Fractals: Living between Zero and Infinity to be Happy

By Jules Ruis (edited from Yay Life Tribe)

Western culture, by and large, associates life with a pilgrimage. Life is undertaken as a challenge, a race to the end - be it success or enlightenment or whatever - and this paradigm is an incredible source of stress and anxiety. By directing our attention at a predictable and supposed future - an end goal - we become distracted from the present. And yet the highest order of mathematics (fractal geometry) and the simplest observations in nature demonstrate that in fact this is utter nonsense.



Fig.1. A Coastline is a good example of a Fractal in Nature

In 1950, Lewis Fry Richardson discovered that the simple task of determining the length of a coastline (see fig. 1) was not as simple as it first appeared. The measurable length of any coast, it turns out, depends on the length of the ruler you use to measure. As you look at a map you might calculate a length in inches, but that wouldn't take into account all the little bays and alcoves that make up a true coastline. Maybe instead of using a map, you undergo the grueling task of walking the coast with a tape measure and recording your findings. This time your measurement would be significantly larger then your initial map calculation, but it still wouldn't account for the slight variations and indents in the rocks and cliffs. These slight indents, while small, drastically elongate the length of a coastline and this carries into such a micro level as the imprecations of every grain of sand. This is known as the <u>Coastline Paradox</u> and it says the length of a coast is ultimately immeasurable since the possible variations are infinite.

A Koch Snowflake is an example of a mathematical <u>fractal</u>, an object or pattern that is self-similar - that is the shape of the sum is replicated in its parts (See Fig. 2).

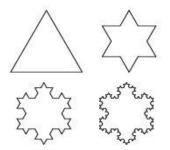
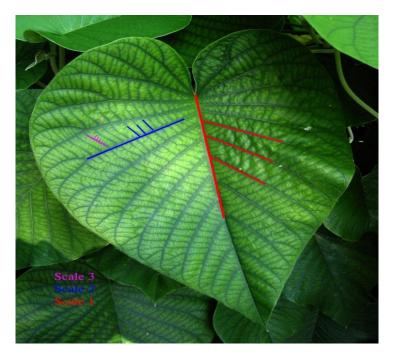


Fig. 2: Koch Snowflake - Intersect each triangle with itself an infinitely

These types of patterns are deeply embedded into the makeup of nature. Examples include river networks, fault lines, mountain ranges, snow flakes, crystals, lightning, broccoli, blood vessels, DNA, and the branches and leaves of a tree. Fractals demonstrate how simple geometric shapes can form the incredibly complex, elaborate, and seemingly chaotic patterns in our day-to-day life. See Leaves in fig.3.



Fractals, in this way, represent to me a type of rhythm to life. They serve as a reminder that incredible beautify does not depend upon a supreme intelligence, but can in fact result from simplicity- and in fact does all the time.

But going a little deeper (no pun intended), fractals also provide insight into the infinite. A fractal pattern such as the <u>Mandelbrot set</u> (see fig.4) has a boundary of infinitesimal growth. The length of it's boundary, like that of a coastline, will grow infinitely larger as you increase your scale yet it is contained within a finite space. In addition, the basic shape of the main pattern is also replicated continuously as you examine it's border in smaller and smaller scales. This is the idea of self-similarity that is so engrained into the makeup of our world.

I find that there are quite a number of philosophical implications the come from this. For example, I would argue that man's attempt to dig into the makeup of molecules, atoms, particles, quarks, strings and so on (going to nearly zero) might just be a wild goose chase. One can *always* imagine a smaller number just as one can *always* imagine a larger number.

Infinity, by analogy, signifies that there can be no goal. There is no particular end to the journey, there can never be a reachable summit at which one might finally decree "*this is it*." Try to touch the furthest boundary of the universe and you'll never get there. Try to break down matter into it's smallest components and you will always discover new parts. The only universal truth that we have uncovered is *that there are no universal truths*.

So by observing and thus accepting that *Life is between Infinity and Zero* and that *There is no goal to reach,* we may finally release ourselves from the bondage of "*doing something*" with our lives. We realize that we are, in fact, already doing it.

And we *are* doing it. We are all doing this great thing called *Life*. There is no more. The pursuit of truth is simply a game. The life we chose to live is simply a game we elect to play.

By seeing the world this way, laughing comes as naturally as the wind. We're able to be in the moment, to smile more, to let go, to love, and ultimately to be internally and spiritually content with things precisely as they are: the good, the bad, the ugly, and the beautiful.

And that to me is happiness.

How about you, what is happiness to you?

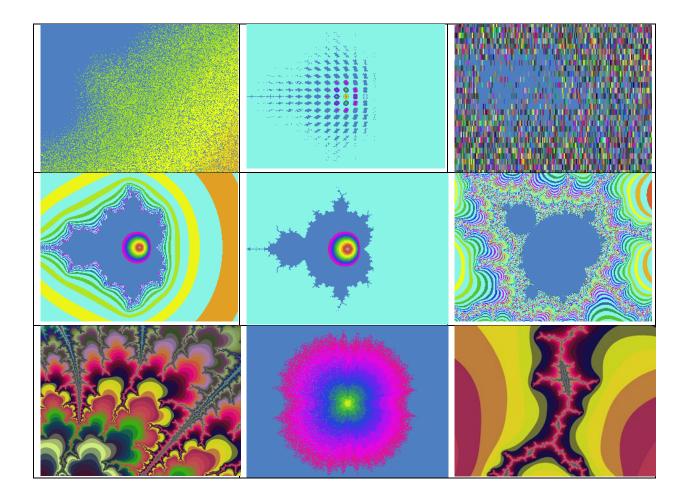


Fig. 4. Examples of Mandelbrot Set (centre) and Julius Ruis Set (centre above)

with never ending possibilities of repeating patterns

• going from 1 to 0 (zero; materiality, internality)

and

• going from 1 to ∞ (infinity; spirituality)

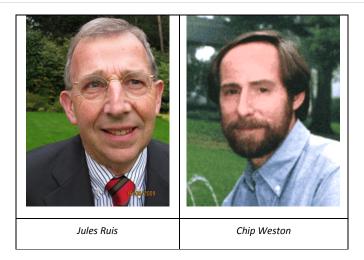
Be Happy: Living as a Connected Unity (1-heid) Here and Now

See understated article :

Between Zero and Infinity to Unity The Fractal Connectivity of Consciousness

Between Zero and Infinity to Unity The Fractal Connectivity of Consciousness

By: Chip Weston; edited by Jules Ruis An Essay on Fractals, Consciousness and Creativity



The Fractal Way leads from the dark into life. When you look deeply into the Mandelbrot fractal, you see thin strands of connectivity which unite all relationships founded in zero, awareness. But all other mathematical relationships do not unite with themselves to form a united, infinite connectiveness, as showed in the Julius Ruis set. There are Mandelbrot sets, which fade away into the infinitely small, and there are Julia sets, which only connect with their own complexity.

If fractal relationships are analogous to human potential and human reality, and we apply the potentiality of mathematics to the different set potentials, then we find the following:

- People who fade off into the infinitely small. Their insignificant works, damaged mentality and self worthlessness all combine to the self disunion of their potential consciousness. Like Seth's (from the book, Seth Speaks) Frank Withers, and all good soldiers from all times and places who pride themselves on marching to someone else's drum beat, they fade away.
- 2. People who create their own version of reality, no matter how complicated, that leads continually back into itself and never goes anywhere. People and groups of people into their own trips are like Julia Sets. They do not endure through time. Those who construct anal retentive versions of reality (all who are truly religious) dwell within their sometimes beautiful, but finally stiflingly limited versions of reality. This is purgatory in life and in death. This is the world of limited belief that perpetually turns back and replicates itself where there is nothing new under the sun. This is where the vast majority of humans on Earth dwell.
- 3. People of the Fractal Way. Creative people who live in spontaneity. Always open to what's new, always living on a path that is connected with all other ways. In potential, every consciousness in the Universe(s) who lives on this path is connected to every other self that lives on this path united in awareness, one with the beginning and the end of time which is connected to only this path as a continuity of consciousness. These are the selves who don't

die when they change forms from one level of physicality to another. These are the persons who, when they meet similarly connected persons, get joyous, excited, charged and open to real communication and communion.

Modern physics and mathematics prove that time is an illusion of our limited consciousness. In reality, there is only infinite potentiality and within that, from our point of view, there is the probability that certain groups of energy, quanta, will be in relation to other groups of quanta. This means that everything and every relationship possible exists. And only if every possibility of all relationships exist, can free will be possible. This also allows for the potential for the connectivity of consciousness through the complete space of the Universe and thus the possibility that we can live forever in one stream of totally connected consciousness. This is the flow which appears to move through the infinity of potential universes or connections. But it is us that's moving through space and thus gives us the illusion of time. We are Fractals surveying small parts of potentiality from within potentiality.

In meditation and other acts of free will, focus and concentration of consciousness, we make quantum leaps into higher, or more connected levels of awareness, consciousness and energy. There are various levels reached so far by human consciousness and these levels are what yogis call the states of Samadhi. Specific exercises which concentrate ever greater packets of consciousness allow jumps into greater and greater states. These are rudimentary road maps of the Fractal Way.

Now in this age, we can look forward to more articulate formulas and virtual maps to help interested consciousness into aspects of their higher selves and possibly into the Higher Self. The Julia Set religions of the past, which always turned back on themselves lost the Joy of their original uniqueness, becoming moral prisons and social power trips. But the old methods did create the jumping-off place for selves, who for what ever reason, had a filament of attachment to the Way, to leap into greater levels of consciousness. The scientific methods of the new potential of this age will articulate the concepts of Grace and Love thru thinking and body. Grace and Love will be understood as confirmations of the experience of higher consciousness and as aspects, or fundamental by-products of the experience of true Awareness. Grace and Love will be understood in completely different ways than in the past, as more and more selves realize that they are connected to all consciousness; they are everything that is connected in the Universe. They are unity, continuity of consciousness: they are Fractal Awareness.

The preponderance of self awareness tends to keep us on the Way. This is Grace. The energization that is confirmation of communion with the Way is Love. Grace and Love can not be faked. Some of the conclusions of previous religions are undoubtedly glimpses, though poor interpretations, of the revelation of the Way. Not all souls are part of the continuity of consciousness. Most of potentiality, as seen in the Mandlebrot fractal graphics are not connected. Most people, units of self consciousness, are not connected. They are either fading away or living in their own purgatories. Unless you have had the experience of Fractal Awareness and remember it in this moment of time or this place within consciousness, you are not of the Way. This does not negate your existence but it does offer a sobering and compelling reason to not waste your time in unconnected activities. Because of free will, all things are not only possible, they are. It is our effort that unites the Universe. Effort is the concentration of consciousness by free self will. It is done for the hell of it not for mechanistic reasons although there is a preponderance or rhythm of effort open to all those who are connected to Fractal Awareness. The very act of effort leads to the sensory experiences of creativity, flow and love. Effort is confirmed in the realization of Love and driven by the preponderance of Grace.

http://piziadas.com/nl/2012/03/viaje-al-interior-de-un-fractal.html