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The idea of wonder is linked to our curiosity and openness to experience and we should seek it everywhere, says Monica Parker

MOMENTS OF WONDER

WORDS - MONICA PARKER

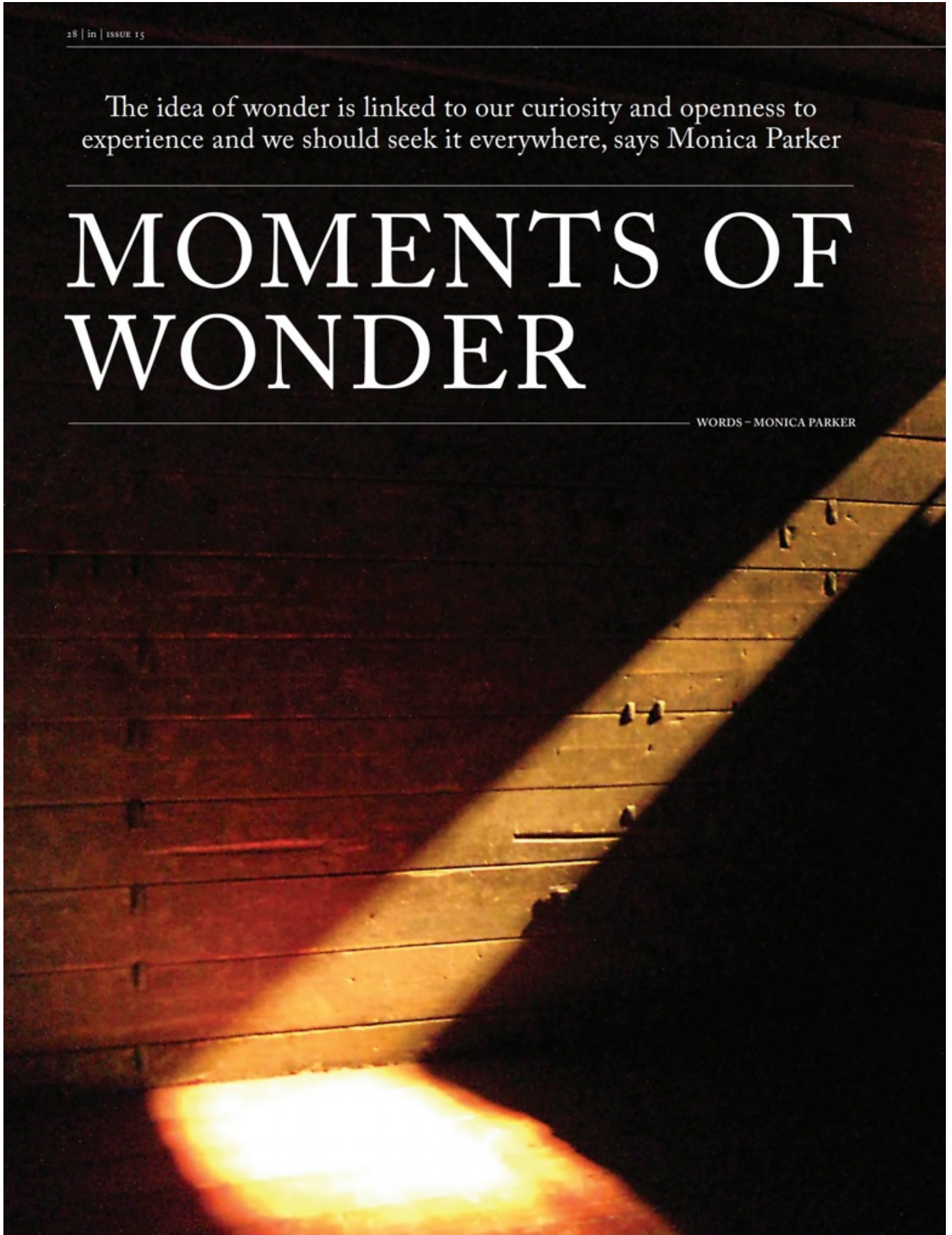




Image: A shaft of light pierces the inside of a boxcar at the Holocaust Memorial Museum in Washington

Frank Lloyd Wright spent twenty-two years building Taliesin West, his sprawling winter home just outside of Scottsdale, Arizona. Often considered his most personal work, Taliesin West was initially conceived as a camp for student architects (and as respite from brutal Michigan winters) but eventually grew to a compound of almost six hundred acres that comprised home, office, and school for Wright and his family.

The compound as it stands today is equal parts inspired, threadbare, and odd. Grand crescendos of rooms open from small, cramped doorways or halls that at certain points are so narrow and low you feel you must dip your head ever so slightly to avoid whacking it, not unlike the doorway in a small boat or family caravan. This seems rather awkward for such an accomplished architect until you realize, of course, it is intentional—a technique he referred to as “compression and release.” A keen student of the psychology of space, Wright knew, without the need for scientific validation or explanation, that the contrast from dark, pent hallways, some “the width of a Pullman aisle,” opening into light-filled cantilevered spaces would elicit eye-blinking wonder in its viewers.

Also known as “tension and resolution” or “embrace and release,” compression and release allowed Wright to express the impact and significance of contrast. It was a technique he used repeatedly, from his Oak Park Home and Studio to the Johnson Wax Headquarters, the Solomon R. Guggenheim Museum, and more. The technique was effective because it hinged on how our brain perceives stimuli. If you’ve ever closed your eyes when >

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An instant serves as an inflection point between what we thought we would experience and what we find instead

thinking about a tough problem, only to
> open them when the solution erupts from
your consciousness, you understand the
benefit of filtering the stimuli we see to
get a clearer picture.

Lloyd N. Trefethen, Professor of
Numerical Analysis at Oxford University
coined the phrase: 'shrink the diameter of
intellectual space.'

Our brain regularly shrinks the
intellectual diameter of stimuli so we
can more effectively move through the
world. And when it reduces what we
notice, contrast like what Frank Lloyd
Wright used in his designs becomes a

mechanism for telling our brain, 'This is
worth noticing.'

That single pivotal instant serves as a
catalyst, an inflection point between what
we thought we would experience and
what we are surprised to find instead. The
term for this moment is an expectation
violation, and it is the lighting of the
touch paper that ignites the spark of
wonder. From compression to release, a
differential, or contrast, possesses within
it a magical synergist that awakens
our senses from the expected to the
unexpected. And the magnitude of that
moment defines the doorway of our

perception and what we see on the other
side.

WHAT IS WONDER?

Wonder as a word is something of
shapeshifter. There is wonder the verb,
which we might associate with curiosity,
and wonder the noun, which might be
something that triggers a sense of awe.
Linking these two concepts into a single
emotional experience, wonder begins
with openness to experience, leads into
curiosity, then absorption, and finally into
awe. And this emotional arc is almost
cyclical, as the more we experience each

The infamous sign
from the gates
of Auschwitz at
the United States
Holocaust Memorial
Museum in
Washington DC

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component of wonder, the more likely we are to experience it in the future. Wonder is a universal mixed emotion and one that is quite different, and more beneficial, than a simple emotion like, say, happiness. And how do we know if we're experiencing wonder? One great clue is asking if it gives you goosebumps, or perhaps makes small tears spring to your eyes (what psychologist William Braud called tears of 'wonder-joy'). That's usually a pretty good indication that you're experiencing a wonderbringer. But why should we seek it?

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Wonder makes us more humble, less materialistic, more generous, and better community members

Wonder makes us more humble, less materialistic, more generous, and better community members. People who are higher in the composite wonder elements are more likely to perform better in school and work and build healthier relationships. Wonder makes us less stressed and feel like we have more time. A very prosocial emotional experience, meaning emotions that inspire us to help each other, wonder quite simply makes us want to be better, more tolerant people. Psychologically, wonder lessens depression, lowers anxiety, and decreases >

CENTRATION
IP UNIVERSE



Left
Frank Lloyd Wright spent twenty-two years building Taliesin West

the intensity of PTSD symptoms. And the physiological benefits are particularly fascinating. Researchers have found a link between people who experience wonder and lower blood pressure, lower stress hormones, and decreased proinflammatory cytokines, the latter of which are the markers associated with a number of diseases, including cancer, Alzheimer's, and cardiovascular disease. These links suggest a direct "biological pathway" between wonder and better health. But the question is, how?

SMALL SELF

The Oude Kerk in Amsterdam is a towering structure that sits a bit out of place in De Wallen, the city's labyrinthine red light district. Begun as a humble wooden chapel in 1213 and consecrated as a stone church about one hundred years later, the Oude Kerk is Amsterdam's oldest building and now serves as a contemporary art and culture center when not undergoing restoration. The granite structure has survived fifteen generations of wars, fires, looting, and mob vandalism, and while it has had several renovations, it looks pretty much the same today as it did when Rembrandt had all four of his children baptized there. It is an imposing structure—36,000 square feet, four pipe organs, with a soaring steeple made of Estonian wood, the biggest of its kind in Europe. Simply put, it is awe-inspiring.

Scientists from the Netherlands used the Oude Kerk as the backdrop for studying the phenomenon known as small-self. Prior to the study, small-self had typically been conceptualized as a psychological smallness, as in a decrease in ego and what's known as self-salience. But researchers wanted to understand the effects of wonder on our physical body perception. To study this, the researchers had church visitors fill out surveys before and after they went inside, asking them to estimate their body size compared to the large entry door of the church. They found that visitors who reported higher levels of awe after the visit perceived themselves as physically smaller.

Beyond offering fascinating implications for the effects of architecture and the built environment this small-self phenomenon is one of the primary ways wonder evokes humility, empathy, and many other prosocial emotions. Small-self precipitates a decrease in self-interest and shifts attention and behavior away from our own needs and onto the needs of others. It allows us to atomize our difficulties into more metabolizable units and grants us the room to consider what those around us may be thinking and feeling, and respond compassionately—obviously a great attribute to have in a manager or team member, and resounding justification for more wonder in workplace architecture.

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Buildings fulfil some of our basic human needs, and are also ubiquitous, accessible wonderbringers

WONDER IN BUILDINGS

Buildings are ubiquitous, and while they primarily serve to fulfill some of our basic human needs, they are also incredibly accessible wonderbringers. Consistently, and through time, certain architectural features tend to evoke wonder. In her research at Princeton University, artist and filmmaker Wendi Yan identified four primary attributes of awe-inspiring architectural design: infinity (e.g., magnitude, repetition, and totality), silence, the illusion of threat (what she calls "safe threat"), and nature. Another study out of Canada examining different qualities of the built environment found three primary wonderbringing attributes: immensity, adornment, and sanctity. The consistency of these characteristics sheds light on why impressive structures, ornate churches, and somber monuments inspire such strong wonder responses.

Admittedly, not all built environments are wonderbringers, but museums are particularly adept at delivering wonder-inducing design. They do this through features like the immensity of an entrance hall or by employing Wright's technique of compression and release through physical space or lighting. The United States Holocaust Memorial Museum in Washington, DC, where dark galleries telling dark stories are punctuated by the solace of halls flooded with light, is an excellent example of this technique. >



Left
Talesin West as it stands today is equal parts inspired, threadbare, and odd

And researchers from Belgium theorized that these structures don't just serve to evoke awe but also facilitate openness, community building, and social cohesion.

A massive opportunity for wonder-based design exists in our office buildings as well. Biophilic design, which applies the thinking of American evolutionary biologist E. O. Wilson to interior design by integrating elements like plants, organic lines, water features, and natural light, colors, and materials, is growing in popularity, and these are top design features consistently desired by office dwellers. Despite the desire, according to one study, 47 percent of office workers still lack access to natural light, and 58 percent lack plants in their workspace. The benefits of biophilic office design, or what could be called 'the green advantage' include attention restoration, improved performance and stress reduction.

As Wilson hypothesized in his book *Biophilia*, humans have a biological imperative to nurture and be nurtured. Our ancient brain still seeks the natural cues of our savanna-dwelling past—open spaces meant safety from predators; water, trees, and flowers were signs of refuge and food sources. Many of these features, like "safe threat," water, and hidden areas of refuge, are those same features in art and architecture that are known to inspire wonder. Wilson suggested that humans evolved to "affiliate with other organisms," and because Mother Earth represents the birth of our very existence, we will always yearn to be connected to her. Wilson

called that ancient yearning biophilia, from the Greek bios, meaning "life," and philias, meaning "love."

In addition to these 'green advantage' benefits, access to natural light increases morale and reduces eyestrain, headaches, and fatigue, and plants can improve poor indoor air quality, which is responsible for the illness of an estimated 64 million employees a year. People are willing to pay more for houses or hotel rooms with biophilic features, and people are more desirous of working in environments with biophilic design. Given Brits spend 92 percent of their time indoors, biophilic design offers a practical and effective remediation for a nature-deprived populous, and a way to bring wonder into the work-built environment.

I appreciate that going to your boss and saying, "I want more wonder at work" might get you a bit of side-eye, but the truth is, work and workplaces aren't working for so many people, so what have we got to lose? Imagine workplaces designed not just with biophilia in mind, but with all the features known to inspire wonder. Wonder at work is achievable, and given the unrestrained influence large corporates have in shaping global policy, culture, and social mores, better work makes for a better world. Who wouldn't want workplaces shaped by wonder-based design and architecture? I know I would ●

Monica Parker is the founder of *HATCH Analytics* and the author of *The Power of Wonder*

REFERENCES

Features of wonderbrining architecture: An example of a design feature using "safe threat" might be a dark area on the perimeter and light in the center creating a campfire effect that draws people to the light. Yan, Wendi. n.d. "Neuroscience Informs Design, Now What? Towards an Awe-Inspiring Spatial Design." *The Centre for Conscious Design*. <https://theccd.org/article/17/neuroscience-informs-design-now-what-towards-an-awe-inspiring-spatial-design/>.

Features of wonderbrining design: Negami, Hanna R., and Colin G. Ellard. 2021. "How architecture evokes awe: Predicting awe through architectural features of building interiors." *Psychology of Aesthetics, Creativity, and the Arts*. Advance online publication. <http://dx.doi.org/10.1037/aca0000394>

Wonder in museum design: Price, C. Aaron, Jana Nicole Greenslit, Lauren Applebaum, Natalie Harris, Gloria Sogovic, Kimberly A. Quinn, and Sheila Krogh-Jespersen. 2021. "Awe & Memories of Learning in Science and Art Museums." *Visitor Studies* (April): 1–50. doi:10.1080/10645578.2021.1907152.

United States Holocaust Memorial Museum: The architect, James Ingo Freed, described his approach, saying, "All the survivors I spoke to said that everything was taken away from them—their families, their identity, their dignity—and the only thing they held on to was a shaft of light. So I played the sun." Freed later said of the feeling it was to be able to produce evocative architecture, "The ability to see space is like the ability, in a way, to hear music." Giovanni, Joseph. 1993. "The Architecture of Death: To Design the U.S. Holocaust Museum, James Freed had to Challenge the Values that had Guided his Work—And Confront Old Horrors." *Los Angeles Times* (April 18). <https://www.latimes.com/archives/la-xpm-1993-04-18-tm-24163-story.html>.

Architecture facilitates social cohesion: Joye, Yannick, and Jan Verpoosten. 2013. "An Exploration of the Functions of Religious Monumental Architecture from a Darwinian Perspective." *Review of General Psychology* 17 (1): 53–68. doi:10.1037/a0029920.

Office design lacks biophilia: 2015. "Global Study Connects Levels of Employee Productivity and Well Being to Office Design." *PR Newswire* (Mar. 31). <https://www.prnewswire.com/news-releases/global-study-connects-levels-of-employee-productivity-and-well-being-to-office-design-300058034.html>. "affiliate with other forms". Wilson, Edward O. 1984. *Biophilia*. Cambridge, MA: Harvard University Press.

Natural light reduces eyestrain, headaches, fatigue: Edwards, L., and P Torellini. 2002. "Literature Review of the Effects of Natural Light on Building Occupants". Air quality and illness: "How Can Facility Managers Protect Their Buildings and Avoid Being a Sick Building Statistic?" n.d. <https://globalwellnessinstitute.org/wp-content/uploads/2018/12/sick-building-syndrome-factsheet.pdf>.

Indoor air quality: Office of Air and Radiation. 2014. "The Inside Story: A Guide to Indoor Air Quality." US environmental Protection Agency. <https://www.epa.gov/indoor-air-quality-iaq/inside-story-guide-indoor-air-quality>.

Time spent indoors: "Brits spend 92% of ALL their time indoors." n.d. <https://road.to/content/news/217728-brits-spend-92-all-their-time-indoors>