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JOURNAL of BIOPHILIC DESIGN

THIRD AGE

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ISSUE 16, July / August 2025 – SOUND
ISSUE 17, September / October 2025 – ARCHITECTURE
ISSUE 18, November / December 2025 – INTERIOR DESIGN

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WELCOME

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

With our population living longer, we want to be healthier longer, and also "retire" (whatever that may look like) in nicer more inspiring places. I don't think any of us would choose to spend our last days, months or years in how many retirement homes or care homes look like. White boxes, with hard surfaces, wipe clean PVC and lino. Rather we would prefer a spa like environment to ease our days out.

Why can't we have this? I hate to simplify it, but it needs to be called out. It's a case of specifying differently, with sense, compassion and also with grace.

People are not just numbers. Just because we get to a certain age, we forget that some of us were rockers in the 70s or hippies in the 60s. To put us into white boxes like prisoners or chickens in a coop is to negate the spirit and LIFE that we have had.

Biophilic Design reconnects us to all LIFE, and it is needed more than anything in older living accommodation, care homes, hospitals and urban design. There is so much evidence which shows how nature connection, especially direct connection with plants, trees, natural light and natural materials, enhances our wellbeing when we are older or when we are sick.

Recovery rates are faster, dementia sufferers have an improved experience, and even air quality is better for those whose respiratory passages might not be as good as they once were.

The same goes for sound, nature doesn't have walls, so acoustics in natural environments are better. Softer furnishings using natural materials, windows with views to the gardens or green spaces, being able to experience the sunrise and sunset, watching wildlife that is full of biodiversity from the window fills us with joy, uplifts our spirits and we know helps heal us.

Thankfully there is an increasing number of designers, architects and urban planners who are embracing Biophilic Design and bringing it into the homes, hospitals and cities for us all to flourish in.

This issue looks at concepts for Biophilic interiors in senior environments, who connecting with nature supports people with dementia, how greener living is redefining renting for older residents. We also look at what older workers want, how we can foster nature and accessibility in modern architecture and create inclusive, biophilic and supportive spaces for an ageing population.

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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.

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 **Light.**

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 Third Age, Light, Sound, Architecture, Interior Design.

THIRD AGE

5 Concepts for Biophilic Interiors in Senior Environments

"Biophilic design enhances well-being by creating uplifting, welcoming spaces, which is especially important for the Third Age, as older adults often spend more time indoors due to safety or health concerns."

Lori Pinkerton-Rolet PPBIID, Reg. ID, IIDA

Biophilic design, is good design. It's about how an environment makes us feel. Is the space welcoming and uplifting? Does it promote a feeling of contentment and well-being? When it comes to design for the Third Age, biophilia becomes critical as it is, unfortunately, quite common for people to spend more time indoors as they age due to safety concerns.

Common design principles for the elderly include maintaining 30 Light Reflective Value points (or LRV's) between floors, walls and furnishings (for which suppliers can assist), thereby creating greater contrasts between surfaces in response to declining eyesight. The lens of our eyes yellows with age so higher than average light levels are recommended and interior lighting should have diffusers so the bulb cannot be seen directly by the naked eye. This helps to counter-act the effects macular degeneration, a naturally occurring condition will create glare, potentially but temporarily blinding an older person. In fact, glare of any kind is to be avoided as are any level changes in a flooring surface. With these basics to be considered as 'standard' let us review some biophilic concerts which can enhance these spaces. It is important to note that dementia criteria differ and should be studied as a different design pathway.

Many biophilic design interventions are feasible, but we're highlighting five which may not be immediately obvious:

1) Internal Vistas
2) Accessories
3) Colour
4) Pattern
5) Window type

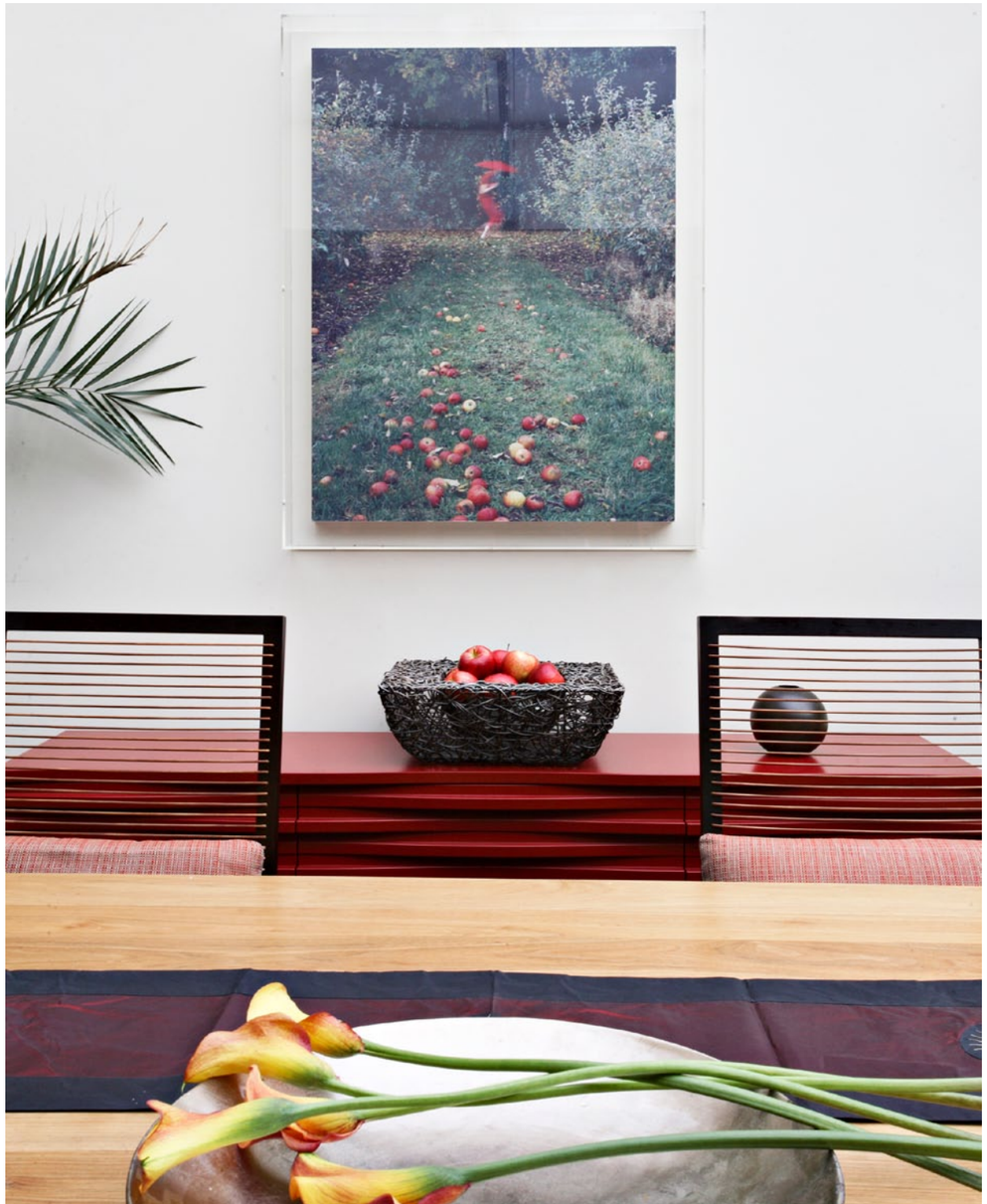
Internal Vistas
A building may not always be in the most salubrious of natural settings. It is not uncommon in the UK for care facilities to be found on a busy road, or adjacent to a roundabout. This is changing with time and competition, and certainly the opposite can be said for many retirement living facilities.

I am not a fan of 'fake' windows and views, but it is possible to create a vista which reflects the natural world in as engaging, sympathetic manner. Where natural views are limited, consider a mural wallpaper which is artistic, rather than photographic. This can reflect a natural style without becoming an exterior pastiche. If there is an internal window, what do you see on the other side; a corridor wall, or a potted plant or nature-inspired artwork? Every vista is an opportunity, and where they don't exist you can create them.

Accessories

Art and accessories represent another biophilic opportunity for older people. Appetite often decreases with age, so why not use creative art pieces which relate food and natural settings while offering the associated food in the same location. This is particularly useful in retirement settings but should be avoided in care due to choking hazards or for people with dysphagia (difficulty swallowing).

Plants have always made great accessories and should be real wherever possible. Preserved natural plants make good alternatives where natural light levels aren't cooperative. For a no-maintenance, slow-growing alternative you might consider a terrarium or even a row of terrariums as an interesting, living alternative.



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Colour

To quote Akzo Nobel (Dulux) colour specialist Dawn Scott on the January '24 Third Age Design podcast:

"*...when we talk about using nature-inspired colour palettes, people automatically assume that it's just blues and greens. But every colour is found in nature, and nature is great at giving us colour combinations and ways to use colours.*"

Bearing in mind the LRV contrasts outlined earlier, finishes and design features can take their inspiration from natural materials while being playful with colour combinations, creating unique interior atmospheres which are less likely to date than whatever current trends dictate. In other words, seek your interior colour palettes outside!

Pattern

The Fibonacci Sequence is found throughout nature, in everything from the formation of spiral shells to the number of petals found on the majority of all flowers. Flower imagery can be found from the decoration of ancient Egyptian tombs to perhaps the zenith of this motif during the Renaissance in the15th-16th centuries. It's worth noting that the popularity of florals in interior design tends to be cyclical, and it's currently experiencing a resurgence. It can look particularly 'old-fashioned' in senior living environments because of its association with 1980's chintz.

Trees or branches make a good contemporary motif and these patterns are also directional, moving the eye through a space, or toward a particular point of interest.

Windows

We automatically relate window to natural daylight and views, but in doing so may miss additional potential benefits. Nature provides a multi-sensory experience with birdsong and natural fragrances among them. Opening windows provide natural ventilation which can minimise the scent of noxious cleaning and infection-control substances.

A generous amount of natural daylight creates further benefits, regulating our circadian rhythms, the natural cycle which repeats roughly every 24 hours and dictates alertness, appetite, and body temperature. Unless the exterior has been beautifully lit, it's best to have a curtain or blind at the window which can be closed at night to prevent artificial light reflecting into the room, like a mirror. Dim-out rather than black out window treatments may also be desirable as they allow for these natural rhythms to properly function while still providing privacy.

Older people tend to sit---a lot. Having low window sills with seating positioned to take advantage of any views, is to be encouraged. While 'nets' may be old-fashioned, there are many light contemporary sheers which allow for exterior views even when closed, while also preventing glare from the sun.

In summary, the use of biophilic design for the Third Age extends well past potted plants, hanging baskets, and living walls. While understanding the basic requirements of senior living design, take time to review project details to see where the interior can be enhanced with some less obvious, biophilic interventions which promote good health and well-being for everyone...in addition to the plants!

Lori Pinkerton-Rolet PPBIID, Reg. ID, IIDA
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Connecting with nature: a path to wellbeing for people living with dementia

"Exploree the transformative power of nature for people living with dementia through outdoor activities which spark joy, boost mental health, and foster meaningful connections. From peaceful walks to creative art in nature, nature connection changes lives, offering not only hope but a tangible path to improved well-being."

Claire Francis

In an age where technology can overshadow our connection to nature, our Creative Spaces project demonstrates that fostering a connection with the natural world is not only essential for our well-being but also transformative for individuals living with dementia. Based in rural Cornwall, a beautiful but underfunded area, this pioneering approach showcases how nature can help people with early to mid-stage dementia and memory loss maintain physically, socially and mentally active lives in their communities. What started in January 2015 with one walk in mid-Cornwall has expanded to ten regular groups throughout the county, many with waiting lists.

Embracing nature: a lifeline for dementia diagnosis

Living with dementia often isolates individuals and their families, creating regular group opportunities to connect with nature has proved incredibly powerful. Our *Creative Spaces* project builds on this by encouraging people with dementia and their carers to get outside, meet other people and rediscover the joy of nature. This could be a gentle walk, environmental action, gardening or creative outdoor activities. For many, the chance to feel the wind in their hair, hear the rhythmic crash of waves or explore the intricate textures of leaves rekindles a sense of vitality and belonging.

There is something very special about walking in the natural environment, we can open up more, talk about what we see and relax. The health benefits are well documented as well, exposure to natural light boosts melatonin levels and fresh air helps regulate our circadian rhythm.

One participant eloquently expressed, "*I love to feel the wind in my hair! It makes me feel alive!*" This simple yet profound connection often becomes a highlight, sparking joy and encouraging physical activity, which is especially valued by people with mobility challenges

Nature as a wellbeing tool

Engaging with nature also creates opportunities for meaningful cognitive stimulation. Activities such as creating art from natural materials or exploring new landscapes evoke memories and emotions that enhance well-being. These tactile and visual experiences often become treasured keepsakes, providing a tangible link to their experiences.

Participants frequently share how these activities improve their quality of life. One carer noted, "G*oing out with the group is a great escape for me. Talking to like-minded people is a great relief*." Such experiences support not only those with dementia but also their families and carers.

Building confidence and bringing joy

Our approach extends beyond its immediate benefits, empowering participants with confidence and skills that improve their quality of life. From walking trails designed for all abilities to inclusive activities, the program creates a space where everyone feels valued and able to connect with the natural environment in a way that works for them.

Participants frequently note a sense of increased wellbeing after sessions. One carer shared, "*It certainly adds to my quality of life to get out and socialise with others*". For everyone involved, these experiences bring a sense of normalcy and shared joy, acting as a buffer against some of the more isolating aspects of a dementia diagnosis.

Environmental action deepens connections

Taking part in environmental action deepens a connection with nature and the natural environment.

We believe everyone should have access and opportunity to participate in meaningful environmental action. Older people, especially those with a disability are often overlooked when it comes to community involvement. We have found that our groups are not only passionate to take part but also keen to learn from and work with other groups to take positive action. For example, our group in Bude are linked with local environmental groups; Bude Climate Partnership, Friends of the Earth Bude and Cornwall Grows CIC. They've explored a community apple orchard and wildflower meadow to deepen their understanding of biodiversity.

Case Study: Dawn's story*

Dawn, who lives alone in a small village, began attending a *Creative Spaces* group after her sons encouraged her to join. Transport provided by the program enabled her to visit places she could no longer access independently, as she no longer drives.

When asked how do you feel when you come to this group? Dawn shared "Oh I enjoy it" (smiles) "I don't want to go home" (laughs) She emphasized how much she valued mixing with others in different environments, a sentiment she repeated during a focus group. Her son remarked that attending the group was one of the few things that motivated her.

On group days, Dawn's mood noticeably brightens, and her recall improves. She often shares vivid details about the day's activities – an improvement her sons find remarkable given her usual difficulties with memory. For Dawn, these experiences offer more than an outing; they provide a lifeline to connection, independence, and joy.

**Name has been changed*

The success of *Creative Spaces* holds lessons for communities far beyond Cornwall. By intertwining nature connectedness with social inclusion, this approach demonstrates the potential of nature to heal, inspire, and sustain wellbeing. A simple intervention of fostering social connections in outdoor and nature-based settings is helping people with dementia and memory loss live with joy and purpose.

Key principles include:

- **Accessibility in design:** All walks and activities are carefully planned to cater to people of varying abilities, offering a wealth of sensory-rich opportunities to connect with nature.
- **Connection to nature:** Immersion in green spaces enhances physical and mental wellbeing. Each walk or activity is grounded in nature and there are always plenty of opportunities for sensory-rich experiences.
- **Creative connection:** Art and craft rooted in nature stimulate memory and foster dialogue. People with dementia and memory loss don't always have many opportunities to experience new creative activities such as pottery, painting and felt making. We provide a safe, supportive environment for people to express themselves creatively.
- **Shared Experiences:** We've seen how mixing with people in similar circumstances tends to put people at ease, any fears of prejudice or judgment fade away and deep connections and friendships are formed rapidly. Peer support is key to this approach.

"Whilst we're walking I can chat about my problems but also just everyday stuff with people that understand what I'm going though, we've become like a little family."

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This approach paints a compelling picture of how nature supports the emotional, physical, and social aspects of life, especially for those living with dementia. By bringing people closer to nature and each other, we can offer a beacon of hope – a reminder that even amidst life's most challenging chapters, growth, joy, and connection are within reach for everyone.

Sensory Trust's Creative Spaces project relies on funding by the National Lottery Community Fund and donations. Sensory Trust run a range of projects, consultancy and training all aimed at making outdoor spaces accessible and engaging.

www.sensorytrust.org.uk

photos credit: Sensory Trust

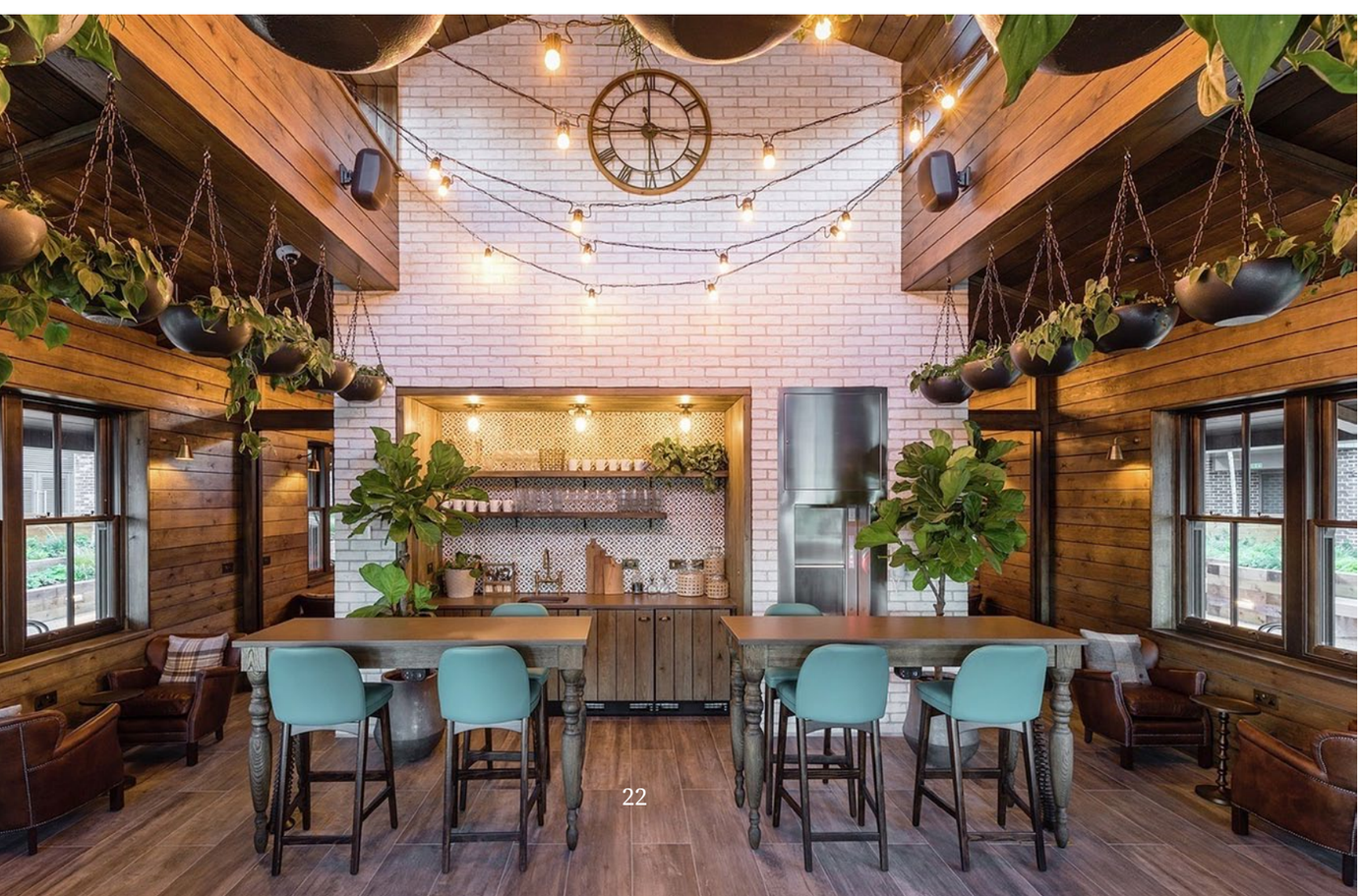
Greener Living: How Biophilic Design is Redefining Renting for Older Residents

"From lush indoor planting to vibrant communal gardens, there is a reimagining of rental spaces to support the wellbeing of older residents. At Wembley Park's Repton Gardens and Canada Gardens, nature-infused design fosters connection, reduces anxiety, and enhances quality of life – proving that access to greenery isn't just a luxury, but a necessity."

Danielle Bayless

"There is much that we can do both to bring the natural world indoors and to provide easier access to the great outdoors when we design homes. Doing so can result in happier and healthier environments for residents of all ages, and especially those in their third age. From indoor planting that improves air quality to the use of natural materials, design decisions can add up to have a major overall impact.

"At Quintain Living, we serve the needs of renters spanning a wide range of ages, with octogenarians among our residents and design our buildings with this in mind. The UK's growing population of older renters means we need to think differently about how we can support wellness within our homes and cities for our mature residents. Embracing biophilic living is part to this, providing scope for reducing anxiety, boosting mood and even mitigating memory issues.



"Our latest building in Wembley Park – Repton Gardens – is showcasing this in action. We use plants extensively within the development to enhance air quality and deliver a greater sense of connection with nature. Our goal is to deliver physical and mental wellbeing benefits as a result of doing so, with greenery within homes and the communal social areas. We regularly share ideas on planting for different seasons, supporting flourishing planting on the balconies which each home affords year-round.

"With social connection in mind, so important for the wellbeing of those in their third age, we've positioned the shared amenity spaces within Repton Gardens to open up onto the podium garden. This creates a natural flow from the sociable setting of the residents' lounge to the fully landscaped garden. There, we've planted a host of native species, mounding the earth to support larger trees, encouraging a garden full of birdsong for our older residents to enjoy.

"The furnishings, both within the apartments and social spaces, also embrace natural and biophilic design at Repton Gardens. We worked in partnership with John Lewis & Partners to create a highly sustainable, curated product range for our apartments, with an emphasis on local sourcing and natural materials. This not only presents residents with interiors that have a natural feel but focuses on the use of furnishings and fabrics that contain fewer surface chemicals.

"At our nearby Canada Gardens buildings, we again promote the physical and mental benefits of access to nature for our mature residents, with an acre of greenery surrounding the apartments. Community allotment beds support residents to come together to grow food for the benefit of all, with our older residents sharing their gardening expertise with the next generation. There's a potting shed for storage, which includes a handy growing schedule for making the most of the seasons. For chilly days, the on-site clubhouse has basket after basket of greenery hanging from the ceiling, so even in the depth of winter, residents can sit by the roaring fire and feel connected to the natural world."

Danielle Bayless
Chief Operating Officer at Quintain Living

https://www.quintainliving.com

https://www.quintainliving.com/repton-gardens

https://www.quintainliving.com/canada-gardens

About Quintain Living

Quintain Living offers more than just apartments. The lifestyle focussed rental company manages amazing places to live in what will be the UK's largest Build to Rent (BTR) campus, delivered by Quintain, the award-winning developer of Wembley Park. Around 5,400 residents rent with Quintain Living, with the super stylish apartment blocks appealing to renters of all ages – and their pets.

The Quintain Living team seeks to raise the bar every day. In 2024, Quintain was awarded, Development of the Year (Repton Gardens) at the RESI Awards and Real Estate Capital's Investment Financing of the Year. In 2023, the Quintain picked up a string of accolades, including Best BTR Development (Repton Gardens) and Best BTR Developer at the Love to Rent Awards, three-time BTR360 Award finalist and earning a place on the Inside Housing Development Awards shortlist for Repton Gardens for Best Build to Rent Development. In 2022, Quintain Living was awarded Property Manager of the Year at the RESI Awards and named Estate Gazette's BTR Specialist.

With studios to four-bed apartments in **Landsby, Ferrum, Canada Gardens, The Robinson, Madison and Repton Gardens,** renting is hassle-free at Quintain Living. The company provides state-of-the-art contactless viewings, speedy move-ins, no deposits or hidden fees and access to money-can't-buy lifestyle amenities. These include cinema rooms, rooftop gardens, private club houses, climbing walls, hireable growing beds, work-from-home suites and concierges. This is the future of renting. All just 12 minutes from central London.

For more information on Quintain Living or to book a viewing, visit www.quintainliving.com, @quintainliving on Instagram or call 020 3151 1927.

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What Older Workers want

How do we create a workplace that works for all?

Katie Le Chevalier

In October, I attended the CoreNet London Conference. The final session of the day, titled *The Future Workforce: Next Gen's Impact on the Modern Workplace*, opened with a provocative statement: "Forget what the Baby Boomers think they know – this is a chance to hear directly from the 'Next Gen' about how they'd like to see the rules of the workplace rewritten. After all, Gen Z are expected to make up 30% of the global workforce by 2030, so understanding their expectations is critical for businesses aiming to stay ahead."

As I sat in the auditorium, reflecting on the findings of the research presented – covering flexible work arrangements, diversity-driven cultures, mental well-being, sustainability, and the role of AI – I couldn't help but wonder: Are generational differences truly as stark as they're made out to be, or are we simply pitting generations against one another?

Generational labels: A barrier to collaboration

I am not a Baby Boomer, but as a member of Generation X, born in 1972, I often feel the divide created by generational stereotypes. The tendency to box individuals into generational categories can be limiting and divisive. While Gen Z is often seen as tech-savvy innovators, let's not forget that Gen X and Boomers have been instrumental in shaping the technological landscape – with figures like Larry Page and Elon Musk (both Gen X) and Jeff Bezos (a Boomer, born in 1964) leading transformative advancements.

As the UK grapples with productivity challenges and hard-to-fill vacancies, we must address the "elephant in the room": the need for true diversity in the workplace, including age diversity. Attracting and retaining older workers offers access to a wealth of experience, leadership, and life skills.

The overlooked potential of older workers

Older workers, particularly women, often exit the workforce due to conflicting demands on their time. Many express a desire to return but find full-time roles incompatible with their commitments. This impacts financial security, as evidenced by Scottish Widows' research showing that women nearing retirement typically have pension pots a third smaller than men's. Additionally, two million women in the UK feel they will never be able to retire at the current rate.

The "sandwich generation" – those balancing responsibilities for teenage children and ageing parents – often face immense stress. Some even become part of the "triple-decker" generation, simultaneously caring for grandchildren. These caregiving demands can lead to loneliness and isolation, making flexible working arrangements essential for older employees who want and need to work but can't commit to traditional schedules.

Designing workplaces that support wellbeing

Chronic stress from caregiving and other responsibilities takes a toll on physical and mental health, increasing vulnerability to illness. Workplaces can play a crucial role in providing a respite from these pressures. A thoughtfully designed environment, grounded in biophilic principles, can promote well-being by reducing stress and enhancing focus.

The WELL Building Standard, based on extensive research, outlines 10 concepts for optimising health and well-being in the workplace. While its recommendations, such as improved lighting, thermal comfort, and nature-connected design, benefit all employees, they are particularly impactful for older workers. At Planteria Group, we specialise in integrating biophilic design into office spaces, creating environments with natural elements that uplift mood and enhance productivity. Our clients consistently report that incorporating planting within employees' sightlines has a tangible positive effect on well-being and workplace satisfaction.

Embracing age diversity in DEI strategies

Diversity and inclusion are key to attracting and retaining talent, yet age diversity remains an overlooked aspect of many DEI strategies. According to *Training Magazine*, "Age diversity often has been an overlooked aspect of an organisation's DEI strategy, and companies are missing out. But by including age in their DEI policies and initiatives, companies can reap the many benefits a collaborative, multi-generational workforce can bring."

With the UK's state pension age set at 66, older workers are a valuable yet underutilized resource. The Centre for Ageing reports that only 1 in 10 unemployed individuals aged 50-64 receive back-to-work support. Addressing ageism in recruitment and workplace culture is critical to leveraging the potential of this demographic.

- **Shared Values Across Generations:** Designing workplaces to support health and mental well-being through biophilic principles benefits everyone, regardless of age.
- **The Importance of Culture:** For workers aged 50+, camaraderie and a positive company culture are highly valued, making office-based roles attractive.
- **Flexibility Is Key:** Flexible working arrangements are essential for attracting older workers, many of whom have significant caregiving responsibilities.
- **Health and Well-Being Matter:** Older workers prioritise working conditions that support physical and mental health, such as ergonomic furniture and spaces designed for movement, plants and nature connection.
- **Ageing Is Universal:** We will all age, so designing workplaces with older employees in mind ensures a more inclusive and supportive environment for everyone.

By embracing age diversity and creating workplaces that cater to all generations, we can foster collaboration, innovation, and resilience in the workforce.

www.planteriagroup.com

Whittington College Courtyard: Connecting Community, Nature, and Well-Being

"Discover how Atelier Architects are transforming senior living by blending community, nature, and sustainability into a vibrant, connected sanctuary."

Stephen Melvin

At Whittington College, home to 215 senior residents with limited financial means, the community naturally forms around key gathering spaces such as the central Chapel and Community Hall. Our vision is to strengthen these connections by creating a cohesive and fluid courtyard, seamlessly integrating the new apartments with the surrounding social hubs. This approach enhances the sense of belonging and supports a dynamic, socially connected environment.

A key focus is to redefine residents' relationship with nature. To the west, the land opens to a large green space, offering expansive views towards Box Hill. This natural setting provides a sense of *prospect* and *refuge*, as well as an opportunity to incorporate biophilic design, encouraging a deeper connection with the landscape. By designing with nature in mind, we aim to enhance well-being, promote active lifestyles, and create peaceful outdoor spaces that invite daily interaction.

Whittington College Design Proposals

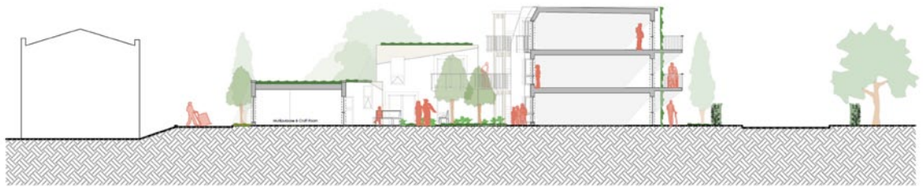
AA+D
Atelier Architecture + Design Ltd

AA+D
Atelier Architecture + Design Ltd

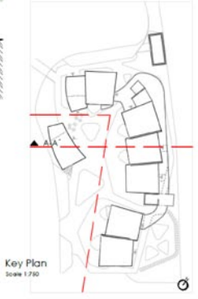
Location Plan
Scale 1:1250

Section and Elevation

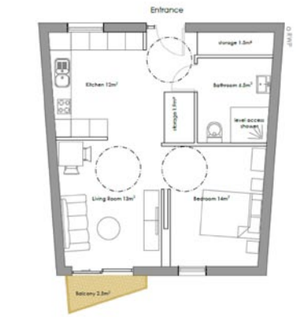
Courtyard longitudinal Elevation
Scale 1:200



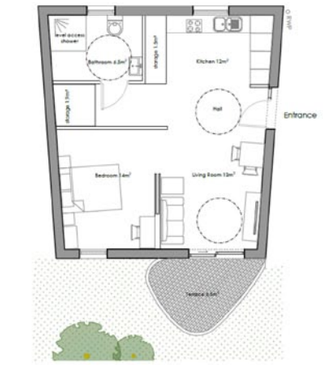
Courtyard Section A-A'
Scale 1:200



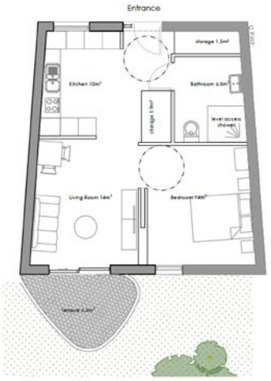
Key Plan
Scale 1:750



Typology 1 - Area 57.3 sqm
1 Bed Module
Scale 1:100



Typology 2 - Area 60.1 sqm
1 Bed Module
Scale 1:100



Typology 3 - Area 61.1 sqm
1 Bed Module
Scale 1:100

Typologies Location Plan
Scale 1:750

Sustainability Approach

Summary of proposed strategies

Natural environment	Carbon and resources	Climate resilience	Value for the community
Landscape-led approach that strengthens and enhances biodiversity through: • A biodiversity net gain of >10% • Designated areas of native species planting • Sections of native species of hedgerow and wildflower meadow • Several larger stock individual native species trees planted in the courtyard, and the wider site. • Green roofs to several of the buildings. • Other appropriate habitat enhancements & restoration elements can be proposed by the project ecologist • A biodiversity management plan during construction. • A biodiversity management and monitoring programme that spans at least the first five years of operation. • Biophilic and HAPPI design principles to promote health and wellbeing for residents and visitors.	A building that is built to best practice environmental design standards: • Passive design that responds to the local microclimate, and delivers healthy and comfortable indoors with minimum energy input • Passivhaus-level building envelope performance, mixed-mode ventilation with heat recovery and daylit spaces • All-electric energy strategy with air source heat pump and roof mounted PVs to contribute to operational energy use • Circularity embedded in the building design for efficient use of material resources (lean design), durability, low maintenance requirements and end-of-life reuse • Eco-Bricks to reduce embodied carbon • Waste prevention and sustainable waste management strategy in operation • Low flow water fittings and submetering to reduce water use by 40%	Proposals that enhance the resilience of both the built and natural environment: • Cross-ventilation utilising prevailing wind direction and building-integrated retractable shading elements to reduce overheating risks in the apartments and communal spaces through passive means • Retractable structures to provide shade and shelter from wind and rain in outdoor courtyard. • Potential for rainwater harvesting from green roofs, including filtering. • Potential for air source heat pump to provide cooling during extreme hot weather and heatwaves • The green roofs reduce building energy, shading and cooling in summer and insulating through thermal mass in winter. • The sustainable drainage strategy inc. permeable paving will protect the building from surface water damage.	A proposal that delivers value for the community: • The site is made inviting and accessible to residents and visitors through the layout and provision of new communal spaces and improved amenities • The biophilic design of the building supports healthy lifestyles and the wellbeing of visitors • The site aspires to become an asset for the community: a hub for social activity and interaction that safeguard its future • The proposals will provide safe and accessible pedestrian paths and crosswalks with firm and non-slip finish path materials, curb ramps and detectable warning surfaces • The layout will improve the pedestrian network and ensure a short distance from car parking to residences.

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THIRD AGE

Beyond improving physical spaces, the project prioritizes sustainability and social engagement. Using natural materials, passive design strategies, and environmentally conscious interventions, we create a place that is resilient, energy-efficient, and responsive to its surroundings. More than just a regeneration project, this is about fostering a way of life that encourages interaction, supports well-being, and allows both the community and the landscape to thrive together.

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Designing for All: Fusing Nature and Accessibility in Modern Architecture

Zoe Ornstein

"How can architects and designers bring nature into the built environment and ensure spaces are inclusive for everyone, especially those with disabilities?"

At the recent Surface Design Show in London, an exciting conversation unfolded around the integration of biophilic and accessible design. The central question: how can architects and designers bring nature into the built environment and ensure spaces are inclusive for everyone, especially those with disabilities? While biophilic design is about seamlessly incorporating nature into our interiors, accessible design is rooted in the 'social model' of disability. This model argues that poor design and outdated misconceptions are far more limiting than a person's disability itself. The responsibility falls on society to remove barriers within the built environment, not on individuals to overcome them. By merging biophilic and accessible principles under a broader banner of Universal Design, architects and designers can create spaces that not only enhance mobility and independence but also promote calm, relaxation and a meaningful connection to the outdoors. Achieving this requires a thoughtful blend of strategic planning, careful material choices, and sensory considerations.

Whilst a great deal of research has gone into how biophilic design impacts our well-being, it has been almost exclusively applied to commercial spaces and there is still much to be done in the residential sector. When it comes to mobility (as a separate consideration to visual impairment or sensory/SEN needs), accessibility is about creating spaces that allow people to move through them with ease and fluidity. Architects and designers thus focus on key elements such as ramps, lifts, doorways, pathways, furniture, bathrooms, controls, flooring, signage and transportation access.

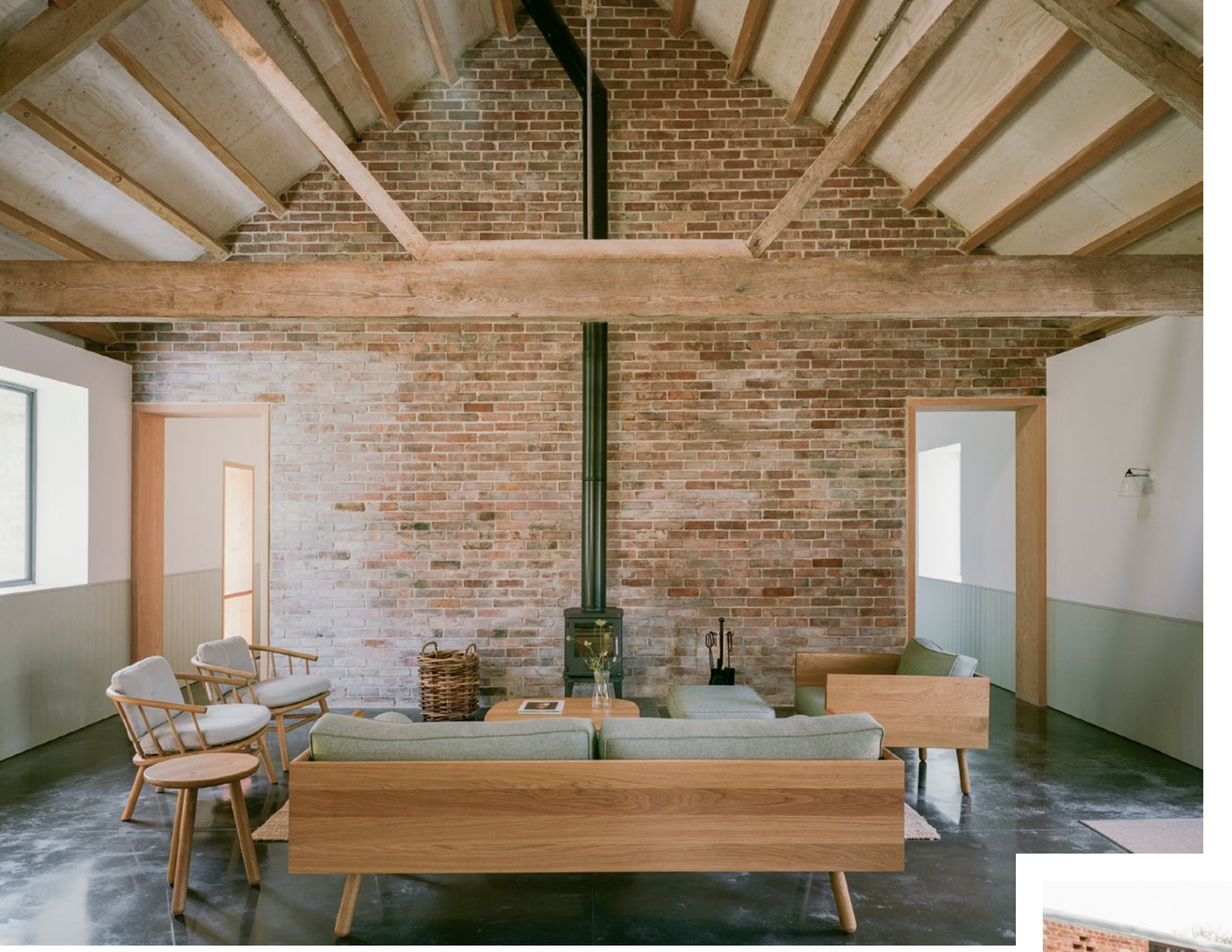
Each of these elements has its own critical considerations: ramps should replace stairs, with proper slopes and slip-resistant surfaces; lifts need wide doors and intuitive controls; doorways and hallways must be spacious enough for wheelchairs or mobility aids with automatic or easy-to-open doors. Pathways should be clear, unobstructed and wide enough to accommodate mobility devices, with smooth, slip-resistant flooring. Floors should be level and free from thresholds or height changes. Internally, open plan room layouts help ensure full turning circle for wheelchairs. Adjustable or lower seating and furniture makes a big difference for comfort and kitchen cabinets should allow for wheelchair access to fit underneath. Bathrooms and restrooms should have ample space to manoeuvre, with grab bars and sinks within reach from a seated position. All switches and controls, like light switches and thermostats, should be at an accessible height and designated accessible parking should be close to entrances, offering enough space for easy transfer to a wheelchair.

One recent project that has been incredibly successful in achieving its ambitions in both respects is Wraxall Yard in Dorset. Clementine Blakemore Architects have created a set of holiday cottages that set a new standard for high quality accessible holiday homes. The collection of five cottages within a restored nineteenth century dairy sit in a picturesque hamlet in west Dorset. Run as a not-for-profit, it is the creation organic farmer Nick Read, who acquired some surrounding land as an extension to his farm. With the derelict barns in a state of near collapse, they were useless for agriculture, so he sought a

socially beneficial use for the site instead. Having seen the shortage of holiday accommodation available to his mother, a wheelchair user, he knew of the desperate need for it.

Referrals directed him to Blakemore and together they dedicated several months to research, obtaining comprehensive guidance from the Centre for Accessible Environments. Consultations with wheelchair users provided practical recommendations and emphasized the significance of inclusive design. ‘It’s about dignity,’ says Blakemore. ‘No-one wants to feel different: “This entrance is for you, that way for everyone else.” We aimed to eliminate all those distinctions.’

Blakemore’s design for the Wraxall Yard complex was equally focused on enhancing biodiversity and landscape accessibility. The full project includes facilities such as a community space, a workshop and an educational smallholding. Reflecting the site’s agricultural character, the converted 19th-century stone barns are arranged around a rectangular courtyard. The original building materials were preserved and repaired using reclaimed and low-carbon products, such as cork and wood fibre insulation. Existing openings were reused and large windows were subdivided to filter sunlight and maintain privacy. The courtyard’s views are filtered through an informal mix of trees and shrubs, creating a peaceful space connected to the wider landscape, where a number of environmental measures have been implemented such as the introduction of wild honey bees and the creation of woodland pasture.



The wide, curved paths throughout the site are for all: there are no special routes, ramps or handrails for wheelchair users. Instead the topography and layout of the pathways have been designed to create gently sloping access for all. The five holiday homes are designed to prioritise easy circulation, featuring rooms on a single level with generous turning circles. Each cottage includes a bathroom, kitchen, dining space and one or two bedrooms. Wraxall Yard's kitchens and bathrooms have accessible features like sinks with grab handles and adjustable rise and fall worktops that accommodate wheelchairs but nothing looks in any way clinical: to all extents, accessibility has been made invisible. Everything has been considered to an exceptional degree of detail and it shows, with Wraxall Yard nominated for a slew of prizes across the industry in 2024, including winning the RIBA National Award and Civic Universal Design Award.

In the residential sphere, Tigg & Coll Architects won a project to adapt a family house in Surrey for two brothers with Duchenne Muscular Dystrophy, a progressive muscle weakness that affects mobility. Their challenge was to redesign a small family cottage in a way that would meet the boys' evolving needs as their mobility declined over time. The project, called House for Theo & Oskar, was featured on Grand Designs and shortlisted for RIBA House of the Year in 2021.

The design skilfully blends accessibility with biophilic principles. A new extension wraps around the side of the cottage, creating a wheelchair-accessible front entrance that integrates smoothly into the landscape. The interior layout of the new extension was carefully crafted to fit the existing cottage's form while providing wheelchair-friendly spaces, including large bedrooms with expansive garden views. Indoors and outdoors were brought together via large windows and sliding doors that offer easy access to the garden.

The stunning diagrid roof was designed as a continuous canopy, offering shade and protection – much like the natural tree canopies in the garden. This playful yet practical timber structure cantilevers over the building, creating a sense of lightness and openness. It allows sunlight to filter through skylights, casting dappled light across the interior and enhancing the connection between the inside and outside. The corner of the roof is even designed to support a swing, able to bear the weight of an adult. Crucially, the canopy's expansive design allows the boys' bedrooms to accommodate adjustable beds and the necessary space for motorized wheelchairs. It also has the structural integrity to support any future health equipment such as hoists, offering flexibility as their needs evolve.

This project is a powerful example of the importance of inclusive, thoughtful design with biophilic aspects, that both meets immediate needs and anticipates future challenges. The outcome is a home that empowers Theo and Oskar, offering them the freedom to grow and live as fully as possible and a testament to how architecture can shape a better future for everyone.

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Creating Inclusive, Biophilic, and Supportive Spaces for an Ageing Population

"As the global population ages and life expectancy increases, it's vital to rethink how living spaces can better support older adults. This includes creating environments that not only meet their functional needs but also promote well-being through biophilic design principles."

Ju-Wei Chen

Whether in retirement homes, care homes, or hospitals, spaces must be designed with accessibility, comfort, and safety while fostering a strong connection to nature.

A standout example of biophilic design is the Tonic House retirement community in Vauxhall, London – the first LGBTQ+ retirement community in the UK. This project was designed to provide a safe, inclusive environment where older LGBTQ+ individuals can feel supported and integrated during their later years. The design prioritises accessibility while integrating natural elements to ensure a calming, restorative environment. Greenery, natural light, and open spaces help residents feel connected to nature, which has been shown to reduce stress and improve mental health.

In our work with clients downsizing from larger homes, we focus on adapting spaces to meet their evolving needs while integrating elements that encourage well-being. For one client moving from a house with a beautiful garden to a city apartment, it was important to preserve their sense of connection to the outdoors. To achieve this, we invited an artist to create custom artwork featuring their favourite trees. These sculptural pieces, paired with carefully designed lighting, cast dynamic shadows that shift throughout the day and night. This interplay of light and shadow brings life to the space, evoking the experience of being surrounded by nature and creating a seamless indoor-outdoor feeling.

Tonic House – ***Before***

Tonic House –
After

We also prioritised accessibility for the client by raising the height of the toilet seat, installing grab rails with removable flexibility, incorporating hidden storage to maximise the use of space, and ensuring the home was flooded with natural light to create a bright and welcoming atmosphere. To enhance functionality and comfort, we integrated smart home systems to control lighting and blinds, making the space energy-efficient and easy to navigate.

Biophilic design goes beyond simply incorporating plants into the home – it also involves using natural materials that are easy to clean and design features that connect people with the outdoors.

By incorporating wood, stone, and other natural textures, we create a sensory environment that supports both physical and mental well-being. Tactile textures provide sensory comfort, while the use of colour – soft blues and natural greens – promotes a sense of calm. Additionally, the design makes space for outdoor views, with large windows framing greenery to help residents feel grounded and relaxed.

For those who spend much of their time at home, creating a nurturing and biophilic environment is key. Lighting, colour, texture, and the integration of nature should be carefully considered to enhance comfort and promote healing. Natural light plays a particularly important role in improving mood, especially for those with limited mobility or visual impairments. The use of plants, natural ventilation, and access to green spaces all contribute to a healthier, more supportive environment.

Ultimately, designing for an ageing population requires a thoughtful, holistic approach that incorporates both functional and biophilic elements. By creating flexible, safe, and nature-connected environments, we can help ensure that people age with dignity, continue to live independently, and experience the therapeutic benefits of being in tune with the natural world.

Ju-Wei Chen is the
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THE SCIENCE BEHIND BIOPHILIC DESIGN

Effects of Indoor Biophilic Environments on Cognitive Function in Elderly Patients with Diabetes

"There are now many many more research studies focusing on how Biophilic Design can have a positive impact on health outcomes. This recent study by Jiajia Dai, Mohan Wang and others looks at a Study Protocol for a Randomised Controlled Trial on Elderly patients who have diabetes."

There is a new study which is aiming to investigate the effects of indoor biophilic environments on cognitive function in elderly patients with diabetes, a group particularly vulnerable to cognitive impairment. As the prevalence of cognitive decline in elderly diabetic patients rises, exploring alternative strategies to improve cognition is crucial. Traditionally, cognition in elderly diabetics has been enhanced through medication, cognitive training, and lifestyle interventions. However, there has been little research on the potential of biophilic environments – spaces that integrate natural elements like plants, artwork, and animals – on cognitive function in this population.

Biophilic environments have shown promise in improving human health by reducing stress and enhancing cognitive performance, making them a potential tool for preventing or mitigating cognitive decline in elderly diabetic patients. This study aims to assess the effectiveness of such environments and explore the mechanisms underlying any observed improvements.

The research is a single-centre, randomised controlled trial with both short-term and long-term interventions. The short-term phase involves 64 diabetic patients aged 60 and above, who are randomly assigned to one of seven intervention groups or a control group. The intervention groups feature varying combinations of three biophilic elements: natural decorative paintings, indoor potted plants, and ornamental fish. Cognitive function will be assessed using the Digit Symbol Substitution Test (DSST) and the Brief Cognitive Scale (BDS), with the primary goal being to evaluate the impact of the biophilic elements on cognitive performance.

The long-term phase expands the study to 240 participants aged 60 and above, who will be randomly assigned to either the intervention or control group. The biophilic elements used in the long-term intervention will be selected based on the results from the short-term VR intervention. In this phase, cognitive function will be measured using the DSST and the Montreal Cognitive Assessment (MoCA). Additionally, biomarkers associated with cognitive function, including plasma p-tau181, esRAGE, and IL-6, will be measured to better understand the physiological changes that may accompany improvements in cognition.

The study's outcomes will provide valuable insights into how indoor biophilic environments influence cognition in elderly diabetic patients. If the interventions prove effective, they could contribute to the development of restorative living environments designed to enhance cognitive function and overall well-being for elderly individuals living with diabetes. The results may lead to new approaches for addressing cognitive decline in this vulnerable population.

To read more visit:
https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2025.1512175/abstract

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INSIDE OUT – HOW MODERN LIGHTING IS STEALING OUR NATURAL VITALITY

Xander Cadisch

"We spend up to 90% of our time indoors – ironically, even prisoners get more exposure to nature. Modern lighting, engineered for efficiency rather than wellbeing, is silently undermining our health and connection to the natural world."

Here's a shocking statistic: according to the National Human Activity Pattern Survey, we spend up to 90% of our time indoors (Klepeis et al., 2001) – that's less time outdoors than maximum security prisoners. Those being punished with restricted access to everything that makes life on this planet sacred ironically get more exposure to the natural surfaces, textures and colours that rejuvenate and energise us than those of us with the freedom to venture outside whenever we choose.

Through millennia of evolution outdoors, humans have developed a deeply integrated positive response to the hues, textures and organic shapes found in nature (Kellert & Wilson, 1995). Yet as we've enclosed ourselves in spaces with tiled roofs and carefully packed insulation, we've severed our connection to the richness of the natural world – particularly our relationship with the life-giving sun.

While humans have replicated natural light for millennia, modern pressures to create more light with less energy have led us to abandon more favourable light instruments in favour of harsh, often flickering LED lighting. As Professor Russell Foster notes in "Life Time" (2022), "we have rushed headlong into our modernity without a second thought for what this may do to us." This hasty transition has had serious consequences: increased cancer rates (Stevens et al., 2014), biodiversity damage (Gaston et al., 2015), and reduced academic performance (Kyba et al., 2020), among others.

THE SCIENCE

Today's indoor spaces typically feature flat, fluorescent lighting with minimal colour saturation, imperceptible flicker that causes headaches and fatigue, and no variation throughout the day. This sorry state stems from relentless value engineering – a process that quite literally engineers the very value out of our spaces. When lighting budgets are cut, every carefully curated nook and cranny loses its soul. The difference is stark: imagine illuminating a space with an iPhone torch versus bathing it in the full spectrum of natural light – rich reds, warm oranges, deep indigos, and vibrant violets. These are the wavelengths our eyes evolved to recognise and process, our direct connection to a space's soul. Yet the problem begins in architectural education, where professionals spend seven years studying how to build human habitats without a single module on biology or biophilic design. Lighting, perhaps the most influential yet underappreciated aspect of our built environment, bears the heaviest burden of this oversight.

Emerging research offers hope for harnessing light to enhance health and wellbeing. We now understand that exposure to the blue light found in LEDs produces cortisol levels equivalent to a double espresso (Lucas et al., 2014). We've discovered that infrared and ultraviolet wavelengths – which we evolved with through millennia of sun exposure – accelerate healing and optimise vitamin D production (particularly important given that 65% of Europeans are vitamin D deficient in winter [Cashman et al., 2016]). Well-designed office lighting enhances cognitive performance, while appropriate spectrum lighting in rest areas support restorative sleep (Lucas et al., 2014).

Nature provides essential contrast – areas of brightness and shadow that maintain visual engagement without causing strain. Our eyes evolved to process natural illuminance differences of around 50% between the brightest and darkest areas (Borisuit et al., 2015), with brightness and colour changing throughout the day. Studies have shown that tuning artificial lighting to match natural circadian rhythms slows mental degeneration and improves mood in Alzheimer's and dementia patients (Cajochen et al., 2019).

The technology to revolutionise indoor lighting already exists. We understand how different wavelengths affect our bodies at a cellular level (Hamblin & Demidova, 2006), and modern LED systems can deliver precise wavelength combinations while smart home technology tracks and adjusts to our daily rhythms (Soler et al., 2021). The third age of lighting isn't just about mimicking natural light – it's about using our understanding of photobiology to create environments that nurture and enhance our bodies beyond what nature alone could provide. By integrating UV, infrared, and visible light in precise, personalised combinations, we can transform our indoor spaces into sanctuaries of biological optimisation.

The path forward requires better legislation that approaches regulation holistically, moving beyond the "do more with less" mentality that ignores our biological needs. It demands that architectural education incorporate biological considerations from the start. While there is much work ahead, this third age of lighting is within our reach – one where we can harness the full spectrum of radiation to support our bodies' needs, enhance our performance, and accelerate our recovery.

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Listen and watch our podcast with Xander
https://journalofbiophilicdesign.com/podcast-journal-of-biophilic-design/seeing-the-light-how-biophilic-lighting-design-improves-health-and-wellbeing

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PLANTS

Houseplant trends for 2025

"Biophilic design remains as popular as ever in 2025, bringing the outdoors in with houseplants, natural textures, and earthy colours. From Pantone's Colour of the Year, Mocha Mousse, to big statement plants, this trend is all about creating nature-inspired homes."

Biophilic design is set to be even bigger in 2025, continuing to bring the outside into our homes. Creating calming, nature-inspired spaces, from indoor plants and living green walls to natural materials like wood and stone. Tall windows, natural light, and organic colours complete the look for 2025, merging interiors with the beauty of the outdoors!

"Houseplants will always remain at the heart of this trend", states Jo, founder of Beards & Daisies and author of the houseplant guide 'The Unkillables'. Houseplants offer an easy way to incorporate biophilic design into your home/office space. Pairing your plants with pots made from natural materials such as terracotta or stone enhances the fresh feel for the new year. With most houseplants having green foliage, this colour matches beautifully with the palette of 2025.

Natural, Warm and Earthy Colour Palettes

As we step into 2025, **earthy browns are taking centre stage in interior design**, creating a calming aesthetic. Jo comments "Pantone recently revealed its Colour of the Year, '*Mocha Mousse*', a warm, rich brown that emphasises comfort and a connection to nature, going back to biophilic design."

For houseplant lovers, brown-toned pots are an ideal way to replicate this trend while enhancing your indoor greenery. The warm hues of brown beautifully complement the greens of houseplants. “Brown and green are both calming colours in the environment, so they work well together. Dark greens like forest green go best with shades of brown”. Jo adds “Not only do these tones add warmth and texture to your space, but scientific research also shows that incorporating natural colours like brown and green can boost your mood, reduce stress, and even increase motivation too.”

Textured and Layered Walls

Texture finishes, such as bold wallpapers, are also set to dominate interior trends in 2025. To copy this look, Jo suggests incorporating elements like “vertical gardens” or “moss walls”, which add texture to your space. Climbing plants like Ivy and Swiss Cheese can add a textured wall effect, creating a striking feature in your home.

Curves and Organic Shapes

Sources reveal that organic, flowing designs are replacing sharp edges in 2025, with curved furniture and arched architecture gaining popularity. Jo comments “choose rounded pots or plants with soft, arching forms, such as Peace Lilies or a Chinese Money Plant, to copy this trend.

Multifunctional Spaces

As hybrid working continues to be popular post-pandemic, beautifully designed home offices are making a big comeback in 2025. Taller plants, such as Fiddle Leaf Figs or Kentia Palms, can create dividers to separate work areas from living spaces, while compact, air-purifying options like Snake Plants are perfect for your desk space with a touch of greenery.

Big and Bold

Houseplants are perfectly aligned with the bold, vibrant interior trend also emerging for 2025, where bright colours and large pieces are coming in. Rich tones like magenta, burgundy, and deep purples are gaining popularity while big, dramatic plants are set to be really popular too. Combining these trends with pots in lilac or green can create an impressive look in your home.

Jo, founder of Beards & Daisies, explains: “We’re seeing a real shift towards self-expression in interiors for 2025 too, with people choosing statement plants as focal points. Pairing large, architectural greenery like a Monstera Deliciosa with richly coloured pots or stands allows you to embrace the trend while adding a personal touch to your home. It’s all about creating spaces that feel unique, vibrant, and uplifting.”

Beards & Daisies Ltd

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Guardians of the Urban Spirit: The Sacred Trees of Korea

"Hidden amidst Korea's modern cityscapes are ancient giants – Dangsan Namu – revered as sacred beings and guardians of wisdom. These trees, honoured by tradition and deeply rooted in the spiritual fabric of their communities, remind us of a vital connection between nature, beauty, and our place in the universe."

Patrick M. Lydon

Down in the urban courtyard, two elderly women sit in silence. Above them, the wind moves through a giant old tree, and the tops of her limbs wave gently. On each limb, a grip of leaves twinkles with a shimmering of sunlight in between the mass of light green hues. These leaves are hoisted up by a trunk and branches that reach above the tallest of the buildings here, around seven stories. So, while a deep urban courtyard holds this tree, from afar you might see something that looks like a crown of glistening broccoli poking out above rows of rooftops.

In the courtyard where the old women sit, it is cool and peaceful. The tree feels like an alter of sorts. In fact, it is. This graceful giant in the middle of the city is both sacred and wise, and the order and decoration of the place around her acknowledges this sacredness and wisdom. So too, do the people. The old women sit in a place that honours not only their connection to the spirit of the tree, but to this nature and the universe.

This, is one of Korea's many Dangsan Namu.

Dangsan Namu is not a designation of any one particular species – indeed, you might variously say that a Ginkgo, a Zelkova, or a Camphor were all Dangsan Namu. Instead, this name is a designation of respect for a living being much older than any human, and for the spirit which animates this old living being. It is easy in this place, to have a sense of admiration, surprise, and above all, awe for these trees.

This is part of why the Dangsan Namu – which stand like guardian deities in many old villages and neighbourhoods in Korea – have been revered by the people as sacred beings. They come here not only to keep that connection, or to pray, but also for solutions to their problems: to be in the presence of the wisdom of nature.

Yet this tradition of fostering a close connection between trees and people has largely disappeared through modernization. So too, the idea that a tree might offer us a connection to something bigger and grander than ourselves has been dismissed as a useless, old-fashioned superstition.

Each of us likely feels in our own way, that a sense of admiration, awe, and beauty are all increasingly difficult to find in the modern city. Many of us can feel that something is missing in these places we inhabit.

While this missing feeling sometimes relates to our physical surroundings, it seems more often to be an absence of a particular view and intention – one that acknowledges the miraculous beauty of this world we inhabit as humans. That acknowledgement, this Biophilia, is the foundation for building such places of beauty.

With this anchor in nature, we have, just like the two old women under that Dangsan Namu, a true and consistent means of tethering our architecture, urban planning, and daily lives into this beauty.

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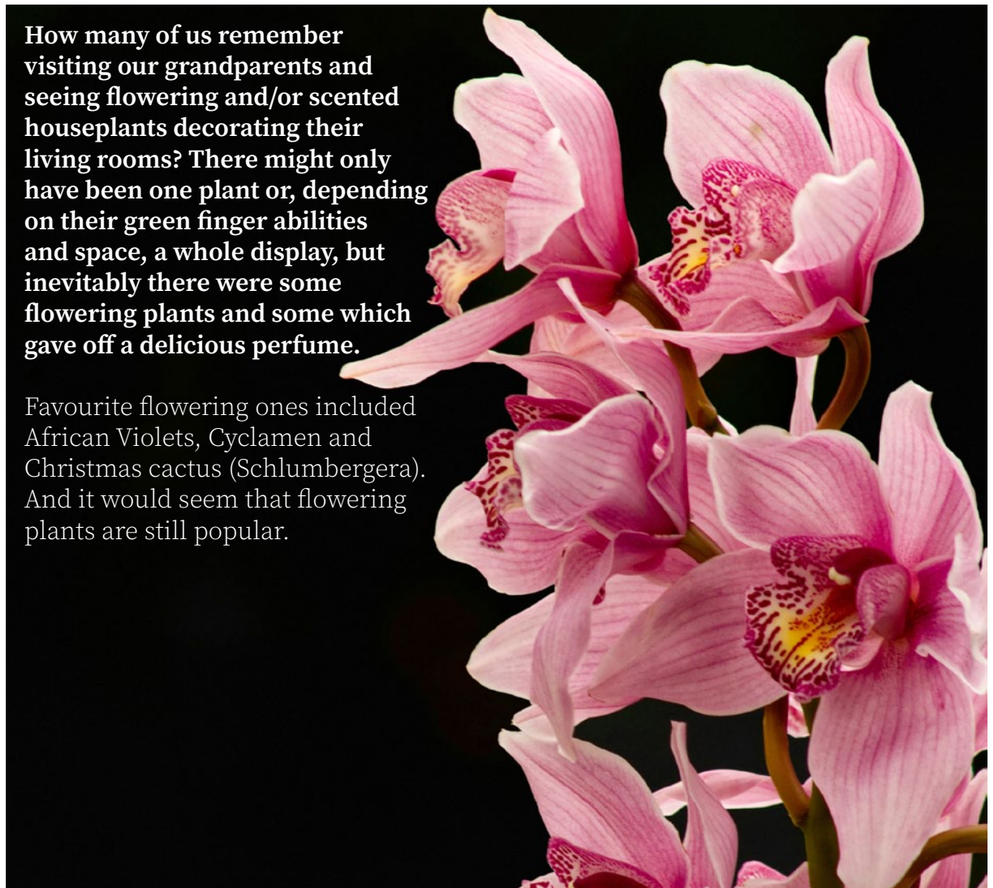
Flowering houseplants

"Plants in the office, home or school do not always just have to be just green leaves, in this issue we celebrate some bright seasonal flowers to bring joy to a space (and also tips on how to care for them!)."

Coll Smith



How many of us remember visiting our grandparents and seeing flowering and/or scented houseplants decorating their living rooms? There might only have been one plant or, depending on their green finger abilities and space, a whole display, but inevitably there were some flowering plants and some which gave off a delicious perfume.

Favourite flowering ones included African Violets, Cyclamen and Christmas cactus (Schlumbergera). And it would seem that flowering plants are still popular.

African Violets
Although the most common colour of African Violets is purple, they are also available in pink, blue, red and white. The Royal Horticultural Society has plenty of tips on how to look after African Violets if you wish to carry on our grandparents' tradition, from the best place to keep them – they like bright light to encourage flowering but not direct sunlight especially in summer; they like a temperature of 18-24°C and at least 16 degrees at night – to more detailed care tips.

They were officially referred to as Saintpaulia, they are now part of the Streptocarcus family.

African Violets courtesy of Flower Council of Holland

Cyclamen courtesy of the Royal Horticultural Society

Cyclamen persicum
Indoor Cyclamen is another plant which gives good flowers during winter enjoying well drained soil and a cool position. They like to be kept moist so watering from the base is good. Dead head regularly to keep them looking good above their heart-shaped leaves.

Christmas and Easter Cactus
Otherwise known as Schlumbergera, are easy to grow and produce interesting flowers in red, pink or white over the Christmas and pink for Easter months. Originally from tropical rainforests, Christmas Cacti like a couple of 'rest periods', one before flowering, during autumn and one after flowering in the spring.

Water regularly from April to September, then reduce until flowering begins nearer to Christmas. Once they finish flowering, reduce watering again.

Christmas cactus courtesy of Flower Council of Holland

Easter cactus courtesy of Pinterest

The Easter cactus has 'hot pink, star-like' flowers which show themselves between March and May. The Easter cactus is super easy to care for – it likes indirect sunlight and should only be watered when soil is dry to the touch. Never let it sit in water.

To encourage flowering keep it where night time temperatures dip to between 13-16°C and as weather warms up keep it somewhere that gets indirect sunlight to encourage flowering.

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Other flowering plants
Other popular flowering plants include Hyacinths, Paperwhites – two more popular ones for the winter/spring period – and Phalanopsis orchids and Anthurium.

Phalanopsis orchids are much easier to look after than you might think. They come in a transparent plastic pot which allows you to see the roots. According to ***orchidsinfo,*** 'This allows you to see the roots of the orchid at the bottom of the pot, so you can check if your orchid needs watering.' If the roots are green, it doesn't need water, but if they are grey or white, then it does!'

Orchidsinfo.eu also advise, that Orchids love a light place, room temperature of 15- 25C and feeding once a month. What they don't like are 'wet feet, a draft, full and direct sunlight' and being close to a radiator or other heat source.

They also advise weekly watering immersing the pot in water for 5-10 minutes before draining well. Once you know and follow these simple instructions you can have great success with Phalaenopsis aka Moth orchids.

Mixed bowl of Phalaenopsis Orchids courtesy of Flower Council of Holland

Anthurium
Anthuriums are a little more particular (fussy!) in their needs than the other flowering plants we've mentioned, but we think their addition is worth it. The RHS advise, 'Anthuriums add a splash of tropical colour to any bright, warm room, producing vibrant, long-lasting displays of flower-like 'spathes' above their glossy leaves.'

They come in a variety of colours including red, orange, pink or white and even a bronzy colour. They thrive in warm temperatures (16-30°C), and like 'bright but indirect light and high humidity.'

They don't like that sunny windowsill and prefer rain to tap water! Too little light will prevent them from flowering and temperatures below 10°C may bring on early death of your Anthurium.

Anthurium courtesy of Flower Council of Holland

The bad news – *'All parts of Anthuriums are toxic, so wear gloves when handling them and keep plants out of reach of children and pets.'*

Of course there are many more flowering plants that can make your home – whatever your age – look wonderful. If you want a larger choice consider easy Kalanchoe or the Peace Lily (Spathiphyllum), Stephanotis, Jasmine, Gardenia, Freesia, Azalea and the glorious Medinilla magnifica.

Peace Lily courtesy of Flower Council of Holland

Medinilla magnifica courtesy of Flower Council of Holland

www.plantsatwork.org.uk

www.RHS.co.uk

Orchidsinfo.eu

ENVIRONMENT
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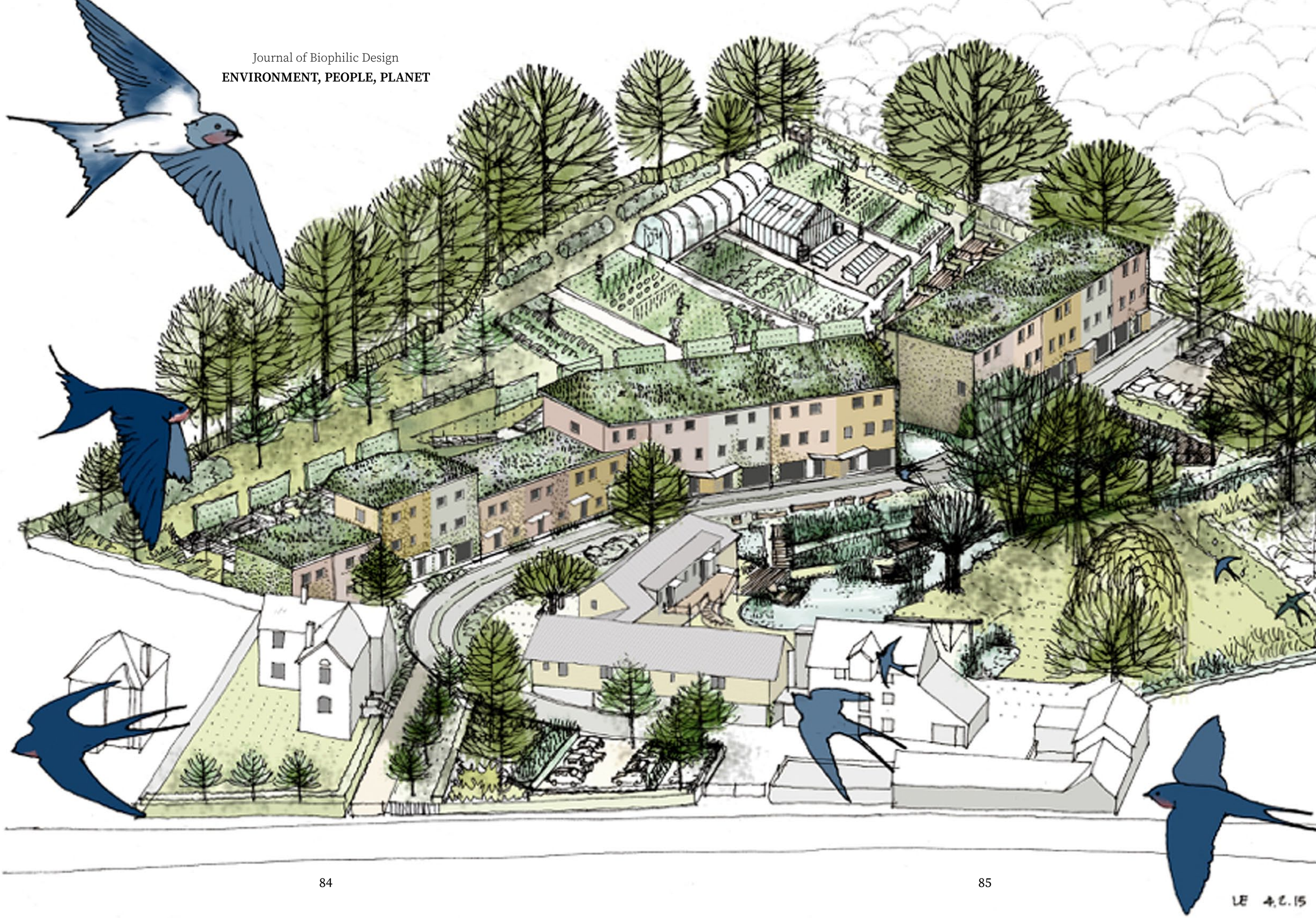
Biophilic Design and Ecourbanism – an example at Cannock Mill Co-housing, Colchester

Winner of the 2024 SALUS Healthy City Design Award for Healthy homes & neighbourhoods

Luke Engleback CMLI FRSA

For me, biophilic design is part of a whole systems approach to caring for people and planet, by thinking in systems rather than silos. This was how we approached the landscape design for Cannock Mill, a small neighbourhood of 26 homes in Colchester. Anne Thorne, a co-client, led the project, her progressive practice ATAP having been a leader in light impact design for decades. She explained that the co-housing group she had founded did not want to end up in 'an old peoples ghetto', instead desiring to live in energy efficient homes in a convivial community close to nature. Its success was recognised last October with an award at the SALUS Healthy City Design International congress in Liverpool.

Studio Engleback first collaborated with ATAP over 25 years ago, the introduction having been made by an ATAP team member who had attended my lectures on sustainable landscape design at the University of Bath. My own view was influenced by Ian McHarg's book 'Design with Nature' (1969), required reading when I studied in Edinburgh, by E O Wilson's poetic 'Biophilia'(1984) and 'The interconnections between human and ecosystem health' (di Giulio & Monosson, 1996). I have also enjoyed books on the biophilia by Kellert ((2008) and Beatley (2011).


LE 4.C.15

In February 2013 I attended the first Biophilic Design Conference and workshops held at Cornell University with my old friend Dr Mike Wells, who gave the keynote featuring a number of projects we had worked on over the previous 15 years. More recently, I worked with Dr Alessio Russo, including a biophilic design workshop with his students at Gloucester University, and subsequently following his move to Queensland University of Technology in Brisbane. This long consideration of natural systems, health and biophilia has fed into a pragmatic design response to Wilson's suggestion that whilst people might appear to be outwardly normal growing up in an environment stripped of plants and animals, they have "missed a wide array of experiences that the human brain is peculiarly equipped to receive." (Biophilia)

Professor Mark Everard wrote in 'The Ecosystems Revolution' (2016) that "humanity is not merely indivisible from, but evolved as a wholly owned subsidiary of nature", pointing out the importance of a biodiverse human microbiome to our health. Ten years ago, I met with Professor Alistair Woodward of Auckland University, who described how his PhD students were gathering data on how we acquire what he called 'microbial old friends' by walking in urban natural greenspaces. The importance of greening to our lives was also being investigated by the clinician Dr Payyam Dadvand at the Institute for Global Health in Barcelona; he presented his findings on the positive impact of green spaces to cognition and attention spans of children at the European the 'Green Infrastructure: nature based solutions for sustainable and resilient cities' conference held in Orvieto, Italy in 2017.

Human environmental exposures are part of 'the exposome' – the non-genetic drivers of human health and disease that are complementary to the human genome. A relatively new area of study, the European Exposome Network was launched in 2020 to research it. Louv's nature principle (2011), and Nichols 'Blue Mind' (2014) explored our connections to nature and water, and scientific investigations into the Japanese concept of 'Forest Bathing' called Shinrin-yoku have revealed the benefits of forest

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aromas to health. These and other stimuli have been explained by Kathy Willis in 'Good Nature-the new science of how nature improves our health' (2024). Taken with advances into how we can make our natural systems more resilient to the environmental emergencies, there is a rich evidence base to inform regenerative designs that play a part in a transformative approach to our complex and interdependent relationship with Nature.

At Cannock Mill, we minimised hard surfaces, using a vast biodiverse green roof, porous surfaces and rain gardens that place a brake on run-off and filter water entering a 900 year old mill pond. Now disconnected from the stream below it, water quality is important as well as needing to limit discharge to the stream, which is flood-prone due to surrounding urbanisation. Direct contact with nature, whether sitting overlooking the pond, or under the dappled shade of the willow trees, raising vegetables in the kitchen garden, making compost, or tending gardens are all important. The design promotes the ephemeral qualities of perfumes, birdsong, passing bees, butterflies and damselflies. Three times a week, residents gather in the old mill, which has become a communal house to eat together, often using food raised on site. Making space for nature in new housing is vital, done in the right way. it can fulfil our innate desire to be closer to nature every day.

Luke Engleback CMLI FRSA, Chartered Landscape Architect & Ecourbanist
Founder / Director of Studio Engleback

Biophilic Design and The Road to the Symbiocene

"The world is at a tipping point. Where the past centuries have been dominated by the Anthropocene – the era in which human activities have irreversibly changed the planet – there is now a growing need to embrace a new chapter: the Symbiocene."

Lianne Bongers

This term, coined by Australian environmental philosopher Glenn Albrecht, stands for an era in which humans and nature live together in harmony. And biophilic design could play a crucial role in this as a catalyst for change. But what exactly is the Symbiocene, and why is biophilic design that step towards this new era?

An era of harmony

The Symbiocene is about harmony and reciprocity between humans and nature. It is about collaborations in which we not only take from nature, but also give back. Instead of pollution and depletion, we look at how we can restore our planet and make it flourish again. This era is characterized by restoration, co-creation and a deeper connection with the natural world. No more 'me against the world' mentality, but a 'we are the world' mindset. The goal is not just to limit ecological damage, but to design systems that have a positive impact on the environment. The Symbiocene is about a shift from exploitation to collaboration, from alienation to connectedness.

What is Biophilic Design?

As we all know biophilia literally means "love of life" and it's a design method that integrates the natural world into the built environment. As biophilic designers we are focusing on restoring the connection between humans and nature through architecture, interior design and urban planning.

How Biophilic Design is the Path to the Symbiocene

1. Restoring Connectedness
The Symbiocene is all about a deeper connection between humans and nature. Biophilic design offers direct ways to restore this connection. Think of adding greenery, daylight optimization and good air quality in buildings. These elements not only bring peace, health and well-being, but also remind us of our intrinsic dependence on nature.

2. Sustainable Practices
The Symbiocene requires a shift towards circular and regenerative systems. Biophilic design plays a key role in this by promoting designs that use less energy, produce less waste and reuse materials. Think of buildings that generate energy, collect rainwater and reduce the ecological footprint of buildings.

3. Increased Awareness
By making natural elements tangible in our daily environment, biophilic design increases our awareness of the value of ecosystems. A building with a living facade or an interior full of plants reminds us that we are part of a larger whole. This awareness is essential for the change in mentality that is needed to realize the Symbiocene.

4. Well-being and Health
Another characteristic of the Symbiocene is the pursuit of well-being – not only of the planet, but also of people. Biophilic design has been shown to have a positive effect on mental and physical health. By incorporating natural light, healthy materials and greenery, stress levels are reduced, creativity is stimulated and recovery is accelerated.

Call to Action

The Symbiocene calls on us to transform our design thinking. Biophilic design offers a concrete and applicable framework to realize this vision. It is not just a trend in architecture or interior design; it is a necessary step in the evolution of our relationship with the planet.

The march towards the Symbiocene requires collaboration between architects, designers, policy makers and communities. Together we can create cities and buildings that not only meet the needs of today, but also contribute to a sustainable, resilient future.

Biophilic design is much more than a design philosophy; it is a movement that symbolizes a new way of living. In a world increasingly confronted with the limits of the Anthropocene, the Symbiocene offers a hopeful vision for the future. By embracing biophilic design, we can take the first steps towards an era of harmony, balance and mutual flourishing. The choice is in our hands – let us build a world in which humans and nature live together in symbiosis.

Liane Bongers not only works as a biophilic consultant and gives lectures but is also founder of the **Biophilic Design Academy:** a biophilic community for (interior) architects, designers & (green) stylists

https://www.biophilic-design.nl

INNER DEVELOPMENT GOALS AND LIVING BUILDING CHALLENGE

Martin Brown

"Martin Brown explores the links between our inner and outer biophilia through bringing together the powerful 'tools' of Inner Development Goals and the Living Building Challenge."

Regenerate hope now
Petals of courage unfold
Buildings breathe new life

Over a number of recent talks and presentations Martin has posed the question, what will life and work in the built environment feel like in 2030–35?

Consider this along with a scenario and prompts for individual and group questioning and reflection:

In 2035 the dominant building standard is indeed the Living Building Challenge, which by that time may have morphed into something even more challenging and more wonderful.

How will we design, construct and be leaders in a world on its way to zero carbon, is reversing biodiversity loss, engaging communities in a just transition, seeing ourselves as good ancestors and having a deep respect and recognition of place and culture.

"*What would the world look like if we all got to work imagining – and then building – a world we were deeply in love with?*" asks Rob Hopkins in his forthcoming new book 'How to Fall in Love with the Future: a time traveller's guide to changing the world'.

Martin's regenerative talks are often framed around the Living Building Challenge, as indeed since 2011 most of his 'regenerative' talks have been. It is a framework seen as vitally important as the built environment's regenerative philosophy, advocacy tool and certification to heal the future. And something that the UKGBC recognised as fundamental change, regenerative design and organisational transformation.

"*The language around climate change has been about stabilisation, reduction, curbing, mitigation. These words are used commonly. Frankly, they seem so inept and weak in terms of the crisis that confronts us*"
Paul Hawken

Yet we know that simply applying any standard simply is not moving the needle in the right direction. And the same for legislation, as we are seeing around the world, significantly in the US, are so easily rescinded. Our climate performance up to now, despite the application of sustainability standards over more than three decades, continues to worsen.

"*The most important journey you will take in life is the inner journey*."
Marianne Williamson.

The Inner Development Goals (IDGs) present a framework designed to support sustainable development by focusing on personal and collective inner capabilities. They represent a fresh and vital approach, asking questions across five dimensions around how we develop ourselves to address the ecological and social crisis we face.

So it is with the IDG Driving Change imperatives of *courage, commitment, optimism and perseverance* we can start to question and enhance our own inner development for regenerative change.

As the Regenerative Playbook notes, regenerative thinking enables us to ask better questions that ensure our organisations, buildings, products and lifestyles co-evolve and thrive as part of nature rather than apart from nature. It promotes connected rather than siloed approaches and importantly enables us to focus on potential and not just on problems.

Presented below are suggested prompt questions to focus on leadership qualities we will need in order to successfully address Beauty and Biophilia Leadership aspects in 2035. The emphasis is on leadership challenges rather than (just) technical or sustainability requirements, so include emotional and psychological aspects of leading transformative change and the importance of maintaining vision and inspiration.

Beauty & Biophilia Leadership

Courage
- How will you defend beauty and biophilia as essential rather than optional?
- What stance will you take on prioritising aesthetic and natural elements?

Creativity
- How will you inspire others to see beauty as integral to performance?
- What innovative approaches will you use to evaluate the impact of beauty?

Optimism
- How do you maintain focus on beauty during value engineering exercise?
- What vision will you share about the power of beautiful spaces?

Perseverance
- How will you maintain commitment to biophilic elements when faced with budget constraints?
- What strategies will help you overcome resistance to “non-functional” elements?

For more on Biophilia Leadership see the Living Future Europe Biophilia Playbook (How do we listen to the voice of nature?)

This article first appeared on Martin’s RegenNotes Substack. Subscribers to Martin’s Substack will find further inspirational leadership prompts mapping the IDG Driving Change dimensions across the Living Building Challenge

And please do let us know when, where and how you use these prompts.

Further Reading / References

Regen Notes https://fairsnape.substack.com/p/inner-development-goals-and-living

Positivity … in a wounded world. Healing the Future Regen Notes Oct 2022 https://fairsnape.substack.com/p/positivity-in-a-wounded-world

UKGBC Trends in Solutions – https://ukgbc.org/trends-in-solutions-2024/#System

Marianne Williamson https://en.wikipedia.org/wiki/Marianne_Williamson

The Regenerative Playbook: https://fairsnape.substack.com/p/the-regenerative-playbook

For more on Biophilia Leadership see the Biophilia Playbook (How do we listen to the voice of nature?) https://living-future.eu/the-biophilia-playbook

The National Forest Walking Festival

The National Forest Walking Festival celebrates its 16th year of exploration, inspiration, and accessible adventures

The National Forest is thrilled to announce the return of the National Forest Walking Festival, marking its 16th year of celebrating the beauty and accessibility of this unique and ever-growing landscape.

Taking place from May 16 to 26, the festival invites walkers of all ages and abilities to explore a transformed environment that perfectly blends nature, community, and sustainability.

Spanning 200 square miles across Leicestershire, Derbyshire, and Staffordshire, the National Forest is a bold and visionary project connecting two ancient forests – Charnwood and Needwood – through a mosaic of newly planted woodlands, meadows, hedgerows, and waterways.

What was once a landscape scarred by coalfields and clay pits has been reimagined as a thriving green space, teeming with wildlife and biodiversity. Today, the National Forest stands as a beacon of regeneration and sustainability. Through planting trees, caring for woodlands, and managing habitats, the Forest and its partners continue to demonstrate how nature and people can thrive together.

As the world calls for more trees, the Forest provides a thriving example of how the natural environment can drive recovery and inspire a greener, healthier, and more sustainable future.

This year's Walking Festival showcases the incredible diversity of the National Forest through a wide range of guided walks and outdoor experiences. Whether you're a seasoned hiker or taking your first steps into nature, the festival has something for everyone:

- **Gentle, Accessible Walks:** More than 20 routes under three miles, ideal for families, those with limited mobility, or anyone seeking a relaxed exploration. Buggy-friendly parkland trails and well-surfaced paths ensure accessibility for wheelchairs, trampers, and mobility scooters.
- **Sensory Experiences:** Thoughtfully curated walks designed to engage the senses, offering a unique way to connect with nature for those with sensory needs.
- **Beginner Adventures:** Guided nature-bimbles, like the stroll around Beacon Hill to explore tree life and wildlife, perfect for those new to walking.
- **Challenging Treks:** Energetic ten-mile routes through iconic landscapes, such as Calke Abbey and its reservoirs, for those seeking adventure and spectacular views.

This year's walks are made possible thanks to a dedicated team of volunteers who lead and support the festival's events.

These passionate individuals bring their local knowledge, enthusiasm, and love for the National Forest to guide walkers on routes that showcase the best of the region.

Whether offering insights into the area's history, pointing out hidden wildlife, or ensuring everyone feels welcome and safe, their commitment lies at the heart of the festival.

Zoe Sewter, volunteer and wellbeing officer at the National Forest, said: "The festival wouldn't be possible without the dedication of its incredible volunteers. "Their hard work ensures that the National Forest Walking Festival continues to grow, bringing together communities and celebrating the Forest's remarkable transformation from industrial land to vibrant green spaces.

"The Walking Festival embodies the spirit of the National Forest, a living testament to the power of nature to inspire policy, research, and practice.

"Each step taken during the festival is a celebration of how people and nature can not only coexist but can thrive together."

Join the fun this May to experience the magic of the National Forest Walking Festival and discover the inspiring story of a landscape that has been reimagined, replanted, and regenerated. Whether it's a gentle stroll or an invigorating hike, every walk is a step towards a greener future.

For more information about the festival and to explore the full programme of events, visit www.thenationalforestwalkingfestival.org.uk

The National Forest Walking Festival is coordinated by South Derbyshire district council on behalf of the National Forest, with support from East Staffordshire borough council, and North West Leicestershire district council.

The National Forest covers 200 square miles of the counties of Derbyshire, Leicestershire and Staffordshire. Its creation began in the early 1990s, a radical vision to bring the benefits of trees, woodland and multi-use forestry to lowland England, where thousands of people live and work.

The Forest provides a national demonstration of the value of the natural environment to drive regeneration and showcase policy and practice, research and development in the heart of the country.

It was the first broadleaf forest to be created at scale in England for more than 900 years and is now seen as one of the boldest environmentally led regeneration initiatives in the country. It has transformed a post-industrial Midlands landscape – scarred by coal mining and heavy industry – from black to green.

Year by year, the National Forest has been steadily turning what was once one of the least wooded areas of England into a multi-purpose, sustainable forest. More than nine million trees have been planted so far.

Forest cover has increased from 6% to 25%, approaching double the national average for woodland cover. The aim is to reach around a third forest cover.

Trees have been the catalyst for change and transformation. The National Forest is a positive response to the climate crisis and is putting in place the building blocks to deliver mitigation and adaptation to climate change. Through partnerships the National Forest is working to create wildlife habitats, reduce flooding, improve air quality, store carbon and create space for outdoor education, supporting the health and wellbeing of communities and enabling Forest-related businesses to thrive.

The National Forest Company (charity no: 1166563) leads the creation of the National Forest, working in partnership with landowners, local authorities, businesses and its communities. It has strong support from government, politicians and the public, and continues to be supported by the Department for Environment, Food and Rural Affairs.
www.nationalforest.org

WELLBEING

Valuing life… at every stage

"Why and how can Biophilic Design help us create "good endings" in every sense."

Victoria Jackson

The third age can now be a much longer and more comfortable period of life than it once was, with average life expectancy rising due to improved nutrition, lifestyles, and medical advances. For those who are active, the third age is sometimes referred to as the golden years, as it can be a time to focus on their own needs and interests if they have retired, paid off their mortgage, or had their children leave home.

However, these newfound freedoms can also lead to a loss of identity and purpose, with people still referring to themselves in terms of what they did before they retired. This can have a detrimental effect on people's wellbeing as that chapter of their life comes to an end. For those still of working age these effects are often unseen or unnoticed and therefore ignored. As such, the voices and needs of the third age community can often be sidelined by those designing the world they live in.

I've recently seen a lot of discussion in my design networks about our need to stop avoiding thinking about endings and instead to design for 'good endings' – whether it is the end-of-life of a building, product, material, or organisation. But what about the end of a person's life? The third age is when we as humans can make conscious decisions about our own endings, while we still have agency. It is also a time for reflection and for sharing the skills and wisdom accumulated over a lifetime.

Within my regenerative design practice, I take inspiration from nature by learning and mimicking how ecological systems function. For example, there is no waste in an ecological system – resources and energy instead change form. This way of seeing life as a process of transformation can help when navigating transitions in our lives. It can also be experienced tangibly through interactions with materials.

As part of my practice, I run a community repair café where people are invited to bring their broken possessions. Then, with help from one of our volunteers, they learn how to repair it, or if it isn't repairable, what can be done with it. This ensures the valuable materials can be transformed into something else after being retired from use in their current form.

Many of our volunteers are themselves retired from their previous professions. They bring their time and skills every month to share with others. This experience can be empowering for both participant and volunteer and (like any volunteering work) can contribute to feeling valued. It can also lead to discovering a new purpose, particularly for those in their third age. But what about those who are no longer active or are unwell in their third age, as they enter a fourth age?[i]

A couple of decades ago, when I started working at a hospice as an artist in residence, I told a friend's mum what I was doing – helping patients with life-limiting illnesses to create digital life stories projects – and she said, "Why bother?" This took me aback and I didn't know how to respond at the time because I thought the answer was obvious. But it made me realise that from the outside some think of hospices as 'death's waiting rooms'. But the people working in them viewed them as something else: a place of care and for supporting good endings.

Don't get me wrong, when I walked in on my first day as a 20 something year old artist from Brighton, the hospice couldn't have been any further from my day-to-day life and experiences. That was the point – I was not there to provide care or to visit a loved one. I was there to listen and help people who were coming to the end of their life to capture the essence of their story and find a way to express it.

One of the people I collaborated with was bed bound on a ward. As we talked during our first meeting, he told me how he loved to watch the reflections of the water from the pond outside the window dancing on the ceiling above his bed. It reminded him of the water gardens in Japan and the time he had spent there in wartime, and it led to us creating a handbound book about the beauty he found (despite the reason he was there) in a landscape that was so foreign to him.

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This was long before I'd heard the term biophilic design and I wasn't aware that he was benefiting from Non-Rhythmic Sensory Stimuli at that time. But his delight stuck with me and in my work as a biophilic design strategist, I often recommend purposefully situating bodies of water outside the windows of buildings. With the right orientation, it is possible to harness this little piece of wonder; blurring the boundaries between outside and in, so that people who cannot be outside can still experience the benefits of nature connections.

Biophilic design (or designing for our innate connection to life) in the third age doesn't just mean putting some plants in a room. It requires thinking about how we (both as individuals and the built environment sector) can support people's ecological and cultural connections to place, whatever their activity level. This means removing the barriers to them having an ongoing relationship with the natural world, and creating opportunities for their voices, experiences, and skills to be heard and valued.

Victoria Jackson is a regenerative design consultant, author, and curator working at the intersection of ecological literacy and community resilience. For the past decade she has focused on helping clients in the built environment sector to incorporate biophilic design into their spaces through design strategies and knowledge development.

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[i] Hubble, N., Tew, P. (2013). Understanding Third and Fourth Age Subjectivity from Mass Observation Responses. In: Ageing, Narrative and Identity. Palgrave Macmillan, London. https://doi.org/10.1057/9780230390942_5

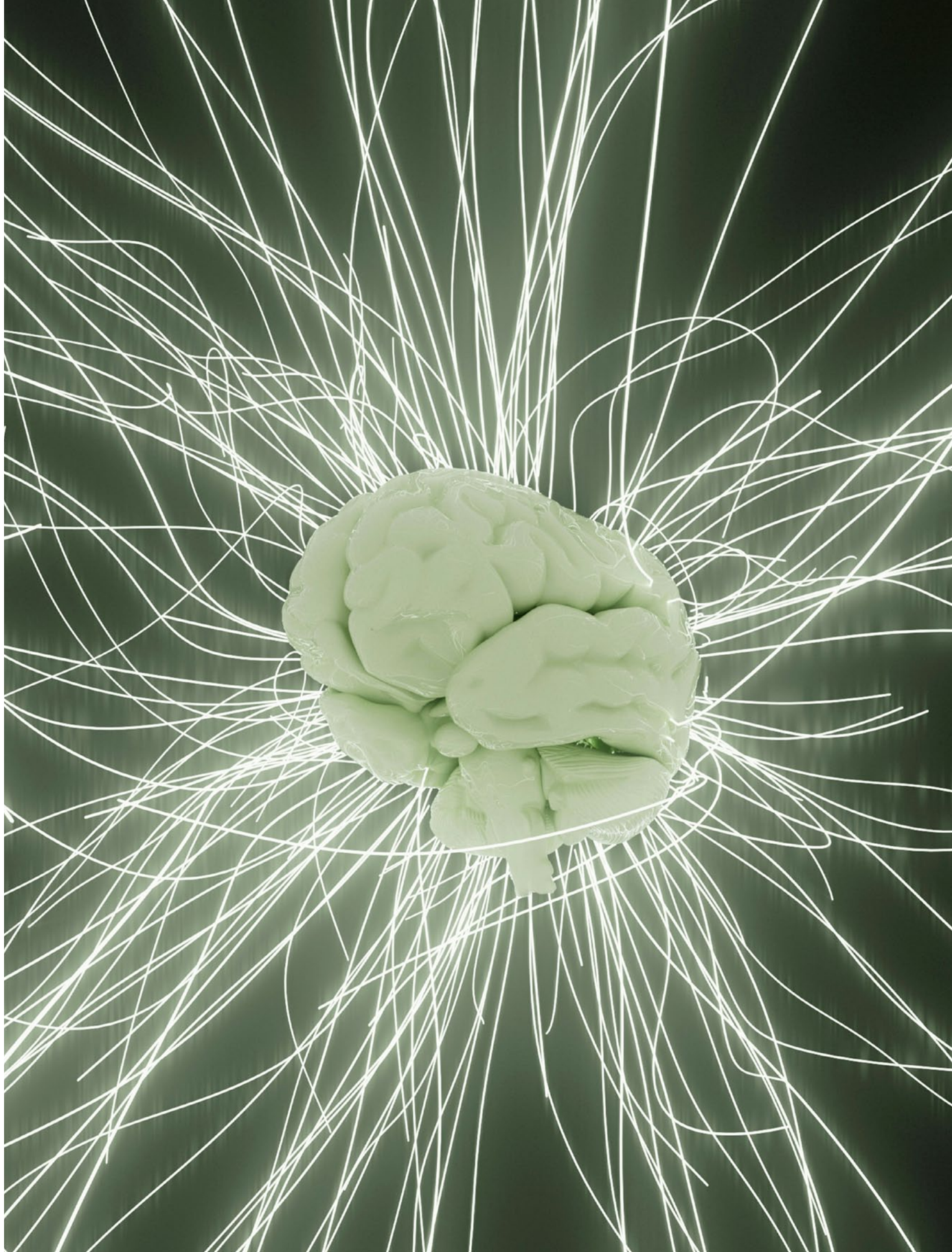
Design for Life – Biophilic Spaces Heal Our Bodies, Minds, and Planet

"Biophilic design isn't just a trend; it's a vital blueprint for healing, offering the potential to reconnect our frazzled minds, aging bodies, and a fractured planet. By embracing the power of our senses, we can create environments that nourish the nervous system, promote well-being, and spark the life force necessary for both personal and planetary renewal."

Chintamani Bird

So, what's the point of all this biophilic stuff! Why should the world care about plants, birds and insects? I am only going to die anyway. We are all going to die, and most of the time, we don't have a choice in the matter. Why should I care when no one else seems too concerned about the world's plight?

I know an architect who is all about sustainability. He even has it on his logo and website. But he still specifies astroturf. When I talk to him, he argues to keep the status quo and thinks that science is transient and will change back to current business practices. I fight back! I stand my ground, and his argument twists and turns. He says he is all about biophilic design but doesn't agree with or know the science. He proclaims that he knows what he is talking about. Funny that. I know some things but would never proclaim that I know the most. To him, it's all about the mighty dollar and how he can position himself.



So, why should I bother? When there are people who really don't care about the greater whole. The omnipresence of humanity and nature and the natural world combined. But then I listen to my heart. I look up at the sky, see the different shades of blue, and get mesmerised by the clouds, which sometimes look like an oil painting. I feel wonder inspired by the audacious awe that swells up within me.

So, why should I care? I will die one day, and everyone I know will, too! But I choose today to claim small and large victories. Sometimes, the victories are masked in trials and tribulations as I recover from Bell's palsy, and the sudden jolt of my humanness comes with a reality check. As I get older, as we all get older, things happen that are out of our control, including the left side of my face becoming paralysed, and I no longer can enjoy a hot cup of tea or drink my green smoothie out of a straw. Oh, my lord, the slurping sounds can be heard for miles. And trying to swoosh the toothpaste around my teeth and mouth comes with some comical relief.

But what happens when my body changes, including my mind, body and spirit? It is often said that biophilic design is based on how we survive, and anthropological studies support this. I want to push this further. Survival is fulfilling our most basic needs, and this is important. Thriving is when we surpass the survival mode of life and go beyond any barriers that would hold us back. This sounds very cool and ideal, but the critical and most vital elements are missing in this equation. HEALING! Healing is the critical element that traverses the bridge between survival and thriving as we age. Design is amazing, and biophilic design has the incredible potential to heal the wounds and mend the stress that we have placed upon ourselves and on the planet. So, when we try to make changes to this world, we need to remember that there is light and there is darkness. The calm of the ocean is equally as important as the thunder and lightning over a storm-engulfed sea.

Our inner and outer worlds are filled with emotions driven by our senses, which influence our parasympathetic and sympathetic nervous systems. When we work out regularly or not so regularly at the gym or engage in any form of exercise or activity, as we age or at any age, our nervous system is the first thing that strengthens before our muscles. It makes sense that strengthening our nervous system as we age is vital to remember before we think about strengthening our muscles. It's like a dance with our body and mind, a push-and-pull dynamic influenced by our environment and how we engage with the world. We are a ball of energy in a constant flux of intensities. The brain's job is to decipher through our senses. Our brains and bodies change over time, and as we age, there is an incredible amount of work and research regarding centenarians and how our environment can significantly influence our quality of life.

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Our brains can shrink from the age of 40, and if a person is under a significant amount of stress over a long period of time, an accelerated form of aging can happen to the brain. There is an increased risk of dementia and inflammation, which damages brain cells. The functionality of those cells and cortisol surges become toxic to the brain.

Whoa! There is much to consider (although my mouth can only express half of the sound: "Oa!").

There is only one primary function we need to remember of the brain; it exists to help us survive. But it is up to us whether we wish to thrive and potentially heal through the opportunities that are presented to us or audaciously pursue them through passion, connection, and purpose.

Biophilic design supports healing through our senses with the brain and autonomic nervous system. It is time to come out of the dark and see the light of possibilities to help the planet and humanity become one again. We can be wholistically unified and flourish without excluding the darker part of the whole. Looking at the thunder and lightning with awe and fear.

But let's look a little deeper.

As a species, we are constantly finding ways to react and adapt. Our brains are very flexible, so they are continually changing and adapting. The adult brain can rewire itself in ways that neuroscience never anticipated before. The corrosive forces of modernity impact life, so when we design and live in an environment that reduces our ability to connect to those living systems like our senses, community, passion or a sense of purpose, there is a decline in our well-being and quality of life.

The living systems in and outside our body are all connected to diverse environments. Biophilic design can extend our internal environment to the external, enlivening our senses and enriching our lives if we decide to make changes to improve the world around us so that people and the planet can thrive. Our nervous system allows us to interact with the environment and is highly adaptable. By understanding what is happening inside the body and managing what's happening on the outside, the nervous system is at the core of who we are.

My paralysed face is not who I am, although it is a bit frustrating that I can't cry, smile, or even laugh with 100% intensity. Slurping down the dumplings I love so much is not as satisfying but is quite hilarious when no one is watching. But the story I tell through my memories, senses, and life experiences is who I am. My autonomic nervous system, brain, and body have allowed me to survive. But the thriving part is up to me with self-awareness and the decisions I make through passion and conviction. The Japanese call it Ikigai. I prefer to think about it as my audacious, fun-loving, playful and fierce spirit.

So, what is the most important thing to remember when we wish to design as we age?

Our environment is essential. Loneliness can cost fifteen years off your life, and two to six years are lost if you are put into a nursing home or retirement village. Having a community and designing for a community must be a core value when designing biophilic design for the elderly. Oh hell! When you create anything, think community. We are social beings, not social media beings.

We have joints that need to be moved. The body will not create health for the hell of it. So, when designing for the elderly, we must keep things moving with storytelling on the walls, with fields of green or embossed stories that demonstrate the patina of time, birth, death, and rebirth of a tree or seed.

Joints can freeze with immobility. So design spaces that draw people in and create curiosity with textures that can feel cool to the touch, warmth with thermal massing, and colour variations. The amygdala is switched on when a memory is triggered through our senses. I remember watching a documentary about a woman who had severe dementia who listened to music that she knew when she was young and had her memory return for a few minutes after listening to her favourite music. Her son was brought to tears. Our senses are powerful tools to link our story and keep ourselves thriving. Can you imagine what we could do to help people thrive if we used this knowledge of biophilic design and supported the senses, which enriches the brain, strengthens our nervous system, and ultimately helps the body heal?

To answer the question that I asked earlier.

Biophilic design, environmental regeneration, and supporting humankind's condition of thriving and healing are my Ikigai. No matter what, my passion is to see people inspired and find their own passion and community. My life will end. But life is not about me. It is how I live my life. How I choose to make a difference, even through my mistakes I hope to learn and be a better person.

What's your Ikigai?

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Rediscovering Wisdom Through Slowing Down and Letting Go

"The Third Age marks a transformative period where we shift from relentless achievement to cherishing everyday moments, re-evaluating our values, and reconnecting with nature and each other."

Dr Ong Boon Lay

The Third Age in our lives is a recent luxury. Now more than ever, we can live a substantial part of our lives reaping the benefits of our working years. The Third Age is an age of wisdom, and in a world increasingly overwhelmed with knowledge and data, wisdom will become a much-valued commodity. Nature teaches us this wisdom in the Third Age through three transformations – slowing down, reprioritising, and re-engagement.

The first transformation, slowing down, is inevitable and often disappointing. We can no longer be as alert, as fast nor as efficient as we used to be. We become more accident prone, and our bodies and minds no longer respond as effortlessly as we are accustomed to. We realise that we need to put in the effort, an effort that used to be unthinking, to do the simplest things and that we need to begin to take care of ourselves – diet, exercise, sleep, etc.

When this happens, we find ourselves rethinking the values that had driven our lives. As observed by Atul Gawande, "among the ill, the age differences disappeared. The preferences of a young person with AIDS were the same as those of an old person". We realise the importance of emotional closeness and that the quality of our lives is measured by "having company, keeping up [our] connections in the outside world, continuing the activities [we] valued most". The earlier values, linked to making a difference to the world at large, fade away against the everyday struggles that we avoided or disregarded. The mundane and the banal are suddenly the most important, and the extraordinary and exciting are flowers along the way but not the path itself.

If we embrace this wisdom, one of the first things we do is to make amends. We also forgive those who have hurt us and realise that it was all in pursuit of meaningless dreams. Lived well, the Third Age is the time when bonds are rebuilt, and the sense that we are not living just in the moment but that our lives are part of the legacy of humanity pervades our actions. More than ever, we realise that the little things count more than the big ones. We realise that the future is not in our hands, and we let go. And in letting go, we live more deeply in the present.

It is a wisdom for our age, the age of humanity and not just individually. Modern psychology advises us to slow down, be more mindful of our actions, and to let go, not let the stresses in our lives overcome us. Our environmental crisis also suggests that we slow down, be content with what we have, and pay more attention to doing good and helping one another. Our mental and emotional health demands that we work to human constraints and stop succumbing to economic prerogatives. In a world that is already overconsuming, the road ahead requires a realignment of our values and priorities. We have more than enough. We just need to find better ways to live.

This wisdom is ancient. It is better reflected in the philosophies and religions of old than they are in current times. It began, like Carl Sagan had said, from just looking at the sky and be filled with awe and wonder. The rigour of science is not found in such ancient ways, but their common truths remain. Buddha saw that life is full of suffering but taught that the solution is compassion. The Stoics noted that much of life is beyond our control, but the virtuous life is the one that frees us. Jesus taught that the first commandment is to love God and to love one another. Be they religion, philosophy or tradition, ancient wisdom reaches out to universal truths and grounds us to our deepest selves.

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WELLBEING

For most of our history, the family has been the cornerstone of society and the anchor of our lives. The Modern Era came to see this as a burden and sought to free us and allow us to be everything that we can be. It is a noble persuasion. But in the process, we lost ourselves because who we are is bound to our circumstances and genetic makeup. There are those who chose not to break away but to build upon the ties that are there. More of us may need to make the same choice moving forward.

The Third Age reminds us that we are part of nature, and that there is a human nature that is as bound to the laws of the universe as any other object or living thing. It is a liberating yoke, rather than an imprisoning one. As the aging amongst us journey towards our end, we have a final lesson, perhaps the most important lesson, to share with the next generation. Life is limiting, but abundant, people are difficult, but to be cherished, what we have is enough, and to be shared, and life may be full of suffering, but to be lived with courage.

www.linkedin.com/in/ongboonlay

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BIOPHILIC CITIES

DESIGNING BIOPHILIC CITIES THAT STAND THE TEST OF TIME

"Blending digital innovation with creative expertise can revolutionise city design, crafting environments that are not only functional and sustainable but also truly loved, transforming architectural visions into immersive, nature-inspired urban spaces that foster genuine emotional connections."

Roderick Bates

Any building that endures must be both functional and loved. Centring a design around humans is crucial – not only for increasing positive interactions between us and our lived environment, but also for future-proofing cities and ensuring design longevity. If a structure is not useful, it likely will have a short lifespan. Similarly, if a building is not loved, regardless of how useful it might be, it will soon meet the wrecking ball. The functional requirements of buildings, despite being an evolving standard, can be met with a variety of known tools. But how can designers create buildings that inspire a positive emotional response, on an intrinsic level, that ensure a long and productive life as part of the urban fabric?

The public knows what it wants, even if it cannot articulate the details. They know a good building when they see one because they feel, on a deep level, an emotional response to great architecture. However, the reality of the traditional design process is that it often excludes public input, because it uses specialised language, tools, and visualisation methods, making it inaccessible to the uninitiated. As a result, powerful and complex design approaches like biophilia face significant hurdles to being understood and incorporated into the built environment. Much of the misunderstanding lies in being unable to visualise and experience the finished product.

After all, how can an emotional response to a design ever be gauged without ever presenting it to stakeholders in a way that can be fully understood? It creates an incredible gamble, particularly when thinking of the time, money, and environmental impact wrapped up in a building. When it comes to creating an emotional connection between occupants and a structure, biophilic design principles stand out as one of the more well-documented and effective approaches. However, how can a design truly evoke an emotional response if it is never shared, tested, and validated by those whose emotions it aims to engage? If sharing a design with stakeholders is crucial to validating biophilic design strategies, there remains the challenge of how the public can fully appreciate biophilic design elements, such as natural light and connection to nature, if the building does not yet exist. This is particularly important given biophilia, at its core, is largely about the environment itself evoking an emotional response. The solution lies in creating an environment that can be experienced during the design phase and with the help of visualisation technology, this gap is being bridged. These tools serve as a powerful medium to advocate for nature in design.

3D rendering technology allows designers to craft a believable visual experience, creating spaces that feel authentic, natural, and real. The ray-traced quality of contemporary visualisation technology creates physically accurate digital worlds from architectural design models. The experiences that result can transport anyone into the design, with a level of realism that avoids the uncanny valley traditionally associated with human likeness but equally applicable to natural elements. Current technology accurately mimics lighting natural materials, vegetation, and even the specific views from the building, maximising visual realism. The resulting digital 3D render allows the biophilic elements of designs to evoke the same emotional response in the occupant that the building will once it is built.

These renders, rooted in the context of an existing site, allow the biophilic design elements to be accurately simulated. Designers can then use them to test the emotional responses of stakeholders, giving clients the ability to explore the spaces, make discoveries, and create a mental map that makes the design their own. The resulting visceral reactions can be captured, taken under consideration, and integrated into the design.

By visualising and trialling the emotional impacts of buildings at the start of the design process planners and designers can ensure they resonate with people on a deeper level, laying the foundation for the lasting success of biophilic cities.

Roderick Bates is Director of Corporate Development at Chaos
https://www.chaos.com

Green public spaces for citizens' health

"What is a Biocity? While the concepts of Smart Cities and Green Cities are well known, Biocities represent a more holistic approach. Rather than seeing nature as being housed in cities, Biocities embrace the idea of "Cities hosted by nature."

Livia Podestà and **Matilda van den Bosch**. EFI Biocities Facility

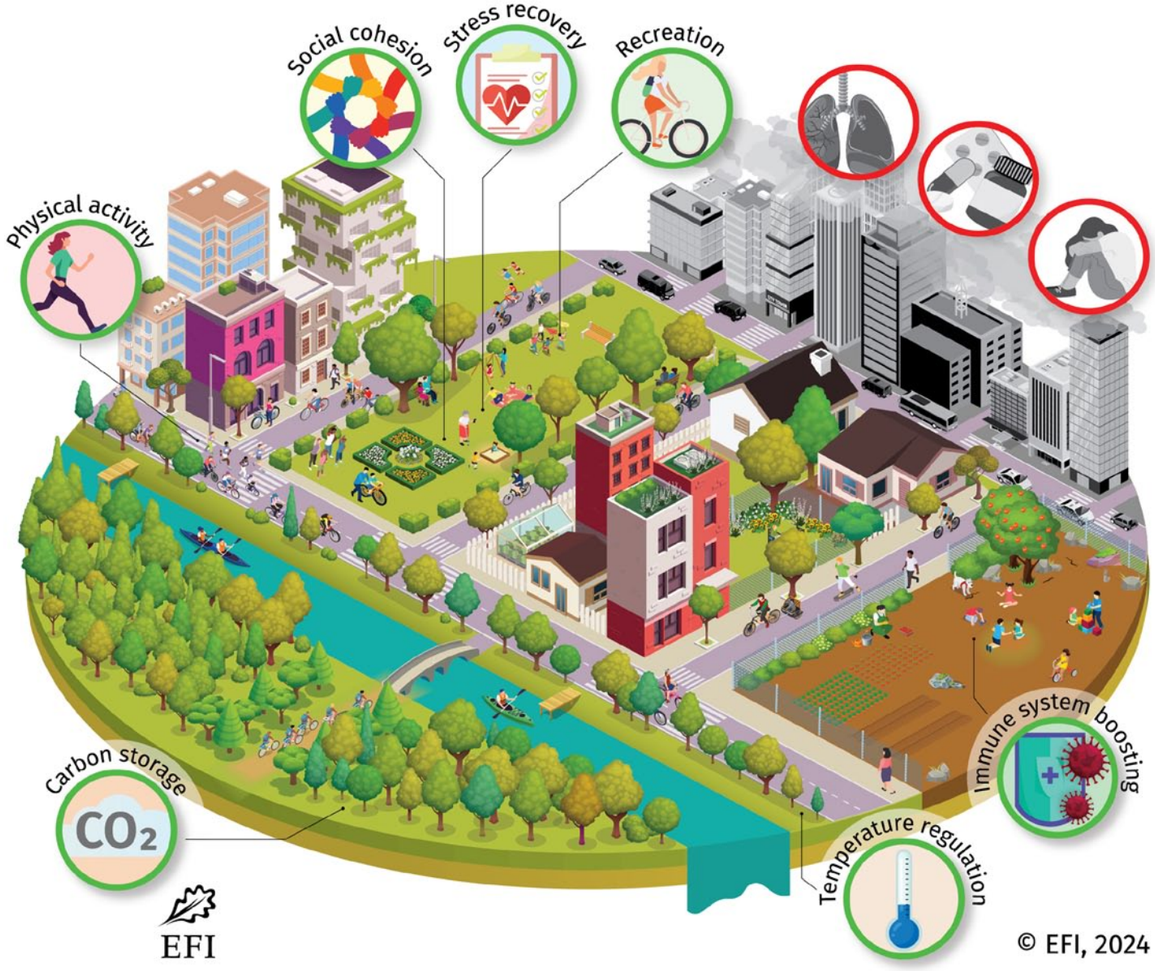
We live in a time of rapid urbanization. Today, 56% of the world's population – about four billion people – reside in cities. By 2050, the World Bank estimates that this number will increase to 70%, meaning an additional six million people will move to urban areas every month over the next 30 years).[1]

This unprecedented shift, which began with the Industrial Revolution, has driven quick economic growth, but at a steep environmental cost. Fuelled by a fossil-based economy, urban expansion has pushed us to an ecological tipping point. Our cities have outgrown the planet's capacity to sustain them. Climate change, biodiversity loss, the degradation of our natural resources, and increasingly vulnerable and unhospitable urban environments are clear symptoms of this crisis.

Not only are existing cities becoming bigger and more densely populated, pushing back the surrounding rural areas and their nature, but megacities – urban areas with populations exceeding 10 million – are expected to increase in number from 44 to 67 by 2050, with most of this growth concentrated in Africa and the Asia Pacific region.[2]

Cities, our economic and innovation hubs, need to lead the way in rethinking their relationship to nature. Transitioning to renewable energy is not enough; we must also shift from non-renewable materials like plastics, steel, and concrete to renewable biobased-materials and replace grey infrastructures with green solutions, making nature a basic urban infrastructure. Nature should not be treated as merely an ornamental addition, but as an essential component of urban planning. Trees, forests, and wood play a crucial role in transforming cities into *Biocities*, with the goal of improving the quality of citizens' life and protecting ecosystems on a global scale.

Photo credit: Ida Gyulai
Vallastaden – Smart City



But what is a Biocity? While the concepts of Smart Cities and Green Cities are well known, Biocities represent a more holistic approach. Rather than seeing nature as being housed in cities, Biocities embrace the idea of "Cities hosted by nature".[3]

Biocities understand green (trees, forests and plants) and blue (water) infrastructures as valuable assets rather than costs. Like natural ecosystems, Biocities are dynamic and constantly evolving, which represents a paradigm shift in the way we design urban areas, requiring multidisciplinary collaboration across natural, technical, and social science sectors.

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Why investing in urban green is equal to promoting health and saving healthcare costs

Biocities possess significant potential to enhance health and wellbeing for all. A robust body of scientific evidence highlights the numerous health benefits derived from interacting with urban nature. These interactions can take various forms; for instance, simply having views of trees from one's home can reduce stress levels and improve mental health.[4] Green areas also encourage physical activity and foster social connections within neighbourhoods, which in turn lowers the risk of chronic diseases, such as heart disease, cancer, and diabetes.[5] Additionally, the regulating ecosystem services provided by natural infrastructure contribute to healthier and longer lives by, for example, mitigating urban environmental stressors like heat, thereby reducing heat-related illness and fatalities.[6] Perhaps most importantly, urban nature can help reduce health inequalities linked to socioeconomic status by offering the greatest benefits to those who need them the most.[7]

Investing in green infrastructures should therefore become a priority for city administrations. There is even potential for significant return on investment in healthcare savings. A recent systematic review called for more research on the topic but concluded that greenspace exposure is associated with both reduced healthcare prescriptions and costs.[8]

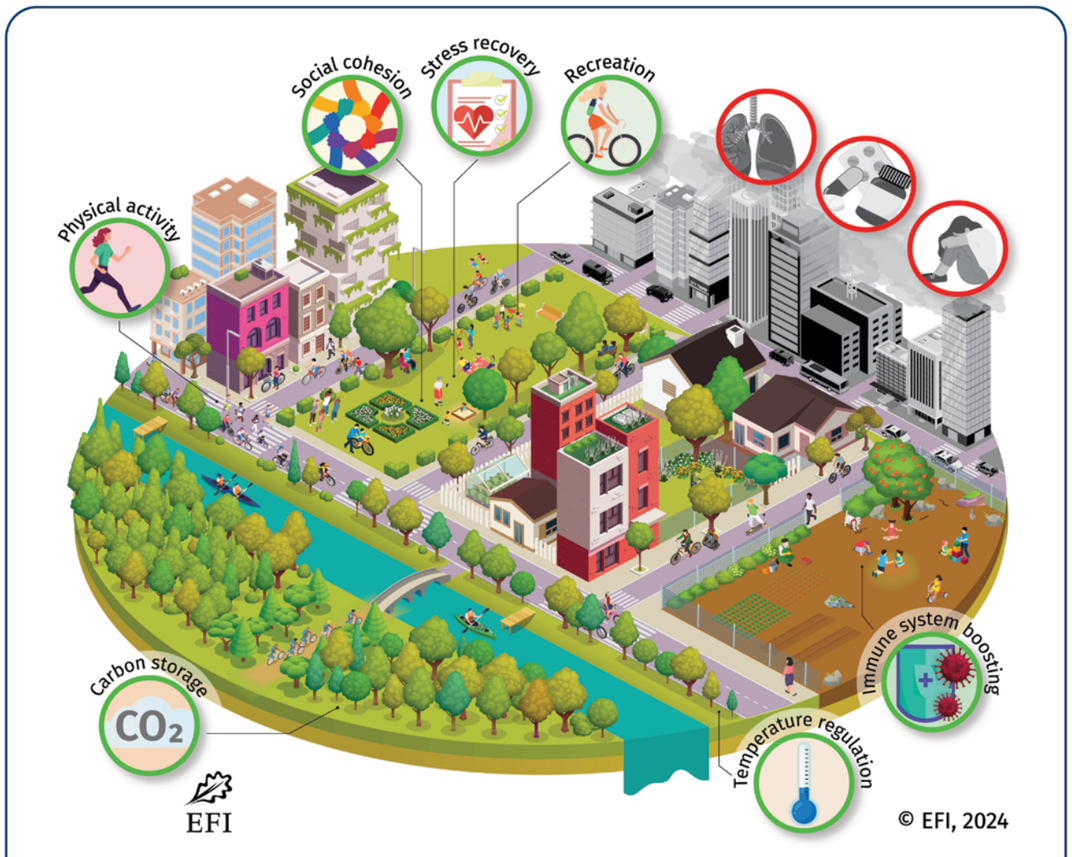
In an era where we are pushing the planetary boundaries to their limits, the need for a transformation of urban environments is urgent. By reimagining cities as living systems, we can create urban environments that are not only more resilient but also healthier, more sustainable, and more attuned to the ecosystems that sustain them.

Livia Podestà, Communications Manager at EFI Biocities Facility and Matilda van den Bosch, senior researcher at EFI Biocities Facility and ISGlobal Barcelona.

Combating health problems with urban forests

Urbanisation is rapidly transforming our societies, posing challenges related to climate change, biodiversity loss, and environmental degradation, all major threats to human health. Another issue is that urban lifestyles, characterised by chronic stress, social isolation, and lack of physical activity, have changed the global disease burden, now being dominated by non-communicable diseases (NCDs), such as obesity, heart diseases, diabetes, and depression.

These interconnected challenges can partly be addressed by nature-based solutions, such as urban forests, which have the potential to improve both the city environment and human health. Urban forests can be broadly defined as any tree and its related ecosystem in and around cities.



Urban greening contributes to health promoting behaviours, reduces the negative impact of climate change, and stimulates a healthy development of the immune system.

Urban trees are a multifaceted solution to several challenges. By prioritizing the integration of trees into urban planning and policy, cities can create healthier, more resilient, and sustainable urban environments for current and future generations.

Urban forests promote public health and well-being

A vast amount of research studies demonstrates that living in urban green neighbourhoods promotes physical activity and social interactions between people with profound benefits for public health. The promotion of healthy behaviours significantly reduces the number of NCDs and makes people live longer and healthier lives. In addition, experimental studies prove nature's stress-reducing impacts and the prevention of depression and other mental disorders. Importantly, urban forests may buffer socioeconomically related health inequalities, contributing to longer lives for everyone if the greenery is planned and managed correctly.

Urban forests contribute to recreational needs and address climate change

Urban forests respond to citizens' recreational demands while also mitigating part of large cities' carbon debt. An important climate adaptation impact is the cooling of urban temperatures, which directly prevents heat-related illnesses in cities and saves tens of thousands of lives each year.

Biodiverse environments lead to improved immune function

Urban forests contribute to biodiversity by providing habitats for diverse plant and animal species. By enhancing urban forests and maintaining tree cover, cities can protect biodiversity and support ecosystem services essential for human wellbeing. As a direct health co-benefit, contact with biodiverse environments improves children's immune systems, potentially reducing the prevalence of a number of "modern" illnesses, such as allergies and asthma.

What can policymakers do?

1. **Integrate trees into urban planning:** incorporate urban tree planting and maintenance programmes into development plans and zoning regulations to ensure the preservation and expansion of tree canopy cover with benefits for biodiversity and urban citizens now and in the future.
2. **Conduct health impact assessments:** quantify health benefits and evaluate healthcare savings from green infrastructure and urban forest restoration projects to justify investments in tree protection and tree planting initiatives, particularly in less privileged areas.
3. **Educate and engage communities:** raise awareness about the long-term health benefits of urban trees through educational campaigns and community engagement initiatives.
4. **Collaborate across sectors:** foster partnerships between different government agencies, non-profit organizations, community groups, and private stakeholders to coordinate efforts and leverage resources for urban tree planting and maintenance projects as a part of public health actions and efforts.

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Designing Tomorrow with Nature-Infused Urban Spaces

"Integrating natural light, live plants, and balanced acoustics can transform our built environments into healthier, happier spaces for all ages. There are more and more examples of how urban planners, workplace designers are adopting biophilic designs."

Christine Jahan

In order to design homes, workplaces, and cities that are happier and healthier for people we need to take intentional steps to put time into design. Natural light is one of the most important things we can do to ensure our older generations. One way we can do this is to ensure large and strategically placed windows get built into new spaces. If that isn't possible, we can try to implement warm or neutral lighting taking careful note to place higher quality LEDs with higher CRI's, for example 90+ (Colour Rendering Index (CRI), meaning that these bulbs light up objects in their true and natural colour).

We can also integrate live plants into our designs to allow for our older generations to have physical interaction with elements of the outdoors. This piece is probably the easiest to implement since these days we can order plants online. Using real plants will provide additional oxygen into the space, which is an added benefit. These days you can get very realistic faux plants. They will also help improve your mood, but unfortunately won't give you that added benefit of oxygen.

Aside from all those things, if we can't create outdoor gardens for our older generations we can think about playing nature sounds in our spaces or even having a video of nature on a television. Personally, I love playing nature videos on YouTube when I work. You can search for a "stream in nature", there are many options out there.

For people with hearing and sight issues, ensuring they live in homes that have acoustics is essential. Using materials that allow for moderate acoustics is something to be aware of. For example, you should try to avoid placing someone losing their hearing or sight in a room where sound is completely absorbed in their surroundings. Like everything we need balance.

Adding nature to urban environments presents a formidable challenge, yet it offers substantial benefits to city life. Encouraging city planners to embrace biophilic design could be a pivotal first move in this direction.

When I attended the Intentional Spaces Summit at The Johns Hopkins University in Washington DC in 2023, I met a city planner for a smaller town in Colorado. I was so impressed with his futuristic visions. He was at the summit to learn what he could about Neuroaesthetics, which is the study of how art, music, and our spatial environments affect our bodies.

Maybe the answer is getting cities to think more futuristically is the key. As seen in the documentary, "A Brief History of the Future" on PBS (Public Broadcasting Service in the US). There are trailblazers in Tokyo, Japan and London, UK doing just this. Both cities have official government officials and departments responsible for ensuring all city projects are executed with the future in mind. They have implemented regulations that aim to safeguard every project has the future in mind and they must show evidence before moving forward with projects.

https://www.christinejahandesigns.com

Christine Jahan was recently featured in Martha Stewart Living for her commentary on natural light and biophilic design (picture number 9)

https://www.marthastewart.com/biophilic-design-ideas-8772507

Sensory connection

"Walkable cities with sensory stimuli mindfully placed can support the wellbeing of society, particularly those who are older."

KK Closuit

Bringing nature into the built environment can enhance a whole-person approach to design by addressing multiple facets of the human experience through the body, mind, heart, and spirit. Research shows that spending time in nature can have physical and mental health benefits. Nature can improve memory and reduce stress, making it helpful for those with dementia or other memory-related impairments. It can also engage multiple senses, such as the sight of trees and plants, the sound of running water, or the smell of flowers, facilitating easier orientation and navigation for aging populations with hearing or vision impairments. Successful strategies for homes, workplaces, and other indoor spaces include establishing gardens and green spaces as landmarks that promote better health, maintaining clear sight lights to outdoor areas, using natural materials and textures to create tactile orientation cues, and mirroring natural forms in design elements.

At Legacy Midtown Park, an assisted living facility, RSM Design produced a signage system that combines healthcare functionality with hospitality comfort and aesthetics. The signage is clear and intuitive while incorporating unique textures to create a comprehensive system across multiple buildings. Such an approach can be helpful to people with cognitive impairments, giving them clear and consistent wayfinding guidance that feels natural rather than cold or confusing.

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When it comes to city planning and design, it is important to introduce nature into everyday spaces to support the community's health, especially aging populations. This can include everything from creating walkable neighbourhoods with tree-lined streets to using water features that provide both visual interest and ambient sound, setting aside space for pocket parks and green corridors that improve the area's biodiversity, and adding living walls and roof gardens that bring birds, bees, and butterflies. Not only do these spaces incorporate the healing potential of nature, but also they encourage social interaction and connection among the community members who stop to enjoy them. While this approach can be especially advantageous for the elderly, it also results in a healthier, more liveable community for everyone.

KK Closuit s Senior Associate
at RSM Design

https://rsmdesign.com

https://rsmdesign.com/work/legacy-midtown-park-healthcare-facility

Reimagining Urban Aging

"From the storied pleasure gardens of 18th century London to today's pioneering intergenerational communities, urban landscapes are gradually shedding their modernist sterility in favour of nurturing, green havens that rekindle a sense of belonging. With one in six people projected to be over 60 by 2030, biophilic initiatives and community-focused designs are offering a hopeful vision of cities where nature and age gracefully converge."

Steve Edge

How does it feel to grow old in today's urban centres? The world's major cities haven't always been concrete jungles, devoid of nature and vegetation, where the elderly live in fear and loneliness. In 18th century UK, the social realist artist William Hogarth helped found a biophilic 'Pleasure Garden' in London's Vauxhall district. Then a village, now a bustling city centre park, it was created for the benefit of all classes of local residents, a gentle place to promenade away from the bear baiting and other heinous activities of the city centre. Although not all activities were that genteels.

At the end of the 19th century, UK architect Ebeneezer Howard founded the Garden City Movement and simultaneously the City Beautiful Movement began in the USA, both formally recognising the therapeutic and biophilic benefits of gardens in the design of cities. Simultaneously, Art Nouveau architecture was blossoming in Europe, seeing a resurgence of organic forms and plants, with decorative motifs both inside and out. In their early twentieth century house, my grandparents had, like many others, an aspidistra blooming in their living room window, absorbing airborne toxins. Their small front gardens held flowering bushes proudly on displays. Sadly, for them and everyone else, Adolf Loos from the Bauhaus Art School in Berlin declared that, all 'ornamentation was a crime', and Modernism was born in 1908; soon after that our homes became 'machines for living', according to Swiss architect Le Corbusier.

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This bleak Modernist vision of our cities is no doubt one of the main reasons why the Biophilic Cities Movement was started by Professor Tim Beatley and his team at the University of Virginia in the USA in 2010-13. The Movement encourages the city councils and developers of its membership to rewild and re-humanise their cities, and to use biodiversity and biophilia as 'green and blue space' capital, to attract even further investment.

So, what does the future hold for members of 'The Third Age' as we are now known? Yes, I'm one of them. According to the World Health Organisation (WHO) research shows that by 2030, one in six people in the world will be aged over 60. This, together with the rising costs of living and of care home accommodation costs, will be of great concern to all of us by then. So, how are we going to prepare?

In West Germany in 2006 communities that were designed for multigenerational living began to appear. The *Mehrgenerationenhauser* was born; a social experiment to mix the old with the young, in harmonious clustered living environments. Here, the elderly could feel more useful and less lonely; they could babysit, teach knitting, cook healthy recipes, and repair broken appliances. Meanwhile the young could help the old with their new technologies, integrating them into the world of computers and smart phones. More recently, some of these intergenerational communities have appeared in the UK. There's one in a village near my home town of York, which is in the socially minded Joseph Rowntree Foundations' 'New Earswick Community Project'. Where they have rejuvenated the Quaker (alcohol free) social housing in the village of New Earswick and its Folk Hall, which is back functioning again. This venue is where I saw several rock bands perform, like the early Pink Floyd and Procol Harum in the 1960s. I wonder what my grandparents would have made of this way of living – and whether the aspidistra remains a centrepiece?

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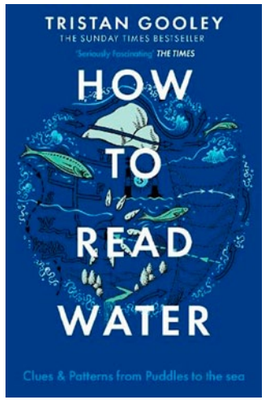
German multigenerational spaces

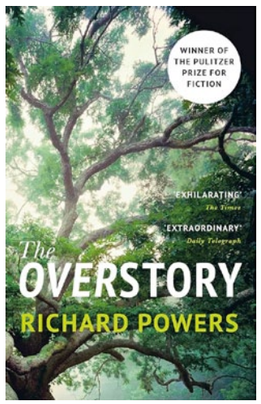
Bookshelf

I've been so busy over the past year that I haven't had a lot of time to read, but over the past month I've revisited and also picked up some new books which I wanted to share with you.

How nature has all the answers, if we know how to listen



How to Read Water by Tristan Gooley, like his other books really encourages you to look at the signs in nature. His books breathe life into your daily walk, even if it's down the high street, and this one is brilliant. It helps explore the art of natural navigation, focusing on interpreting the myriad signs and patterns found in water bodies. Gooley, a seasoned navigator and founder of The Natural Navigator, draws upon his extensive travels – from wild swimming in Sussex to Arctic expeditions – to reveal how observing water can enhance our understanding of the environment.



The Overstory – Richard Powers. This is a brilliant book which was winner of the Pulitzer Prize for Fiction in 2019 and is a beautiful celebration of trees. The Overstory is a deeply layered novel that weaves together the lives of nine main characters whose personal journeys all revolve around trees in some way. Some of them are scientists, artists, activists, or ordinary people whose lives are profoundly changed by their encounters with trees and forests.

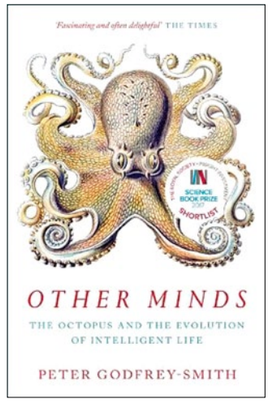
The book is structured like a tree itself – with parts titled Roots, Trunk, Crown, and Seeds – symbolizing the growth of the story and its themes.

At its heart, the novel explores humanity's complex relationship with nature, especially our often-destructive disregard for forests, and the deep interconnectedness between people and the natural world. Powers uses rich, lyrical prose to show how trees communicate, adapt, and even collaborate, highlighting research about forest ecology.

As the characters' lives intersect, many become involved in environmental activism, trying to save ancient forests from destruction. The story doesn't shy away from moral complexities: it asks hard questions about sacrifice, purpose, and what it means to fight for something bigger than yourself.

Beyond being an environmental novel, The Overstory is also about connection – between people, between generations, and between all living things.

Other Minds – Peter Godfrey Smith. I absolutely love this book, Godfrey-Smith uses the octopus as a case study to think about what consciousness is, how it arises, and whether there are different kinds of minds across the animal kingdom. Along the way, he unpacks neuroscience, evolution, and philosophy of mind in a way that's very readable and often poetic.



It's not just science – the book is also about the wonder of encountering another form of intelligence, one that developed completely separately from our own. It raises big questions such as what does it feel like to be an octopus? How do we define consciousness in creatures so unlike us? Are minds like ours inevitable, or is there a whole spectrum of possible minds in nature?

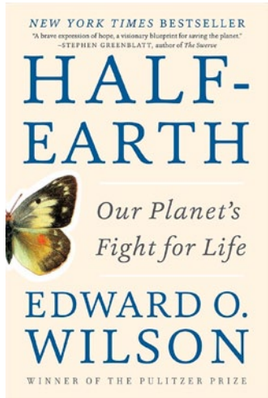
Biophilic Design and Workplace

Spazio al Benessere – Come la Pscicologia Ambientale e il *Biophilic Design* possono rigenerare l'ambiente di lavoro. Authors Lucilla Malara and Donatella Mongera kindly gave me a copy at the Surface Design Show this year. The book explores how workplace design and Biophilic Design in particular can positively influence the psychological and physical well-being of employees and enhance professional performance. Lucilla is an architect specializing in biophilic design and a consultant in architectural psychology, with experience in designing workspaces focused on well-being. Donatella is a work and environmental psychologist, focusing on talent management and organizational well-being. Evidence based diagrams and figures explain how healthy buildings, biophilic design, privacy, acoustics and more, all should be playing a part to create healthier and more inspiring workplaces.

Essential reading on the state of our climate and reaching Net Zero

Mission Zero: The Independent Net Zero Review by Chris Skidmore is a comprehensive report examining how the UK can achieve its legally binding target of net-zero carbon emissions by 2050. Commissioned in September 2022 by Jacob Rees-Mogg, who was the Secretary of State for Business, Energy and Industrial Strategy (BEIS) at the time and published on January 13, 2023, the review involved extensive consultations, including over 50 roundtables and 1,800 submissions from businesses, civil society, and academics. A central theme of the review is that achieving net-zero emissions is not merely an environmental necessity but also a significant economic opportunity. Skidmore emphasizes that net zero represents "the economic opportunity of the 21st century," highlighting a potential global market opportunity of £1 trillion by 2030 for British businesses. For me, there are many aspects where Biophilic Design implementation can help mitigate, regenerate and save our planet, helping us reach our net zero targets. Mission Zero advocates for viewing the transition to net zero as an economic catalyst, urging prompt and decisive action to harness the substantial opportunities it presents. What do you think?

Half Earth – *Our Planet's Fight for Life* – Edward O. Wilson. Author of the book Biophilia, Wilson proposes an ambitious and urgent plan to combat the ongoing mass extinction crisis: dedicate half of Earth's surface – both land and sea – to nature. He argues that protecting 50% of the planet's surface is crucial to preserving biodiversity and ensuring the long-term health of our biosphere. "Half-Earth" serves as both a warning and a hopeful call to action. Wilson urges us to recognize the gravity of the biodiversity crisis and to support bold initiatives aimed at preserving the natural world. The book has inspired the Half-Earth Project, an initiative dedicated to advancing this vision by identifying and protecting areas critical for biodiversity. Another reason for me, why we, as designers, can help specify better solutions to help the planet that sustains us. We are nature. Let us help other people not forget that too.



Do you have a favourite book?
Write in and tell us what it is and why you love it.
editor@journalofbiophilicdesign.com we will aim to feature your choice in a future issue.
Reviewed by our editor, Dr Vanessa Champion

FINAL WORD

Dr Vanessa Champion
Editor

A couple of years ago I read about a complex in Germany where the students from a university were living in a retirement village, as part of their deal, they were to spend time with the older inhabitants there. The feedback was rich and rewarding on both sides. Learning and life.

We just need to think differently. And boldly. When it seems like everyone else is saying we need to do things the way we've always done them, there is a growing tribe of designers, and I believe if you are reading this, then you are one of them, who are doing things the right way. The way that helps life flourish. And I know there are many who are thanking you for being bold, having vision and designing with care, compassion and love.

I do keep asking myself why can't we do this? But then I speak to more and more designers and architects who are embracing Biophilic Design and bringing it into healthcare, into our older generation homes and urban spaces, creating community and social cohesion as well as healthier and happier environments.

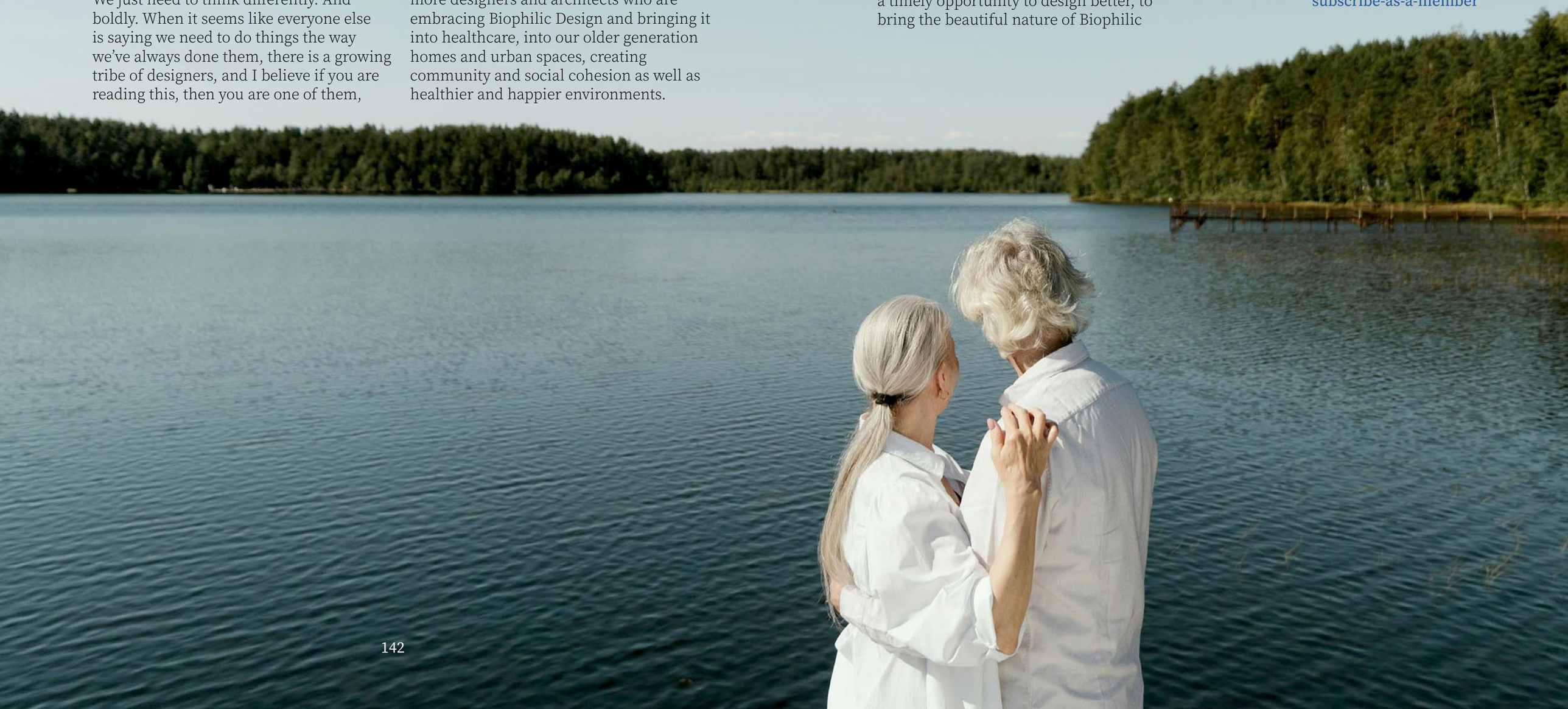
Isolation and depression is a problem when we get older. Approximately 14% of adults aged 60 and over live with a mental disorder, with depression and anxiety being the most common according to the WHO. https://www.who.int/news-room/fact-sheets/detail/mental-health-of-older-adults

Did you know that we are in the Decade of Healthy Ageing (2021–2030) which is a global collaboration led by WHO to improve the lives of older people, their families and the communities in which they live? No, me neither. But isn't this a timely opportunity to design better, to bring the beautiful nature of Biophilic Design into spaces which enrich lives for all who live there.

There is nothing not to love about designing for life. Biophilic Design is the artist's palette, the builder's toolbox, the planner's guidelines for health, wellbeing and flourishing throughout all stages of life wherever we are on the planet.

Thank you for being part of the Biophilic movement.

https://journalofbiophilicdesign.com/subscribe-as-a-member



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