

## 1 The Geometry of Christianity

## 2 Amnesia Test

- Last week we discussed how there is an enormous amount of things in the universe that are engineered around a simple ratio called PHI ( $\Phi$ ).
- While the ancient Greeks observed this ratio in nature and used it in much of their art and architecture, it wasn't until the Middle Ages when PHI was rediscovered by Leonardo Fibonacci.
- In simply asking a question about rabbits and how many pairs could be reproduced in a year, Fibonacci produced a numbering system, that when calculated as a ratio produced a number now called PHI.
- Fibonacci Numbering Sequence – (0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55 . . .)
- PHI ( $\Phi$ ) :  $55/34 = 1.618$ ; PHI ( $\Phi$ ) Ratio: 1:1.6180

## 3 Examples of PHI

## 4 The Divine Proportion

## 5 Benoit Mandelbrot

- Last year one of world's greatest mathematician passed away at the age of 85 years old.
- He is remembered for his work with fractals and how he saw within nature now small parts often resemble the whole.
- This theory called, "self-similarity," became the bases for building a new kind of geometry, which also can help us understand our relationship with God.

## 6 The Cauliflower

- While it is easy to weigh the cauliflower, it is another thing to measure its surface, for it is neither flat or smooth.
- To measure it, we need a way to measure its irregularity.
- However, if we look closely, we will notice that each floret is a miniature representation of the whole.
- In fact, this principle applies to many things in nature, such as trees, where the branches resemble smaller trees.

## 7 Complexity in Nature

- So what Mandelbrot proved in his study of fractals was that irregularly shaped objects are not randomly shaped products of nature.
- Instead, they follow simple rules to generate seemingly complex and chaotic patterns.
- Mandelbrot explained that roughness of shapes in nature isn't a mess, but something in which he found "very strong traces of order."

## 8 Geometry of Coastlines

- If we look at a coastline, it will appear to be irregular or rough.

- However, if we look closer, we will see that it is made up of several small peninsulas and inlets.
- If we look even more closely, we see that each peninsula and inlet has its own bays and headlands.
- And the recurring pattern of roughness is more or less the same, no matter how closely we look at the object in question.

## 9 Understanding of Fractals

- Understanding fractals has made possible significant advances in fields as varied as physics, music, linguistics, weather forecasting, medicine, economics, and even the understanding of teenagers.
- They are not necessarily the result of random chaos, but the outcome of fractal algorithmic patterns.
- However, what makes this so interesting is how Fractals and PHI ( $\Phi$ ) are related.

## 10 Fibonacci, Fractals, & Socionomics

### 11 Fractals and Faith

- The fractals theory or the theory of “self-similarity” can also be applied to faith—especially with the Incarnation.
- The fractal principle of self-similarity seems to be reflected in Jesus' words in John 14. There, the disciple Philip says to Jesus, “Lord, show us the Father,” to which Jesus responds, “Whoever has seen me has seen the Father.”
- In a sense, Jesus is speaking fractal language. He is saying what you see in me resembles what is in the Father.
- Or in other words, Jesus is a chip off the old block. As He says in John 10, “I and the Father are one” (John 10:30 NIV).

### 12 Fractal Christians

- This self-similarity principle of fractals also has an application for us who follow Jesus.
- For there is a sense in which people should be able to look at any sincere Christian and see a small-scale representation of who Jesus is.
- We know that such isn't always the case, but it's a goal of the Christian life to be like Jesus.

### 13 C. S. Lewis

- We can, if we let God have his way, come to share in the life of Christ. ...
- If we share in this kind of life we also shall be [children] of God. We shall love the Father as he does and the Holy Ghost will arise in us.
- [Jesus] came to this world and became a man in order to spread to other [people] the kind of life he has – by what I call “good infection.”

- Every Christian is to become a little Christ. The whole purpose of becoming a Christian is simply nothing else.

#### 14 Whose Your Father?

- In John 8, Jesus gets into an argument with the Pharisees over who was their father.
- The Pharisees tell Jesus that Abraham was their father, but Jesus disagrees because they don't do what Abraham did.
- “You belong to your father, the devil, and you want to carry out your father's desire. He was a murderer from the beginning, not holding to the truth, for there is no truth in him.” (John 8:44 NIV)

#### 15 Becoming a Little Christ

- “I am the vine; you are the branches. If a man remains in me and I in him, he will bear much fruit; apart from me you can do nothing.” (John 15:5 NIV)
- So how do we abide in the vine?
  - “Now remain in my love.” (John 15:9 NIV)
  - If you obey my commands, you will remain in my love, just as I have obeyed my Father's commands and remain in his love. (John 15:10 NIV)
  - My command is this: Love each other as I have loved you. (John 15:12 NIV)

#### 16 Faith & Grace

- God has a plan for our transformation into His likeness. It is a work of His Spirit and grace, but functions only when we through faith put God's word into practice.
- As the Apostle Paul says,
  - And we, . . . are being transformed into his likeness with ever-increasing glory, which comes from the Lord, who is the Spirit. (2 Cor 3:18 NIV)
- Like fractals, Jesus was a replica of God. Seeing Him was like seeing the Father.
- In the same way, we as a church and as individuals are like fractals too, replicas of Jesus.

#### 17 Christians in the World

#### 18 Letting God have His Way

- If a country has a large percentage of Christians and that country is full of murder, strife, hatred, and all kinds of evil, what is really going on?
- What fractal do they really belong to? Or who is their real father?
- Perhaps their devotion to God is unbiblical or simply been watered down where their faith is not generating the kind of actions that allows grace to flow and so produce transformation.
- Something is the matter, if we are not producing fruit.

- Nevertheless, this all can changed, if we properly abide in God's vine where He can live His life in us.
- Faith + God's Grace = Transformation into His Image.