

Can Workplace Design Really Enhance Creativity?

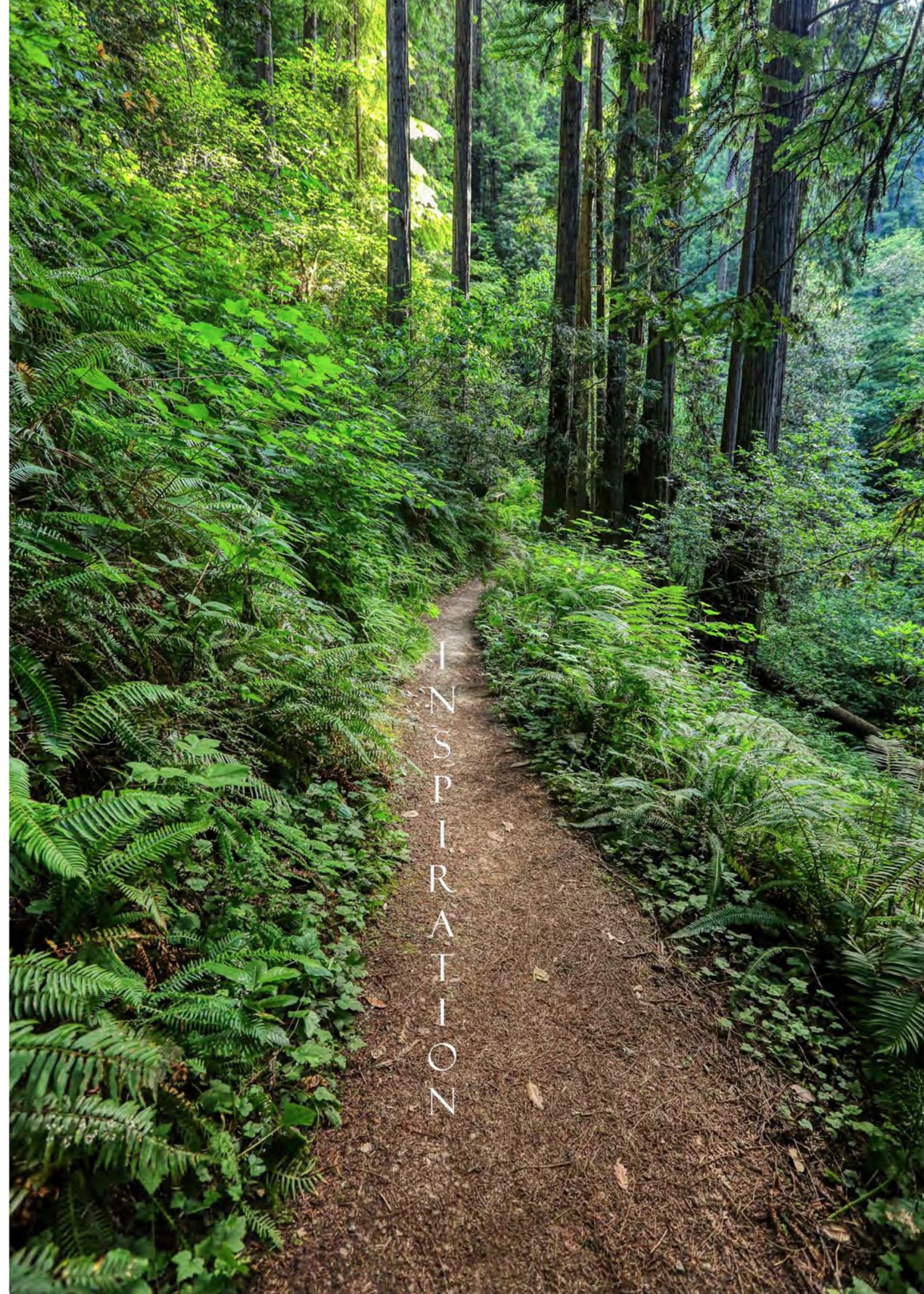
“Creativity is a hot topic with workplace designers. A stimulating, colourful, quirky, fun and buzzy office (sometimes including bean bags, slides and even trampolines) is often thought to contribute towards creativity and innovation. As such spaces set the tone for informal serendipitous interactions. However, studies show that the creative process not only involves people coming together to share and test ideas but requires long bouts of time in solitude thinking through and developing those ideas.”

Nigel Oseland, Workplace Unlimited

Consider where you are most creative or where you have your best ideas. It's no coincidence that Archimedes had his “eureka” moment in the bath. Research and my own workshops reveal that many people have their eureka moment in the shower. So, it's ironic that some people have their best idea in the shower but then rush to catch their train to the office. Other activities, such as walking the dog, jogging in the park or driving, are also frequently reported as ideal situations for inspiration. It may therefore be better to spend the morning in solitary non-sedentary activities to develop those original ideas before meeting with colleagues to share and validate them.

Some researchers believe that ideas come to us during lone activities because we are functioning in auto-mode, where we are predominantly focussed on a mundane, repetitive or routine task. Jonathan

Schooler, of the University of California, asked volunteers to complete a divergent thinking task before and after three exercises with Lego. Divergent thinking tasks are used to test creativity and a favoured exercise is the number of uses for a common household object. Schooler found that the participants came up with more imaginative uses for a house brick when they were conducting a mundane task (sorting Lego) rather than doing a complex task (building a Lego house) or doing nothing at all. Such researchers believe that working in auto-mode results in a transient dip in the frontal lobes. Ordinarily the frontal lobes work hard – problem solving, making decisions, memory, language and planning are just a few of their functions. The transient dip, or brain blinking, is linked to insight and ideas as it allows subconscious random brain activity to become conscious and focussed.



Daydreaming, or more accurately mind wandering, also allows us to archive information, moving it from short-term to long-term memory. Kalina Christoff, of the University of Columbia, used imaging to confirm that mind wandering evokes a unique mental state that allows opposing regions of the brain to work together. Mind wandering facilitates problem solving through insight and that spark of an idea. Unfortunately, daydreaming in the office is often considered unproductive. This may be one reason why people like their own office, so they can daydream without having to explain themselves. If seeking more innovation and enhanced creativity from colleagues, then provide more time and spaces for solitary activities and mind wandering.

Nature has also been found to improve creativity and problem solving. Evolutionary psychologists Rachel and Stephen Kaplan have promoted the benefits of biophilic design since the early 1990s with their introduction of Attention Restoration Theory (ART). They proposed that mental fatigue is reduced, whereas our ability to focus and concentrate are improved, with exposure to natural environments. The capacity of the brain to focus on a specific stimulus or task is limited and results in fatigue of “directed attention”. However, when exposed to nature people feel refreshed and replenished because nature provides a setting for “non-taxing involuntary attention” enabling our directed attention capacities to recover.

One of my favourite studies on the impact of nature is that of Atchly, Strayer & Atchly, of Kansas University. They compared performance on a series

of creativity tasks before and after 4-6 days of back-packing in the wilderness and found an amazing 50% increase in performance on their return. Heschong and colleagues conducted a study of a call centre, with relevant embedded objective performance metrics, and found that operatives with views out, access to daylight and greenery processed calls 6% to 12% faster than their colleagues in poorer spaces. For restoration and reenergising, the workplace should incorporate nature by bringing planting indoors or providing a semi-covered terrace or garden area. As taking time out and away from the desk also assists creativity, colleagues should be encouraged to take breaks by walking amongst nature.

New and original experiences can also improve creativity. Simone Ritter, at Radboud University, tested divergent thinking after participants were exposed to new experiences, created using virtual reality. In her study, those immersed in virtual simulations improved their scores on divergent thinking tests by 15%. Ritter proposed that humans develop “functional fixedness”, or stagnation, from repeated standard routines. To disrupt it we need unexpected experiences to unlock the synapses in other parts of the brain and open new neural pathways. New experiences might be travelling or bungee jumping, but it can also simply be taking a different route to work, sitting next to new people, or using a different approach to doing the same tasks. So, provide opportunity for moving around and build interest into the workplace with alternative routes, biophilic shapes and layouts, nooks and crannies, along with art and points of interest.

In summary, office designers tend to focus on designing for creativity and collaboration, the fun and funky bits of the workplace. Ideas are indeed generated when brainstorming and socialising with colleagues, but we also need to provide places that foster mind wandering and attention restoration. Introducing nature into the workplace through biophilic design is a more sensible starting point than bean bags and slides.

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