

This was a revelation that I had a few years ago, which Phil asked me to put into writing and I never did. More recently, at the YWAM Leaders Gathering in Lyon, Carl Tinnion was talking about kaleidoscopes and fractals, and urging us to think through how embracing the possibilities of chaos might allow us to lead more open-handedly. So, with that in mind, here at last is my attempt to begin sketching out a fractal theology.

Preamble: Our Insatiable Desire For Beauty

“He has made everything beautiful in its time. He has also set eternity in the human heart; yet no one can fathom what God has done from beginning to end.” Ecclesiastes 3:11

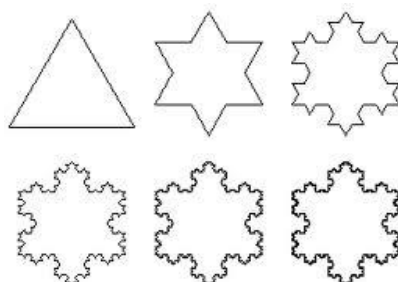
The human heart has an insatiable appetite for beauty. We look and we see and we like what we see — and so we grasp and we take and we taste and see whether or not that which looked good really is good. But our hunger is for an ever deeper taste of goodness, our desire is for an ever richer experience of beauty. Our heart refuses to be satisfied with any finite manifestation of the good, the beautiful or the true. We are curious, like questioning children infuriating their poor parents with endless requests for deeper understanding.

Sometimes we are told that this desire, this curiosity, this *lust* for the infinite is a bad thing. But to deny this is to deny our humanity. And to deny this is to blaspheme our Creator’s divinity. It is God who has set eternity in the human heart.

Fractals: Delightfully Complex In Their Simplicity

“Being a language, mathematics may be used not only to inform but also, among other things, to seduce.”

We come then to the fascinating mathematical entities known as ‘fractals’, which are basically patterns that are similar at every level of magnitude. Such a definition might not satisfy real mathematicians, who discuss such things using words like ‘topological’ — but it communicates the idea well enough for us to look at some examples.



Our first specimen is a thing called ‘the Koch Snowflake’. The construction of the Koch Snowflake is very simple. First you take an equilateral triangle. Next, you divide each side up into thirds and turn the middle third of each side into the base of a new equilateral triangle. Then you repeat. Infinitely. At the age of fifteen, my maths teacher thought it would be amusing to set me the task of working out its perimeter and area. Which I did by working out a recursive formula and then applying it. Fascinatingly, the length of the perimeter tends to infinity, while the area never exceeds eight fifths that of the original triangle. The key thing to notice is the exact self-similarity of this object at every level of magnification.

In contrast, the Mandelbrot set is a more complex thing, possessing only quasi self-similarity—which is to say that at greater zoom it approximates but never quite replicates itself.

Biblical Fractals: The Cherubim

“...their appearance and construction being as it were a wheel within a wheel...”

In the last few decades, fractals have helped further scientific understanding in a huge range of different fields. But I found it utterly astonishing when I saw that the biblical cherubim appear to possess exact self-similarity. Quite a claim, I know. But let’s look at the relevant passages.

In [Revelation 4](#), John talks about how one of the living creatures had a face like a lion, one the face of an eagle, one the face of an ox, and one the face of a man. Then in [Ezekiel 1](#), Ezekiel says something similar—but rather than saying that the four had faces like a ox/human/lion/eaglerespectively, he says that they *each* had the faces of all the four different creatures. And then—to prove the point—in [Ezekiel 10](#) he says that each has the face of the eagle, the lion, the human and—not, contra the NLT, the ox! but rather “the face of a cherub”. Which, we saw in Ezekiel 1, is the four-fold fractal face.

I would love for [someone with artistic talent](#) to attempt a visual rendition of these fractal cherubim. It would be something like Michelangelo crossed with Escher. And certainly nothing like [the typical depiction of baby-faced cherubs](#).

Theology: Typology Is Just Fractal Christology

“In the type there must be evidence of the one eternal intention; in the trope there can be evidence only of the intention of one writer. The type exists in history or temporal experience and its meaning is factual, that is, objective...” ([Jonathan Edwards](#))

Perhaps this is true, you finally concede, but what is the relevance of this? Surely all this talk of fractals is nothing but mathematical snobbery and theoretical uselessness! But I would beg to differ.

For when one begins to train one’s eye to see the fractals around you, one realises that even theologically this is not such a new thing—in fact, finding christological fractals is a standard trick in the arsenal of any competent preacher. It’s just that it usually goes by a different name: the name ‘typology’.

Moses, almost killed by a tyrannical king at his birth, leads his people out of slavery. David, rejected by his brothers but filled with zeal for the house of God, refused to be deterred by political opposition from establishing worship on earth as it is in heaven. Jeremiah, a weeping bachelor, stood boldly against the false prophets of his day to declare the good news of the new covenant. Ezekiel, aged thirty and by a river, suddenly experienced the opening of heaven and the infilling of the Spirit of God, and was commissioned as the Son of Man to enact the word of God to the watching world.

And who do all these remind you of? That’s right — Jesus!

Anyway, this is what we call typology. And this is just a tiny slice of a rich and fascinating subject of infinite depth. Because if Jesus is the Word through whom all creation was made, then actually we should expect all of creation to echo and exemplify various characteristics of the nature and character of Jesus. If you're interested in more reflection upon these lines, then I highly recommend James Jordan's book [Through New Eyes](#).

Discipleship: Great Commission as Recursive Equation

"Fractals are normally the result of a iterative or recursive construction or algorithm." ([Paul Bourke](#))

The Gospel of Matthew famously ends with [Jesus commissioning his disciples](#) to go and make disciples. What is less frequently commented on is that this is undeniably a recursive task, as is emphasised by the task of "teaching them to obey everything that I've commanded you"—including, most importantly!, this very Commission. This is seen most clearly in [Paul's exhortation](#) to his readers to "imitate me as I imitate Christ".

And if the Great Commission is a recursive equation, it must follow as a logical consequence that the church should be a dynamically fractal organism of believers grafted into community with God through relationship with each other, and gradually being transformed into the likeness of Christ.

Prophetic Hermeneutics: The Inevitability of Fractal Fulfilment

"Those who study Bible prophecy are aware that many prophetic passages have multiple references."

I am convinced that thinking in terms of fractals also helps with getting one's head around the interpretation of biblical prophecy. There are various examples of the double reference of certain prophecies—eg. Isaiah 7:14's promise that God would give Ahaz a sign by way of a *virgin* conceiving and bearing a son. Once one has managed to grasp the strange idea that God's prophetic word might function in some sort of fractal way, it's an incredibly attractive suggestion. It's almost enough to persuade me to be a Six-Day Young-Earth Creationist and a Premillennialist together at once, purely for the neatly symmetrical fractal chronology that would result!

But lest we get too quickly carried away, let us first look a little more closely at prophecy, and see why one might think that a fractal effect might occur. The thing to notice is that with prophecy we have to hold two things in tension: on the one hand, there is the permanent fact of the prophetic word (as seen clearly by Ethan the Ezrahite in [Psalm 89:26-33](#)); on the other hand, there is the dynamic responsiveness of the prophetic word to faith and repentance (as God unequivocally tells [Jeremiah](#)). Now, permanent promises that are interacting throughout history with varied responses of faith and repentance (the results of which are themselves affecting subsequent levels of faith and repentance) are again going to function as a sort of recursive equation.

And so to my mind it would seem that the only conclusion is that the various promises of blessing and prophecies of judgement that God has made throughout history must therefore ultimately come together in the sort of apocalyptic end-time scenario of which [someone like Mike Bickle speaks](#). In which case, he seems right to suggest we start praying for abundant revelation and insight into the days in which we live!

Conclusion: The Fertility of Fractal Faith

Now before I go off on too eschatological (and doubtless controversial) a tangent, let me bring my sketch to a close with the modest claim that, whether or not you agree with the details of my suggestions as to where a fractal theology might lead, I think I have successfully shown that looking through the kaleidoscopic lens of self-similarity does at least offer the possibility of contributing to a variety of areas of Christian conviction.