













Satu Maaranen, a Finish fashion designer, has gained her internationally renowned title and various prestigious awards by embracing a unique style and approach to fabric design. Her prints can be characterized by their bold, painterly qualities and rich

While many artists find inspiration from nature and environmental elements, Maaranen poses an interesting perspective during an interview with Elle Finland. The designer states that while nature can "sometimes be really random and even scary", she has actually experienced a nature consisting of systems and order. Maaranen elaborates with an experience living in Australia and witnessing rain every day at five o'clock and " not a minute past".

While there is a vastness and vagueness to nature, the presence of a systematic order can be found across full spectrums. Systems transcend size, species, and expectations.

I remember realizing how systematic nature can also be

Satu Maaranen, Elle Finland



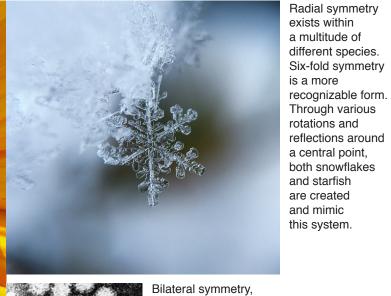
The Fibonacci Sequence is one of the most well known examples of natural systems. The sequence is consisted of numbers in which after the first two is the sum of the two preceding. This system is also very closely tied to golden ratios. For example, the golden spiral, most clearly seen in the common among



every number shell below, is



origin in this system.



also commonly viewed in nature, nvolves mirrored alves of an object. Even down to smaller forms, symmetry can be seen within the makeup of viruses that harm the digestive system.





this behavior this exact idea. behaviors involves has developed. Distance, volume, Smaller species and shape of the coordination of utilize collective groups all play a a set of individual major role in the behavior as a actions and local mechanism for patterns created

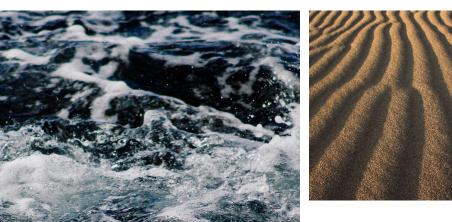
Schools of

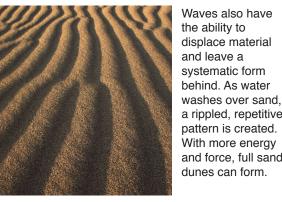
fish exemplify

survival against in collective behaviors. larger predators. The groups cohesion creates greater density and protection than a individual.









the ability to displace material and leave a systematic form behind. As water washes over sand, a rippled, repetitive pattern is created. With more energy and force, full sand dunes can form.

Fibonacci Sequence Cracking Collective Behavior Waves Waves

rules, a coherent

action is created

Flocking birds are

a key example

However, there are other reasons

of collective

behaviors.

among all.