

## “Finding God, Finding Ourselves... in Fractals”

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*Psalm 139:1-14; John 15:4-8; Heaven & Hell 99*

About twelve years ago I worked at the biotech company Genentech in South San Francisco. I worked as an administrative assistant first, then as a tech support person, and later as a web developer. Over the time I was there I worked on a lot of different computers, and one thing that I really liked was a particular screen saver that Genentech had. Over and over again, I would find myself captivated by the slow and precise animation that would start with a tiny collection of pixels in one part of the screen assembling together in a tight, geometric design. The design would grow out from that small beginning, replicating itself in larger and altered iterations of the same initial configuration, in fantastic ways. The screen saver used dramatic combinations of vivid colors too, and as the design completed itself it would include large, dynamic curves and arcs juxtaposed next to intricate geometrical patterns. By the time one cycle of the screen saver was complete, it had created an absolutely breathtaking geometrical image. And then it would start over again, and I would get captivated all over again. (And just for the record, despite my fascination with screen savers, I did manage to get work done while I was there!)

I found out that these fantastic geometric designs were called fractals. A fractal is a fragmented geometric shape, generated by a mathematical formula, that can be subdivided in parts, each of which is (at least approximately) a reduced-size copy of the whole. They appear similar at all levels of magnification and so are often considered to be infinitely complex. Fractals were discovered by a mathematician, Benoit Mandelbrot, in 1975, who discovered a mathematical formula that more accurately described the variegated and irregular structures of nature than Euclidian geometry. ( $Z=Z^2+Z$ , where  $Z$  is a complex number.) Some natural objects that approximate fractals are clouds, mountain ranges, lightning bolts, systems of blood vessels, pulmonary vessels, and broccoli! Mandelbrot published a book in 1982 entitled *The Fractal Geometry of Nature* which showed how this mathematical formula is present throughout the natural world, and even extends to describe stock market fluctuations, architecture, and music.

The aspect of fractals that I find so fascinating is that they are what the mathematicians call “self-similar.” The whole has the same shape as one or more of the parts. If you isolate one tiny piece of the fractal and look at it, you will also see the whole, and vice versa: if you look at the whole, you will see the image of every constituent part. The minute and the infinite are reflections of one another.

I have come to see that if we were asked to come up with an illustration of Swedenborg’s thought, we might very well propose a fractal. I’d like to tell

you why, and I'd like to tell you why I think Swedenborg's vision itself is a stunningly beautiful design.

Swedenborg stands in a line of Christian thinkers who believed the Bible could be interpreted according to an inner or symbolic meaning. Although this method, referred to as spiritual exegesis, was unusual in his day, the notion of the Bible's often confounding stories actually pointing to a deeper, spiritual truth was commonplace in ancient and medieval times. In the Jewish mystical tradition Kabbalah, there is a very old and very rich tradition of seeing mystical truth within biblical words and even in the shapes of the Hebrew letters themselves.

So Swedenborg was not the only one to suggest that the Bible could be read according to what he called correspondences, but the interpretation that he arrived at through his method is as vast as it is unique. Swedenborg suggests that the Bible can be read on multiple and concurrent levels. The first is the literal sense: what the stories appear to say at face value. This level is rich and dense with information, history and meaning—enough that one could spend a lifetime studying it! But there is another layer. The second is the continuous internal story of how spiritual growth happens to us; how we move from an un-regenerated state of being primarily self-centered, to an enlightened state where we act completely from love of God and others. This second level of meaning is pretty extraordinary, but as if that weren't enough, he proposes a third layer of meaning as well. This is the story of the enlightenment process of Jesus Christ himself; the story of how he became both fully human and fully divine. And that's pretty extraordinary too, but as if that weren't enough, Swedenborg also says that this story of spiritual growth—the gradual move from love of self to love of God—is also the story of the evolution of human consciousness. He believed that we are on a continuum of human history that is slowly but surely moving toward greater understanding and compassion.

So just to make sure you got that, I have described four layers of meaning. First: the literal meaning of the biblical texts themselves; second: a description of our own spiritual growth process; third: a description of the Lord's enlightenment or glorification process; and fourth, a description of the growth of human consciousness itself. Remember the fractal? The whole has the same shape as one of its parts. The story of our own individual spiritual growth process is a reflection of the story of the glorification of Jesus Christ himself; which is in turn a reflection of the growth of human consciousness. In other words, what happens to us as individuals is a reflection of the story of human history. And vice versa: the story of human history is a reflection, ultimately, of what happens to us as individuals. The macrocosm is a reflection of the microcosm. The infinite reflects the infinitesimal. Now I am just running quickly over some very complex material, but I hope you can sense that the design we have just glimpsed with Swedenborg's theory of correspondences would be a very stunning fractal image.

But it doesn't stop there! Swedenborg's theory of correspondences also applies to his understanding of heaven. Swedenborg wrote extensively about

heaven and in his opinion, heaven was not a place, but a state of being that was alive, conscious, loving and relational. The image that he said best corresponded to this state was a human being, so he called it the *Maximus Homo*, or Grand Human. On a cosmic scale then, heaven resembles an enlightened human person. The reverse is true, too: on a minute scale, an enlightened human person resembles heaven: alive, conscious, loving and relational. In the passage in our bulletin that is reprinted from *Heaven and Hell*, Swedenborg says "to the extent that the deepest reaches within us accept heaven, we are heaven in least form." What that means is that within us, distinct from our external appearance and engagements with the natural world, there is a deep and inner landscape of spiritual love and wisdom. To the degree that we foster the growth of that deep, inner, spiritual knowledge and being, we more closely resemble heaven. We let more of heaven into us, and we become more of heaven.

A couple of years ago I found myself struggling with some issues in my life that, as much as I tried, I could not unlock. I thought about going to see a counselor, but I resisted it for many reasons. I hemmed and hawed, on the one hand trying to convince myself of my relative health and privilege and to just get on with things, and on the other hand struggling so much that I felt like I was losing my head and endangering myself and everything important to me. I asked my trusted colleague, Rev. Rachel, for advice. She told me how strongly she believed in the therapeutic process and encouraged me to start. She told me that when we understand ourselves deeply, we can function like a well-tuned machine that is more able to help others and be of service in the world. She told me, further, that according to Swedenborg's thought, when we work on our own spiritual and psychological growth, we actually affect the cosmos. I thought that was a nice thing for my minister to say, but to be honest, I didn't believe her. Nevertheless, I took my confused, hurting and guilt-ridden self to therapy.

Two years later I can say that it has been a fascinating journey. Issues that seemed to be major turned out to be window dressing on other, more important but unexpected issues. Pieces of my past that I had never noticed were drawn out and examined and found to be potent, unusual, sometimes painful and sometimes life-giving. Some days I would feel overwhelmed at how screwed up I was. Some days I would feel the weight of grief over something I had lost a long, long time ago. Some days I would feel thunderstruck with creative energy as new options seemed to open for my life. Gradually, over time, I began to feel better, mainly because I came to realize two things I hadn't known I needed to know: first, that I could heal, and second, that I could be myself.

What I also found along the way is that as I got better, I was better able to help others, just as Rachel predicted. I could listen better to others, had more energy and creativity to extend to others, had much more patience and love for my daughters, more desire to be in relationship with people, more of a sense of humor, and more energy to devote to my work and other activities.

But the strange thing I began to glimpse was that other piece that Rachel said about the relationship to the cosmos. I saw that the particular wounds that I addressed were not unique to me, and that in fact issues of love, loss, grief, family, birth, and death—just to name a few—are part of being human. To the extent that I accepted my own pain, I actually bonded more with the experience of being human and awakened an ability to connect more with others. It awakened compassion within me. The more I accepted my pain, the more I accepted my need for healing, the more I had to accept that the presupposition of healing is that health is more normal than disease. That, in turn, led me to slowly accept a belief that my mind had learned in theological school but that my heart had not truly accepted: that the essence of being is good.

Now I can't know whether I will actually affect the cosmos, but I do believe in ripple effects. And I'm certainly not enlightened, but I do feel better about being human, and if we go back to our fractals and to Swedenborg, we are reminded that the more we embrace our deep humanness, the more we embrace God.

What I am coming to understand is that within our own lives and within our own stories is contained everything we need for spiritual enlightenment. We don't need to go out and do or be something different than who we already are to find enlightenment. If we live fully into our own experience, we will feel and witness the breadth of what it means to be human. We will live through joy and grief and love and heartache, idealism and injustice, ecstasy and depression. I think what Swedenborg meant with his theory of correspondences is that what is contained in the Bible is also contained within us. When we begin to make those connections, we begin to understand and change the cosmos. Each one of us is a minute and infinitely complex expression of the infinite complexity of human creation.

Remember the fractal. Just as the microcosm reflects the macrocosm, just as a part of the fractal reflects the whole, we are each a reflection of God. As we open ourselves deeply to who we really are, we will find joy and healing and compassion. When we discover who we are in our deepest and inmost being, we discover God. Who we are is God. What surrounds us is God. And what we can be together is heaven. Amen.