The Felicity of Fractals

Patterns repeated at different scales like the branches in lungs and neurons, are fractals where simple mathematical rules apply to a vast array of things that look visually complex or chaotic. Interestingly, different fractals found in nature when viewed as an enlarged image, some will bore uncanny similarities. Natural fractals such as the surface of water, the structure found in spongy bone, coral design, or aerial view of mountain ridges could give different interpretations from one person to another. For example, at a close angle, the brain cortex somehow could be mistaken as leaf veins. Theoretically, viewing fractal images can induce positive physiological changes in the observer. Our visual system is in some way hardwired to understand fractals. Stress reduction is triggered by a physiological resonance that occurs when the fractal structure of the eve matches that of the fractal image being viewed. This experimental study on fractals uses light to emphasise the different shape of fractal patterns. Images produced when lights pass through the patterns are varied. including a few that are mysterious or perplexing. The shadows are intended to portray the unification of nature where different fractals seem interconnected. The artefact also demonstrates how patterns of nature can be experienced visually as part of a restorative approach by using lights, while the intricacy of the images will evoke curiosity and excitement among viewers.

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