering acoustics in line with WELL requirements. A number of measures will ensure the highest air quality, such as mixed mode ventilation systems, which remove fine dust and

carbon dioxide, and incorporating plants like ivy that are known for their pollution-filtering properties. Apart from contributing to cleaner air and eliminating toxic pollutants, these solutions will also regulate internal temperatures for optimal thermal comfort.

We thought about how to actively encourage healthy lifestyles and movement through the power of layout and design. Examples include installing two filtered waterpoints on each storey so that occupiers have visual cues and easy access to keep hydrated through the working day. Similarly, the cycling facilities, lockers, and showers, promote and facilitate a greener and healthier commute.







A key goal for us was to maximise the well-established positive impact of nature on wellness, mood, productivity and motivation – either via proximity to natural spaces or by referencing it through the use of more natural materials. Therefore, we opted for non-toxic and natural materials like timber and stone internally, while external green roofs not only look appealing but also act as a rainwater buffer and air purifier, also helping to maintain indoor temperatures. From the outset, we set out to re-green the site,

with biophilia informing everything. The garden space, with carefully selected seasonal planting and water features, allows people to work or relax surrounded by wonderful greenery; it's a serene oasis of calm in the centre of busy central London, an opportunity to unwind, reflect and enjoy a true connection to nature. This, and the terrace gardens, will provide herbs to be used in the café which will serve nutritious, seasonal food. The 1,680 sq ft roof terrace, too, will offer seating areas nestled amongst scented flower walls and herb gardens.

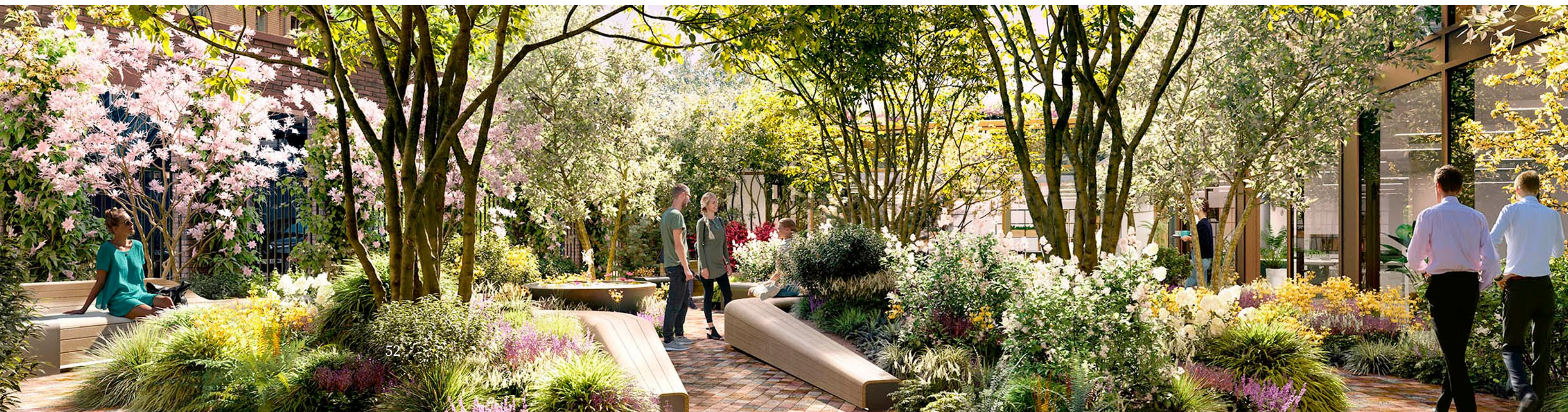
Inside, meanwhile, large floor-to-ceiling windows and sliding glass doors break the traditional barriers between the typical workplace and natural environment, letting serotonin-boosting natural light flow freely and maximising fresh air and views of greenery for everyone. Occupiers will benefit from bright, airy and open spaces, with a mix of peaceful and private areas as well as those dedicated to collaboration and socialising. What became abundantly clear as the teams worked on this multi-faceted project is just how closely wellbeing, sustainability and biophilia are interlinked, and each element should not be viewed in isolation but rather holistically.

The role of digital technology is also significant within that. It can boost comfort and wellbeing even more and, through a smart app that will be available at 11 Belgrave, employees will be able to personalise their experiences, operate the lockers, book meeting rooms, tailor their environment (for instance, by adjusting the temperature

and lighting in a specific zone) and more. Display screens will also help them visualise how much energy the building is using, with tips on how to efficiently manage their carbon footprint and ensure that the building's ongoing performance reflects the high levels of sustainability with which it has been designed.

Promoting wellbeing on every level, from the sheer volume of greenery and effortless connection to nature, to healthy food choices, flexible working spaces and the fitness facilities that promote an active working day, 11 Belgrave will be a workplace where people really want to spend time. Together with its long-term, positive environmental impact, this is a place that promises to contribute to a healthier planet as well as enriching the daily experiences of its occupants for years to come, and we hope it is the first of many more such schemes in the capital.

<https://www.quadrumglobal.com/portfolio/11-belgrave>



Being Human - Wellbeing in the workplace

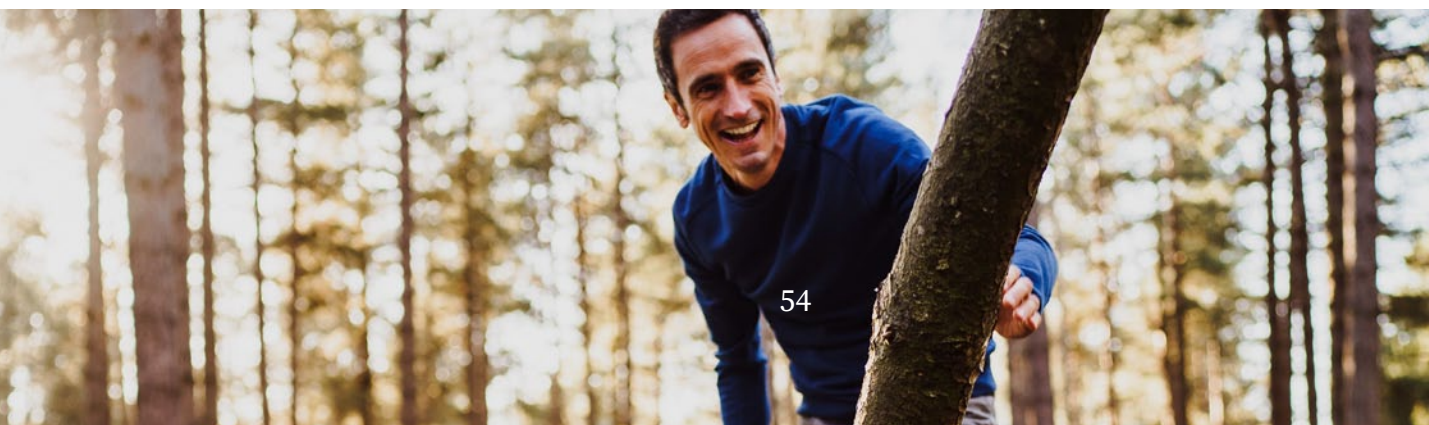
“Bringing people together ... To break bread, sit around the campfire, share and tell stories with your tribe, even the little things like make your colleagues a cuppa T! The importance of these things will have a positive impact on your wellbeing.”

Steve Brewer

There are from my perspective many other pieces of the Wellbeing jigsaw puzzle. Air-quality, biodiversity/biophilia, aesthetics, sustainability, temperature, neurodiversity, inclusivity, safety, acoustics and lighting. And many more, all of which I will leave to the experts to comment on. But all of which we must consider when looking at the workplace environment. And don't get me started on the importance of culture!

“You can please some of the people some of the time, but you can't please all of the people all of the time.” But we are getting there. Taylorism is nothing new, one might say that Fred W. Taylor back in the 1880's was onto something... Just maybe today with a more empathetic approach.

I do feel though that some businesses need to wake up, have a shake down and simply admit that we are now in an evolving way of working. *We always have been.*



To consider the workplace as a 50/50 split of use, physically and timewise. From the quiet, knowledge-based thinking working alone or 1-1 to meetings, to workshops and collaboration time all the way over to storytelling and sharing stories that I mentioned earlier. Work related conversations, but also to last night sports results (remaining non-sports specific here) to your plans for this coming weekend. I would argue all better when discussed in person.

“The design of the space has helped to create a genuine community of Co-Workers, with adaptable places to work, meet, drink and eat.”

John Wilkinson, Director
Community Regeneration

When joining together in person and connecting with each other, our brains release dopamine. It unites us and we start bouncing ideas around. We naturally become happier humans. Connecting, talking in person strengthens a team's camaraderie and relationships grow, helping our overall wellbeing.

Human connections are so important. They go on to build trust amongst your colleagues. And trust is so important, as when working together you get better results.

“Working jointly with our internal team BJB designed an adaptable and flexible space, with working and meeting spaces that has made the building a place for our teams to work together.”

Dan Burraway
*Assistant Director at
Shelter – Strategy Enablement*







Back to time and place though

Creating the right places is easy! Consultation, engagement and co-creating these places within a workplace isn't rocket science. Ascertaining the right kit-of-parts and creating that landscaped office, full of alternative work-settings that offers choice is fundamental. Yet ensuring everyone is aware this isn't the final result, as future flexibility, adaptability and change is key. Think evolution not revolution.

Supporting an individual's way of working, be it hybrid or not, based on the work activity to be undertaken is achievable. However, maybe allowing people the time to do so, isn't!

Think of that brainstorming, blue-sky thinking collaboration lounge. With its flexible, biophilic, acoustically treated and sustainable sourced products on wheels with batteries (I'm not personally sure about that last one), all with good intent to help your wellbeing through design.

However, that meeting has been scheduled in your diary for post-lunch slump o'clock at 2-3pm. So, all that initial design thinking mentioned above goes out the window.

Come 2:15pm things are really only getting going. You've travelled into the office, as have your team, to meet in person, all within this specifically designed area within your place of work.



Now at 2:45pm ideas are starting to flow. Being together in person, sitting in this really comfortable chair, while others choose to stand is really starting to pay off. People are enjoying being together! But your 3pm 1-1 with your boss is now on your mind. It starts to wander and you would now much rather be alone somewhere ready to prepare. How is your Wellbeing now?

I warned you not to get me started on culture!

The right balance of the right environment (the environment can/should be therapeutic itself) and the right culture can help and even improve our wellbeing. Just please ensure you get outside at some point today...

Resulting in people-centred workplaces, that are cultivating the company culture offering the right balance of

collaboration & engagement and quiet work-settings. Choice.

"We were after an environment that could give the flexibility and choice that everyone wanted. BJB has given us a space we're happy to be in each day!"

Sapio Research

So, to allow time, less rushing, resulting in a less stressful workplace, producing a better overall outcome. Hopefully the by-product of this will be yours and your colleagues' improved Wellbeing. Being human.

Steve Brewer

Workplace Design/Experience coordinator

burt-jonesandbrewer.com

BJB (Burt-Jones & Brewer)
ReThinking & ReDesigning the workplace

Creative planting for biophilic spaces

There's so much more to biophilic design than just adding plants. However, the world's best biophilic designers know that one of the most authentic elements of contact with Nature is through the creative use of plants. We've been helping interior designers create and maintain beautiful interior planting schemes throughout the UK for almost 30 years.

The Benholm Group

Design

Installation

Maintenance

We enhance your reputation

We protect your business

We make your life easier



where creativity blossoms



WELLNESS AND BIOPHILIA IN COMMERCIAL HOSPITALITY SPACES

Tola Ojuolape

“The influence of health and wellness in the hospitality and tourism sector is ever growing, and Biophilia and wellness have become considered strategies to enhance guest experience and comfort levels.”

Here are two design examples of how plants, repurposed materials and natural indigenous clay can have a positive impact on the wellbeing of those using the space.

Selina, Brighton

For Selina Brighton, the integration of plants – along with an increased focus on exploring repurposed and resourceful materials was a guiding point to drive biophilia into the hotel.

Introducing biophilic notes throughout the public and private spaces was even more important as the brand catered to gen z and millennial travellers who innately care for wellness and self-care as part of their travel requirements.

It is also true that there has been a rise in wellness-motivated customers in hospitality-led spaces, as well as a desire to be in spaces which evoke the senses. Plants, greenery and nature are multiple ways to introduce this into a space. Bringing these materials into the hotel immediately encourages guests to respond intuitively to the surfaces, colours and materials being used.

The Africa Centre interiors [over the page]

For The Africa Centre interiors, biophilic design was very much part of the design concept. It was important to connect nature by experiencing all the senses in the space – nature is inherently restorative and soothing and by introducing surfaces, textures and colours to facilitate this, we created a holistic experience throughout the interior experience.



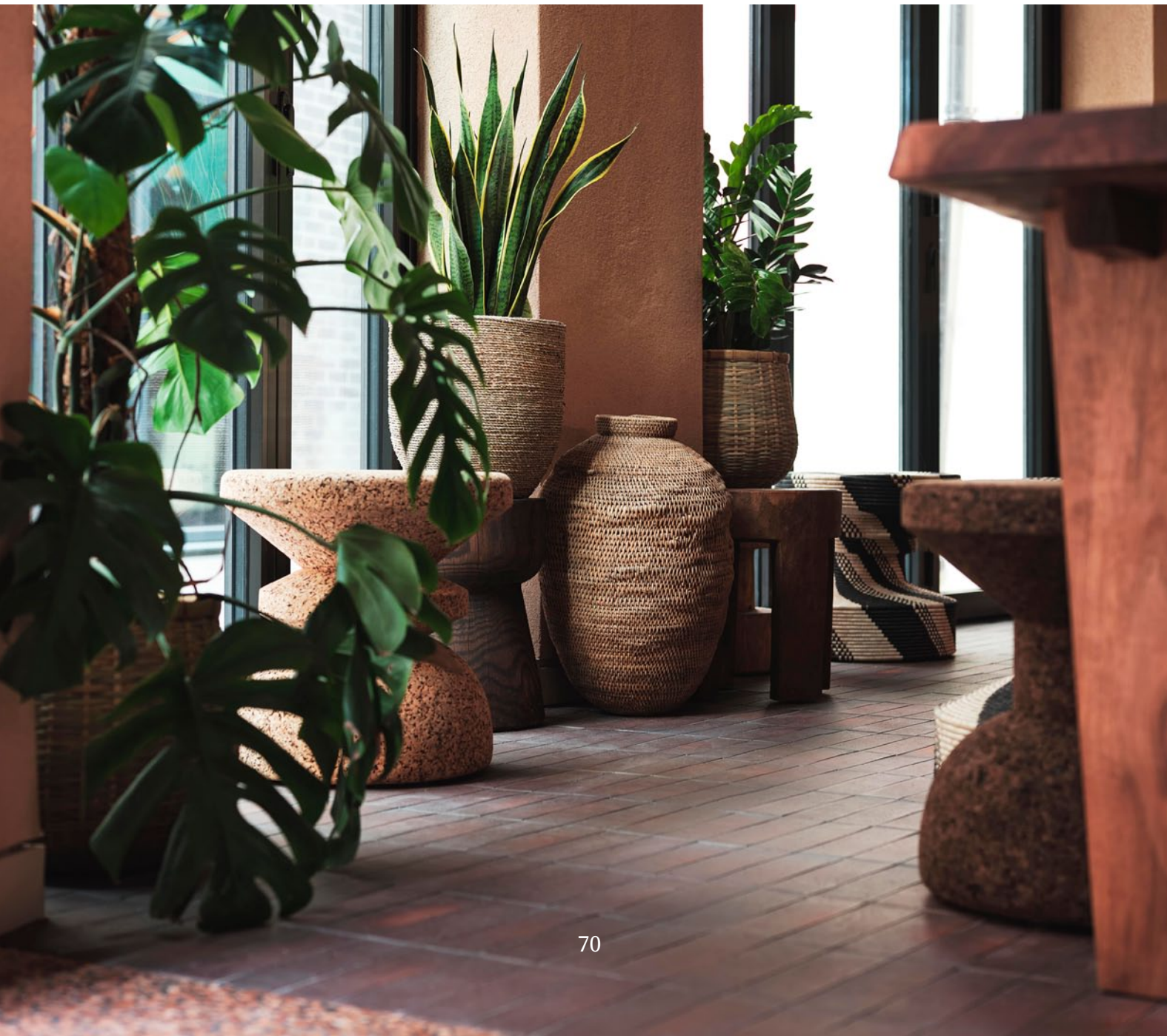


"We also used clay as a natural sustainable material. Clay is a natural indigenous material and pigment. Its eco-friendly nature also made it fitting for the project. Its breathable properties and natural and tactile texture was appropriate as it relates directly to the aesthetic we wanted to achieve."

The clay plasters are unique blends of unfired clays mixed with minerals and pigments to provide healthy, breathable finishes for internal walls. Manufactured in the UK, they are amongst the lowest carbon and healthy wall finishes available.

Tola Ojuolape is a multidisciplinary designer and creative director with a focus on materiality, aesthetics for contemporary brands globally. Her studio is centred on the concept of beauty, quality and balance in all things with an approach to create memorable objects and experience Tola combines all with a lifelong passion for the arts and the African continent and has worked in the contemporary art space to curate installations in the UK and beyond.

<https://www.tolaojuolape.com>



THE UK'S ONLY PROFESSIONAL INSTITUTE FOR INTERIOR DESIGNERS

AS A MEMBER YOU WILL RECEIVE:

- PROFESSIONAL GUIDANCE
- BADGE OF PROFESSIONALISM
- CPD SUPPORT
- SPEAKING OPPORTUNITIES
- NETWORKING EVENTS
- SUSTAINABILITY GUIDANCE
- DISCOUNTED ENTRY TO THE BIID INTERIOR DESIGN AWARDS



Become a Member

T: +44 (0)20 7628 0255

E: info@biid.org.uk

biid.org.uk

CONNECT WITH US



SpaceInvader turns vacant workspace into highly-desirable new concept: 'Nest' at Glasshouse, Alderley Park, Cheshire

Caroline Collett

— CASE STUDY —

Glasshouse represents the redevelopment of a former toxicology lab, comprising 16 separate buildings, arranged around a central courtyard garden, into a single, new 150,000 sq ft commercial office building, specifically designed for digital and tech businesses.

Developers Bruntwood SciTech invited SpaceInvader to consider best usage for a lower ground space within this newly re-developed 'Glasshouse' building at this world-leading life science and innovation campus, Alderley Park in Cheshire. The lower-ground floor, which originally offered 1,425 sq m of open space, presented a challenge in terms of limited natural light, with only one glazed area facing out onto a sunken garden. This,

combined with changing market needs, more demand for fully-fitted space and a growing focus on employee wellbeing, presented a perfect opportunity for the designers to create something truly unique.

'Rather than giving us a brief, our client simply asked, 'What can be done?' **John Williams, SpaceInvader Director/Founder explained.** *'Our response was to find the light within the dark and seek to transform the feel of the space completely, using lighting and biophilia as our major tools. At the same time, we realised we could also make a virtue of the space's safe and cosy feeling of enclosure, creating a kind of hideaway. It was the kind of challenge we love.'*



The plan for the new Nest space was to create two small, dedicated work suites that could be rented out to smaller-scale tech companies, whilst the rest would be a collaboration and co-working area, open to everyone in the building. Functionality was high on the agenda, needing to hit the mark on acoustics and offer a variety of zones, including comfortable destination tables and eye-catching feature lighting, as well as joinery pieces incorporating planting. A final requirement was for a Yoga Studio and wellness space.

Design Approach

'Our overall design approach', commented Mollie Ruttle, Interior Designer on the project, 'was to design a space that felt serene and uplifting when you entered, through the incorporation of great lighting and biophilic cues, whilst also making the best use of natural daylight. We looked to use clean lines, with a less-is-more approach, plus bespoke joinery with radius corners for softness and visual interest, including curved timber rafters, alongside materials such as reflective steel and natural timbers.'



Lighting was key, with the design team taking inspiration from the hospitality sector, whilst pairing this with a practical mindset, to ensure users could work in any part of the space. As well as diffused light created by track lighting, other key elements included light panels; curved lighting features; backlit planting; dramatic wall-to-floor lights and curved suspended lights.

Design Detail

The furniture colour scheme boasts a range of oranges and greens, alongside aluminium and brushed steel. Flooring includes *Nora Interface* rubber flooring with a concrete effect finish, which looks great and is quiet underfoot, with a 20db sound impact reduction. This flooring material also boasts low-emission, low-pollutant, PVC-free and phthalate-free properties, ensuring it contributes to a healthy indoor floor quality.

Sturdy timber co-work tables are by *Orangebox*, with the warmth of the timber lending an almost-domestic ambience to the space. The space is given further emphasis by three large, curved timber rafts, complete with suspended lighting and hanging planting.







An eye-catching, floor-to-ceiling timber shelving unit then draws the eye to the more informal lounge space beyond. Here, a bespoke shelving unit features bespoke prints created by **Jenny Crossland** of **SpaceInvader**, who explained ‘It was important that the themes for the art prints tied the concept together, as well as enriching the space. They include data and nature fusions, such as sun charts and scientific diagrams that reference the light and dark concept, as well as fluid, repeat patterns and grids that reflect data trends and natural, organic forms.’

Large plants in pots also feature in this very relaxing zone, which also features a circular table with a tree at its centre. With sustainability being key for the client, furniture includes chairs made of a textile created from recycled naval suits or from hemp. Beyond is one of the most spectacular and unusual features in the whole scheme within the Yoga Room – a light wall made of white Corian, which changes colours on a spectrum using backlit LEDs.

‘Our design approach has proved extremely popular’ **John Williams** added. *‘People really love the finished space. It’s gone from being something of a hideaway to one of the most sought-after areas of the building to spend time in.’*

www.spaceinvaderdesign.co.uk
To view the Glasshouse visit
<https://bruntwood.co.uk/our-locations/cheshire/glasshouse/>

Images by photographer Andrew Smith
for SG Photography

The Dreaming Retreat, Wales

Sustainable & Biophilic Restoration

“The holistic vision for restoration of house and woodlands is central to the success of Charlotte Church’s Dreaming Retreat in Wales, where handcrafted natural materials work in harmony with views of the Welsh landscape, creating a place like no other where a visitor feels the restorative benefits of nature that refresh the soul.”

Clare Bowman & Elliot Cooper



I joined the project in the depths of the winter of 2021. On that crisp winter morning as I stood with the team looking out from the house, the morning sun lit the Nant Caethon Valley. Charlotte Church had brought together a team of experts and crafts people that shared a vision for sensitive restoration of both the landscape and buildings of Rhydoldog House, the former home of Laura Ashley.

I was inspired by the scale of environmental solutions already being implemented which encompassed every aspect of sustainable and biophilic design values;

- The reuse and refurbishment using fabric first principles by improving the thermal performance, alongside low carbon lighting, space heating and hot water solutions.
- 70% of the house energy demand is met by on-site green energy sources, including a hydromill and water source heat system, with a solar PV array.
- Onsite waste-water treatment is carried out using a reed bed.
- The use of natural materials, daylight and ventilation.
- Connecting to views to nature is present in every space.
- Extensive use of materials sourced on site, such as fallen trees to unwanted timber were given a new purpose to be celebrated in a new way.
- The landscape and woodland masterplan is designed to include permaculture gardens to nourish communal meals.
- Staff received additional training in forestry for the ongoing care of the extensive mature woodlands.

- Local employment was sustained during construction, alongside new local employment and in the running of the retreat. This added to the positive energy for the regeneration and breathed new life into the house with the same ethos as Laura Ashley had once – she designed and lived close to her printworks in nearby towns.

I have never felt more inspired and creative, and it was a privilege to be part of the team, providing advice on both sustainability and biophilic design principles, as well as ensuring interiors finishes and furniture came from sustainable sources of natural materials.

Biophilia is a love of nature and is central to Charlotte’s healing vision, for guidance I always refer to the 14 Patterns of Biophilic Design (Terrapin, Bright Green 2018)
<https://www.terrapiinbrightgreen.com/reports/14-patterns/>

Nature in the Space Patterns

1. Visual connection with nature
2. Non-visual connection with nature
3. Non-rhythmic sensory stimuli
4. Thermal & airflow variability
5. Presence of water
6. Dynamic & diffused light
7. Connection with natural systems

Natural Analogues Patterns

8. Biomorphic forms & patterns
9. Material connection with nature
10. Complexity & order

Nature of the Space Patterns

11. Prospect
12. Refuge
13. Mystery
14. Risk/Peril



Charlotte had a vision for the house as a spatially uplifting journey, with each space tuned to calmness, and adaptable to meet changing healing needs. The space is imbued with cascading indoor plants, with lots of opportunities for cosy refuge, and stunning views of the landscape allowing nature to flow into each space.

Consistency in design was central to the calming ethos, and this led to investing in a variety of sculptural light fittings throughout the house that were carefully located by the lead builder Kerry. Italian hand painted silk cesendello wall lamps designed by Mariano Fortuny are mixed with nature-inspired handwoven jute

pendants by Annie Legault, the creator of Amulett.

The natural colour pallet of walls and fabrics vary in harmony with orientation and views. Natural dyes, stains, lime and water-based paints create the textual atmosphere with beautiful scent of spices used by their creator Antonia in her hand dying process of sheers and curtains.

Investing in comfort was important, with specially designed day beds made in England by Kuhn Upholstery, further items using natural materials mixed with recycled and handmade furniture was made on site by carpenters Martin and Simon.



WELLBEING

When Spring arrived Charlotte led the team, and together completed the interiors through a community inspired approach with a mutual respect of each other and their trades. This enabled Charlotte to share her unfolding vision and for the whole team to uniquely tailor each space with further layers of biophilic design in the form of artwork and an abundance of dried flowers grown in the Isle of White by LSF. LSF were established in 1986 to meet a growing demand for dried flowers in interior design during the Laura Ashely era – it felt like the life of the project had come full circle as we created bouquets to hang once more in the communal refectory at the heart of the house.

One of the final rooms to be restored is the Print Room, and this was Laura Ashley's office. This delightful room

looks south out over the valley and has been decorated with one of Laura's prints of a stag. The room is simply furnished and is now a place for reading, reflection, and counselling.

The project was completed as restrictions were lifted from the Pandemic, and I valued and enjoyed each opportunity to help others benefit from the natural setting. Lauren, an architectural student who complete her degree online during the Pandemic was able to assist me and gain valuable site experience. Jennifer, with whom I run wellbeing flower workshops, joined us in May to create the hand-dried dried flower bouquets for the refectory, while my mother, a retired couture seamstress, felt rejuvenated while hand-sewing final touches to the furnishings. It was a pleasure for all of us to be involved and see the house come alive.





Healing through forest bathing is also essential to the restoration of the landscape and was designed in collaboration with RHS Chelsea Gold Medallist Juliet Sargent. Along paths native woodland planting begins high in the forest and follows waterfalls and streams down to the main entrance to the house before sweeping around the house as two rolling rivers of flowers flowing across the hillside, shimmering like the streams that run at the boundaries of The Dreaming. The landscape is a seasonal banquet for bees while honouring the elements: fire, air, water and earth.

<https://www.thedreaming.co.uk>

Clare Bowman is Director & Founder of RCZM Architects, Chartered Architect, Sustainability & Biophilic Design Advisor and Lecturer of Architecture De Montfort University. **RHS Chelsea 2021 Designer Gold Medal Winner – The Biophilic Classroom, Putney High School (GDST)**

www.rczm.co.uk

Photos courtesy of Elliot Cooper
[@cooperexplores](https://www.instagram.com/cooperexplores)

Sustainable Sourcing

Arbor Architects, Elle Deacon Smith & Matt Hayes www.arborarchitects.co.uk

Landscape Design by Juliette Sargent
www.juliettsargeant.com

Biophilic and Sustainability advice by Clare Bowman www.rczm.co.uk

Furniture by Evandro Kuhn, Kuhn Upholstery info@kuhnupholstery.co.uk

Handmade furniture from fallen wood
<https://madebyhand.wales>

Lead Builder, Services & lighting Kerry Butt U-e-s@outlook.com

Local builders TPL construction
www.tlpconstruction.co.uk

Jupe Light sculptures www.annielegault.com

Cesendello Wall lamp www.fortuny.uk

Dried Flowers www.lsfwholesale.co.uk





Look out for the podcast with Charlotte Church and our Editor Vanessa Champion. Ness was a guest of Charlotte's at the retreat. *"It was life changing. I had lost my mother earlier in the year, and I was still holding lots of grief and sadness on my chest. Through what I can only describe as "best friend" encouragement, she somehow got us all expressing ourselves through our voice, beginning with a simple chanting sound I ended up releasing all the weight and tragedy that I hadn't realised had been weighing so heavily on me.*

I left The Dreaming lighter, freer, and as I sit here now typing these words, I feel like the retreat for me, acted like a restart button on my internal computer. It's hard to explain. The way the Biophilically Designed interiors have been crafted and shaped you can feel that it was done with love, vision and honesty. The harmony of the natural tones, the natural materials, the rounded corners and organically shaped plastering seem to "hold" you. They don't fight you, they support you. The view of nature and connection to the land view in every room is incredibly powerful.

It's about as close as you'll get to rewinding to a simpler and more natural way of being close to the land, while feeling nurtured and safe in the most beautifully designed home. And the food was amazing too. I just wanted to say Thank you to Charlotte for having the vision and to the incredible designers and artisans who put their hearts into creating a beautiful sanctuary which is both fun and awe inspiring at the same time. And thank you to the land that holds it too."

To book, visit <https://www.thedreaming.co.uk>



THE SCIENCE BEHIND BIOPHILIC DESIGN



Proof that Biophilic Design enhances Wellbeing

“Neuroscience research proves that Biophilically Designed environments really do enhance our wellbeing.”

Dr Sally Augustin, Science Editor

The neuroscience research makes it very, very clear that being in a biophilically designed space elevates our wellbeing.

There is so much research which proves the value of indoor biophilically designed spaces. Here's a representative sample of research project findings:

- People feel very comfortable in biophilically designed spaces (Kellert, 2012). So comfortable that the odds increase dramatically that they get along well with other people and their brains work to their full potential, for example.
- Joye (2007) reports, in general, that biophilic design has a positive effect on human emotional and cognitive functioning; Determan Akers, Albright, Browning, Martin-Dunlop, Archibald, and Caruolo (2019) identified the same effects in children in biophilically designed classrooms. HyunLee (2019) determined that people staying in a biophilically designed hotel were in better moods than people staying in other places.
- The amount of stress we're experiencing is likely at lower, manageable levels in biophilically designed spaces (Wijesooriya and Brambilla, 2021), which can have desirable effects on our health as well as our minds. Wijesooriya and Brambilla also found that biophilic design improves our mood, cognitive performance, and creativity.







- Being in a biophilically designed space decreases blood pressure while improving memory performance (Yin, Zhu, MacNaughton, Allen, and Spengler, 2018).
- After we've been stressed, we recover faster in biophilically designed spaces (Yin, Yuan, Arfaei, Catalano, Allen, and Spengler, 2020).
- Circadian lighting systems can improve overall health as they help maintain sleep-wake cycles (Africa, Heerwagen, Loftness, and Balagtas, 2019). Other elements of biophilic design from use of natural materials to quietly hearing nature sounds to designing in alignment with local conditions have also been specifically tied to better physical and mental health and performance.
- In summary, "Biophilic design can reduce stress, enhance creativity and clarity of thought, improve our well-being and expedite healing" (Browning, Ryan, and Clancy, 2014). Psychological and physiological measures agree: biophilic design has a very, very positive effect on our wellbeing – and we like being in biophilically designed spaces.

Here is some essential reading:

Julia Africa, Judith Heerwagen, Vivian Loftness, and Catherine Balagtas. 2019. "Biophilic Design and Climate Change: Performance Parameters for Health." *Frontiers in Built Environment*, <https://doi.org/10.3389/fbuil.2019.00028>

William Browning, Catherine Ryan, and Joseph Clancy. 2014. "14 Patterns of Biophilic Design: Improving Health and Well-Being in the Built Environment." Terrapin Bright Green, LLC: New York, <http://www.terrapinbrightgreen.com/report/14-patterns/>

Jim Determan, Mary Anne Akers, Tom Albright, Bill Browning, Catherine Martin-Dunlop, Paul Archibald, and Valerie Caruolo. 2019. "The Impact of Biophilic Learning Spaces on Student Success." <https://www.terrapinbrightgreen.com/wp-content/uploads/2020/01/The-Impac...>

Seung HyunLee. 2019. "Effects of Biophilic Design on Consumer Responses in the Lodging Industry." *Journal of Hospitality Management*, vol. 83, pp. 141-150, <https://doi.org/10.1016/j.ijhm.2019.05.006>

Yannick Joye. 2007. "Architectural Lessons From Environmental Psychology: The Case of Biophilic Architecture." *Review of General Psychology*, vol. 11, no. 4, pp. 305-328.

Stephen Kellert. 2012. *Birthright: People and Nature in the Modern World*. Yale University Press: New Haven, CT.

Niranjika Wijesooriya and Arianna Brambilla. 2021. "Bridging Biophilic Design and Environmentally Sustainable Design: A Critical Review." *Journal of Cleaner Production*, vol. 283, 124591.

Jie Yin, Jing Yuan, Nastaran Arfaei, Paul Catalano, Joseph Allen, and John Spengler. 2020. "Effects of Biophilic Indoor Environment on Stress and Anxiety Recovery: A Between-Subjects Experiment in Virtual Reality." *Environment International*, vol. 136, 105427, <https://doi.org/10.1016/j.envint.2019.105427>

Jie Yin, Shihao Zhu, Piers MacNaughton, Joseph Allen, and John Spengler. 2018. "Physiological and Cognitive Performance of Exposure to Biophilic Indoor Environment." *Building and Environment*, vol. 132, pp. 255-262, doi: 10.1016/j.buildenv.2018.01.006.

Also visit www.thespacedoctors.com and click on the top button "Create your own Research Magazine" and type in the words "Biophilic Design" (or any other relevant search term) for your own research report pulled from hundreds of curated articles from Science.

www.designwithscience.com
www.thespacedoctors.com

Biophilic Design and Well-Being

“To understand the benefits of biophilic design, it is useful to first address the evolutionary factors that influence its relevance in today’s world.”

Judi Heerwagen

We evolved as a social species on the savannahs of Africa. For most of our existence, the natural landscape provided the resources necessary for group survival, chief among them water, light, shelter, distant views, and fire. For our hunting and gathering ancestors, the natural environment was a source of food, information, protection, and socialization. We used the sky as an indicator of time and weather, the landscape for distant views to assess safety and plan movements, and fire for cooking and protection from nocturnal predators as well as a venue for storytelling.

Recent research shows that the evolution of controlled fire and our capacity for cooking lead to major changes in

the life of early humans, as long as a million years ago (R. Nuwer, 2014). The daytime activities of the hunting and gathering group focused on gossip and the practicalities of finding food. The nights, with firelight, evoked a different behavioural pattern focused on imagination as well as conversation that healed rifts, aided memory, and enabled broader, more imaginative thinking. The nights also soothed over daytime tensions with singing and storytelling.

These night-time behaviours around a campfire continue today for many people, as noted by Melvin Konner in his 1984 book *The Tangled Wing*. Storytelling, planning, knowledge transmission, and social bonding are key activities of modern-day campers.







We now live and work in environments that are often devoid of nature and its many physical, social, and emotional benefits. How can we use biophilic design to enhance our built environments to support individual and social well-being? We know that on-going connection to the natural world – even in small doses – matters to our health.

Using Our Evolutionary History as a Design Guide

With the advent of cities, many people have little or no access to nature in their everyday experiences. But the rapid growth of biophilic design reflects our desire for greater individual and social connection to the natural world in both indoor and outdoor settings.

Each of us has likely had positive experiences in the natural environment that stick with us long afterwards and can serve as a guide to design. These moments may be connected to the sky, water, the landscape, or just quiet moments in a garden. They may be linked to colour, patterns, or natural events – such as rainbows. Other experiences in nature may also be regular, enjoyable parts of our daily life such as gardening or going for a walk in a natural setting.

The benefits of connection to nature in its many forms – from large parks to street trees and home gardens – are powerful and well established through decades of research. Extensive studies shows that benefits of access to water features, varied vegetation, and nature sounds, are consistent across studies. Benefits include stress reduction,

increases in positive emotions, and enhanced cognitive performance.

Although most of our experience with nature takes place in the outdoor environment, there is a growing movement to enhance our connection with nature indoors through the application of biophilic design indoors as well as growing evidence for the benefits of indoor nature (Kellert, Heerwagen and Mador, 2008). Indoor features include natural patterns and colours as well as the presence of flowers and plants. A recent example comparing offices with and without plants showed a decrease stress and an increase in perceived attention, productivity, and efficiency with the presence of plants vs no plants (Hahn, Essah and Blanusa, 2021).

These results are consistent with a growing body of evidence for the benefits of biophilic design in our everyday life.

<https://research.be.uw.edu/people/judith-heerwagen/linkedin.com/in/judith-heerwagen-56639110>

N.Hahn, Essah, E. and Blanusa, T. 2021. Biophilic Design and Office Plants: A case study of the effects on perceived health, well-being, and performance. *Intelligent Buildings International* 13(4), London: Taylor Francis.

S.R. Kellert, J. Heerwagen and M. Mador (Eds.), 2008. *Biophilic Design: The Theory, Science and Practice of Bringing Buildings to Life*. New York: Wiley.

Melvin Konner, 1984. *The Tangled Wing*. New York: Penquin Books

R. Nuwer, 2014. Embers of Society, Firelight talks among h Ju/'hoasni Bushmen. *PNAS Research Article*: 111(39).



Finding a moment of calm – hiding in the loo at work

“While we are rightly busy debating the future of workplaces, and how to encourage people back to the office, and re-writing our hybrid working policies, we seem to have forgotten about one of the most important rooms at work – the loo.”

Dr Harriet Shortt

Over the past eighteen years I have been researching workplaces and user experiences of the spaces and places of work. In my research, I ask people to take photographs of their spatial experiences and one of the most photographed places is the toilet – and this is not because people want to talk about the ‘ick’ or the ‘yuck’ of their facilities, it is because they want to talk to me about where they go to de-compress, to relax, to ‘have a moment’, and switch off from the emotional labour of work. They want to talk to me about the spaces that positively support their wellness – and this happens to be in the toilet.

The emotional labour of work – the management and control of emotions, feelings, and appearances in front of others – is part of everyday life for many workers. Whether we work in an open-plan office, a co-working space, a shop, or a hair salon, the expectations of interactions with clients, customers and co-workers are ones that portray a sense of calm, control, happiness, and self-discipline. But this is hard work. Being ‘on stage’, ‘on show’ and performing all day takes its toll. So, where do workers go to switch off? What places within the organisation provide a moment for escape? In much of my research, it is the toilet that provides this sanctuary.

The toilet offers moments of respite for workers, a temporary dwelling place away from the emotion work, scripts and emotion rules prescribed by the organisation, and a breather from the expectations of maintaining professional personas. Toilets, along with stairwells, cupboards, and corridors are the peripheral, liminal spaces of work that are, for many workers, vital and meaningful to their everyday lives because they are spaces away from the relentless gaze of others. Toilets are micro-territories on which people like to stake claim and construct as informally 'owned' terrain, or as some of the people I have interviewed suggest, are 'little staffrooms':

It's like our kind of personal chatting area, like our own private staffroom, our own meeting area! We go to the toilets to talk . . .

Yeah, the toilet is a good place to cry or take a breather! It looks a bit grotty (referring to the photograph they had captured as part of the research), but it's where we go!

Other people I have spoken to as part of my fieldwork have told me stories about taking phone calls about the death of a parent in the disabled toilet because they worked in an open-plan office and all the meeting rooms were booked up. Others have shared the moment they got the news they did not get a promotion, and this was delivered in the stairwell of the office because there was no other

private space – this was followed by a trip to the loo for a quiet cry and a moment of reflection.

But why, we might ask, do these workers *not* use a staffroom? Well, as one of my interviewees put it,

I'd rather sit in this corridor than have to sit in the fucking staffroom . . . here I don't have to listen to anyone, I don't have to be on a break, I can just get a bit of privacy and watch what goes on around the place . . . and listen to the general buzz of stuff going on.

Interestingly, it is the auditory nature of working life that also plays a role here. The toilet offers a *quiet* space – something that can be in short supply in some professions. Indeed, the literature and research on the sounds of work is scant. Contemporary organisational research appears, as Corbett argues, 'is a strangely silent world' (2003). The 'aural' is often ignored and subsequently we remain ocularcentric in our outlook on both wider cultural experiences and more specifically, our working worlds. In my research, many workers identify how they tune out of work and into particular sounds to help them create what I call, 'sound walls' as a means of escape. Hairdressing and retail work are good examples of occupations that require constant interactions with clients and members of the public, and so seeking space for private *and* peace and quiet is key to their sense of wellbeing.





James told me about ‘hanging out’ in the salon toilets (where he would often text-message his friends and rest his tired feet) and explained that it was the muted sounds and background hubbub of the salon in the distance that helped him tune out for a while,

When you are in the toilet . . . you can just be quiet. I mean you can still hear the salon, but it’s, like, faraway . . . a nice hum . . . and no one’s shouting at you to do something! It’s just in the background, over there, in the distance. I can sit here and chill, send a few texts, feel connected with the outside world and my mates . . . I rest my head on this wall and close my eyes . . . it’s quite nice in there!

So, what does all this tell us about wellbeing at work? For me, it raises three core questions.

- **Have we designed privacy out of the workplace?** It seems so, yes. If workers are being driven to the toilet to take important phone calls, to cry, to find a moment of peace and quiet, then we need to seriously re-think how and *where* people can manage their wellbeing and happiness.
- **Are we doing enough for the humans that work with/for us?** Some are, but we could do better! We need to be designing workplaces for wellness and health – salutogenic spaces that provide a healthy and happy place to work. If people are *happy* hiding in the loo – that’s ok! But we need to spend far more time listening to and consulting with our workforces to really understand the nuances and lived experiences of workplace and wellbeing. In-depth, qualitative,

visually led consultation will help provide a rich picture of what makes people happy at work and what spaces and places enable them to feel well.

- **What are toilets really for?** More than we currently realise! Not only could we be doing more to design toilets to be more inclusive (like provide bins for men who might need to dispose of incontinence pads after prostate cancer treatment), but we need to consider what else goes on in the loo. People talk, cry, use the toilet as breathing space between activities. It is a place to find a quiet moment. It is a place to legitimately be on your own, away from others. Now we know this, not only could we design better facilities to support these spatial practices, but also consider what *other* spaces across the organisation might provide opportunities to catch a breath and find a moment of calm.

<https://people.uwe.ac.uk/Person/HarrietShortt>

www.harrietshortt.wordpress.com

Further readings:

Corbett, M. (2003a) ‘Sound organisation: a brief history of psychosonic management’, *Ephemera*, 3 (4) 265 – 276

Shortt, H. (2015) ‘Liminality, space, and the importance of ‘transitory dwelling places’ at work’ *Human Relations*, 68 (4) 633 – 658

Shortt H. (2013) ‘Sounds of the Salon – the auditory routines of hairdressers’ at work’ *International Journal of Work, Organisation and Emotion*, 5 (4) 342 – 356

For more information on inclusive toilet design, follow the work of Martha Silcott at Fab Little Bag.

How a multisensory approach to biophilic design could enhance employee wellbeing and behaviour

“Biophilic Design is also sensory design. In this article, Lisanne explores and explains why sensory design helps wellbeing and also asks why workplaces are not embracing it.”

Lisanne Bergefurt

According to the evolutionary psychology theory, human behaviour can be explained through innate psychological drivers (Lee, 2021). Some authors argue that the biophilia theory is a result of the innate need to be connected to nature. For instance, humans have the innate tendency to seek for an environment that provides a balance between prospect (i.e., visibility) and safety (i.e., refuge), which can be designed through combining open views

and enclosed areas. The exposure to natural light may also help in regulating humans' circadian rhythm, which can be supported by biophilic design through maximizing daylight entrance. As Ostner (2021, p. 170) argues “both views (i.e., biophilia and evolutionary psychology) share the assumption that evolutionary processes have shaped the human body and the brain and therefore even the psychological mechanisms and the behaviour associated with it.”



However, in order to survive in today's environment, evolutionary human behaviour may need to be adapted (Fitzgerald & Danner, 2012). As indicated by the mismatch hypothesis, the environmental settings of today often clash with people's innate behaviour (Ostner, 2021), which may even reduce their health and wellbeing (Fitzgerald & Danner, 2012). The hypothesis underscores the need to consider evolved human behaviour when addressing challenges related to health and wellbeing. The mismatch is also well-recognized within the workplace context, which is often designed in the absence of biophilic elements. The modern workplace is frequently designed with artificial light instead of natural light and may not sufficiently provide views outside or indoor plants. The integration of such biophilic elements in the workplace environment could foster innate physical and psychological human needs (e.g., need for connection with natural world, or need for balance between prospect and refuge) and contribute to the health and wellbeing of employees.

So why do modern workplaces still frequently lack a connection to nature through biophilic elements? Traditionally, offices were designed as functional and efficient entities, often lacking specific design elements that could foster health or wellbeing (Nag, 2019). Organizations may also have prioritized cost reductions (e.g., through the design of open-plan offices lacking biophilic elements) over their employees' health. To solve these issues, several researchers have adapted Kano's model

to specify the requirements of an office environment where employees can flourish (e.g., Clements-Croome, 2021; Kim & Dear, 2012). Here, flourishing refers to a holistic approach to stimulate employees' psychological and physiological health and wellbeing by understanding bodily responses to multiple environmental stimuli (e.g., the layout of the office, the use of natural materials) (Clements-Croome et al., 2019).

In Kano's model, three levels of environmental factors are distinguished, namely basic, proportional, and bonus factors. Basic factors include standard or minimum comfort and health requirements of space (e.g., temperature and sound). Proportional factors are aspects (e.g., air quality and light) that may increase employees' satisfaction when well-designed, and bonus factors are aspects like aesthetics, décor, and colour, influencing the look and feel of space. As there are no standard regulations for the third layer, these aspects may often be neglected in the modern workplace design. Nevertheless, Clements-Croome (2021) argues that all three layers should be captured to provide a healthy work environment, characterized by a multisensory experience.

The multisensory design approach pleads for including design elements that stimulate all senses harmoniously, instead of solely focusing on visual design aspects (Clements-Croome, 2021). For instance, natural scents (e.g., plants and flowers) have been found to improve people's wellbeing and behaviour

(Spence, 2020). Furthermore, the combined influence of the visual and olfactory stimuli of coriander plants could have a positive influence on employees' cognitive performance and mood within the office environment (Li et al., 2024). Nevertheless, this study is one of the few that focuses on the multimodal influence of people's senses when exposed to a biophilic design element within the workplace. As Spence (2020, p. 9) argues *"to date, only a relatively small number of studies have directly studied the influence of combined ambient/atmospheric cues on people's perception, feelings, and/or behavior, with much of this multisensory research having been conducted in the field of sensory marketing."*

This underscores the necessity for a multisensory approach to understand

the potential positive influence of biophilic design elements on employees' wellbeing and behaviour. As emphasized by Clements-Croome (2021), a comprehensive understanding of employees' bodily responses to multiple stimuli within the work environment is imperative for the design of workplaces that effectively enhance wellbeing. Workplace designers are therefore encouraged to create more immersive workplace experiences through design, as these could foster employee health and wellbeing. This can, for instance, be done by integrating biophilic design principles that stimulate multiple senses, such as through desk partitions made of natural materials, with natural scents, and providing both refuge and prospect.

<https://www.tue.nl/en/research/researchers/lisanne-bergefurt>





References

- Clements-Croome, D. (2021). Flourish Theory. In *A Handbook of Theories on Designing Alignment between People and the Office Environment* (pp. 157–168). Routledge. <https://doi.org/10.1201/9781003128830-14>
- Clements-Croome, D., Turner, B., & Pallaris, K. (2019). *Flourishing workplaces: a multisensory approach to design and POE*. 8975. <https://doi.org/10.1080/17508975.2019.1569491>
- Fitzgerald, C. J., & Danner, K. M. (2012). Evolution in the Office: How Evolutionary Psychology Can Increase Employee Health. *Evolutionary Psychology*, 10(5), 770–781. www.epjournal.net
- Kim, J., & Dear, R. De. (2012). Nonlinear relationships between individual IEQ factors and overall workspace satisfaction. *Building and Environment*, 49, 33–40. <https://doi.org/10.1016/j.buildenv.2011.09.022>
- Lee, Y. (2021). Evolutionary Psychology Theory. In *A Handbook of Theories on Designing Alignment between People and the Office Environment* (pp. 195–208). Routledge. <https://doi.org/10.1201/9781003128830-17>
- Li, Z., Zhang, W., Cui, J., Wang, L., Liu, H., & Liu, H. (2024). Biophilic environment with visual-olfactory stimuli contributes to psychophysiological restoration and cognitive enhancement. *Building and Environment*, 250, 111202. <https://doi.org/10.1016/j.buildenv.2024.111202>
- Nag, P. K. (2019). *Office Buildings*. Springer Singapore. <https://doi.org/10.1007/978-981-13-2577-9>
- Ostner, S. W. (2021). Biophilia Hypothesis. In *A Handbook of Theories on Designing Alignment between People and the Office Environment* (pp. 169–180). Routledge. <https://doi.org/10.1201/9781003128830-15>
- Spence, C. (2020). Using Ambient Scent to Enhance Wellbeing in the Multisensory Built Environment. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.598859>

PLANTS



Pioneering Research Reveals the Economic Advantages of Biophilic Workplace Design

“In Issue 5 of The Journal of Biophilic Design, we delved into the world of workplace design and previewed a groundbreaking biophilic design study taking place in the offices of PLP Architecture in London. Reap What You Sow: Valuing Workplaces that Grow Good Ideas has now been published and we recently had the honour of dissecting the results as hosts of a live discussion panel with the authors of the study.”

Scott Togher

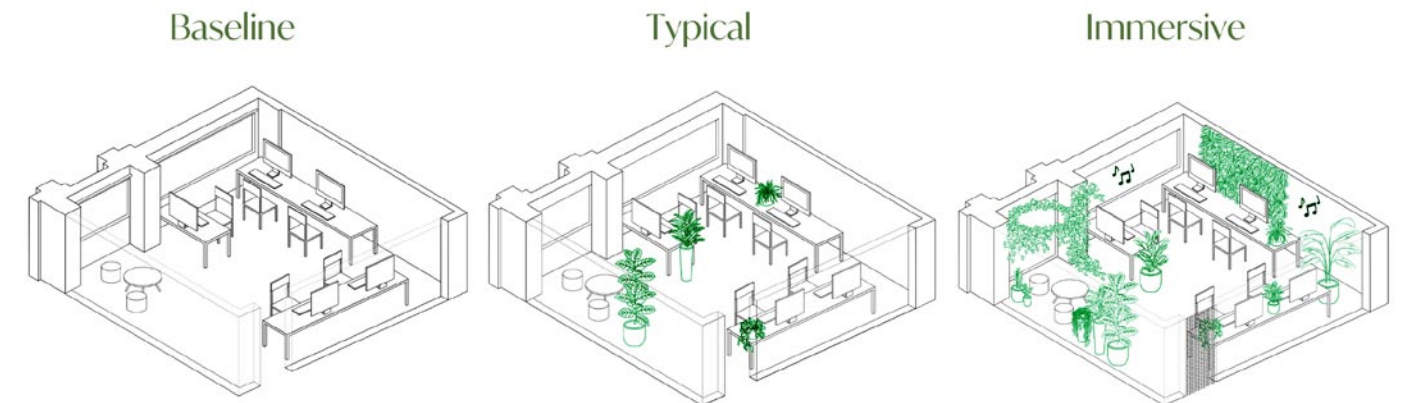
Given employees are the largest cost for a business and biophilic design is still often seen as an expenditure rather than an investment, to what extent can biophilia save companies money by ensuring that staff are healthier and happier at work?

Reap What You Sow attempts to answer this complex question by detailing the process of measuring and monetising the well-being and environmental value of biophilia in architectural design. It explores how design decisions can be

given a monetary value to enable real estate clients to fairly evaluate the worth of these interventions alongside other project costs.

The dynamic team behind this exciting study included Sustainability Lead at House of Commons and PhD Researcher, Joyce Chan-Schoof, PLP Architecture and their in-house research and development team PLP Labs, lecturer, author and expert in multisensory design, Professor Derek Clements-Croome, and planting experts, Benholm Group.

Scenarios

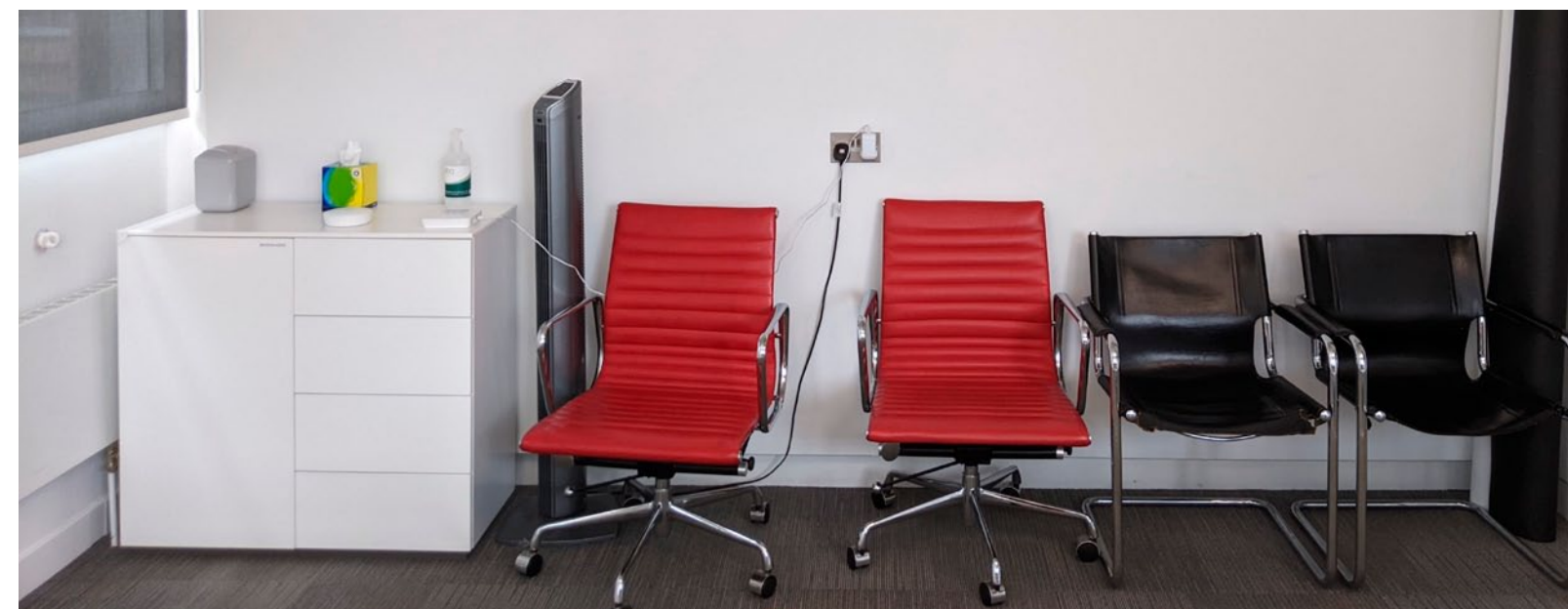


Three office scenarios were prepared at PLP Architecture’s Ibex House Offices in London, and the environment was transformed from an average office space to a multi-sensory experience by introducing rich, natural stimuli, over a period of eight weeks.

The scenarios were designed to represent non-biophilic and various biophilic

environments. There were two key variables, indoor green and views out, and changes were kept to a minimum to avoid too many environmental stimuli being introduced to participants.

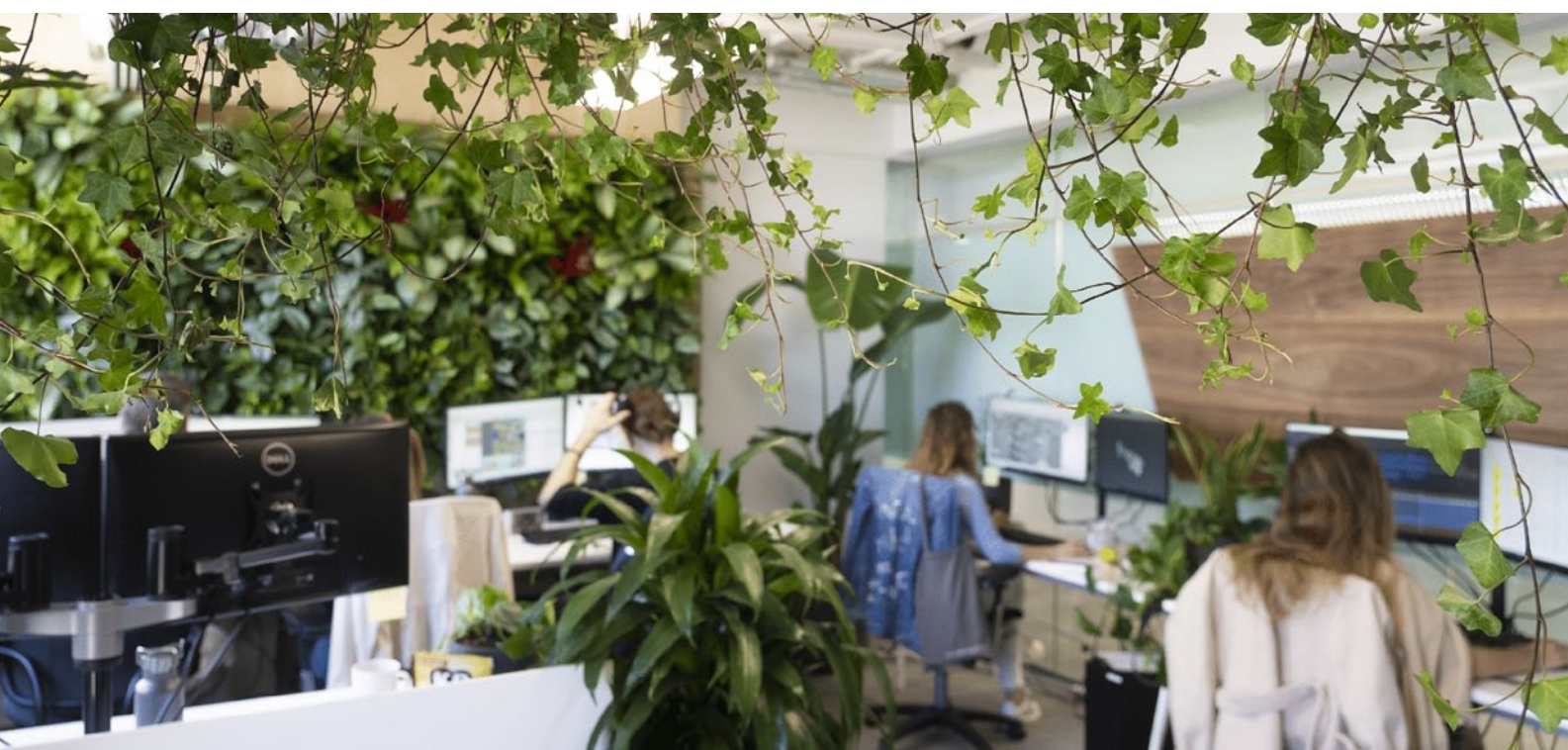
Scenario 1 – Existing: A cubicle-like workspace, i.e., a non-biophilic environment with no views out (windows with blinds).



Scenario 2 – Typical: A standard open-plan workspace with minimal biophilic elements in the existing workplace, such as small potted plants and views out from half-height windows. This scenario represents a typical workplace.



Scenario 3 & 4 – Immersive: Two biophilic workspaces (direct and indirect visual connection). More biophilic elements were applied to these two workplaces i.e. green potted plants with lush foliage were introduced to the workstations, and some were coloured plants and aromatic. The participants were relocated next to a full-height window with dual-aspect views.



Data capture

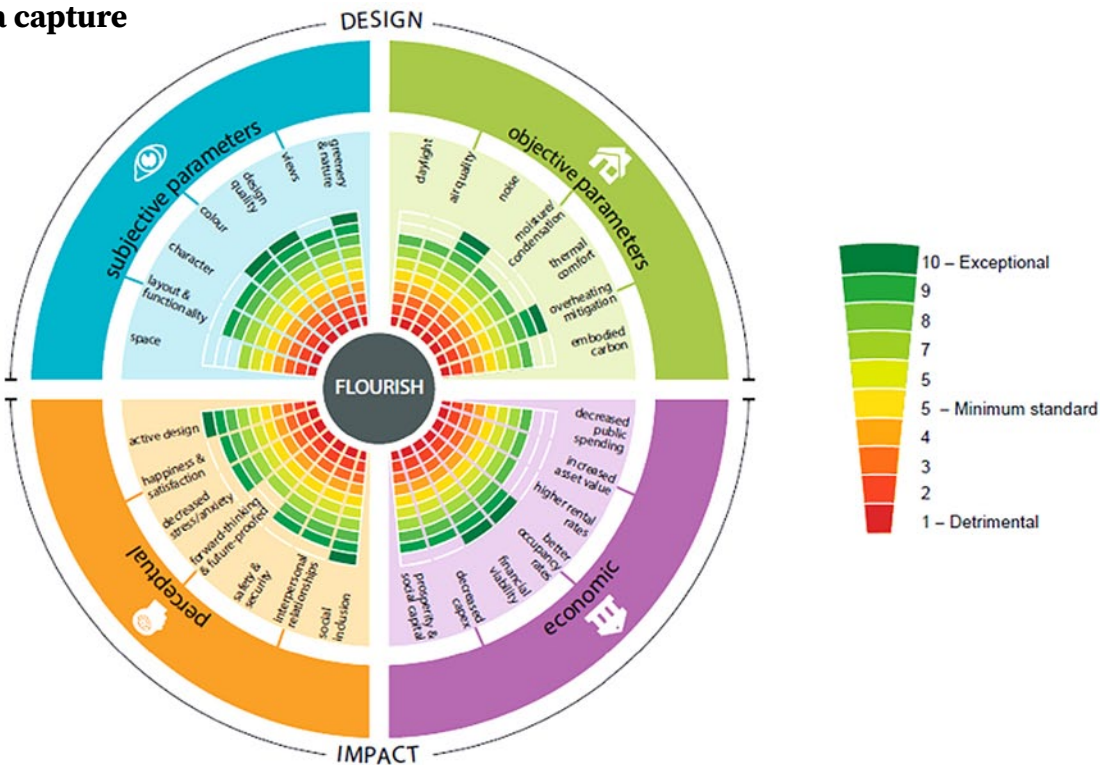


Figure 1
The Flourish model: 26 concept stage
Courtesy of Derek Clements-Croome; illustrated by Marylis Ramos and used by Joyce Chan with PLP Architecture

The pilot study adopted the Flourish Framework to a gain deeper understanding of the multi-sensory experience. The framework evaluates how the subjective and objective parameters of a design (top two quadrants) may impact people in terms of feelings, cognitive functions, and economic outcomes (bottom two quadrants).

During the study, participants were monitored through qualitative (questionnaires, interviews, journaling with diaries) and quantitative means (air quality, VOC, CO2, temperature, humidity, light, heart rate, steps, sleep quality, noise level, brainwaves).

Wearables tracked the participants' heartbeat, step count, calorie intake, and sleep quality to measure their

overall health. An EEG headset was used to measure the brain waves of participants in the baseline and various biophilic scenarios. During each test, the participant completed their daily work and brain activity was subsequently measured.

A value-based approach was used to monetise the well-being and environmental values. The Warwick Edinburgh Mental Wellbeing Scale (WEMWBS) and a set of healthy-building-related questions were used in weekly questionnaires.

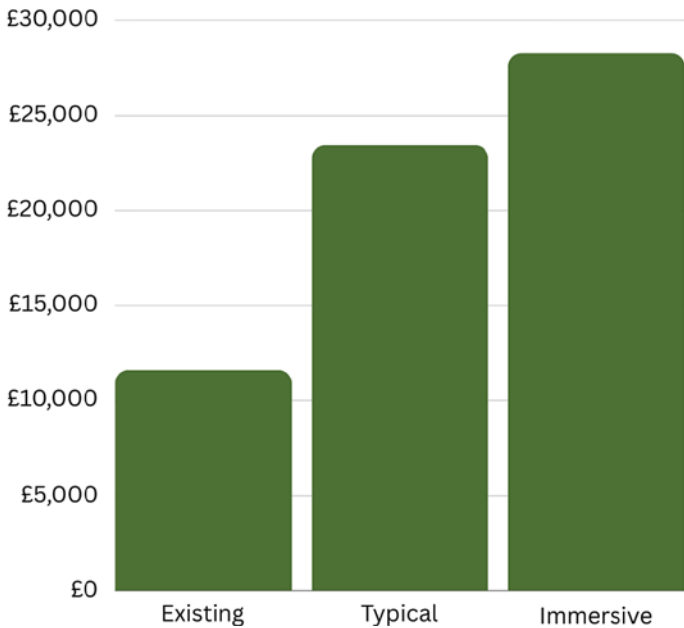
This data informed the creation of a financial proxy, in the form of a price point, and monetary values were applied to each office type from the breadth of qualitative and quantitative data gathered.

Results

The results support previous research that

biophilic scenarios, both subjective and objective, improve well-being compared to a non-biophilic workplace setting.

Well-being and environmental value by office type:



Clear differences were found between the different degrees of biophilic workspace. The immersive scenario was valued at approximately £28,288 and the typical scenario was valued at £23,440, this is stark compared to the £11,627 valuation of the existing space.

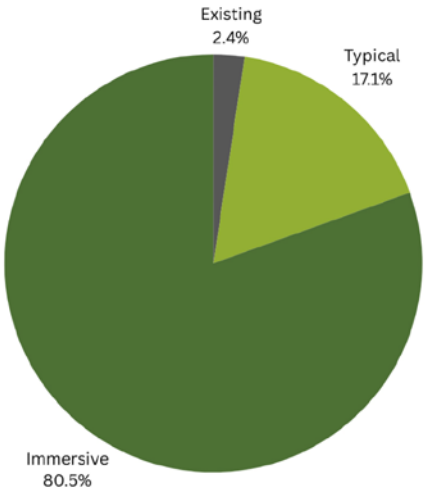
Next, the net financial gain of having a biophilic scenario was identified by subtracting the costs of delivering each environment from the monetised value of the spatial interventions. Even when accounting for costs, the biophilic interventions were significantly more valuable monetarily than the non-biophilic scenario.

Capital investment		Existing	Immersive	Typical
Net Value	Well-being value: Life satisfaction	£10,449	£12,648	£10,257
	Environment Value: Access to nature, light & environmental quality	£1,178	£15,640	£13,183
	Cost & benefits analysis	£11,627	£16,830	£22,211

The valuations applied to each office type are an effective tool in communicating with clients and investors about the value of holistic,

quality space. When attached to a £ sign, biophilic design has the potential to drive commercial decision-making.

Which workplace scenario would you prefer to be your future workplace?



Beyond the more nuanced results of the study, 80% of participants agreed they preferred the immersive scenario when simply asked which space they would prefer to work in future.

This observation holds considerable importance in the context of employee attraction and retention, as well as the impression a biophilic office conveys to visitors.







By introducing nature into the office environment, businesses may increase the value of their staff and workplace at a fraction of the cost of other interventions, like team retreats or office renovations.

Places that encourage attention, productivity, and creativity, and decrease stress are critical to both offices and employers. If our workplaces are truly to be places of productive and thoughtful work, it is time we start designing and valuing them as such.

To learn more about **Reap What You Sow**, scan the QR code where you'll find a free PDF of the publication in full, as well as short films of the study and discussion panel.



To learn more about Reap What You Sow, visit:
www.benholm.com/academic-research/reapwhatyousow

* British Council for Offices (BCO) financed an earlier pilot study on the use of wearables to collect meaningful data from office workers. This previous research informed the study on the measurement and value of biophilic design.

"Without data, we will not be able to prove the business case for biophilic design. We want to make a more direct link upfront to the budget planning stage of the design brief so that companies start having biophilic design in their projects. It will win half the battle for design teams because you will not have to negotiate once the design is finished to introduce biophilia – it would have been integrated into the process"

Joyce Chan-Schoof

"Offices designed for profit-motivated productivity without social and human values are soulless shells which will crack."

Derek Clements-Croome

Plants and Office Wellbeing

“Wellness is the complete integration of body, mind, and spirit – the realization that everything we do, think, feel and believe has an effect on our state of well-being.”

– Greg Anderson

James Smith

I have lost count of the number of times in the past I have been lead around a dark and dingy office space by an enthusiastic manager, saying the words “*We just need some plant displays to brighten the place up a bit*”. They are of course right, but what they don’t realise is that they also need some windows, twice the amount of floor space, updated furniture, a new breakout room and a 180° shift in their working culture. I can use shade loving plants and clever space saving containers to make a

start, but I can’t help but feel this is often an afterthought.

Luckily this style of workspace is becoming rarer, and as interior landscapers we are now finding ourselves getting involved in the design process long before any staff members sit down at their desks. This is a truly positive step, not just for the interior landscaping industry, but for office workers everywhere.



Since the work from home revolution, companies have had to completely re-evaluate how they are using their workspace, and how their staff are using their time. This new flexibility in the physical world, as well as work life balance, can have a hugely positive impact on the wellbeing of office workers.

I believe that office plants and interior landscaping are an integral part of protecting the well-being of staff, and I want to explore the three key areas of Greg Anderson's definition, and how each of these can be intrinsically linked to the benefits of interior landscaping. It's difficult to distinguish between the wellness of your body and your mind, and the line separating mental and physical health is often blurred and crossed, making it difficult to pinpoint causes and solutions. This is much the same as trying to quantify and evaluate the health benefits of office plants.

I can point you in the direction of NASA studies showing how plants remove toxins from the air, released by printers, carpets and building materials; it's also well known that plants will increase the levels of oxygen in the air, regulate humidity and reduce noise pollution. All these benefits can be quantified and measured by science, but what is far more interesting is the non-tangible benefits of office plants to well-being.

There is a reason why the managing director gets the dual-aspect office, or why business parks are built around lakes. The connection between humans and nature is written into our DNA, and

we are instinctively drawn to natural spaces. Plants are food, water, and shelter; they are comfort, security, and safety. The subconscious benefits of even being within view of plants has been proven to be beneficial to your health and productivity.

Office are not natural spaces with organic movement, light, or sound. Every aspect of nature that represents life and growth is frozen in time, in the belief we have created the perfect environment for progress (between the hours of 09.00 and 17.30). Companies and individuals are expected to grow in spaces that are far removed from the environment we have spent thousands of years evolving in. We need to remember how we got here in the first place, and office plants are a small step towards this.

A working environment that is close to nature is proven to improve both physical and mental health, as well as increase creativity, innovation, and productivity. How much of this is from the physical benefits of plants, and how much is psychological is not an exact science, and it doesn't need to be. We know these things are interconnected in all life, and plants perfectly represent this.

Spirituality is not something we would usually associate with biophilic office design, but I believe it's a core aspect of using nature to create good workspaces. It could be the ancient system of Feng Shui, or the religious belief in a creator of all life, there are many ways in which we can be deeply connected to the natural environment in a non-physical or health-conscious way.

The benefits of plants in your office not only involves living organisms that improve the space, it also represents the time and effort somebody has put into finding something beautiful for you to enjoy. You can see the effort that goes into maintaining them by trained technicians, and you can often see the bond staff members have with them after years of growing together.

Seeing the care that goes into the process promotes faith in your employer, and the more involved the staff are in the process, the more benefit they get from it.

There is no panacea to creating a work environment that looks after your employees' wellbeing, and I'm always reluctant to make claims to that enthusiastic manager that their new Spathiphyllum is going to bring inner peace, or a lone Kentia Palm is a good replacement for a week in the Caribbean, but plants do represent growth and belonging, nature and art, so they are a damn good place to start.

James is Managing Director of
Botanica Nurseries Ltd
www.botanicanurseries.co.uk



Plant energy and how it can change our lives

“Anyone reading this will already know that plants heal and help us in all aspects of our lives. They sustain us, keep us dry, heal us physically in so many ways...

However my interest over the last couple of decades is in how they can help us emotionally by taking their energy into our bodies.”

Saskia Marjoram

Indigenous people have instinctively known for millennia that the dew that collects on the leaves and flowers of a plant can be drunk to absorb the energy of that plant, but it was only in the 1930s that a Harley Street doctor named Dr Bach realised that when alcohol is added to this energised liquid the vibration of the plant is fixed between the water molecules for many years. He also found that when this liquid is diluted down to concentration that the body can ‘hear’, it encouraged sustained changes to our emotional state often changing behaviour patterns that his patients had carried since childhood. His famous range of 38 Flower Remedies (aka

Flower Essences) are still being used to great effect nearly 100 years later.

As a flower essence producer and practitioner, I am still being amazed and surprised by the changes these liquids can bring... sometimes they bring small changes like a teenage boy feeling safe enough to wear his hood down for the first time in years or being able to confidently ask for a pay rise or standing up for yourself in an argument. Sometimes they bring larger changes like leaving an abusive relationship, changing careers, being able to sleep properly for the first time in months, or deeply love ourselves after years of self-contempt and loathing.





Because flower essences work in such a subjective way on our emotions and behaviour (and are very cheap and easy to make) there has been little meaningful scientific research to back up millions of people's experience of these magical liquids. However, there is more and more scientific evidence that water can take on the vibration/energy of anything it comes into contact with, including our thoughts and, like many things in life, it seems that only by experiencing something ourselves can we know something to be true.

As a lover of analogies, I often describe taking flower essences as learning the song of the flowers and trees. Everyone will be drawn to different music at different times of their lives and even at different times of the day ... sometimes a song will lift our spirits just for a few minutes or a day or two and at other times we will be deeply moved and changed forever. And so it is with flower essences.

Another musical analogy I like to make for people who find the concept of essences and vibrational medicine hard to get their head around is that of a vinyl record. With no previous knowledge, and from the outside, it looks just like

a piece of round plastic ... however with the right equipment the vibration of the music can be heard many years later with the voice and instruments travelling through the air into our ear to change how we feel. Taking drops of a liquid that holds the vibration of a plant is much the same – however the effects can be much more powerful and often life changing in a deeper and more profound way.

Being able to live and spend time amongst plants and flowers brings deep solace, inspiration and meaning, however being able to take the energy of the plant kingdom inside of ourselves wherever we are and whatever the time of year is the next step in being able to listen to the songs the plants have to teach us in these complex and challenging times.

Saskia Marjoram has been working with plants her whole life as a professional gardener and cut flower grower for many years, assistant florist to King Charles 3rd, and as a flower essence producer and practitioner. She is based in East Somerset and you can find out more about her work and the essences she makes at www.saskiasfloweressences.com



ENVIRONMENT PEOPLE PLANET



FOUR OF THE FIVE MOST SEVERE GLOBAL RISKS ON THE TEN-YEAR HORIZON ARE ENVIRONMENTAL

“Cooperation is needed if we are going to address the urgent and imminent threats to our planet and our own existence.”

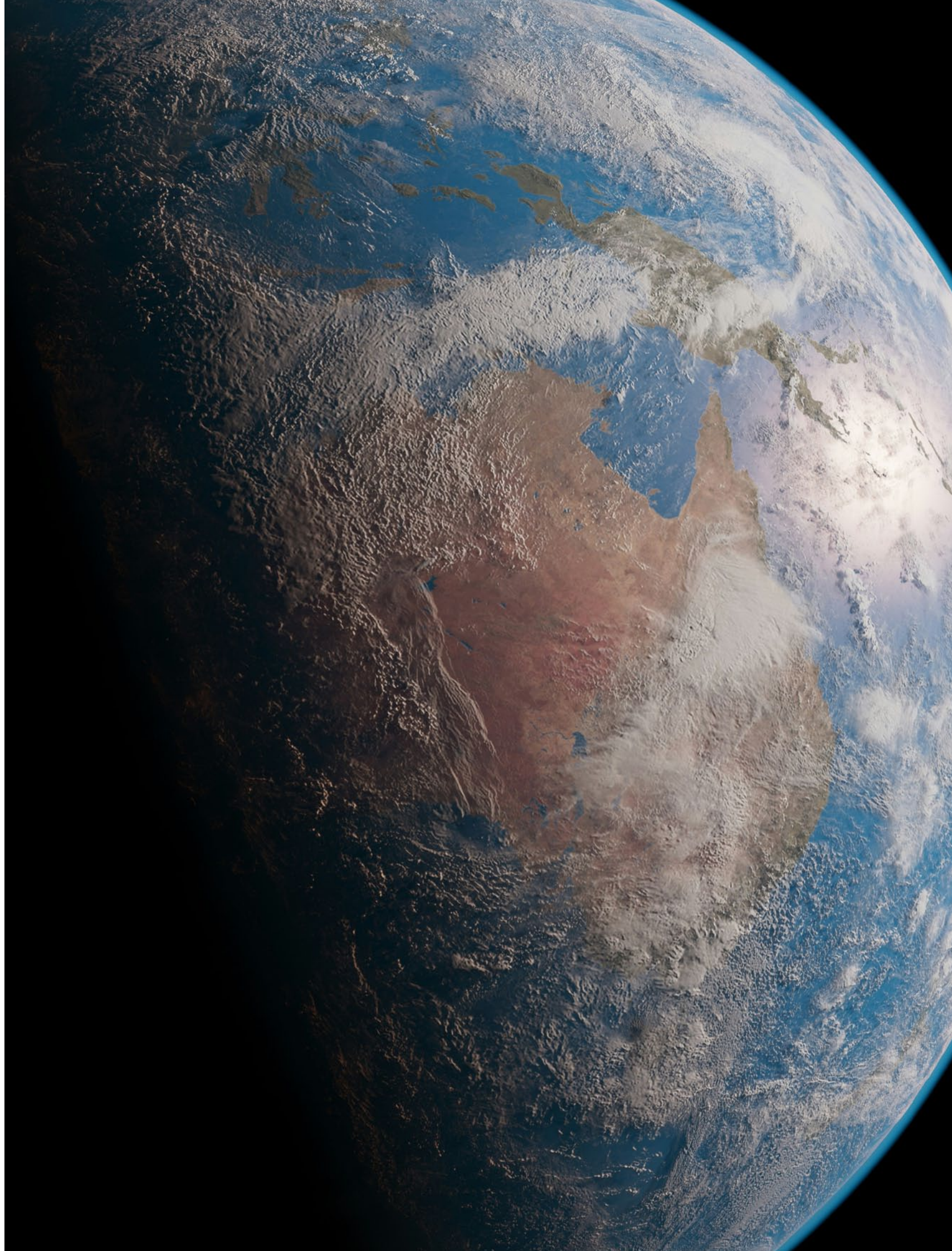
Alexander Verbeek

Four of the five most severe global risks on the ten-year horizon are environmental. This is one of the conclusions of the World Economic Forum’s Global Risks Report 2024.

The key to addressing these risks is cooperation on urgent global issues. However, two-thirds of international experts whose insights form the basis for the annual report anticipate a multipolar or fragmented order; it will be characterized by competition among

middle and great powers to establish and enforce new rules and norms.

As frequently highlighted in this newsletter, there is a notable absence of the global leadership required to address a spectrum of environmental and other pressing challenges. Postponing collective action only exacerbates the issues, contributing to heightened geopolitical tensions and conflicts, further diminishing the likelihood of cooperation on global matters.





The top five risks identified in the [report](#) are extreme weather events, critical changes to earth systems, biodiversity loss and ecosystem collapse, natural resource shortages, and misinformation and disinformation.

The identified risks pose a significant threat to progress in human development, with the report highlighting a gradual erosion of adaptive capacity amid shifts in global power dynamics, climate, technology, and demographics.

The report recommends a re-evaluation of global risk response strategies, emphasizing the need for leaders to focus on swiftly establishing guardrails against emerging risks. Specific areas of concern include agreements addressing the integration of artificial intelligence in conflict decision-making.

Not all activities require cross-border cooperation; the report explores actions that can enhance resilience at the individual and state levels. Initiatives such as digital literacy campaigns on misinformation and disinformation aim to fortify against these threats. The report suggests fostering research and development on climate modelling and technologies to expedite the energy transition, with contributions from both the public and private sectors.

This is the 19th Global Risk Report; none of them has been light reading material. I read most of them when they were published each year in January and noticed how the risk perceptions have changed towards more environmental issues. In the first one, risks like weapons

of mass destruction, the situation in the Middle East, and terrorism ranked high in the report. Climate change was the only ecological issue recognized as a risk, but the respondents differed widely in their perception of climate change impacts.

It looks like progress in recognising the importance of global environmental challenges that this year, four of the five most severe global risks on the ten-year horizon are environmental in nature. However, expert respondents disagreed regarding the urgency of these risks. While private sector respondents anticipate a more extended timeframe for ecological risks to materialize, civil society and government stakeholders emphasize the growing threat of reaching a point of no return.

I guess that a year from now, when the 2025 report comes out, those private sector respondents will have seen a year of unprecedented environment-related disasters that may finally convince them of the utmost urgency to act and that civil society and government stakeholders are right to emphasize the growing threat of reaching a point of no return.

Alexander Verbeek is a Dutch environmentalist, public speaker, diplomat, and former strategic policy advisor at the Netherlands Ministry of Foreign Affairs. Over the past 30 years, he has worked on international security, humanitarian and geopolitical risk issues, and the linkage to the earth's accelerating environmental crisis. He is currently serving as Policy Director at the Environment & Development Resource Centre.

<https://theplanet.substack.com>

“How we relate to the natural world is a key to understanding how we treat the natural world around us. As Glen says here ‘Our ways of relating have tended to deny the role played by our emotional and spiritual wisdom. Our heart wisdom is a better guide than logic for it is in-formed by an openness to the sacred, to dignity and respect. The philia of biophilic design allows us to hold such contradictions and honour their alchemical wisdom.’ ”

When the Journal of Biophilic Design asked me to explain what compelled me to invest so much time and energy in researching and writing my book on Edinburgh’s Living Landscape, I found myself reflecting on why connecting to nature is so fundamentally healing and what it is we need to heal. As part of this, I also found myself trying to distil what it means to care about the natural world and to more fully appreciate the miracle of life that animates our every breath and breathing moment. This inevitably involves confronting why our brains behave in ways that mean we are not genuinely present to nature, to ourselves, to reality itself.

In this article I want to reflect on why we need to need to develop our attentional practices and fall in love again with the beauty and sacredness of the living world. Our ways of relating to ourselves, to others and to nature have become dysfunctional as we relate to nature increasingly through judgements, concepts, theories, abstractions and representations rather than direct experience. Our ways of relating have also tended to deny the role played by our emotional and spiritual wisdom.

Yes wisdom, for knowledge is not limited to the rational; it is also enriched by that which touches us deeply. And, more often than we like to admit, our heart wisdom is a better guide than logic for it is in-formed by an openness to the sacred, to dignity and respect. The importance of integrating the insights provided by turning to the *I-Thou* (Buber and Smith, 2000) into our practices such that our ways of relating are transformed by learning to meet genuinely are gaining increasing recognition (Cousquer, 2023; Kramer and Gawlick, 2003; Vervaeke and Mastropietro, 2021). Experiences of such felt connection allow us to realise the latent potential to become with – the unknown in us that has been changed by an I-Thou meeting suddenly becomes known and with it we become aware that there is more to know and more of ourselves to be known. Vervaeke and Mastropietro (2021, p.255) describe how “our attention becomes perceiving and anyone caught in our attention becomes commensurately more perceived” ... this deepening or our percipience has important consequences for the recursive shaping of mutual realisation, for unfoldings our refoldings and our re-entanglements – that is to say our healing.

As Iain McGilchrist (2021) writes in his magnum opus, *The Matter with Things*, “we need both the vision that reveals separation and the vision that reveals union”. We need to see ourselves as fundamentally individuated and inseparably intra-dependent without this being a contradiction (Siegel, 2022). The *philia* of biophilic design allows us to hold such contradictions

and honour their alchemical wisdom. So, my motivation for researching and writing this book stems from a deep concern that we need to learn to attend and relate mindfully and respectfully in ways that reveal the depths of our relatedness. Once revealed, or at least glimpsed, we can then nurture the latent potentialities we carry to be more relational and for these ways of being to transform our doing. It is in recovering our human *beingness* that we will come to truly belong and to heal the many disconnections that characterise modern society.

In exploring how our attentional practices can help us explore our longing for belonging and healing, I want to share a few insights into how encounters with curlews can help us to connect to nature. I then go on to explore the practice of gratitude in more depth to highlight why it is a crucially important way into healing and belonging.

Encounters with Curlews

Even at a distance, whether stalking the shallows or in flight, the silhouette of the curlew is almost always instantly recognisable. One glance at the gentle sweep of the throat that levels as it meets the beak, before then plunging in a delicate curving line (Figure 1) is enough to commit this profile to memory. There is, however, a growing concern that this bird may become a bird of memory, consigned to history, a victim of the Industrial Growth Society (Macy and Brown, 2014) that has ravaged and continues to imperil our planet.

This would be a tragic loss. But what does “loss” mean? How are we to understand the enormity and finality of extinction? And how do we make sense of the fact that the Sixth Mass Extinction we are sleepwalking into has arisen because of our colonial and exploitative way of viewing the world. In what follows, I attempt to explore these questions and consider how we can transform our societies to save the curlew. The intention here is to introduce readers to the curlew, to the work of deep ecologist Joanna Macy and to One Health as a truly transdisciplinary approach that transcends disciplinary silos and seeks to promote ecological health for the environment, other-than-human-animals and humans.

I start with **gratitude** for this wonder of nature, celebrating some of the attributes that make this bird so remarkable. Gratitude gives way to

honouring our pain, however, for I must share with you just how dire things are looking for the curlew. Continuing with the spiral of the work that reconnects (Macy and Brown, 2014), gratitude and grief, give way to **seeing with new eyes** for we can know more genuinely our relatedness to all that is. We can feel the rich texture of our inter- and intra-connections with past and future generations and with our brother and sister species. Seeing with new eyes arises because we can sense who we really are and feel our own power to change. Finally, we **go forth** into the actions that call each of us in keeping with our gifts and our calling (Macy and Brown, 2014, pp.67-68).

These are the four stages of the *Work That Reconnects* and I will organise what follows around each of these four stages before moving on to consider gratitude in more detail.



Figure 1: Whether captured as a reflection in the water or seen against the sun that sets our estuaries and bays asparkle, the superior size, long neck and slender downward curving bill of the curlew marks them out from other waders.

Gratitude

The name “curlew”, or “courlis” in French, is onomatopoeic, capturing something of the bird’s call, in the same way that the call of the cuckoo and chiffchaff are reflected in their names. Where the curlew is concerned, however, the name only hints at the magical haunting call of these birds and the manner they evoke other-worldly feelings. Scotland’s national bard, Robbie Burns, wrote that he had never heard the call “without feeling an elevation of the soul”. More recently, Ted Hughes captured something of their essence, declaiming them as “wet-footed gods of the horizons”, who “in April hang their harps over the misty valleys”.

Anyone who has been lucky enough to spend time attuning to and appreciating the soundscape of our upland areas where curlews breed, or our estuaries where they overwinter, will have an embodied and experiential understanding of how their calls can lift and inspire us. The sound is soulful and touches something beyond words, something deep within us that poets and artists are often best placed to appreciate and evoke. We know we are alive and why we are alive when touched in this way and we are profoundly grateful to have been awakened from our thoughts. The curlew helps the mind-full become mindful. This can perhaps best be understood as recovering mind’s coherence which has been defined by Dan Siegel (2022, pp.144-145) using the following C-O-H-E-R-E-N-C-E acronym:

Connected – a feeling of belonging and that we are a part of something bigger.

Open – an expansive sense of receptiveness to whatever arises in the moment.

Harmonious – the quality of synergy emerging from the linking and integration of parts to make a whole.

Emergent – the sense of being a verb, arising in fresh ways perhaps difficult to control or predict. This is very different from the fixed noun-like entities that characterise the English-speaking world and Anglo-Saxon cultures.

Resonant – resonating with the elemental parts of the group without losing our own uniqueness.

Engaged – discovering a sense of meaning and purpose in life, tuning into an energy that drives us to be part of the whole.

Noetic – drawing on a sense of knowing as conceptual wholeness where things make sense, fit together and are consilient because the common ground across ways of knowing is recognised and respected.

Compassionate – the state of mind where we are open to another’s suffering (including our own) and intentionally will their suffering to be alleviated.

Empathic – the gateway for compassion which arises when we cognitively open to and imagine what it might be like to be another person. This gives rise to empathic joy and empathic concern where we rejoice in their success and happiness or care about their suffering. This is distinct from compassion however, for where empathy is a noun, compassion is a verb.

The connection we feel in such wide open soulfully atmospheric places has a harmonious quality to it for we are synchronising our own energy fields and nervous system with the wider socio-ecological field the curlew haunts. We are then no longer the little I-am but are in touch with an extended, (or ecological) self, we are realising our possibilities and becomings and are in resonance with the natural world. John Muir, the father of the National Park movement grew up on the East Lothian coastline where the images in this article were taken. When he wrote of “the tired, nerve -shaken over-civilised people beginning to find out that ... wildness is a necessity”, that visiting these places is a home coming and that such places are useful “as fountains of life” (Muir, 2019, p.8), he is urging us to listen to how such places speak to us, care for us, calm our nervous systems, wake our souls and touch the essence of our being.

It is not too farfetched to say that such experiences of coherence could, and indeed should, be offered on prescription for visiting and waking to such places, with their open skies and haunting soundscapes, are healing. We need to seek out and connect with these places (Figure 2). The experiences we have in such environments can reunite us with a naturescape we have spent millennia in and two centuries disconnecting from. They can provide us with an eco-somatic experience that allows us to attune to our inner nature, which all too often we have disconnected from. They can wake us up and, in doing so, alert us to the pandemic of disconnection, or the pandemic of the solo self (Siegel, 2022) that has swept the world. And we can be grateful for waking up, for becoming wake-full, because this allows us to recognise what we have lost, to grieve for it and to honour our pain.



Figure 2: The low-angled autumn sun dances off the curlew's beak, eye and plumage and causes the red colour of marsh samphire (*Salicornia europaea*) to blaze. Also known as common glasswort, samphire is, like the curlew, to be sought out and appreciated when exploring the salt marshes on foot and with your binoculars..

Honouring our pain

Where once, the curlew provided an essential contribution to the orchestral performances that hold up the heavens over estuaries in winter and their upland breeding grounds, in summer, there is now no guarantee that our descendants will hear this magic. The curlew, sadly, is now in peril here in the UK: Between 1995 and 2012, the breeding populations declined by 55% cent in Scotland and 30% in England. In Wales, between 1993 and 2006, a decline of 81% was seen whilst, in Northern Ireland between 1985-87 and 2013, a decline of 82% has been recorded. This is tragic, given the international importance of the UK breeding population, which makes up between 19 and 27% of the global population. In 2015, the curlew was added to the UK Red List, following losses of nearly half their breeding numbers over the preceding 20 years with the British Trust for Ornithology (BTO) launching its curlew appeal (BTO, 2015; 2021).

Bearing witness to this loss and honouring our pain is very different from the shift into problem solving mode. I therefore invite the reader to pay attention to the curlew and to contemplate the spectre of a “Silent Spring” (Carson, 1962), devoid of their and other bird's calls. In addition to listening attentively to their calls, you are invited to imagine (or perhaps watch if you are lucky enough to be able to) them feeding and to marvel at the pure genius of these birds as they use their bills to probe deep into the mud in search of

food (Figures 2a-2b). These birds are part of the genius of these places for they have evolved in partnership and the intelligence of such life forms is as evolved as our own. To lose this as a result of our mindless plundering and destruction of the natural world will challenge us to find words for the loss, for the apology and healing that must follow if we are to address the moral injuries and trauma that accompany this way of living at war with nature. Indigenous peoples are leading the way in expressing and articulating this. Dr Maria Yellow Horse Brave Heart defines historical trauma as “cumulative, emotional and psychological wounding over the life span and across generations, emanating from massive group trauma experiences”. Such trauma is accompanied by a personal and collective sense of unresolved grief. It is sobering to recognise that the imperialist and colonialist project that took slavery, smallpox and forced migrations and cultural extermination of First Nations peoples and Native American tribes is ours to own up to. The emerging field of collective trauma studies is teaching us that our societies are trauma organised and traumatising rather than healing and that our education systems do not teach us how to move from trauma denial to trauma awareness and then into trauma integration. Honouring our pain at the enormity of the nature emergency is a crucially important move and one we need to integrate into our education systems so that we are awake to the pain of destroying the same life force (the one source of health and vitality) that flows within each and every one of us.



Figure 2a: The curlew above has a small worm clasped in their bill. In pondering how this catch was achieved, it is worth noting the slight bulge at the terminal end of the bill. This is often termed a “bill tip organ” and is rich in sensory receptors that pick up vibrations and pressure cues, allowing invertebrates to be detected and then caught, deep in the mud.



Figure 2b: This curlews' bill is feeling for invertebrates deep under the mud. The bundle of sensory receptors at the bulbous tip of the bill allows the curlew to recognise worms and other food items that can then be artfully seized and dexterously drawn from their tunnels to be eaten.

Seeing with new eyes

Whilst there may still be tears in our eyes, honouring our pain allows us to “see through a glass darkly”. We can learn to see and appreciate the true value of the life that the generator of diversity has gifted this planet. This is the essence of the multi-species justice that the generations inheriting the earth are seeking as they take our governments to court and challenge them to recognise that our understanding of responsibility has been so ego-centric and anthropocentric that we have created the first civilisation to become a geological force, one whose legacy will be the Sixth Mass Extinction. Part of seeing with new eyes will involve engaging in a sense of wonder that allows us to see more of the whole and appreciate our inter-dependencies. This will allow us to become more creative in our approaches.

This means a radical shift in how we account for costs, for historically the burden of costs has been shifted to future generations and to the planet. By placing them on the balance sheet and by developing One Health approaches that require us to partner and collaborate with other professionals, disciplines and stakeholders, we can start serving the health of the whole and move away from operating in bubbles.

A One Health approach is increasingly transdisciplinary in its approach, integrating contributions from the arts and humanities who are better placed to re-imagine our humanity and how we can move from the domination system to the partnering system. This will not be easy for those of us who are not used

to surrendering control and partnering in such radically open ways. We can start small, perhaps by seeking out opportunities to contribute to curlew conservation. It may sound strange as a starting point, but there is now a curlew ringtone for phones that can work as a great conversation starter (see the curlew sounds project). There are also opportunities to contribute to surveying curlew breeding areas which help us to dial into the realities curlews face on a particular patch. The importance of showing an interest and caring enough to share that interest with others is easy to underestimate. We can also promote awareness of “green prescribing” and encourage people to seek out such prescriptions from their GPs. We may choose to embrace the challenge of supporting small scale regenerative farming and in integrating our work with ecological insights into how to promote biodiversity on farmlands. This can involve actively seeking out, getting to know and supporting local suppliers who are evolving their farming practices to support biodiversity through organic farming or more ambitious approaches. Curlews will thank you for this because their needs in terms of shelter and food will be better met throughout the seasons. Other areas where we can make a significant contribution include promoting leave no trace education and responsible dog ownership. This includes ensuring dog owners understand how vulnerable ground nesting birds are to disturbance and the impact of allowing dogs to enter watercourses following treatment with flea products. These are just a few examples of things we could explore to help save the curlew.

Cultivating gratitude as a pathway to healing

Having considered why and how we might better care for and perhaps even save an iconic bird like the curlew, I now turn to considering how our underlying attitudes towards nature are important and why it is so essential that we nurture biophilia.

Gratitude, along with compassion, awe and wonder are pro-social emotions whose cultivation allows us to increase our sense of belonging and connection (Seigel, 2023, p.202). They allow us to feel less contracted and shut down because they open us up to possibility, to a sense of our extended self. The reason that large open spaces and expansive vistas, the sight of a rainbow arcing across the sky or a wide-open sea view can help us feel more alive is because they allow us to experience our deeper connection to the world beyond the solo-self. This is why they are also termed “self-transcending” or “self-expanding emotions”. Cultivating these emotions in our lives, communities, organisations and in our centres of learning is essential if we are to reclaim our attention from the algorithms and marketing onslaught that we are subject to in today’s world. Doing so allows us to become more aware of what we attend to and of the quality of our attention, helping us to disarm the weaponry (Stein, 2021) that has hijacked our attention and impoverished our cultures, turning us into mindless consumers,

vulnerable to the plutocratic powers who stoke base impulses and appetites and turn them into private profit. We need to wake up to the fact that extrinsic values (fame, fortune and materialism) have become more important than intrinsic values.

In what follows I draw on writings from Robin Wall Kimmerer and Joanna Macy to develop our appreciation of why gratitude is fundamental to our wellbeing and how it can be cultivated. I also offer a few practical suggestions that may help us bring more gratitude into our homes and workplaces.

Robin Wall Kimmerer on Gratitude and Reciprocity

In a recent interview for the Guardian newspaper, author of [Gathering Moss](#) and [Braiding Sweetgrass](#), Robin Wall Kimmerer summed up one of the key challenges we face as follows: “people can’t understand the world as a gift unless someone shows them how it is a gift”. Understanding that we are in relationship with the world and therefore interdependent is an idea that lies at the heart of indigenous cultures across the world and yet it is something we, in the West have largely lost sight of. It is essential for our western culture’s healing that we learn to reintegrate this understanding. Doing so has the potential to open the way to the development of coexistence science (Schroer, 2022).

To connect with this insight, I invite you to contemplate the elderberries and blackberries that were ripening in our hedgerows back in the autumn. In her beautiful essay “[The Serviceberry](#)”, Kimmerer tells us that, in her Potawatomi language, the word for berry and for gift have the same etymological root. Having shared this insight, she goes on to write:

“In naming the plants who shower us with goodness, we recognize that these are gifts from our plant relatives, manifestations of their generosity, care, and creativity. When we speak of these not as things or products or commodities, but as gifts, the whole relationship changes. I can’t help but gaze at them, cupped like jewels in my hand, and breathe out my gratitude.”

In the presence of such gifts, gratitude is the intuitive first response. The gratitude flows toward our plant elders and radiates to the rain, to the sunshine, to the improbability of bushes spangled with morsels of sweetness in a world that can be bitter.

Gratitude is so much more than a polite “thank you.” It is the thread that connects us in a deep relationship, simultaneously physical and spiritual, as our bodies are fed and spirits nourished by the sense of belonging, which is the most vital of foods. Gratitude creates a sense of abundance, the knowing that you have what you need. In that climate of sufficiency, our hunger for more abates and we take only what we need, in respect for the generosity of the giver.”



© Glen Cousquer Photography

Figure 3: Fieldfare taking off from buckthorn bushes whose branches are heavy with berries drawing in thousands of thrushes and other birds who know how to appreciate nature’s larder.

This insight from the world of plants reminds us that we are part of a gift economy and that we have much to be grateful for ... if we stop to notice. Unfortunately, positives are, it seems, coated in Teflon, whilst negatives are coated in Velcro; our negativity bias therefore gets in the way of appreciating the positives. It is a bias built into our nervous system but one that we can learn to over-ride. It is also a product of living in a consumer culture. The job of advertisers after all is to create dissatisfaction in their audience. Research has shown that people living in countries that spend more on advertising tend to be less satisfied with their lives (Torres, 2020).

So how can gratitude help us cultivate satisfaction and wellbeing?

Well, to understand this it helps to recognise the three elements that make up gratitude (Macy and Johnstone, 2022):

“The first is appreciation – the valuing of what has happened. The second is attribution, where another’s role is recognised. The third is giving thanks, where rather than just experiencing gratitude, you give it legs by acting on it.”

Robin Wall Kimmerer has captured the essence of this insight in the following line:

“If our first response is gratitude, then our second is reciprocity: to give a gift in return.”

She writes in Braiding Sweetgrass (2013, pp.184-186) of “The Honorable Harvest”:

“The Honorable Harvest asks us to give back, in reciprocity, for what we have been given ... Reciprocity is an investment in abundance for both the eater and the eaten. That ethic of reciprocity was cleared away along with the forests, the beauty of justice traded away for more stuff ... If the Earth is nothing more than inanimate matter, if lives are nothing more than commodities, then the way of the Honorable Harvest, too, is dead. But when you stand in the stirring spring woods, you know otherwise.”

So how can we cultivate gratitude?

Well in very simple terms by valuing, attributing and giving thanks. We can develop a gratitude practice that helps us pay attention to what we are grateful for, perhaps through a gratitude journal or a gratitude app, of which there are a growing number. My own practice involves setting aside time at the end of each day to share what I have most appreciated about the experiences we have been gifted. In doing so, I bring into focus the many contributions that have allowed what we are grateful for to become manifest. I also learn what my partner or other companions appreciate. And together we feel more appreciative of a day well lived and we can give thanks.

Giving thanks

Sometimes this can be as simple as writing a thank you note, sending a card or taking the time to say something sincere and appreciative. It helps to explain why you are saying thank you and this benefits from careful consideration of what it is you are grateful for. When feeling grateful to nature itself, we find ourselves challenged to exercise our creativity in giving thanks. It may be that we choose to volunteer on a local nature reserve, to plant fruit trees that will provide food for birds at a particular

time of year when food is scarce, to become a wildlife gardener or to research our consumer purchases to ensure they have the best possible ecological footprint.

There are many other ways of giving thanks and the closing invitation here is to find more opportunities and reasons for doing so. We all will be grateful for the gifts that flow from this as gratitude, leads to generosity. It may be that gratitude will help us articulate the prayer that bridges our longing for belonging and that heals our rift with nature.

https://www.whittlespublishing.com/Wild_Places_Wild_Encounters

<https://www.research.ed.ac.uk/en/persons/glen-cousquer/?relations=activities>

Also visit www.journalofbiophilicdesign.com click on the “podcasts” link and search for “Cousquer” to listen to two podcasts we have done with him over the past couple of years

“From Veterinary Science to a Wellbeing Biophilic Economy”

<https://journalofbiophilicdesign.com/podcast-journal-of-biophilic-design/glen-cousquer>

and [The COP26 Nature Pilgrimage](https://journalofbiophilicdesign.com/podcast-journal-of-biophilic-design/the-cop26-nature-pilgrimage)

<https://journalofbiophilicdesign.com/podcast-journal-of-biophilic-design/the-cop26-nature-pilgrimage>

Subscribe to the YouTube/ Spotify / audible / iTunes, etc channels to listen to the new podcast we will doing with Glen exploring the subject of his new book “Wild Places, Wild Encounters”.

References

- Buber, M., & Ronald Gregor Smith. (2000). *I and Thou*. Scribner Classics.
- Cousquer, G. (2023). From domination to dialogue and the ethics of the between: Transforming human-working equine relationships in mountain tourism. *Austral Journal of Veterinary Sciences*, 55(1), 35–60. <https://doi.org/10.4067/S0719-81322023000100035>
- Emmons, R. A., & McCullough, M. E. (2003). Counting blessings versus burdens: An experimental investigation of gratitude and subjective well-being in daily life. *Journal of Personality & Social Psychology*, 84(2), 377–389. <https://doi.org/10.1037/0022-3514.84.2.377>
- Kimmerer, R. W. (2013). *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants*. Milkweed Editions.
- Kramer, K., & Mechthild Gawlick. (2003). *Martin Buber's I and thou: Practicing living dialogue*. Paulist Press.
- Macy, J., & Johnstone, C. (2022). *Active hope (revised)*. New World Library.
- McGilchrist, I. (2021). *The matter with things*. Perspectiva Press.
- Schroer, S. A. (2021). The arts of coexistence: A view from anthropology. *Frontiers in Conservation Science*, 2. <https://doi.org/10.3389/fcsc.2021.711019>
- Siegel, D. J. (2022). *IntraConnected: MWe (Me + We) as the integration of self, identity, and belonging*. W. W. Norton & Company.
- Torres, N. (2020, January). *Advertising makes us unhappy*. Harvard Business Review. <https://hbr.org/2020/01/advertising-makes-us-unhappy>
- Vervaeke, J., & Mastropietro, C. (2021). Gnosis in the second person: Responding to the meaning of crisis in the Socratic quest of authentic dialogue. In J. Rowson & L. Pascal (Eds.), *Dispatches from a time between worlds: Crisis and emergence in metamodernity* (pp. 241–270). Perspectiva Press.



In Conversation: Biophilia, Art and the Human Connection

Diane Epstein, Mary Davidge and Eve Edelstein



Pantheon Dome Rome, Italy © Diane Epstein

Nature, Architecture & the Spirit of Place: the Art of Diane Epstein

A Solo Exhibition at the [Point Richmond Gallery](#) from December 9 – February 11, 2024

The Point Richmond Gallery in Point Richmond, California hosted a unique panel of experts to discuss the synergy between nature, art, design & neuroscience. [Diane Epstein](#), international artist & pioneer of 'Fresco Photography', recognized for her mixed-media, biophilic art, facilitated the conversation with [Mary Davidge](#), luminary biophilic designer for the workplace and our planet, and [Dr. Eve Edelstein](#), renown for her innovative healing design, for the brain, body and building, based in neuroscience and architecture.

Diane Epstein noted, "I've always been intrigued by the juxtaposition of nature and culture. It could be the spirit of place, its history, memories, anything that you feel, that you are viscerally drawn to or longing for. Nature and 'biophilic art' can stop us in our tracks; beckon us to be truly present, to look, listen, feel, and touch all of our senses. It affects our environments, our creative output, and our emotional, sensory, perceptual, cognitive and physical well-being.



Aquatic Embrace California © Diane Epstein

Expressing the panel's purpose, Diane spoke out. "We stand together, to illuminate, preserve and share the beauty that exists in nature, in art and in the places we work, rest and play. Our brains, minds, and bodies measurably respond to the sensorium, and can bring more connection, creativity and a sense of wonder into our architectural, interior, urban and outdoor spaces.

Dr. Edelstein reflected that form and function are aligned. "If we don't ask why it's formed like that and why you need a space like it is, then we're missing our purpose. Designers should balance solutions around the users. We spend too little time asking our users what really matters to them. There's a return on investment in design that enhances experiences that help all of us."

Mary Davidge, as Director of Global Design at Google, instinctively knew good art & design represents that feeling of being in the natural world. "It's really important to design a workspace in layers to function well, for as many people as possible, but also to offer individuals the opportunity to create their own space/ work environment, to give them choice and control. We can then inspire wonder, be more productive and feel empowered and uplifted."

Diane added, "We need to continue to ask designers, architects and users to envision what they would like to feel, and what they would like to evoke in their spaces".

Mary noted her fascination in the layers of mystery, when one is able to discern and yet not see exactly what lies beyond. "Like in great art or buildings, something just kind of draws you into a space. I really do think that happens in Diane Epstein's fresco photography and paintings."



Forest Serenade Moss Beach California © Diane Epstein

Eve remarked, "...when you look at Diane's layering of images, you can delve into memories, you get to create the story, you get to solve your own mystery. You can feel the textures, the beauty that light brings. It is amazing to watch Diane's frescoes as they are created. Underneath each piece could be 10, 20 layers of art, beginning with a concept, and developing layer by layer."

The audience noticed the passage of time and light in Diane's fresco images. Eve noted the light/dark verticals induce the eye to move in a pattern that the brain interprets as movement.

Diane, with her background in creativity, healing and psychotherapy, added, "Biophilia plays a pivotal psychological role by assisting us in reconciling with our inner struggles, and the isolation we might experience as individuals within the vast network of life and built environments. We bring nature and culture from the outdoors inside, to help us feel at ease, relaxed, rested, or healed. Nature's fundamental trait lies in its perpetual resurgence, constantly birthing new life. Even in the face of the most profound challenges, time reveals growth, renewal, and a profound sense of hope for our own existence. Accepting this connection with all life, acknowledging each of us as a part of nature's grand story, is key to saving our planet."

Diane was given accolades by a room full of participants from clinical, architectural, design, art, and environmental disciplines. Gail Brager, Director & Professor of Architecture at U.C Berkeley, was the finale:

"I'll start by just saying Diane Epstein's art is stunning. Breathtaking! So why would we characterize it as biophilic? So, biophilia, love of nature; biophilic design is about bringing what we love about nature into the built environment. So now what is it about Diane's art? Some of the reasons we love nature is because those experiences are very multisensory. They're very dynamic. They're variable. It's not just about greenery. It's not just about the flora and fauna, it's about climate, right? And it's

about it changing every moment. Diane's art is so much more than just visuals. There's so many paintings and photographs of nature. Would we call them all biophilic? I would not! And the reason I would call Diane's art biophilic is because of the mystery and the imagination. You can get drawn in. I can see the dapple of light. I can imagine myself moving through that passageway. I can hear the sound of my footsteps. I can feel the breeze coming through the archway, the sunlight on my skin. She works at scales from artichokes to landscapes, to ancient monuments. Diane's art is biophilic, because We are brought in and we can feel and experience those dynamic qualities of the natural environment that we love so much."



Behind the Hidden Door Rome, Italy © Diane Epstein

<https://www.margisullivanart.com>

145 West Richmond Ave., Point Richmond, California.

For more info please contact Margi Sullivan, gallerist at: sullivanmargi@gmail.com Tel: (415) 286-6298

Diane Epstein's Expanded Definition of Biophilic Art

"Curating a sensory rich spirit of place, honoring our human nature bond, and the innate, visceral, natural affinity and yearning for love and aliveness expressed and cultivated to the shape and soul of our story, culture, and a patina of time."

Biophilic bonobos

Kasongo squeals in delight at the toad in his hands. He is six years old and has never successfully caught a toad until this moment. The toad puffs out its throat and croaks in protest. Kasongo startles then peers closely.

Kasongo is fascinated by all living creatures. He can spend hours pouncing on grasshoppers. He delights in running through flights of butterflies. He calls his friends over to see the toad, and they gather around, exclaiming in surprise. But toads, although not as slippery as frogs, they are still difficult to hold and the toad wriggles through Kasongo's fingers, and slaps his face as it jumps with a splash into the water lilies.

The late E.O. Wilson would have been delighted with this evidence of biophilia in our closest living relatives. Kasongo is a bonobo, and he lives at Lola ya Bonobo, a sanctuary in the Democratic Republic of Congo.

The year 2024 is the 40th year anniversary since Wilson proposed biophilia, the 'emotional affiliation of human beings to other living organisms.' According to Wilson, biophilia has an innate, or genetic component, and Kasongo's fascination with the natural world points to a shared evolutionary psychology that supports his idea.

However, if it were left to evolutionary anthropologists to carry on the idea of biophilia, the hypothesis would have been dead a long time ago. Evolutionary anthropologists rarely talk about biophilia, probably because of two small errors in Wilson's original hypothesis; one was the savanna hypothesis (the idea that humans evolved on the savanna and therefore prefer to live overlooking an open, tree studded landscape near water), and the serpent myth (even unpleasant or dangerous parts of nature, like snakes, become part of biophilia in the form of fascination and awe). It turns out that humans did not evolve on the savanna, nor do people prefer savanna habitats, and snakes may invoke awe but other elements of nature, like mosquitoes, do not. These errors were serious enough that evolutionary anthropologists never fully engaged with the biophilia hypothesis the way they did with Wilson's other ideas.

Instead, it is the field of design that has taken on biophilia. Architects, interior designers, landscape architects have explored biophilia in ways that touch many aspects of the modern environment. Biophilic design has expanded green spaces, brought nature indoors, and thoughtfully influenced urban planners to think about how nature might be incorporated so that cities might support life other than ourselves.

Kasongo, looking for toads





The Congo basin,
important bonobo habitat
and biodiversity hotspot

Now, 40 years later, although slow to arrive, evolutionary anthropologist (myself included) may have something to contribute. Firstly, the way we think about the way biophilia expresses itself in individuals has changed. Rather than an attraction to the natural world that is present at the same intensity in everyone, we now think of biophilia more as a temperament trait. While some people flourish in the natural world, others prefer to spend their time indoors, away from bugs and unpleasant weather.

For example, back to our bonobo relatives, Kasongo's best friend, Boyoma, doesn't like to get rained on, and he is terrified of large grasshoppers and toads. Boyoma isn't scared of everything – he loves playing catch and is terrific with a ball. He is also friendly and outgoing, and he doesn't mind being outside. But when it is cold and rainy, he prefers being inside in his comfortable hammock.

Similarly, we expect that some people are more biophilic than others. We are developing a way to measure this variation. In our initial results, we have found that just like a temperament trait like sociability, where humans are social in general, but there are introverts and extroverts, we are all biophilic in general, but there are those who are *really* crazy about remote wilderness outposts and others who prefer curling up on the couch with a good book.

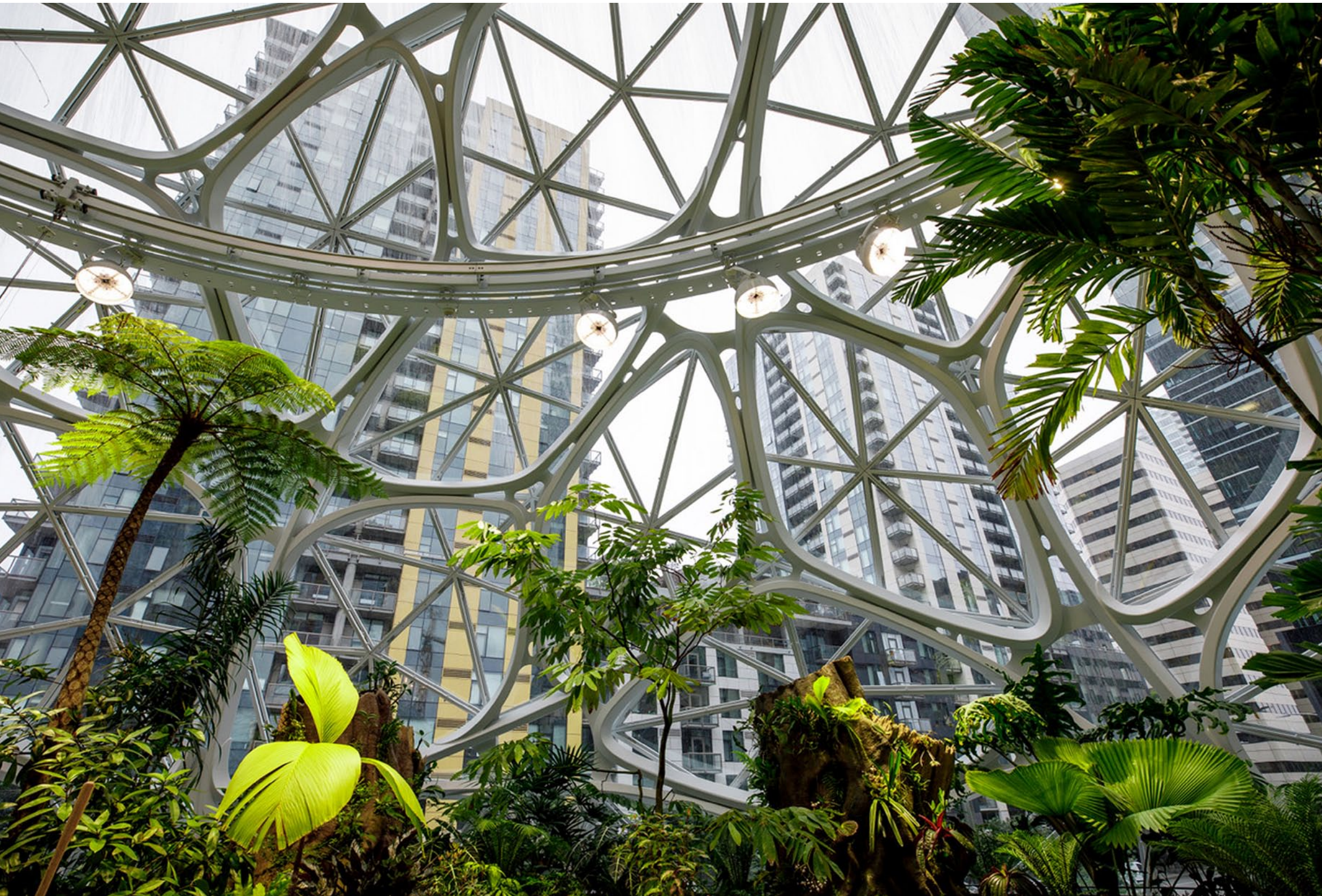
If we can measure biophilia in people, then some people may benefit more from biophilic spaces than others. For example, imagine if you knew that the company you were designing for attracted highly biophilic individuals

who would perform better in a biophilic environment. Or you could distinguish between clients who would truly flourish in a biophilic home versus clients who would be happy with a less elaborate aesthetic. Our research in this area is just beginning, but the initial results are promising.

The second contribution from evolutionary anthropologists is a slight shift in the way people think of biophilia, from a general attraction to nature, to a more specific attraction to biodiversity. Simply put, biodiversity is the diversity of life. So biophilia is an attraction to an environment that has as many kinds of life as possible, like a tropical rainforest or a coral reef.

This is important because biodiversity occurs in nature, but not all nature is biodiverse. A green space that is made of synthetic turf, or treated with pesticides and herbicides is more biocidal than biophilic, and can have adverse consequences to the people and other lifeforms who inhabit it.

The critical importance of incorporating biodiversity into biophilic design has never been more apparent than now. Human induced biodiversity loss continues at an alarming rate, perhaps a thousand times more rapid than it would be otherwise. Biodiversity loss is intricately connected to climate change and ecosystem collapse and we are already seeing the catastrophic consequences both internationally and in our own cities. For instance, bonobos are endangered. Without significant action, he and many other animals in the Congo Basin could go extinct.



An example of biophilia as biodiversity in design would be the Amazon Spheres in Seattle, that has over 40,000 plants sourced from cloud forests all over the world.

Biophilic design has the opportunity to bring biodiversity back into our urban spaces; to create wildlife corridors and butterfly highways. In this way, biophilic designers can join conservationists, ecologists, and evolutionary biologists in finding a way for people to live with nature and among nature, while slowing the disappearance of the plants and wildlife that bring us all joy.

Vanessa Woods is a research scientist in the Evolutionary Anthropology of Duke University and a research associate in Horticulture Sciences of NC State University.

<https://vanessawoods.net>

Further reading: Woods, V., & Knuth, M. (2023). The Biophilia Reactivity Hypothesis: biophilia as a temperament trait, or more precisely, a domain specific attraction to biodiversity. *Journal of Bioeconomics*, 1-23.

Photo credits: Bonobo and Congo is credit to Lola ya Bonobo; Spheres image credit to Amazon



WELLBEING

Where hearts become more sincere and filled with love

“A personal journey of biophilia and a profound understanding of the empathy and gifts that horses have and their connection with us. It is a reminder that Biophilia also refers to the connection we have with the animals we share our planet with too.”

Loredana Caminiti

It was a crisp evening, with the scent of autumn in the air, and I found myself enchanted as I walked through the charming streets of Tring, a typical English Market Town.

The tranquillity and night-time silence embraced me deeply. Just the day before, I had been in the concrete jungle of Manhattan, and that evening, the silence seemed louder than the honking New York taxis.

It was November in the distant year of 2007. This marked the beginning of what was supposed to be a temporary work assignment in England. Little did I know

that my life was about to change forever.

It was my first time in the country, yet a warm sense of belonging welled up within me. Everything around me was new, but at the same time, strangely familiar. There was something in the air that felt like “home”. I remember being surprised by this feeling of comfort and happiness. I had expected to feel like a fish out of water in such a different world, but what I discovered in the English countryside was a truly special opportunity. And so I tossed away the return ticket to the USA, breaking the connection I once had leaving space for a “reconnection” to my true self.





I started spending time with horses. I had no prior experience with them, but I soon discovered that it wasn't necessary to establish a bond with these majestic creatures. In fact, my lack of equestrian experience allowed me to approach any horse with an open heart and mind, free from preconceptions or limitations. This enabled me to experience them for who they truly are: magnificent sentient beings, honest, intuitive, and possessing incredible healing abilities. The horse spirit touched me profoundly and helped me overcome the loss of my father and later recover from depression.

And so, my life's purpose took shape. I now understood the magic of horses and how they can be instrumental in the wellbeing of us humans, helping us feel better and overcome many mental and emotional challenges commonly

experienced in today's society. With this awareness and a strong desire to help others, I decided to be courageous and follow my heart and true calling, to show the path to wellbeing to all those who are suffering, offering support through Equine-Facilitated Learning (EFL). And Be Horselife – Horse Assisted Wellbeing was then born.

It was a year of intense study, culminating in an EFL diploma and a Level 3 certificate in Counselling Skills. I also became the guardian of two horses with whom I share my personal and professional life and created the magical "Be Horselife land" with a narrative that centres on the deep bond shared between humans and horses, a connection that possesses the extraordinary capacity to catalyse life-altering transformations.

This was because the tapestry of the English countryside brought back a part of me that was deeply ingrained. My childhood, a beautiful period of my life, was spent in the countryside of southern Italy, and the vast English greenery transported me back to my true home, the one that had always resided in my heart.

My more authentic life began in harmony with nature. Autumn made space for winter, and then spring came along followed by summer and I found serenity and wellbeing in the natural

cycle of life; without even realising it, I started to engage in what I now recognise as "earthing" and "forest bathing"; I rediscovered that special connection that unites us with nature.

To deepen this connection with nature were the animals, particularly "the horses". The wonders of the animal kingdom and the beauty of the natural world served me as remarkable mentors, offering priceless insights into resilience and prosperity. I cherished it all and drew inspiration from them.



For many years now, together with my beloved horses, I have been helping children, young people, and adults to rediscover themselves, to love themselves more, and to lead healthier and happier lives, a life worth living. This is achieved through ground-based interaction with the horses, great masters of empathy, connection, resilience, unconditional love, authenticity, and pure presence.

Imagine being welcomed into an environment where there is no judgment, only understanding. Surrounded by the green countryside, among meadow flowers and a willow grove. Where our feathered friends, the kite and the barn owl, soar overhead, symbolizing the freedom and lightness of our true selves. Where horses show us how to be truly present, in the here and now. Where hearts become more sincere and filled with love. Where everything becomes clearer because it is demonstrated through honest and immediate feedback from the horses.

This is what you can expect when you set

foot on the grounds of the Be Horself land but there is more ... you aren't merely embarking on a voyage of exploration ... you are becoming a part of a community that comprehends the profound relationship between animals, humans, and the therapeutic influence of the environment.

There is no gentler, more honest, and effective way to get to know yourself, reconnect with your being, and discover your strength and beauty. This is why EFL can be beneficial to everyone, absolutely everyone, leaving no one behind. It's ideal for you if you're looking for yourself, going through a challenging period, want to rediscover your vibrant colours, or if you're simply intrigued by this educational and therapeutic method. Because we all need support, and we welcome everyone with open hearts. We work with clients on an individual basis, organize workshops and retreats, assist companies by offering employee well-being days, and provide tailored programs for their managerial roles.



You don't need experience, you don't need to ride a horse, and you don't need to speak. Just a beating heart and the willingness to improve yourself.

This is a part of my story, and I would be happy to meet you and learn part of yours. Perhaps help you define it ...

*Loredana is founder of Be Horself
Horse Assisted Wellbeing,
Equine-Facilitated Learning (EFL).*

www.behorself.co.uk





THE ARCHETYPE OF FIRE: ILLUMINATION & CONNECTION

This is the third in a series on the five elements

Maureen Calamia

In feng shui, there are five elements of nature (wood, fire, earth, metal, and water) and according to Eastern philosophy, each of these elements make up all of creation. Not only as these elements the material of physical matter, unlike the Western elements, they are connected with all of unseen energy, or chi.

These elements are sometimes called the five phases, or transformation of chi. That is because they represent how energy shifts, changes, and impacts each of the other elements. There is a process of creation and control (sometimes referred to as destruction). Each element has an element that creates it, another that controls it, and yet another that drains its energy.

This elegant process is so simple, yet profound, in that it describes how the natural world, basically

everything in creation, maintains equilibrium and harmony.

*Each element has many characteristics and layers that form a depth of knowledge of how the natural world works, including us humans. These elements are expressed as character and personality traits within us. Below is an excerpt from my book, *Creating Luminous Spaces: Use the Five Elements for Balance and Harmony in Your Home and in Your Life* (Conari Press, 2018), goes into detail about how these elements show up in our lives, representing archetypes of energy and personality traits.*

“Fire is ignited; from a tight bud a flower head is unfurled and the full splendor of life is there for all to see.”

– Feng Shui Fusion, by Jane Butler-Biggs

Journal of Biophilic Design

WELLBEING

The Fire Archetype: The Wizard

The Fire Element is known as the archetype of the Wizard who has the ability to bring ideas to fruition. From the seed on an idea (Water), to the emergence of the tender young shoot (Wood), Fire makes things happen!

Fire is Warmth, Laughter & Fun

Fire is enthusiasm, joy and passion for life. An extrovert, she lives life with gusto! Burning brightly, she can be boisterous and is usually the life of the party.

According to Western astrology I was born a Leo – a fire sign that is represented by the Sun. Before I even understood what that meant, I was a quintessential Leo child. My older sister and brother would nudge me during family pictures and say “stop that fake smile!” But what they didn’t realize is that it wasn’t a fake smile. It was my smile – big and toothy – happy to be in the spotlight and in front of a camera. A genuine, big smile is a sure sign of Fire.

Fire is a Performer

In our lives, Fire generally represents our ability to be “out there” displaying our passions and skills with confidence. It also represents our reputation and the ability to be recognized for our gifts.

I got my taste of the stage at an early age. My first experience was being picked to represent the first grade at a mass for the Virgin Mary. I read a passage from the bible as the microphone cracked and screeched, but my parents were so pleased. From that point on I was comfortable on a stage. I entered talent shows and sang in the school chorus and joined every club (yes, there were several) that related to singing. I hadn’t sung on stage in years, but just this February in Milan, I “volunteered” to be the first karaoke competitor of the evening when visiting a youth hostel with my son. Fire people love to perform.

Another point on performing: After practicing feng shui for a few years I was given the opportunity to start a feng shui training program at a prestigious design school. I was being called to perform again! And if you didn’t think that teaching was akin to performing, think again! Fire is about connecting with others, often on a large scale.

... But Fears Criticism

Although Fire people love to be in the spotlight, watch out if they feel unloved and unwanted. Fire craves praise from others to feel substantial and accomplished. They feel kind words from others as intensely as the sun’s rays. But this can all be shattered by one critical word. Requiring constant outside validation is a sign of low self-esteem. Fire people need to cultivate self-respect and esteem by acknowledging their own achievements.

Throughout my life I have been challenged to grow beyond needing constant approval from my peers. Without that approval, I have second-guessed myself, which sometimes serves a good purpose. It slows me down a bit, and has saved me from making impulsive mistakes (Wood!). Fire has a soft heart and needs attention and admiration.

Fire Needs Connection

Fire is formless and aspires to the heavens. She has an insatiable need for contact and merging with others. She reaches out, just like a flame, to connect with others. She wears her heart on her sleeve and this ability to be so vulnerable is often captivating to others. People respond to Fire – they feel their sincerity and warmth.

Fire is about confidence and the ability to connect to others. She speaks and moves quickly and with confidence that comes from an open heart, self-acceptance and love. Fire has compassion and non judgment that emanates from a balanced and open heart chakra.

Others love their enthusiasm and light. Fire people are often laughing and living life to the fullest. She loves being involved with groups be it from work, from community, special interest, or all the above! They have a large group of friends, often from all different areas of their life.

Growing up my mother had a saying about me that, now I can see how it sums me up in many ways!: “No grass grows under her feet!” I think she said that partly because I was always out of the house, never spending much time at home. Or when I came home after school I’d be right back out to someone’s house or a meeting. In school, I belonged to many clubs: the student government, drama club and four singing groups (yes, the performer!). In addition, I volunteered for various events and had many different groups of friends.

When I left the corporate world and started out as a feng shui consultant, I knew immediately that one of my challenges would be the lack of work community as a solo entrepreneur. I immediately focused my intention to get involved and two opportunities came to my attention shortly after. I volunteered to be on the board of directors for an international feng shui organization. At the same time, I joined another board of directors for a local environmental group. Fire loves connection and camaraderie.

... But Fears Smothering

Fire people love being surrounded by a group of friends, but sometimes too much can be too much. Sometimes they over commit and feel stuck with responsibility and drudgery. Drudgery is the worst thing for Fire! They can feel smothered, just as if too much Earth (dirt) gets swept up into a Fire – it goes out. Fire needs to flea before any chance of being smothered.

When overwhelmed she often cannot discern between her emotions and others; emotions can overwhelm her and create anxiety and confusion. When life suddenly shifts her reality, she can become fearful and agitated. She may sense a loss of identity and feel isolated. This can lead to melancholy and passivity.

After several years of serving with both boards, I realized that I over committed myself. I started to feel suffocated with responsibilities of my work and these two positions. I felt a heavy burden in my heart and I knew that I needed to leave one of them, but still do some volunteer work on a less-demanding schedule.

Fire Loves Passion & Drama

As in the drama of a sunrise or sunset, Fire is center-stage, the focus of attention. Hypnotizing all who come within its grasp, she exudes personal magnetism and charm. Fire people love drama, of course, and they are very enthusiastic and passionate, whatever their interests are. They love the novelty of new things, new ideas, new people and new projects. They throw themselves into whatever is the topic of the day, with great gusto!

Fire goes all out! She gives and demands a lot from her circle. Fire takes on a lot, volunteers for this and that, but often does not recognize that this one more thing she will push her over the edge. She must learn to contain her power or be consumed by it, like a forest fire wasting all of the resources of the land.

I get very passionate about my work. As an energy healer, my work is my spiritual path. I get tons of ideas (flowing Water), believe that they all are valid and worthy of my immediate attention (lots of Wood), and throw myself into each one with abandon, chunking through each project. I’m excited, filled with adrenaline, and very productive.

... But Often Isn’t Enduring

But this impulsive project-starting often ends with confusion and melancholy. Fire people can be all in with a new friendship or romance and then, when the novelty wears off, they are on to the next person. Same with work projects – they are not great long-term project managers. And yes, the same goes for home projects. Ever see that house where there are maintenance and renovation projects in all stages throughout a home? Or the paints and canvasses for oil painting or piles of photos and odds and ends for a scrapbooking? Yes, these are Fire people with unfinished projects everywhere!

Fire Lights Others Up

It's palpable. People love being around Fire because they feel the light in them. There is joy and exuberance. Fire's light and heart-centeredness is often a catalyst for other's to see things that were obscured before. Fire can bring people out of the doldrums and raise them up, even momentarily. Fire can activate and energize. Fire provides the clarity and illumination of transcendence. Fire can be that lightning strike that briefly illuminates all around it.

During my early days of practicing feng shui I had a dream that I was struck by a lightning bolt. Some say that is part of shamanic initiation. It was so vivid and real. There wasn't any pain, thankfully, yet there was such a strong pull upward that I was suspended in mid air before the dream ended. Some say this was an activation of the Fire Element dormant in my soul, which has aided the process of my spiritual growth and activated my career in energy healing.

The archetype of the Wizard is the stage performer, the court jester, and the traveling salesman. They command attention and create quite a gathering. Their passion and enthusiasm attracts energy like a moth to a light. The Wizard is often found in performers, successful speakers and sales people, and any occupation that requires high energy and connection.

The Wizard's eyes are the most dramatic trait. They sparkle and gleam. She often has red or curly hair, or perhaps its spiky or bald (Fire burns it off!). She often has a cleft chin and dimples, with pointed tips to corner of eyes. She is quick to smile and laugh, has quick movements and speech. Her skin has freckles and a pinkish tone (regardless of race).

Too little Fire results in a weak heart, low blood pressure, fainting and anemia. With little energy, Fire can be lethargic and chill easily. On the contract, too much Fire is too much heat. It can result in enlarged heart, profuse perspiration, flushed face, chest pains, and dry painful eczema.

Her home is often a place of parties and overnight guests. She decorates in dramatic color schemes, has unfinished projects all over. She loves to collect things, and favorite things everywhere, in a rather haphazard fashion.

Curious what True Nature Element you are? Visit her website and take the True Nature Quiz: <https://www.luminous-spaces.com/> She is author of *Creating Luminous Spaces*, on the 5 elements of Eastern philosophy, a corporate speaker, retreat leader, and founder of Luminous Spaces School with online courses on feng shui, biophilic design, mindfulness, and spirituality. Through Biophilic Design and Feng Shui Maureen empowers others to discover and nourish their connection to nature in both their inner and outer spaces.

An Escape to the Country

"From a crazy workload and impossible stress levels working as a Global Director of Cyber Security, Ian Hill escaped to the country, literally. Transforming an old pub, repurposing the land and setting up a micro brewery and honey farm. An inspirational journey, and one I think we can all take heart from."

Ian Hill

At 12:30am on Sunday the 3rd of May 2020, I received the call that all CISO's dread, "we've got ransomware". At the time I was Global Director of Cyber Security for the Royal BAM construction group, and this ransomware was not about money, but a state sponsored attack deliberately targeted to disrupt the building of COVID emergency nightingale hospitals, to which BAM was the largest contractor. The attack was purely geopolitical and intended to undermine confidence in the UK's ability to fight the Coronavirus pandemic. Welcome to my work world. It's a virtual one of electronic ghosts and shadows, where faceless hackers, with an army of automated machines conduct an

invisible and relentless onslaught. It's a lonely two-dimensional world, and one in which I've lived and to a degree been imprisoned by for some 30 years. It's understandable then, that this level of responsibility and stress can have a profound impact on mental health, with increasing numbers of CISOs suffering periods of illness and burnout.

For me, after a particularly traumatic period in my life, I found my escape, a way to rediscover myself. 17 years ago, my wife Iz and I brought a tired and neglected former pub with 3 acres of land set in the heart of the Cambridgeshire fens, and through it have been able to repair, reconnect and rebalance with the real world.

For the first year we did nothing, apart from deal with leaks, damp, dodgy electrics, and an overflowing septic tank. The previous owners had converted the land to equestrian use but had left the building and barns neglected and needing structural work, and the garden completely overgrown. I had no experience of DIY, let alone a major building project, so with a stressful job and 3 school-age children, the prospect was daunting. However, we both connected with the house, it has an indescribable aura and warmth about it, having once been a beer house and then a pub for some 150 years, echoes of happiness and good fellowship feel somehow infused into its very structure, and it welcomed us.

So, with no plan, and Google and YouTube as advisors, we set to work. Early on we discovered our neighbour John, a larger-than-life Irishman who was renovating his 17th century witch's cottage down the road. With an infectious enthusiasm and can-do attitude, he became my close friend and mentor. He grounded my propensity to overanalyse and overthink things and taught me the value of simplicity in self-belief.

In hindsight having no plan was part of the plan, work life is so systemised, it was liberating doing something completely out of my comfort zone and pseudo-impulsive,

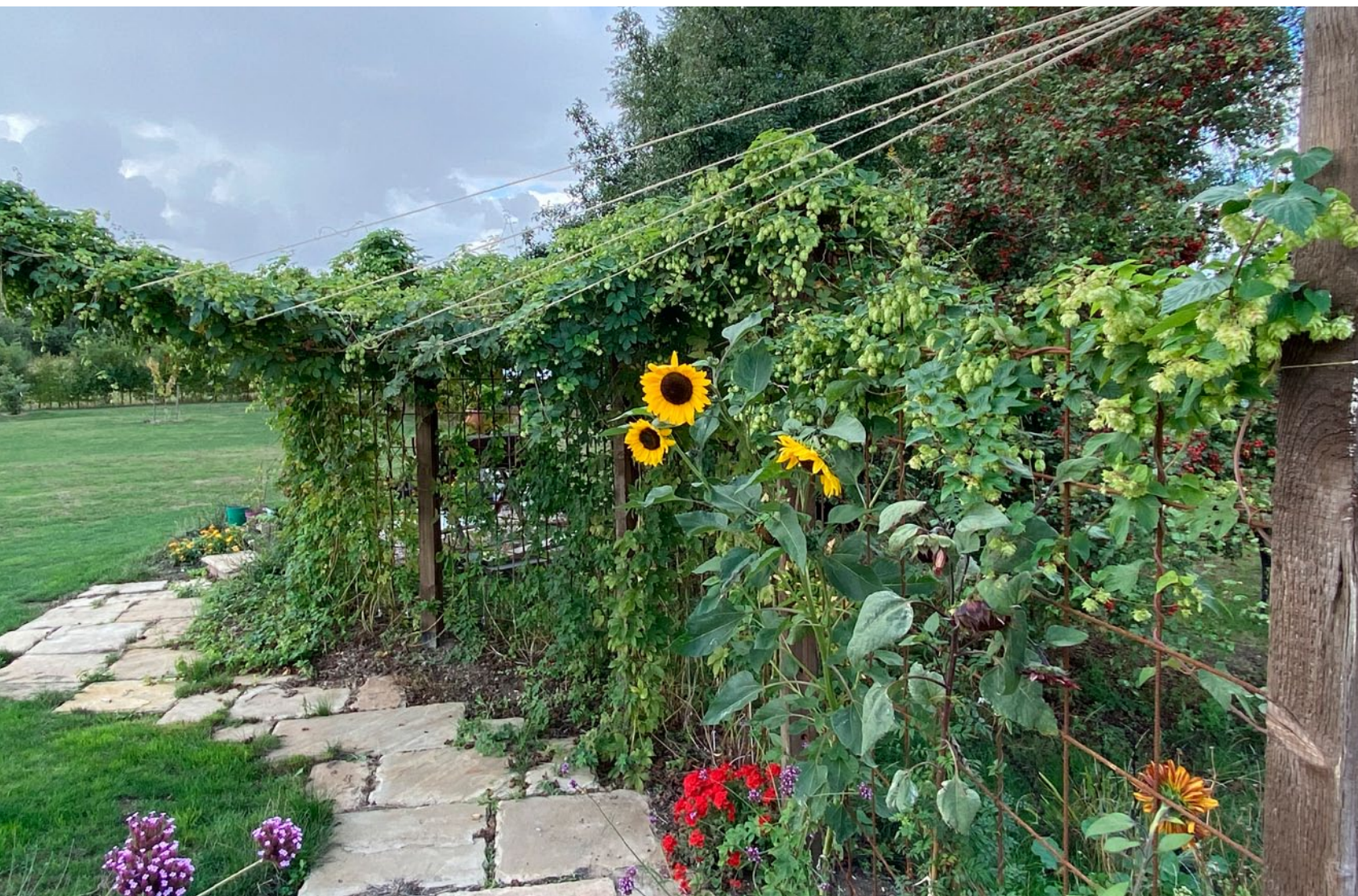
letting nature and instinct lead us. Financial constraints also meant it became a necessity to use as much repurposed materials as possible, however this evolved into something of a passion, as we learnt to appreciate the importance of sustainability through re-imagining materials that my past self would have just thrown out.

With no idea where to start, it was of all things a welly boot stand made from a slice of tree trunk found in the barn and a broken broom handle. It may seem trivial, but to me it was special, the first something I'd actually made and not brought.

And so, it began.

We started by clearing the overgrown paddock and garden, part of which had sunk over the years, become boggy and unusable and required 600 tons of soil to bring it back level. We ripped up a rather expensive purpose built floodlit menage, turning it back into garden and reverted a 2-acre paddock to meadow, much to the consternation of our horsey friends. Recovered aggregate from the menage was used as a sub-base for a new driveway, and paddock fencing was repurposed as a bridge to an island in a new pond, which became larger than had been agreed with Iz, due to my enthusiasm at the controls of a 6-ton excavator.





An early realisation was that the barns to the east of the building were beyond economic repair, so we struck on the idea of replacing them with an extension. Planning guidelines restricted building the extension within the original footprint of the barns and due to the inconsistency of historical additions, the final design required demolishing a single story out-house and bathroom and the entire roof to be replaced. Keeping as much material as possible for reuse, we did the demolition work ourselves, which firstly required converting our teenage daughter's bedroom into a bathroom, and for over a year she lived in the dining room which was by now disconnected from the rest of the house.

We couldn't afford to contract the entire project, so outsourced the foundations, shell, plastering, windows, and roof, and did everything else ourselves. Stud walls, electrics, plumbing, joinery, internal brickwork, floors, tiling, we learned as we went, for 5 years with virtually no breaks. It wasn't all plain sailing, with heated differences of opinion between

my obsessive perfectionism and Iz's "that'll do" approach, mostly around tiling, and my also ending up in hospital (twice) due to some unfortunate power tool incidents.

Repurposing was everywhere, a walk-in wardrobe with shelves and rails made from scaffold planks and metal tent poles, a fireplace made from reclaimed bricks from the original barns' foundations, wall lamps from spare copper pipe fittings and second-hand kitchen from eBay. As a side project we built an oak cart lodge, with as much reclaimed wood and tiles from the old barns as possible and used the excess oak to make various pieces of furniture.

I felt I was somehow putting a piece of my soul into everything. As I grew in confidence, I felt able to take on and complete tasks that I would have never previously contemplated. It's not perfect by a long shot, some wonky tiles, creaking doors (I never did get the hang of hanging doors), and various things that don't quite line up.



Nothing was left untouched, the original building required repointing, chimney stack repairing, new lintels and windows. As with many old houses, the damp problem was finally solved by tearing down the modern sand and cement render and replacing with natural lime render, allowing the walls to breathe once again.

With the house complete, we turned our attention back to the garden. Replaced an 80-metre row of overgrown leylandii with a natural hedgerow of Hawthorn, Dog rose, Guelder rose & Blackthorn, interspersed with a few Hop plants. The felled leylandii has provided our two log burners with thus far 5 years' worth of wood. Planted a diverse variety of native trees in both the garden and meadow, (problematic in heavy clay soil) and installed bee hives, from which some of the bees decided to take up permanent residence in the repaired chimney stack. Our three hives produce on average 70 lbs of honey a year, half of which is sold and the rest along with rosehips and haws from the hedge, goes into making meads. As an avid home brewer, I now brew traditional ales using my own hops. A word of warning about hop plants, they are a fast-growing rhizome rooted creeper that will spread everywhere if not kept in check.

The garden and meadow are alive again, developing their own natural beauty, facilitating frequent visits from muntjac and roe deer, and providing regular hunting grounds for Barn Owls, Red Kites, and Buzzards, and even Kingfishers.

It was the COVID pandemic that made us fully realise and appreciate the importance of this place. We were lucky enough to have the space and freedom to enjoy the land, while so many were imprisoned in their homes. During that period, we spent a lot of time in the garden, decided to lay a patio, which was subsequently extended with decking, that scope crept to include a balcony and spiral staircase as a way of getting to the patio from the master bedroom. That's how random our thought processes became. Our most recent project has been a hybrid solar system on the roof of the stable block which was large enough to accommodate 7.3KW of Solar panels.

It's been all about re-balancing, and sometimes it's just the little things. I planted a Black Poplar in the back garden as a memorial tree for my mother who died in 2011. Their leaves make a very distinct rustling sound in the wind, and it's quite therapeutic when I'm having a particularly difficult day to just come outside, stand by the tree, and just listen to it.

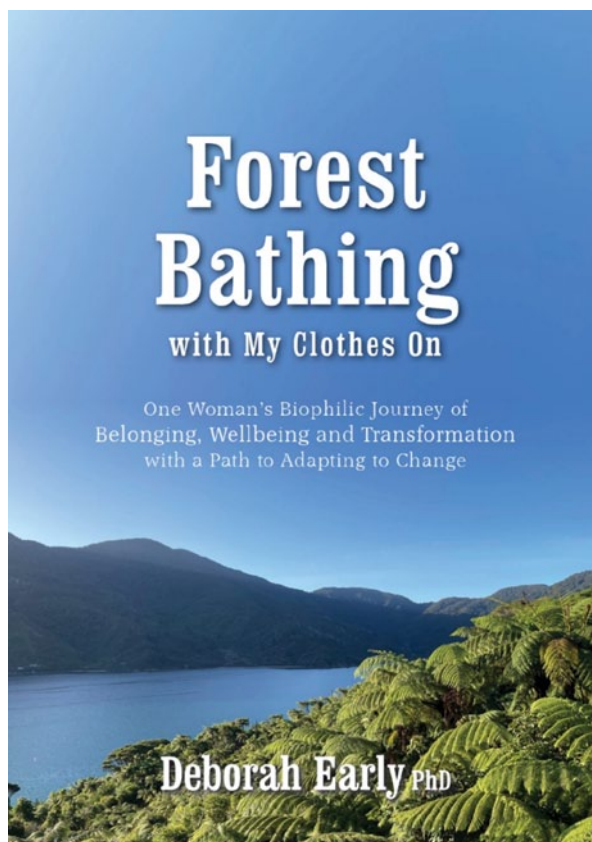
There was no grand design, we just made it up as we felt, complete with quirky touches that make absolutely no sense. The Old Jolly Farmer has become our sanctuary, has enabled me to find my work life balance and given me an escape from the daily virtual nightmare of invisible attackers.

<https://www.jollyfarmerbrewhouse.co.uk>

How Deep is Your Own Biophilia and How Do You Design for Wellbeing?

“Are you involved in, or considering, biophilic design? Or the application of biophilic design, perhaps with an aim to enhance wellbeing in the home, the office or in healthcare facilities? When we design, do we engage all our senses and come from a place of awareness of our relationship with the natural world? How deep, really, is your own biophilia – your love of nature? What can you do to strengthen this love, enhancing your design work and supporting not only the wellbeing of people, but also of the planet.”

Deborah Early, PhD



A design has intention and is the art or process of deciding how something is arranged and will look and function (Oxford Dictionaries, 2023). Herbert A. Simon proposed that “Everyone designs who devises courses of action aimed at changing existing situations into preferred ones” (Simon, 1969). The boundary between art and design is blurry, with art often thought of as intentional use of the imagination and even a bridge between the spiritual and physical. There is also research showing that **creative expression** (<https://www.myamericannurse.com/creative-wellness-boosting-wellbeing/>) e.g. reflective writing or painting is good for wellbeing. According to the design researcher Nigel Cross “Everyone can – and does – design”, and “Design ability is something that everyone has as a natural cognitive function” (Cross, 2011).

We are all creative and I am particularly interested in biophilic art which overcomes the modern living perception that we are separate and disconnected from nature. Connection with nature is about relationships and there is a strong body of research (<https://www.sciencedirect.com/science/article/abs/pii/S0272494419301185>) which suggests that this connection increases wellbeing for people as well increases pro-environmental behaviour for the planet. We need to be psychologically connected to the natural world and everyone can create; this is a way to live more fully. We employ biophilic design as a way to integrate nature into the design of our cities and biophilic art is a path that helps us to be present, take notice and connect with the natural world and with our natural selves.

I have recently collated a collection of reflections and insights which have been taken from notes and inspiration sparked by the natural world around my current home where we live off-grid and closely connected to the natural world. Our home on the Queen Charlotte Track, Aotearoa New Zealand is very remote, we are only accessible by boat and rely on solar power. This move has made me rethink and reconsider a great many things. Revisiting my old journals and notes, I have woven these stories of belonging, identity, nature connection, culture, death, life and hope into an anthology of biophilic (literary) art: *Forest Bathing with My Clothes On: One Woman's Biophilic Journey*. I share the

trials and tribulations from the rain, wind, earth, soil and sun which have significant impact on our simple, daily activities. Inspiration has also come from the nearby waterfalls, the shapes of spun cobwebs and unfolding spirals of fractal ferns outside my home. These are symbols of interconnectedness new beginnings and a return to the starting point.

For example during one night walk I reflected:

...I'm waiting for the moon to re-emerge from the clouds. I can smell the fresh, flowing water. I am near the creek. My fingers run along the soft, bouncy moss and stiff fern lining the embankment. The aroma of mud and rich, rotting vegetation hangs in the still, crisp air. There are no glow worms tonight and I pause, but I hear no birds. I can't see the details of the fractal-like fronds of the ponga (silver fern tree), but I catch sight of the silhouette of the ferns further in front of me. Guiding me home. I watch to see if the bent fronds catch the moonlight and illuminate the path with patterns, perhaps in the way Māori hunters and warriors would use the silver underside.

The Silver Fern is embedded in the psyche of New Zealanders and is a long-standing and respected national symbol which is recognised internationally by sports teams and the military.

“What will happen to our national identity now that the fern has been removed from the junior printed dictionary?” I wonder...



“....discover new beginnings as well as celebrate those hidden roots within yourself. Debbie invites us to rethink, explore and find answers to so many questions regarding our relationship not only with the natural world that we feel and see around us but also that Nature which sits within ourselves as well.... Thoroughly recommend.”

Dr Vanessa Champion,
Editor of the JBD

I have experienced many crossroads on my journey. Like many of us, I have wrestled with how to respond to some of the changes and challenges of our time, especially our relationship with the natural world and incorporating nature into our identity.

As we consider interconnectedness and how our human bodies are also part of nature, I attempt to bridge Western, Eastern and Indigenous philosophies as they relate to biophilia and design. In the West the placenta is often seen as waste and discarded. Years ago, in an effort to reduce research on animals and to look at, and utilise, “waste” differently I was involved in clinical research using placenta in the research design. In Aotearoa New Zealand, where I am now based, it is Māori custom to bury the placenta. In the Māori language the word for land also means placenta, metaphorically indicating the connection between people and land. In my anthology I attempt to weave together my own experiences of exposure and adapting to change from living in five countries.

Debbie is a previous contributor (<https://journalofbiophilicdesign.com/contributors>) to the Journal of Biophilic design podcast and Journal; first on (Earth Day 2020) and more recently in the Blue Mind (<https://journalofbiophilicdesign.com/shop/journal-of-biophilic-design-issue-6-blue-mind-ebook-version-over-210-pages>) edition. In 2022 we also sat down with Debbie and discussed the joys and challenges of living immersed in the natural world. Debbie is the author of *Forest Bathing with My Clothes On: One Woman’s Biophilic Journey of Belonging, Wellbeing and Transformation with a Path towards Adapting to Change* which is due for release in early 2024.

“If you would like to learn more, I invite you to reach out to me. I hope that sharing this journey will empower individuals to navigate the challenges of nature and culture and to embark on a on life-changing inner voyage of self-discovery and increased awareness to strengthen belonging and deepening personal biophilia.”

www.TheArtofAwareness.studio
www.forestbathing.earth
www.biophilic-art.design

References

Biophilic Cities, *Biophilic Art*. Accessed 15 December 2023, <https://www.biophiliccities.org/biophilic-art>

Cross, N., (2011) *Design Thinking: Understanding How Designers Think and Work*. Berg. pp. 3 & 140. ISBN 978-1-84788-846-4.

Martin, L., et al., (2020) Nature contact, nature connectedness and associations with health, wellbeing and pro-environmental behaviours. *Journal of Environmental Psychology*, Volume 68, 101389, ISSN 0272-4944, <https://doi.org/10.1016/j.jenvp.2020.101389>

Newpoff, L.D., et al. (2018) Tap into creativity to reduce stress and increase positive emotions. *American Nurse*. Accessed 15 December 2023 <https://www.myamericannurse.com/creative-wellness-boosting-wellbeing/>

Premium Oxford Dictionaries, (2023) Design meaning. Accessed 15 December 2023, <https://premium-oxforddictionaries-com.libproxy.ucl.ac.uk/definition/english/design>

Simon, H. A., (1969). *The Sciences of the Artificial* (first ed.). Cambridge, Massachusetts: M.I.T. Press. p. 54.

Te Aka Māori Dictionary, whenua meaning. Accessed 17 December 2023, <https://maoridictionary.co.nz/search?idiom=&phrase=&proverb=&loan=&histLoanWords=&keywords=whenua>

Ayurveda

“Ayurveda translates as ‘the knowledge of life’. An ancient medical system that balances the physical, emotional, mental and spiritual self through analysis of the elemental energies and application of core treatments including diet, lifestyle, yoga and meditation.”

Alice Ford

In Ayurveda, dis-ease is caused from an imbalance in the five elemental energies: earth, fire, water, air and ether, that pulls us away from our natural homeostasis. These elements and their expression within us, governs our physiology, emotions, physical appearance and how we interact with ourselves and life around us. Stress, exhaustion, poor diet as well as lack of connection, joy, fulfilment and gratitude are all influences that disrupt our life-force energy (prana) and overall health and wellbeing.

We can all recognise the impact our external environment has on our

internal world, which is where my love of interiors and holistic health blends together. Ayurveda came into my life at a time where I was experiencing a lot of crippling anxiety. My environment felt overwhelming and even triggered many panic attacks. By beginning to understand myself as a unique combination of these elements, with properties I saw reflected in nature, I was able to create a balancing home environment and a lifestyle that felt truly harmonious. Creating a home that was conducive to keeping my natural constitution balanced, became a beautiful space that kept me grounded and feeling safe while I healed.



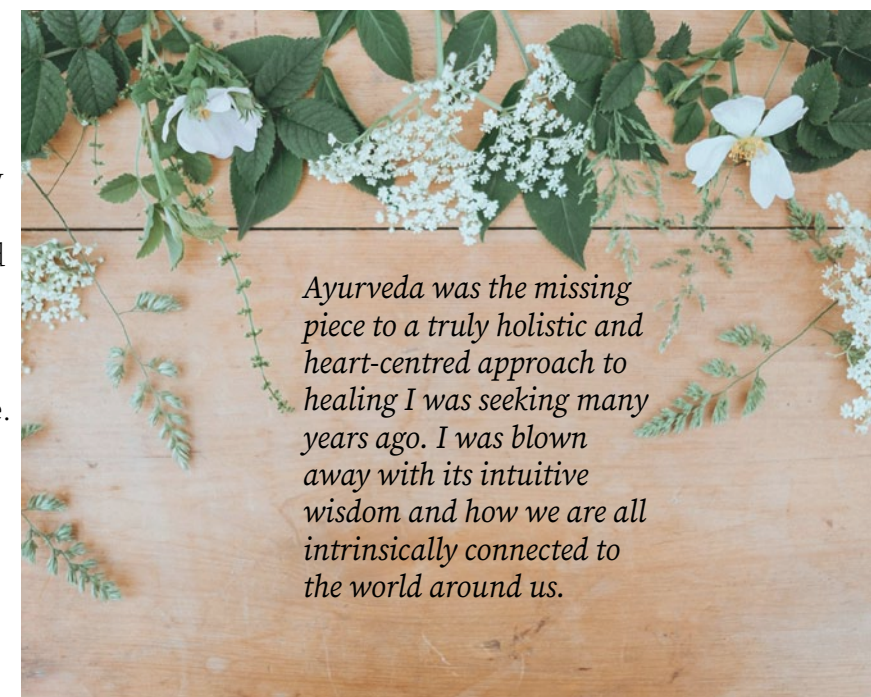
Journal of Biophilic Design
WELLBEING

have in your life that are affecting you and consider how they can be reduced. This might require a shift in mindset and letting go of any fear or worry associated with things that are out of your control. Also, ensuring you have a beautiful relaxing space to come home to after a stressful day to unwind helps calm your nervous system. Thirdly, and perhaps the most important, is to reflect on how connected you are to yourself and loved ones. A loss of sense of self and loneliness can feel deeply painful. When we become disconnected to the essence of our soul and lack meaningful connection to others, we exist in a disconnected and fragile state that impacts our health and wellbeing.

As we transition into a deeper and more holistic approach to health and design, we must ensure our homes are places we want to retreat to and that support our healing from the stresses in our lives and the world around us. When we look at our inner and outer worlds through an elemental and nature-inspired lens, we can create harmonious spaces that will nurture us for a lifetime.

Alice Ford, *Founder Soulful Space*
www.soulfulspace.co.uk

While many Ayurvedic practices are uniquely prescribed, we can all implement some of Ayurveda's key philosophies for a balanced and more fulfilling life. Here's three of my favourites: Firstly, make sure you are connected to nature. Go outdoors and immerse yourself in the elements, ground yourself by going barefoot and of course, integrating biophilic design within the home or workspace. Secondly, observe what stresses you



Ayurveda was the missing piece to a truly holistic and heart-centred approach to healing I was seeking many years ago. I was blown away with its intuitive wisdom and how we are all intrinsically connected to the world around us.

BIOPHILIC CITIES



WELLBEING IN THE BUILT ENVIRONMENT

“Our very survival depends on the health and wellbeing of the natural world because if nature can thrive, we can thrive.”

Sue James, AA Dipl, RIBA, FICFor (Hon)

We need nature; left to itself, nature does not need us.

As the UK is one of the most nature deprived countries in the world, we have to take action now and help nature to restore itself. The campaign by Wildlife and Countryside Link sets out what we must do.¹

At the same time, the exponential growth in human population – from 2.7 billion in 1955 to over 8 billion today and, even with a slowdown, still forecast to be 9.7 billion by 2050 combined with the rapid use of non-renewable resources which must now be curtailed if we are to avoid runaway climate change, mean that most of us will have to live in urban settlements if we are to have any chance of a sustainable future living within planetary boundaries.

But these must be ‘healthy places’ if we are to have ‘healthy people’ in terms of our physical and mental health.

The term ‘biophilia’ was first used by Erich Fromm, a social scientist, as representing ‘a passionate love of life and all that is alive’. E. O. Wilson, a biologist/naturalist/ecologist proposed the hypothesis that human beings have an innately emotional affiliation to other living organisms and that this is an intrinsic part of human nature and then Stephen Kellert, a professor of social ecology, took these ideas further by showing how biophilic principles could be applied to the design of buildings. The next step up in scale was the concept of the biophilic city with Professor Tim Beatley’s ground breaking book showing us how to integrate nature into urban planning and design.² He gave a key note talk about this at Ecobuild (now Futurebuild) in London in 2013 and ten years ago in 2014, Tim Beatley spoke at the Trees, People and the Built Environment 2 Urban Tree Research Conference at the University of Birmingham soon after Birmingham became the first UK Biophilic City.³



We have now had a decade of increased interest in the role of biophilia to guide both building design and urban planning and design. So how are we doing?

There is considerable and ongoing research on the benefits that access to nature can have on our physical and mental health perhaps starting with Roger Ulrich's research between 1972 and 1981 on patients' recovery times from surgery if they had views onto the natural world.⁴ The Covid 19 pandemic made it clear that access to greenspace and nature could make an enormous difference to people's mental and physical health during lockdowns. *Groundwork's report Out of bounds: equity to access to urban nature* (2021) shows that lack of access to greenspace tends to coincide with areas of social inequality.⁵

'Nature inequality' should not be present in urban environments in the 21st century! to counteract this, Professor Cecil Konijnendijk van den Bosch of the Nature Based Solutions Institute has proposed a simple rule: 3-30-300 by which everyone can see at least three trees from their homes, that their neighbourhood has 30% tree canopy cover and they live within 300 metres of accessible greenspace.⁶ Cecil makes it clear that this is not a prescription, but that it raises our ambitions and shows the degree of access to nature that we should aim for.





‘Views of three trees from every home’ – Dr Kathleen Wolf, a social scientist, was one of the early academics to research into the social value of trees and their benefits for human environments. A useful summary on the impact of trees and health is “Urban Trees and Human Health: A Scoping Review”.⁷ A wide range of papers on Human Dimensions of Urban Forestry and Greening can be found on the University of Washington’s website.⁸ Of course if we want the multiple benefits that urban trees can deliver, we need to decide why we want them (can be many reasons), where we want them, which species we want, how to plant them properly in the specific locations so that they survive – become established and how to look after them so that they can live their long lives – remember, trees gain in value over time and start to deliver their real benefits at 20-30 years of age. The Trees and Design Action Group offers guidance on a wide range of urban trees issues, all free to download from the website.⁹

The purpose of this short article is to say that the case has been won for the role of biophilic design and an increased role for nature in our urban environments if they are to be resilient, healthy places to support healthy people. Below are some of the initiatives that are underway in the UK. As stated above, there is a great deal of comprehensive research to provide an evidence base for design and practice.

This article provides a first step in collating organisations and information as a resource especially for those engaged in the design, planning and development of our urban settlements.

BIOPHILIC CITIES

It is hoped that readers of this journal will contribute by adding to the brief list outlined below. There is much that is happening, much that could happen and so an opportunity to learn from each other what best practice is and could be.

For more information on the work that Sue and her colleagues are doing, and even to join them, visit <https://www.tdag.org.uk>

ILLUSTRATION

TDAG: Healthy Places, Healthy People from *Trees, Planning and Development: A Guide for Delivery* (2021) © The Trees and Design Action Group Trust

RESOURCES FOR EVIDENCE

Public Health England (2020)
[Improving access to greenspace: 2020 review](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/86421/improving-access-to-greenspace-2020-review.pdf) ([publishing.service.gov.uk](https://www.publishing.service.gov.uk))

Useful bank of evidence covering all aspects of green space and health that you might find useful – [Evidence Archive – NHS Forest](#)

URBAN FORESTRY

The European Forum on Urban Forestry (EFUF) is a unique meeting place for practitioners, policy-makers, managers, educators and scientists who are active in urban forestry, urban greening and green infrastructure.
<https://efuf.org/about/>



Nature Based Solutions Institute

Nature-based solutions, ranging from planting a single tree to development of green infrastructure for an entire city or urban region, are needed to tackle the grand challenges human society is facing. They are natural solutions to urban problems.

<https://nbsi.eu/>

See also the references provided in the article.

The Mersey Forest : Forest bathing

<https://www.merseyforest.org.uk/things-to-do/mindfulness-in-woodlands/>

Natural England

Green Infrastructure Framework
<https://designatedsites.naturalengland.org.uk/GreenInfrastructure/Home.aspx>

A rapid scoping review of health and wellbeing evidence for the Framework of Green Infrastructure Standards (NEER015)

<https://publications.naturalengland.org.uk/publication/4799558023643136>

Green Infrastructure Principles
<https://designatedsites.naturalengland.org.uk/GreenInfrastructure/Principles/GIPrinciples.aspx>

Environmental Horticulture Group

<https://hta.org.uk/ehg>

Unlocking Green Growth, Horticultural Trades Association (HTA)
Unlocking Green Growth <https://hta.org.uk/policy/unlocking-green-growth>
Useful infographic

Achieving green infrastructure and urban tree equity

In most parts of the country the places with the poorest health (e.g., high Index of Multiple Deprivation) are usually the places with the smallest / worst green infrastructure and tree coverage.

The Tree Equity Score UK tool has been developed to help people across the UK identify neighbourhoods that can benefit most from increasing tree cover. The tool was created through a partnership between American Forests, the US non-profit organisation that created Tree Equity Score, the Woodland Trust and the Centre for Sustainable Healthcare.

You can find out more here –
Tree Equity – NHS Forest

See also: Birmingham Urban Forest Master Plan <https://birminghamtreepeople.org.uk/about-us/the-urban-forest-master-plan/>

Birmingham Health and Wellbeing Board
<https://www.bebirmingham.co.uk/info/21/realising-legacy/46/healthy-city>

Town and Country Planning Association (TCPA)

The TCPA has been running a healthy homes campaign. It also has a director of healthier placemaking.

The TCPA ran an online conference in 2021 on *Achieving a Healthy Green Recovery – the essential role of green infrastructure*. It can be accessed here:
Webinar: The role of green infrastructure in a healthy green recovery – Town and Country Planning Association (tcpa.org.uk)

The Landscape Institute

Public Health and Landscape – creating healthy places
<https://www.landscapeinstitute.org/policy/health/>

The benefits that trees can bring to our towns and cities
<https://www.landscapeinstitute.org/blog/benefits-trees-towns-cities/>

Royal Horticultural Society (RHS)

Gardening for health and wellbeing
<https://www.rhs.org.uk/advice/health-and-wellbeing>

European Healthcare Design – Salus Healthy Cities

Annual conferences – see, for example – <https://healthycitydesign2019.salus.global/conference-show/healthy-city-design-2019>

Fields in Trust

Revaluing Parks and Green Spaces aims to change perceptions by establishing a baseline for the value that parks and green spaces contribute to health and wellbeing rather than simply being judged by what they cost to maintain. The research findings demonstrate that parks and green spaces across the United Kingdom provide people with over £34 billion of health and wellbeing benefits.
<https://www.fieldsintrust.org/revaluing>

NATURAL HEALTH

Intelligent Health

Dr William Bird was one of the first medical practitioners to recognise the value of nature and human health.

He proposed the need for a Natural Health Service in 2015 (<https://www.intelligenthealth.co.uk/natural-health-service-a-call-to-action/>) and, encouragingly the concept of green prescribing is getting traction.
<https://collegeofmedicine.org.uk/beyond-pills-campaign-dr-william-bird-on-the-impact-green-social-prescribing-can-have/>

Oxford textbook of Nature and Public Health: the role of nature in improving the public health of a population
<https://academic.oup.com/book/31752?login=false>

Note: Non-communicable diseases (NCDs) cause an estimated 89% of deaths in the UK.
The UK Health Forum has warned that: “*the current and escalating future burden of non-communicable disease on the NHS is unsustainable*”.

See:
World Health Organization, *Non-communicable Diseases (NCD) Country Profiles* (2018): www.who.int/nmh/countries/2018/gbr_en.pdf?ua=1

reen Prescribing

Ulmer, JM, Wolf, KL, Backman, DR, Tretheway, RL, Blain, CJA, O’Neil-Dunne, JPM and Frank, LD (2016). *Multiple health benefits of urban tree canopy: The mounting evidence for a green prescription*. Health and Place. 42: 54-62. Found at: <https://doi.org/10.1016/j.healthplace.2016.08.011>

Mental Health

See: www.england.nhs.uk/mental-health/adults/

Healthy people Healthy places

Journal of Biophilic Design
BIOPHILIC CITIES

Centre for Sustainable Healthcare
<https://sustainablehealthcare.org.uk/>

The Centre for Sustainable Healthcare offers strategic input and consultancy for healthcare develops knowledge and resources to support the NHS and other health systems to reach net zero carbon and wider sustainability. Their NHS Forest programme works with healthcare sites to realise the potential of its green estate as a resilient healthcare asset, help improve their natural environment as well as reconnecting their staff, patients and the wider community with their local green space to benefit their health. The Green Space team support and collaborate with professionals and communities in healthcare, sustainability, estates management, research, landscape architecture, environment, and social prescribing settings – to ensure we collectively build a resilient health service and natural environment for the benefit of biodiversity, the climate and people.

Their work with healthcare sites has seeded a range of innovative projects.

These include research studies, green prescribing initiatives and green space improvement projects – all with the focus and drive to strengthen the links between the natural environment and population health and wellbeing.

Some examples:

Ranger programme: Their Nature Recovery Rangers currently work with NHS partners at healthcare sites in London and Liverpool to improve the quality of green spaces, and to help integrate nature into patient care, staff wellbeing and community engagement.

Space to Breathe Research Report: Study focusing on improving healthcare staff wellbeing – [Space to Breathe: study on staff wellbeing – NHS Forest](#)

Green Space for Health Network Highlight the latest research and resources and enables all engaged to share experiences etc.
[Green Space for Health network – NHS Forest](#)

¹ Wildlife and Countryside Link's campaign for Nature 2030 <https://www.wcl.org.uk/nature2030.asp>

² Timothy Beatley (2011) *Biophilic Cities: integrating nature into urban design and planning*. Island Press

³ <https://www.charteredforesters.org/wp-content/uploads/2016/11/TPBEII-Paper-Grayson-01.pdf>

⁴ https://www.researchgate.net/publication/17043718_View_Through_a_Window_May_Influence_Recovery_from_Surgery

⁵ <https://www.groundwork.org.uk/news->

[report-finds-severe-inequalities-in-access-to-parks-and-greenspaces-in-communities-across-the-uk/](#)

⁶ <https://nbsi.eu/the-3-30-300-rule/> and <https://www.sciencedirect.com/science/article/abs/pii/S0048969723063660>

⁷ Kathleen L. Wolf et al Urban Trees and Human Health: A Scoping Review <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7345658/>

⁸ <https://naturewithin.info/> and <https://depts.washington.edu/hhwb/>

⁹ <https://www.tdag.org.uk/our-guides.html>



High birth weight for infants and reduced levels of toddler obesity – forest schools, play spaces shaded by trees and more activity

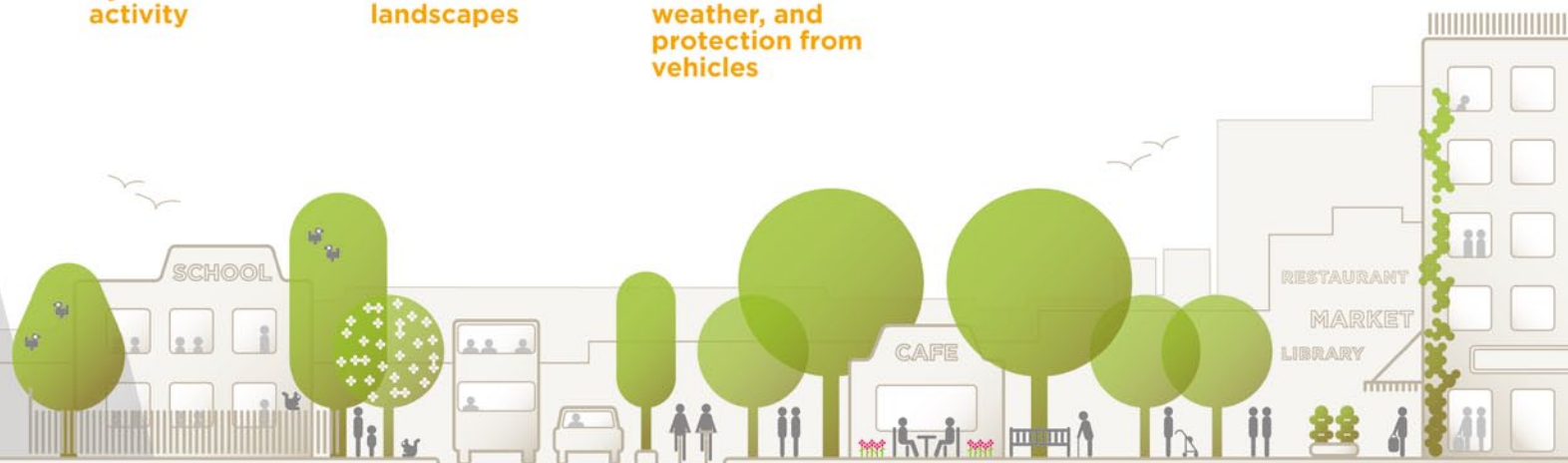
Students have reduced stress levels, improved concentration and learning. Schools should have views of trees and landscapes

Inviting environments for adults to embrace active travel – walking, cycling with tree canopy cover in hot weather, and protection from vehicles

Urban woodlands help contribute towards a sense of self-worth

Encourage the less-able to be outside – pedestrian friendly walkways, tree cover, places to rest and socialise

Engagement with trees and nature reduces stress and improves mental health for everyone, with positive impacts on non-communicable diseases



Increase summer cooling, reduce peak-flow rainfall, and reduce heating and cooling costs for buildings

Create seasonal interest throughout the year. Support biodiversity and provide green links

Tree-lined streets promote calmer driving. Trees can separate transport modes to encourage both walking and cycling

Trees help create a sense of place, encourage social activities and build stronger, friendlier communities

Contribute to improved urban air quality

Support retail by increasing dwell-time and higher spend

Having nearby nature improves job satisfaction, reduces job related stress, and promotes creativity

Lower levels of violence and crimes

Human Nature: why 'urban rewilding' is good for us

“There is more and more evidence and thankfully a wider understanding and acceptance that we need to build in greater nature connection in cities to help us and wildlife flourish. But how do we do it, and how do we make it equitable so everyone has access?”

Sian Moxon

A human need for nature

Since our very evolution in the forests, humans have had an innate need for nature. This is the origin of biophilia, our love of nature (Dembe and Lundberg, 2000), and explains the indisputable fact that spending time in natural surroundings is essential for our optimal wellbeing (Maller *et al.*, 2006). These positive impacts increase in natural environments that support greater biodiversity (Fuller *et al.*, 2007), highlighting a further need for contact with non-human species. This is one good reason to act on reversing the global biodiversity crisis (IPBES, 2019).

Nature in the city

In cities, immersion in natural spaces and encounters with other species can be hard to come by. Yet these experiences are especially crucial for city residents to counter their stressful lives (Grahn and Stigsdotter, 2003), attributed to long working hours and an overstimulating environment. Besides, city demographics create concentrations of poverty, correlating with poor access to greenspace (Roe, Aspinall and Ward Thompson, 2016), and immigrant populations with additional cultural traditions embedded in nature (Kloek *et al.*, 2018).

Nature will become increasingly valuable in cities to mitigate the effects of climate change, as built up areas exacerbate the overheating and flood risk associated with extreme weather (Gerrits, Green and Ampt, 2023). In UK cities, hotter, drier summers and warmer, wetter winters (Secretariat, 2018) will necessitate increased tree cover for shade and shelter, and more vegetation to cool the air and absorb rainwater. Planting can also help improve air quality, which significantly impacts our health in cities, due to their concentration of busy roads, and polluting stoves within buildings (Janhäll, 2015).

Increasing urban nature would benefit the quality of life of many people, given that in England 80% of us live in cities and this is projected to grow (Nash, 2016). Indeed, better urban planning can benefit the lower socio-economic groups that are most vulnerable to negative health and wellbeing outcomes (Cassarino, Shahab and Biscaya, 2021).

Building nature in

Urban rewilding has been defined by the author as ‘reinstating vegetation, water, and other wildlife habitat in towns and cities to enhance biodiversity, climate-change resilience, and human wellbeing’ (Moxon, Sian, 2024a). Rewilding principles can be applied to most buildings in cities, including homes, hospitals, schools, offices, and public outdoor spaces. Rewilding can be retrofitted around existing buildings and landscapes as easily as

it can be incorporated into the design of new ones. It can be implemented by residents, landlords, healthcare trusts, businesses, school children, community groups and councils – or by designers and developers working on their behalf, from interior architects and architects to landscape architects and urban designers. Of course, it is best enabled by a combination of changes in individuals’ behaviour and statutory policy (Moxon *et al.*, 2023). Policy change at local, regional and national level would support existing strategic aims, such as the Mayor of London’s 2050 greening targets (Mayor of London, 2018) and UK government’s Biodiversity 2020 strategy (DEFRA, 2011). In the meantime, there are plenty of tools and inspiring case studies we can use to drive change.

Wholesome homes

The obvious place to start is where we live. Our homes should be foremost environments that nurture our and our loved ones’ wellbeing. With hybrid working and working from home showing no sign of abating, we are spending more and more time in our homes. Adding greenery and encouraging wildlife to our homes’ outdoor spaces – whether this means a private or shared garden, balcony or window sill – can create our very own natural haven away from the demands of the city. Greenery can also tackle the pressure of rising energy costs by contributing to insulation, cooling and shading around our homes (Blanusa and Page, 2011).



Fig. 1: Postcard imagining a future rewilded London, Siân Moxon/Rewild My Street (with altered photos courtesy of Potapov Alexander/Shutterstock, Karen Arnold, pau.artigas, Lawrence Elgar Blog, Steve Cadman, Jordan Carson-Lee/Shutterstock, Peter Church, Adrian Colston, Didier Descouens, EricIsselee/Shutterstock, Freebie Photography, J Gade/Shutterstock, Gordon, H Helene/Shutterstock, George Hodan, Gary Houston, Isarra, Nataliia K/Shutterstock, Aptyp koK/Shutterstock, Bohdan Malitskiy/Shutterstock, Nelson L, P Martin, Dennis Matheson, Dudley Miles, Luis Molinero/Shutterstock, Ninjaticoshell, Keith Pritchard/Shutterstock, Rishichhibber, Denise Schmittou, Charles J Sharp, Piotr Siedlecki, Sonicpuss/Shutterstock, Adam Soukup, Super.lukas, Tarter Time Photography, Andreas Trepte, Peter Trimming, Bryan Walker, Chris Whippet).

The author's own Rewild My Street project offers guidance for existing homes in the form of a design-centred toolkit. Its website provides design-led guidance for urban residents wishing to adapt their homes, gardens and streets to encourage wildlife. Inspiring images, featuring architectural drawings of a rewilded London street, show how to integrate wildlife features into a typical urban setting. Links to carefully chosen products and step-by-step activities show how to achieve this, while species and habitat information highlight the value of making these changes (Moxon, 2024). The Wildlife Trusts' 'Homes for People and Wildlife' report concentrates on how to build new housing in a nature friendly way to address both the housing and biodiversity crises. It has recommendations for locating and designing housing developments to improve people's wellbeing and access to nature, while contributing to habitat recovery and connectivity (The Wildlife Trusts, 2018).

RSPB's partnership with Barratt Homes is putting this approach into practice, having built 2,450 new homes in Aylesbury, incorporating swift boxes and hedgehog highways, alongside new wetlands, wildflower verges and orchards (RSPB, 2023). A more design-oriented version is demonstrated by the Stirling Prize-winning Acordia housing in Cambridge, which converted 'brownfield' land into terraced houses amid public gardens and landscaped streets with over 700 trees (FeildenCleggBradleyStudios, 2024). In Antwerp in Belgium an existing street has been rewilded as a prototype to show what can be achieved in even this densely planned city (City of Antwerp, 2024). Lange Ridderstraat

now includes raised beds with flowering plants fed from rainwater pipes, paving setts interplanted with grass and wall-mounted insect hotels.

Healthy hospitals

Healthcare buildings are where we need to focus on regaining our wellbeing. It is therefore encouraging that hospitals with views of nature can quicken patients' recovery times (Ulrich, 1984), while nature's potential role in preventative healthcare is evident (Pretty and Barton, 2020).

The World Health Organisation advocates that hospitals incorporate greenery, such as green roofs and trees (WHO, 2009). In the UK, the NHS Forest project helps healthcare sites add new greenery to benefit wildlife and people (Centre for Sustainable Healthcare, 2024).

Nature is central to the design ethos of Maggie's Centres, which are intended to support the wellbeing of cancer patients and their families. Its Manchester centre includes a greenhouse and views to a garden designed by Dan Pearson Studio (Foster and Partners, 2024).

Stimulating schools

In places of education, from nurseries to universities, greenery enhances the wellbeing of both students and staff. Specifically, it alleviates exam stress, improves pupils' concentration skills and attainment, and encourages children to learn from nature and play outside (Gerrits, Green and Ampt, 2023).

Eco-Schools helps schools in England take environmental action and shows inspiring examples of schools that have encouraged biodiversity on site (Eco-Schools, 2024), while Ireland's Biodiversity in Schools organisation offers resources focused on this topic (Biodiversity in Schools, 2024) and WWF's 'Planet-Friendly Schools' poster offers an engaging infographic on how a school could be adapted with wildlife in mind. Suggestions include installing habitat boxes for insects, birds and bats; growing food; adding mini ponds; and creating areas of long grass and wildflowers (Robins, Wesley, 2024). The London National Park City Schools network offers useful support and tips on making schools 'greener, healthier and wilder', with an urban focus (London National Park City, 2024).

At Mellor Primary School in Stockport, Sarah Wigglesworth Architects co-designed a habitat wall with the schoolchildren for their timber building extension. This covers the gable elevation with integrated homes for birds, bees, bugs and bats, forming both a striking architectural feature and a learning tool (Kucharek, 2016).

Wild workplaces

Nature is a valuable asset for workplaces, helping to reduce the stress and improve the focus of office workers. Indoor plants improve air quality and job satisfaction, while external planting reduces demand for air-conditioning and encourages restorative lunchtime walks (Gerrits, Green and Ampt, 2023).

WWF's 'Sustainable Office Guide' includes

practical tips on improving biodiversity around the workplace, such as adding 'living walls' of plants and habitat boxes, avoiding the use of pesticides in garden maintenance and providing an allotment space for staff (WWF, 2020).

Aptly WWF-UK's headquarters in Woking by Hopkins Architects follows these principles to connect its workforce with nature. The building has a tree-filled atrium, as well as views over Grant Associates' landscape, which includes rainwater swales, a wetland and wild garden, and a podium covered in native shrubs and grasses (Quin, 2017).

Peaceful public spaces

Undoubtedly, rewilding individual buildings will have greater impact if they are connected by a network of equally green routes and public spaces. These encourage people to adopt healthier, active forms of travel and act as 'habitat corridors' for wildlife.

Rewild My Street's 'London: Urban Jungle' postcard invites us to imagine a future rewilded UK capital, comprising 'pocket parks', 'wild play streets', 'tiny forest squares' and a 'wild belt', all linked by 'green and blue ways' (Moxon, Sian, 2024b). The project's concept collage for Highbury Fields in North London applies the green ways idea to a disused road bisecting this public park. All of the concepts in the postcard are based on real projects, with examples of green and 'blue' (water-based) routes including the High Line in New York and Bishan-Ang Mo Kio Park in Singapore, respectively (Moxon, Sian, 2024a).

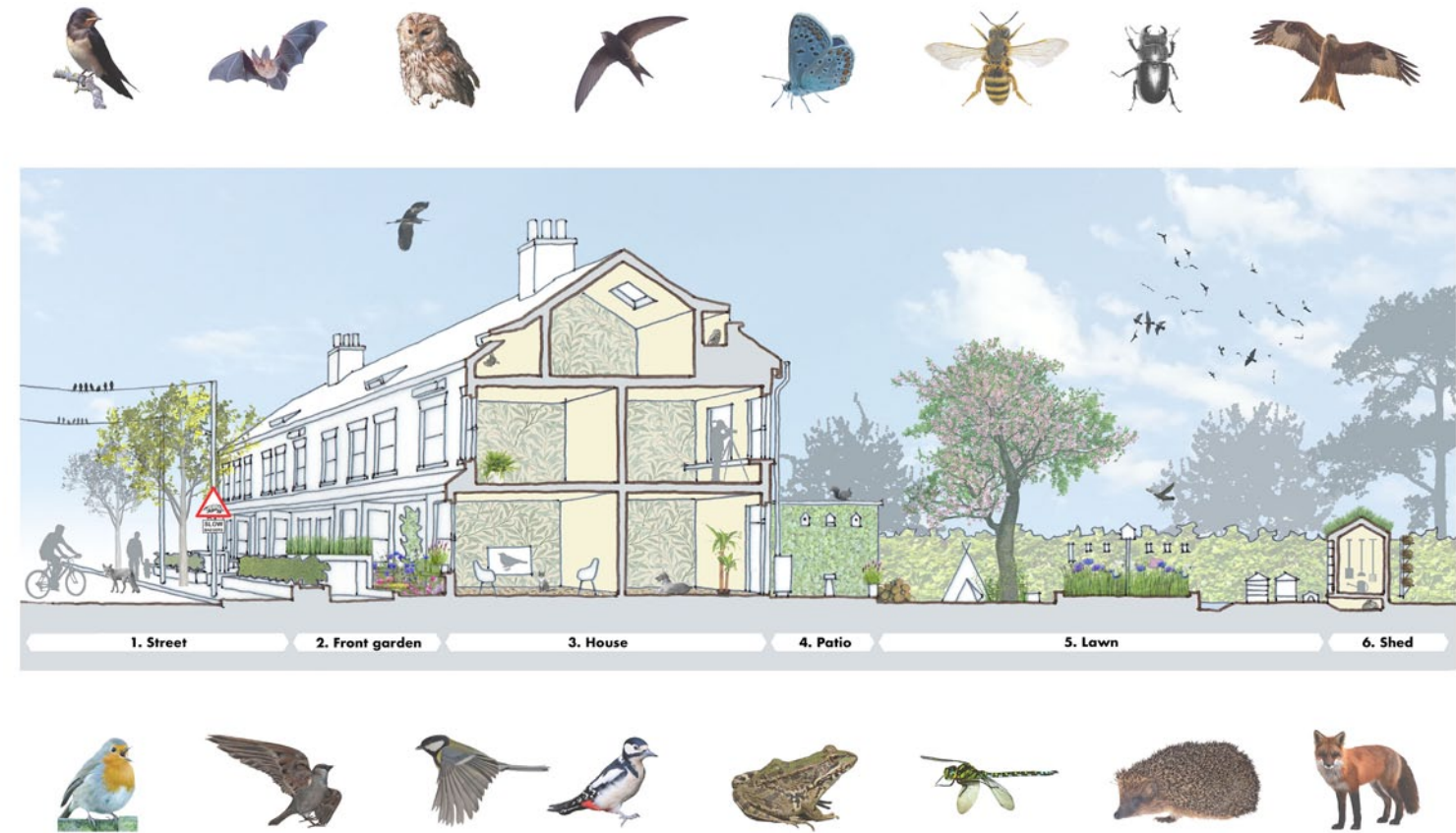


Fig. 2: Drawing showing wildlife features residents can add to their own home, garden and street, Siân and Jon Moxon/Rewild My Street (with altered photos courtesy of Charles J Sharp, Pau.artigas, Super.lukas, Didier Descouens, Ninjatacoshell, George Hodan, Piotr Siedlecki, Peter Mulligan, Potapov Alexander/Shutterstock).

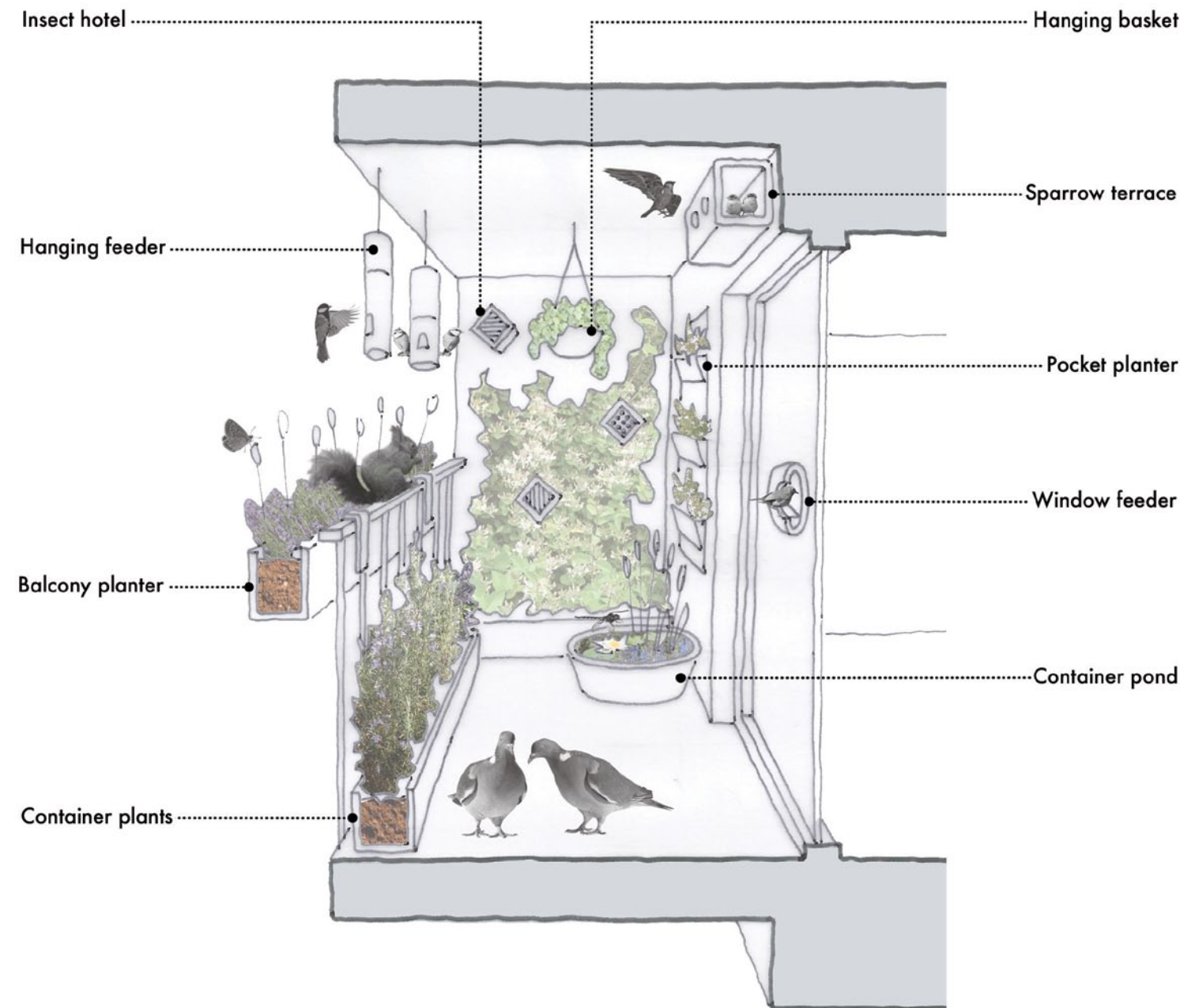


Fig. 3: Drawing showing wildlife features residents can add to their own balcony, Siân and Jon Moxon/Rewild My Street (with altered photos courtesy of JGade/Shutterstock, Alexander/Shutterstock, Piotr Siedlecki, Super.lukas).

Welcoming a wilder future

Urban rewilding will help many people reconnect with nature to fulfil a basic human need. We can all contribute to this effort, from individual to government level. Collectively, we clearly have the means to take this timely opportunity to redevelop all building types and outdoor spaces in our cities to help address the climate and biodiversity crises. In return we can look forward to future cities that nurture our wellbeing alongside that of other species. Why wait?

Siân Moxon is Associate Professor of Sustainable Architecture at London Metropolitan University's School of Art,

Architecture and Design. Siân is an architect, author and founder of the award-winning Rewild My Street urban-rewilding campaign. Rewild My Street aims to inspire and empower urban residents to transform their homes, gardens and streets for wildlife through design-led guidance. Siân is an expert in sustainable design, who teaches Architecture and Interior Design, conducts design research on urban rewilding, and works with community partners on knowledge exchange around design for biodiversity. She writes for both academic and trade publications, and her 'Sustainability in Interior Design' book (Laurence King, 2012) is published in 5 languages.

www.rewildmystreet.org

References

- Biodiversity in Schools (2024) *Biodiversity in Schools*, Biodiversity in Schools. Available at: <https://www.biodiversityinschools.com/> (Accessed: 1 February 2024).
- Blanusa, T. and Page, A. (2011) *Gardening matters: urban gardens*. Royal Horticultural Society. Available at: <http://www.rhs.org.uk/science/gardening-in-a-changing-world/front-garden-research/urban-greening-science> (Accessed: 2 February 2024).
- Cassarino, M., Shahab, S. and Biscaya, S. (2021) 'Envisioning Happy Places for All: A Systematic Review of the Impact of Transformations in the Urban Environment on the Wellbeing of Vulnerable Groups', *Sustainability*. Multidisciplinary Digital Publishing Institute, 13(14), p. 8086. doi: 10.3390/su13148086.
- Centre for Sustainable Healthcare (2024) *What is the NHS Forest?*, NHS Forest. Available at: <https://nhsforest.org/about/nhs-forest/> (Accessed: 1 February 2024).
- City of Antwerp (2024) *Lange Riddersstraat wordt tuinstraat*, Antwerpen. Available at: <https://www.antwerpen.be/info/5abb4909a67793cbc17ccb74/lange-riddersstraat-wordt-een-tuinstraat> (Accessed: 1 February 2024).
- DEFRA (2011) *Biodiversity 2020: A strategy for England's wildlife and ecosystem services*. UK Gov. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69446/pb13583-biodiversity-strategy-2020-111111.pdf (Accessed: 1 August 2022).
- Dembe, A. and Lundberg, A. (2000) 'The Environment and Mental Health: A Guide for Clinicians', *Journal of Public Health Policy*, 21, p. 480. doi: 10.2307/3343288.
- Eco-Schools (2024) *Biodiversity*, Eco Schools. Available at: <https://www.eco-schools.org.uk/ten-topics/biodiversity/> (Accessed: 1 February 2024).

FeildenCleggBradleyStudios (2024) *Projects | Accordia | A sense of community and wellbeing made Accordia the first Stirling Prize for Housing*, FeildenCleggBradleyStudios. Available at: <https://fcbstudios.com/projects/accordia/> (Accessed: 1 February 2024).

Foster and Partners (2024) *Maggie's Manchester | Projects*. Available at: <https://www.fosterandpartners.com/projects/maggie-s-manchester> (Accessed: 1 February 2024).

Fuller, R. A., Irvine, K. N., Devine-Wright, P., Warren, P. H. and Gaston, K. J. (2007) 'Psychological benefits of greenspace increase with biodiversity', *Biology Letters*. Royal Society, 3(4), pp. 390–394. doi: 10.1098/rsbl.2007.0149.

Gerrits, A. J. M., Green, W. H. and Ampt, G. A. (2023) *THE POSITIVE EFFECTS OF GREENERY IN URBAN ENVIRONMENTS GREENERY: MORE THAN BEAUTY AND HEALTH*. WAGENINGEN UNIVERSITY & RESEARCH: J.A. HIEMSTRA, S. DE VRIES AND J.H. SPIJKER.

Grahn, P. and Stigsdotter, U. A. (2003) 'Landscape planning and stress', *Urban Forestry & Urban Greening*, 2(1), pp. 1–18. doi: 10.1078/1618-8667-00019.

IPBES (2019) *Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*. Zenodo. doi: 10.5281/zenodo.6417333.

Janhäll, S. (2015) 'Review on urban vegetation and particle air pollution – Deposition and dispersion', *Atmospheric Environment*, 105, pp. 130–137. doi: 10.1016/j.atmosenv.2015.01.052.

Kloek, M. E., Buijs, A. E., Boersema, J. J. and

Schouten, M. G. C. (2018) 'Cultural echoes in Dutch immigrants' and non-immigrants' understandings and values of nature', *Journal of Environmental Planning and Management*. Routledge, 61(5–6), pp. 818–840. doi: 10.1080/09640568.2017.1319803.

Kucharek, J.-C. (2016) *Out of the woods*. Available at: <https://www.ribaj.com/buildings/mellor-primary-out-of-the-woods> (Accessed: 1 February 2024).

London National Park City (2024) *London National Park City Schools Network*. Available at: <https://nationalparkcity.london/schools-network> (Accessed: 1 February 2024).

Maller, C., Townsend, M., Pryor, A., Brown, P. and St Leger, L. (2006) 'Healthy nature healthy people: "contact with nature" as an upstream health promotion intervention for populations', *Health Promotion International*, 21(1), pp. 45–54. doi: 10.1093/heapro/dai032.

Mayor of London (2018) *London Environment Strategy*. Available at: <https://www.london.gov.uk/what-we-do/environment/london-environment-strategy> (Accessed: 19 November 2020).

Moxon, S. (2024) *Rewild My Street, rewildmystreet*. Available at: <https://www.rewildmystreet.org/> (Accessed: 19 November 2020).

Moxon, S., Webb, J., Semertzi, A., Samangoeei, M., Rowsell, S. and Grant, M. (2023) 'Wild Ways: understanding rewilding behaviour in urban gardens', *Environmental Stewardship for Health*, 5 August. Available at: <https://citieshealth.world/wildways-understanding-rewilding-behaviour-urban-gardens-adaptations/> (Accessed: 2 February 2024).

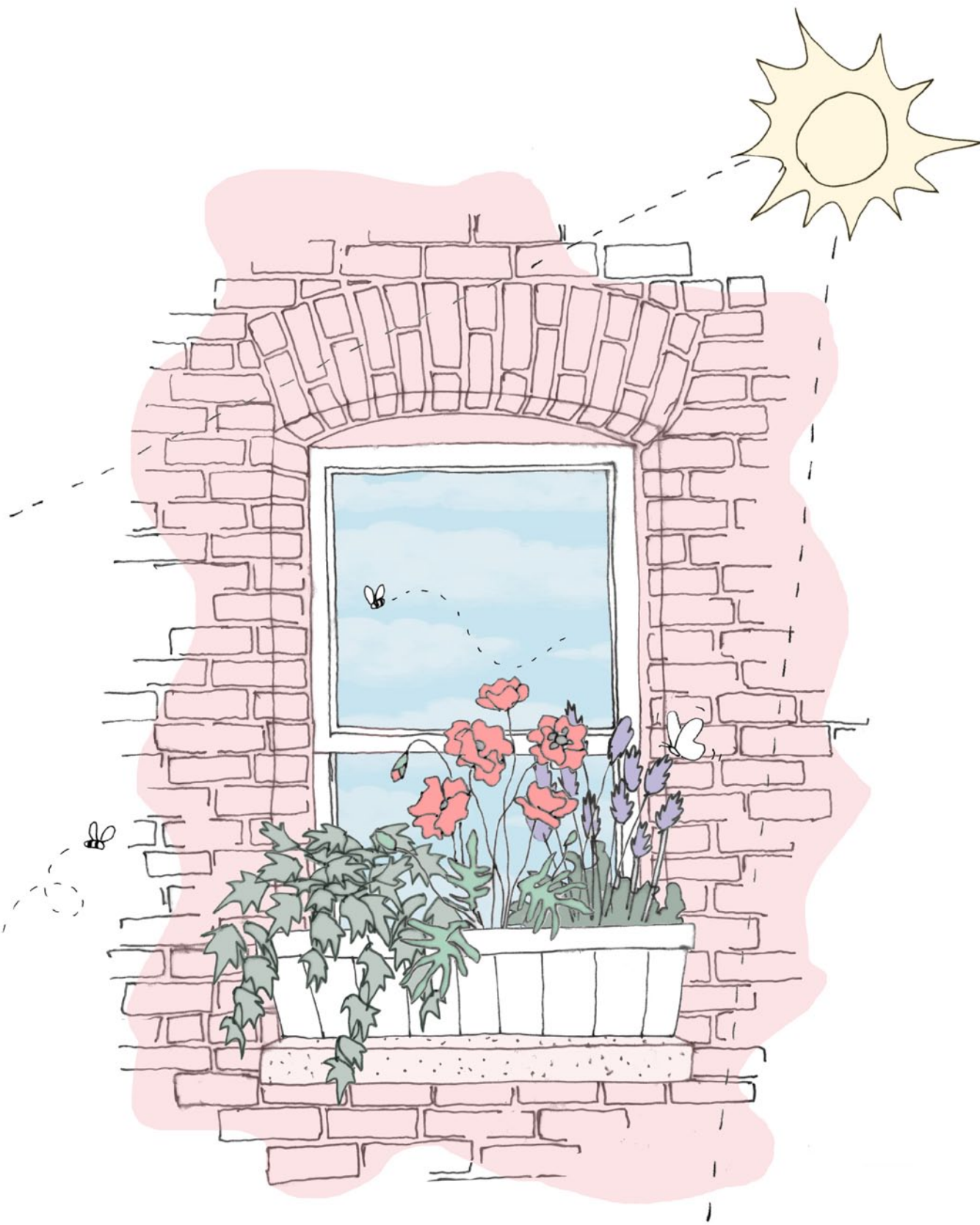


Fig. 4: Drawing showing how to create a window box for wildlife (Siân Moxon & Viktoria Fenyes/Rewild My Street).

ISLINGTON GREENER TOGETHER



Highbury Fields

Fig. 5: Highbury Fields concept collage, Siân Moxon /Rewild My Street (with altered photos courtesy of Nekrasova Anastasiya, Pau.artigas, Clarst5/Shutterstock, Freebie Photography, Gallinago Media/Shutterstock, Gordon, H Helene, George Hodan, Imagewell/Shutterstock, Islington Council, Peter Mulligan, Serkan Mutan/Shutterstock, Photomaster/Shutterstock, Keith Pritchard/Shutterstock, Ljupco Smokovski/Shutterstock, Super.lukas, Rudmer Zverver/Shutterstock).

Moxon, Sian (2024a) 'Exploring the Urban Jungle: Making Space for Wildness in Cities', in Kokkiou, C. and Malakasioti, A. (eds) *Beauty and monstrosity in art and culture*. Abingdon, Oxon: Routledge (Routledge research in art history).

Moxon, Sian (2024b) *Inspiration, Rewild My Street*. Available at: <https://www.rewildmystreet.org/inspiration> (Accessed: 1 February 2024).

Nash, A. (2016) 'Population dynamics of UK city regions since mid-2011 – Office for National Statistics', Office for National Statistics, 12 October. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/articles/populationdynamicsofukcityregions sincemid2011/2016-10-11> (Accessed: 2 February 2024).

Pretty, J. and Barton, J. (2020) 'Nature-Based Interventions and Mind–Body Interventions: Saving Public Health Costs Whilst Increasing Life Satisfaction and Happiness', *International Journal of Environmental Research and Public Health*. Multidisciplinary Digital Publishing Institute, 17(21), p. 7769. doi: 10.3390/ijerph17217769.

Quin, P. (2017) *The story of WWF-UK's living planet centre*, WWF. Available at: <https://assets.wwf.org.uk/custom/stories/lpc/> (Accessed: 1 February 2024).

Robins, Wesley (2024) *Schools Sustainability Guide* | WWF. Available at: <https://www.wwf.org.uk/get-involved/schools/sustainability-guide> (Accessed: 1 February 2024).

Roe, J., Aspinall, P. A. and Ward Thompson, C. (2016) 'Understanding Relationships between Health, Ethnicity, Place and the Role of Urban Green Space in Deprived Urban Communities', *International Journal of Environmental Research and Public Health*. Multidisciplinary Digital Publishing Institute, 13(7), p. 681. doi: 10.3390/ijerph13070681.

RSPB (2023) *RSPB*. Available at: <https://www.rspb.org.uk/corporate-partnerships/barratt-developments> (Accessed: 7 December 2023).

Secretariat, C. C. C. (2018) 'Climate change: the future of UK cities', *Climate Change Committee*, 4 January. Available at: <https://www.theccc.org.uk/2018/01/04/uk-cities-climate-change/> (Accessed: 2 February 2024).

The Wildlife Trusts (2018) *Homes for people and wildlife*. The Wildlife Trusts. Available at: <https://www.wildlifetrusts.org/news/new-guidelines-call-homes-people-and-wildlife> (Accessed: 7 December 2023).

Ulrich, R. S. (1984) 'View Through a Window May Influence Recovery from Surgery', *Science*. American Association for the Advancement of Science, 224(4647), pp. 420–421. doi: 10.1126/science.6143402.

WHO (2009) *Healthy Hospitals, Healthy Planet, Healthy People*. World Health Organisation. Available at: <https://www.who.int/publications/m/item/healthy-hospitals-healthy-planet-healthy-people> (Accessed: 1 February 2024).

WWF (2020) *WWF-UK's Sustainable Office Guide*. WWF. Available at: <https://www.wwf.org.uk/media/57626> (Accessed: 1 February 2024).

We need parks that everyone can play in

“How to Foster Physical Literacy, Nature Connection, and Community Engagement.”

Gill Erskine

When our children are little and still need watching over, most of us spend a lot of time standing, sleep-deprived, in cold play parks, clutching a coffee and wondering what we should do about lunch.

It's a short period of time, although it feels endless when you're in it. When you move on to the next stage, past the deep tiredness, the children require less watching, yet we still spend time in parks. But now, many of us no longer want or need to sit in the corner as bystanders. We want to move too.

But there are so few options to do so in a meaningful way. And because of that, you rarely see adults joining in, so those of us that do definitely look like weirdos. I mind less about that, but it's definitely “a thing.”

There's a good blog article by Amy Brotherton¹ who is campaigning for “less crap playgrounds.” It's a valid gripe, how many times have you been

to a park to find that either the slide has been removed or the water area has been cordoned off...? Over the last 12 years, England's parks have seen a £350 million reduction in budgets, resulting in deteriorating playground quality and a decrease in number – with nearly 800 playgrounds closing across the UK within the last decade.²

Amy references a report by ARUP³ that states, “When areas provide for everyone, space can be saved. Management costs also tend to fall because the more a public space is used and shared by a community, the more behaviours in public spaces automatically improve. Consequently, a child-friendly agenda is no longer simply a CSR requirement.” When we create public spaces that multiple generations can interact with meaningfully in different ways, the more these areas are used and the more we create opportunities for meaningful connection with each other and with a place.





I'd much rather see a selection of odd objects to climb, crawl, hang, jump off that everyone can interact with in multiple ways than more outdoor gym equipment. The latter misses the point of what's great about learning how to move in nature by taking hyper-specialised gym equipment and putting it in a park setting. They teach us nothing in terms of how to use our bodies or how to interact with real-life scenarios.

Research shows us that children naturally seek risk in play and adventurous play outdoors confers many benefits, but often parents' attitudes to risk and injury can be at odds with that.⁴ Normalising adults playing alongside children from the outset would contribute to shaping a lifelong association with outdoor play and movement. This, in turn, could positively influence physical literacy, foster a deeper connection with nature, enhance ties within local communities, and cultivate a shared sense of heritage for a particular place.

Gill Erskine is Co-Founder of WildStrong, a community building and outdoor movement company.

WildStrong runs group classes & courses that teach movement skills so we can keep participating in life.

All their sessions are outside and focus as much on nature connection as they do on movement and friendship.

www.wildstrong.co @wearewildstrong

References:

¹ CRAP PLAYGROUNDS: London Mum Fighting for Better Play Spaces in Newham, AMY BROTHERTON.

² Arrogant parents and extravagant tantrums: all the world's a stage in our precious playgrounds – Rhiannon Lucy Cosslett.

³ ARUP Report – *Cities Alive: Designing for urban childhoods*.

⁴ Playing it safe: The relationship between parent attitudes to risk and injury, and children's adventurous play and physical activity – Alethea Jerebine, Mohammadreza Mohebbi, Natalie Lander, Emma L.J. Eyre, Michael J. Duncan, Lisa M. Barnett.

Psychology of Sport and Exercise, Volume 70, 2024, 102536, ISSN 1469-0292, <https://doi.org/10.1016/j.psychsport.2023.102536>; Adventurous Play as a Mechanism for Reducing Risk for Childhood Anxiety: A Conceptual Model Dodd, H.F., Lester, K.J. Clin Child Fam Psychol Rev 24, 164–181 (2021). <https://doi.org/10.1007/s10567-020-00338-w>; Child's Play: Examining the Association Between Time Spent Playing and Child Mental Health. Dodd, H.F., Nesbit, R.J. & FitzGibbon, L. Child Psychiatry Hum Dev 54, 1678–1686 (2023). <https://doi.org/10.1007/s10578-022-01363-2>

Book Reviews

Journal of Biophilic Design

BOOK REVIEWS

Experiential Design Schemas

Mark DeKay and Gail Berger
ORO Editions, 2023

Biophilic Design creates spaces that help ease or inspire the senses. A lot of poor design results in creating spaces that overload our senses causing cortisol levels to rise, and our stress levels as well as physical wellbeing to weaken.

When I was sent this book to review, I can honestly say, I didn't know where to begin. I began, like all reviewers (if we were to admit to it) by flicking through and looking at graphs, images, chapter headings, getting a look and feel of the book. It's like eyeing up a blind date. I am an academic and I love research and reference books, but the older I've got and the more I've moved into understanding the challenges that arise in practice, I know that accessibility is also important. You can write all the research you want but if it's not presented well or enmeshed behind rhetoric you've lost the benefit of conducting the research in the first place. That is why with this book, I was truly overwhelmed, but in a good way! It is an extensive reference bible of sensory design schemas which will help back up ideas as well as stimulate new ones.

I probably could have done with a road map right at the beginning of the book to help me navigate all the gems of information inside (because I was impatient!), but the more I leafed through it and, as it was intended (!), began to read from the beginning it became like a lotus flower, opening and revealing all the beauty of life, light, movement, sound, smell, opportunity, drama, sequence, ventilation, connection of human experience within a building and nature without, and so much more.

The research is brilliant, and the more you use the book, and study the many beautiful examples which showcase just how architects have designed for sensory relief or stimulation, you begin to realise that you will never look or "experience" another building the same again. Ever.



And it is this "experience" that the authors aim to help raise our awareness of. They have identified and defined different design schemas to show how these can positively or negatively impact the users of the space. How does the building "feel"? How does that space resonate with the people using it? How does the building 'sound'? What is the journey of the light throughout the day? How does it "move"?

Even taking just one example schema, that of "Flux". The authors have visuals of water in the Cherry House in Eastern Japan, and explore how the changing light reflected of the water on the ceiling for instance, provides continuously changing conditions which we perceive as random or chaotic (also think leaves in a tree). They take "flux" to mean constantly changing, where nature is rhythmic or non-rhythmic, and there are sudden changes and randomness of weather for instance. The authors have developed different references for these schemas, and so for instance cross reference "flux" and "water" in their schema F3 later in the book where they look at Water Animated Surfaces (as well how ceiling fans create movement), offering extensive design guidelines too. The dictionary style indexing along the edge of the pages also helps with navigation.

"Experiential Design Schemas" is an essential design reference book that will become an old friend. And just like an old friend it warrants time to get to know and understand it, the more you stay with it, ask yourself and it questions, the more you'll learn, and be inspired by the myriad of design combinations that can create spaces that are filled with awe, harmony, and grace.

Thrive, A Field Guide for Women in Architecture

by Sumita Singha
RIBA Publishing 2024

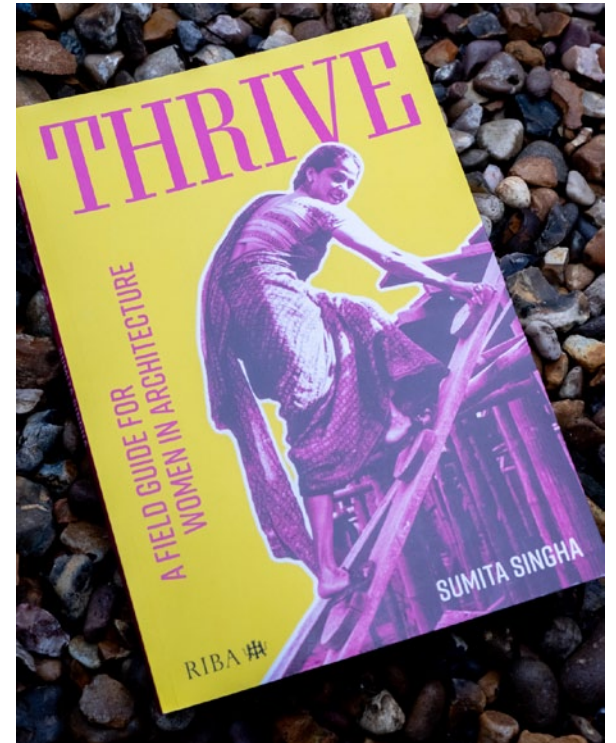
A woman is climbing a wooden ladder in flipflops and sari on the cover of "Thrive". This is Minnette de Silva who was one of the first women to head up an architectural practice in the world. Born in 1918 the story of her pioneering spirit, determination, creativity and professional journey is just one of 160 women architects whose lives and achievements are celebrated in this brilliant and very readable book by Sumita Singha, herself a multi award-winning architect, pioneer and a creative force of good in the world of architecture.

Broken down into 6 main sections: Context, Education, Practice, Projects, Promotion and Intersectionality, we begin with an overview of some fantastic stories of how women have shaped architecture in history. From women's patronage of architecture to the pioneers in the study of architecture. For instance, we learn of the Jamaican nurse Mary Seacole's "British Hotel" in the Crimea who used floating rubbish from the harbour in 1855 to get structures built by local carpenters. We learn about women architects in post war societal movements and how "Waterloo Bridge" is often called "Women's Bridge" because it was constructed by a mainly female workforce from 1942 – 1945. Did you know that the first solar heated houses were created by Eleanor Raymond who worked with Hungarian American biophysicist and inventor Mária Telkes (Dover Sun House, Dover, Ma)?

There are so many stories and case studies like the one about Anne Thorne Architects LLP which is a female led practice, specialising in new build and retrofit sustainable projects and who also advise on low energy design like Passivhaus. There are discussions on how women are working as co-professionals across engineering, surveying, planning and project management.

The way Sunita writes is engaging and incredibly readable. The book is full of examples of how women have been part of and helped shaped architecture all over the world. It's one of those

These books were reviewed by Dr Vanessa Champion, Editor of the Journal of Biophilic Design. If you have written a book and would like us to consider it for review please get in touch. We can't promise to review every book sent to us, but we'd love to hear from you and support where we can.



books that if you have friends who are thinking of becoming, or who are already architects, it would make an ideal gift. I learnt from the book that one of my most favourite places in the world, the Musée D'Orsay in Paris, competed in 1986 was designed by Italian architect Gae Aulenti. I'm now on a mission to learn more about her.

As Sumita says at the end of her Introduction: "I hope this book will be useful to all those on the journey to equality and equity. This includes architects and practices wanting to understand issues about women in architecture, students of architecture, women returners to the profession, feminist researchers, charities that work with women architects and students, policymakers, professional institutions and international audiences/practices wishing to develop feminist ways of working. Actually, most of the world!"





FINAL WORD

CONFERENCE

We are starting to pull together our conference to be held in November this year, 2024.

The conference's aim is to be more than just a networking opportunity, of course it will be that too, but because it will be inter-disciplinary, we will have all our voices in one place together so we can all discuss how we can plan and design our built environment better using Biophilic Design. There is legislation, but is it enough, where are the issues, is it in the supply chain, culture, lack of understanding or awareness, advocacy, lobbying, or accountability?

Your voices will come from architecture, interior design, planning, ecology, environmental psychology, neuroscience, psychoacoustics, facility management, healthcare, education, government,

APPGs and everything in between.

Our hope for the conference is that together we will explore examples of best practice, cutting edge new research, evidence to show how Biophilic Design improves Biodiversity Net Gains, how it helps businesses reach Net Zero, WELL Building certification, ESG, BREEAM and even many of the Sustainable Development Goals.

"Biophilic Design has the potential in the right hands, to solve the climate and health crises."

That's a big statement . . . come along and let's discuss what we know, what we are doing, and what we can do better.

Look forward to seeing you there.

www.biophilicdesignconference.com

FRIDAY LUNCHTIME BIOPHILIC DESIGN CONVERSATIONS

The 1st of March saw us launch a series of Friday lunchtime Biophilic Design conversations.

If you would like to join us, visit our website and get hold of a ticket, would be lovely to see you there. They are

going to be held on the first Friday of every month at 1pm UK. We will be doing additional ones in person and at different time zones, so hopefully we will get to meet as many of you as we can.

www.journalofbiophilicdesign.com

Will we meet you at The Office?

The Office, run in partnership with the Evening Standard, is a brand-new event, taking place at ExCel, London on 23rd and 24th April 2024. It will offer a one-stop shop for organisations that are rethinking their approach to workplace design and experience and are looking for solutions that will enable them to create innovative, sustainable workspaces that support employee wellbeing, engagement and productivity.

Claire Farrow, who heads up content and programming for The Office commented:

“Many employers are recognising that bringing teams together in person – at least some of the time – is **fundamental to wellbeing**, engagement and productivity. However, employers now need to work harder to create work environments that colleagues want to return to and which meet employees’ evolving needs”

“Those tasked with designing the workspace post Covid need to create places where people can connect, collaborate, innovate and learn together, and do so in a space that actively nurtures their health”.

“The Office has been designed as the go-to event for employers seeking to upgrade their spaces and create well-designed workplaces that put wellbeing at the centre of the back-to-office strategy, inspire creativity and support new ways of working.”

As employers adapt their workplaces to meet the diverse and changing needs of their employees, The Office will offer free education sessions, partner-led workshops and exhibition space. It will be an opportunity for key buyers and purchasing influencers from the UK’s top employers, commercial real estate professionals and managers to come together and share

insights and solutions for the workplace environment.

The Office will be co-located with two established sister events, which are also run in partnership with the Evening Standard: The Watercooler Event, which is all about connecting workplace wellbeing solutions, and SME XPO, which is dedicated to powering scale-up businesses.

A host of inspirational business leaders are already confirmed to speak across the three, co-located events. Confirmed speakers for The Office include Tim Oldman, Founder & CEO of Leesman, the world’s largest benchmark of employee workplace experience; Penny Goodall Quraishi, Director, EMEA Region, International WELL Building Institute (IWBI), Claudia Bastiani, Head of Workplace Experience and Design, Legal & General and workplace consultant and author Simone Fenton Jarvis.

If you’re rethinking your approach to workplace design, workplace experience and facilities management, you can find out more about **The Office** – the brand new event co-located with **The Watercooler Event** and **SME XPO** – taking place at ExCel on 23rd & 24th April and [register here](#).



23 – 24 APRIL 2024 EXCEL LONDON

Co-located with  **THE WATERCOOLER**
Connecting Workplace Wellbeing Solutions

In partnership with



REGISTER FREE to visit at theofficeevent.net

Workplace and Workspace Solutions for Employee Wellbeing, Engagement and Productivity

Join us at “The Office”, a brand-new event which offers a one-stop shop for organisations who are rethinking their approach to workplace design, workplace experience and facilities management and looking for solutions that will enable them to create innovative, sustainable workplaces that can meet the changing needs and diversity of their employees.

FREE EDUCATION PROGRAMME WELCOMES



Tim Oldman,
Founder and CEO,
Leesman



Claudia Bastiani,
Head of Workplace Experience and
Design, Legal and General,



Maud Santamaria,
Workspace Director,
GWI.



Penny Goodall-Quraishi,
Director, EMEA Region,





BIOPHILIC DESIGN
CONFERENCE
12 NOV 2024

THE BARBICAN
LONDON

REGISTER YOUR
INTEREST NOW

[BIOPHILICDESIGNCONFERENCE.COM](https://biophilicdesignconference.com)

POWERED BY [JOURNALOFBIOPHILICDESIGN.COM](https://journalofbiophilicdesign.com)



JOURNAL *of* BIOPHILIC DESIGN

IN THIS ISSUE :
CASE STUDIES
INTERIOR DESIGN
RESEARCH
SCIENCE BEHIND BIOPHILIC DESIGN
ENVIRONMENT
WELLBEING
ARCHITECTURE
PLANNING
CITIES

WWW.JOURNALOFBIOPHILICDESIGN.COM