

DesignIntelligence™

Quarterly



Technology-Inspired Trends Emerging in Biophilic Design

Human designs are becoming more organic. From mobile phones to automobiles to public buildings, the trend is most evident in the shapes we create. In nature, you can't find 90-degree angles and rectangles. Similarly, we're letting go of sharp edges in favor of natural shapes that curve and flow.

DAVID OAKEY

When we imagine the future, we envision objects, buildings and entire cities that flow with organic beauty. This collective imagination has been depicted for decades in TV shows like the *Jetsons* and movies like Disney's recent *Tomorrow Land*.

Advances in materials and technology are catching up with our imagination and allowing us to better match form to function. Our desire to move beyond the clunky building blocks of the past is also driven by—or results in—biophilia. E.O. Wilson's theory that humans have an innate affinity for nature is now well supported by scientific evidence. Nature's designs make us feel good.

Nature's designs are flexible, curved and organic. They include variety, randomness, and diversity. By contrast, human designs of the past are rigid, angular and monolithic. They include repetition and uniformity. But that's beginning to change.

Organic Design Is More than Just Shape

In addition to shape, two less-obvious organic trends are beginning to influence the way we create biophilic environments and experiences. The first is dynamic design.

In nature, there is no monolithic uniformity, and there are no static conditions. From hour to hour and season to season, color, light, temperature and, yes, even the shape of natural environments are constantly changing.

In interior design, we recognize the value of "bringing the outside in." We prioritize natural light and mimic colors and textures found in nature. But the next step is to design environments that change, like nature, with the passage of time.

The noonday sun is brilliant and enlivening, but it's not constant. In nature we enjoy a continual shift in the quality and

color of light from dawn to dusk. Similarly, the attraction (and distraction) of spring colors serves a limited purpose, for a limited amount of time. Humans are accustomed to change in the environment. Change gives us the pleasure of release, and with interiors, it can lessen the sense of confinement. We're just beginning to design environments that change with the biorhythms of their living inhabitants.

New technologies and materials are making it easier to create dynamic designs. For example, architects are using Dynamic Glass by View that gradually darkens to protect against direct sunlight, while maintaining the view and connection with the outdoors. Boeing recently imagined how the ceilings of aircrafts could virtually disappear with high definition images of sky, clouds and stars. Philips is creating lighting products that can change the color of a room, and Steelcase has incorporated similar technology so their corporate offices can transform with the whim of employees.

Our studio monitors trends like these not only in architecture and interior design, but also in art and fashion. We're seeing lots of dynamic work, such as Richard Wright's skylights that create shifting patterns on walls and floors with the movement of the sun. We've also seen various approaches to designing apparel that changes color with movement or conditions.

What Does Bio Feel Like?

The other biophilic trend we're paying particular attention to is human touch.

John Naisbitt first predicted this in the 1980s and wrote about it at length in his 1999 book *High Tech/High Touch*. He posited that in a world of increasing digital technology, we long for a balance of personal, human contact.

Our studio noted corresponding trends towards interactive art at Art Basel last year. We also see the desire for haptic experiences behind the resurgence of analog technologies. Interestingly, Urban Outfitters is now the leading seller of vinyl records. They also sell \$300 Polaroid cameras to teenagers who have smartphones with 12-megapixel cameras in their pockets.

People want to be continuously plugged in to the Internet, but they also desire sensual and emotional engagement in the physical world. This explains the continual and growing demand for hand-made and custom goods like furniture and pottery. Or even the centenary reissue of Robin Day's Reclining Chair with Mourné Textiles.

Mourné textiles have been made the same way, by hand, in Northern Ireland since 1951. Knowing that human story, there's a conscious or subconscious emotional connection every time you sit in the chair to read a magazine or browse the Internet.

Ultimately, the convergence of technology, nature and people is the big trend to watch in the years ahead. With good design, increasing technology can enable greater respect for natural forms and functions, and greater expressions of human connection.

David Oakey founded David Oakey Designs in 1985 and has been the exclusive product designer for Interface and Flor

since 1994. He was an early adopter of biomimicry as an approach to sustainable design and presents the topic around the world, including to companies like Nike, Walmart and Boeing. He and his team have won numerous awards while designing for international clients such as DuPont, Heuga in Holland, Collins & Aikman, Atlas, Mohawk, Milliken, Wilton Royal in the UK, and EGE in Denmark.



"Something tells me you've skipped lunch again, Tom."