

THE SPLENDOR OF PEACE

Carlos E. Puente

Department of Land, Air and Water Resources

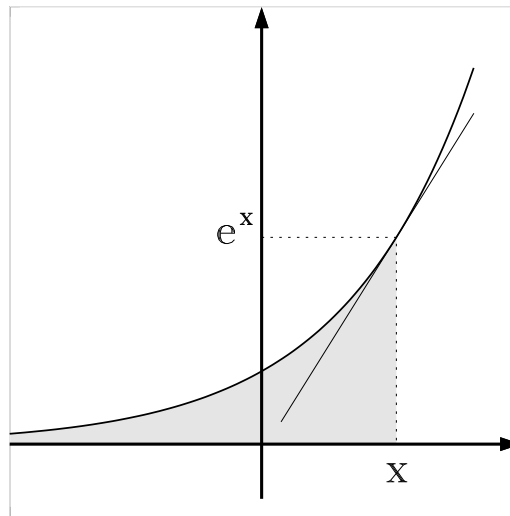
University of California, Davis

<http://puente.lawr.ucdavis.edu>

Outline

- *Explains additional symbols about love from calculus and geometry.*
- *Argues that important lessons may be learned from man-made power-laws.*
- *Stresses, consistently with previous lessons, that peace may be achieved via the Holy Spirit.*
- *Shows the α and the Ω in a relevant diagram from physics.*
- *Argues that accepting God's invitation to conversion, as expressed in the Bible, is good.*
- *Stresses that the best time to say yes to Love is now.*

- As mentioned before, Jesus summoned his disciples to be recognized by their **love** to one another (Jn 13:34-35) and their **love** for others, including even their *enemies* (Mt 5:44).
- This “commandment” may be translated into the language of **calculus** as *“integration without differentiation.”* (!)
- As there exists only one solution to this statement, i.e., the positive **exponential** function:



$$\int e^x dx = \frac{de^x}{dx} = e^x$$

one wonders if this fact may provide additional symbols to express **Love**.

- By considering the famous words of Jesus to his early disciples regarding the vine and the branches, “**I am the true vine**, and **my Father is the vine grower**. He takes away every branch in me that does not bear fruit, and everyone that does he *prunes* so that it bears more *fruit*. You are already pruned because of the word that I spoke to you. *Remain in me, as I remain in you*. Just as a branch cannot bear fruit on its own unless it remains on the vine, so neither can you unless you remain in me. *I am the vine, you are the branches*. Whoever remains in me and I in him will bear **much fruit**, because without me you can do *nothing*. Anyone who does not remain in me will be thrown out like a branch and *wither*; people will gather them and throw them into a *fire* and they will be *burned*. *If you remain in me and my words remain in you, ask for whatever you want and it will be done for you*. By this is my Father glorified, that you bear **much fruit** and become my disciples. As the Father loves me, so I also love you. *Remain in my love. If you keep my commandments, you will remain in my love*, just as I have kept my Father’s commandments and remain in his love” (Jn 15:1-10), it may be seen that **surrendering** to Christ, and with Him, yields the “ultimate **power of Love**.” (!)
- This passage, closely related to other themes in this class, may be “translated” into mathematical symbols as follows:

- Jesus, the vine, may be expressed numerically saying that He is the **1**, certainly the **one** and only who did not sin (1 Pt 2:22), the **one** who died for people's transgressions (1 Pt 2:24), and also the **only divine** son of God (Jn 1:18). (!)
- His followers, by accepting **Him** and **His cross** of righteousness, and by choosing to be below Him, therefore become $1/x$. (!)
- As the process of "*pruning*" takes place, that is, as the *positive* increases, we may see how Jesus disciples become holier and how such takes them closer and closer to the desired condition of "*abandonment*," as symbolized by the *root* of the Feigenbaum tree. (!)
- With this in hand, one may see geometrically the **union** of Jesus and his followers as $(1+1/x)$, and when such intimate relationship is compounded with the disciples' increased **power** to ask for anything on His name, this yields the equation $(1 + 1/x)^x$.
- As in the limit when x grows to **infinity** such a quantity gives precisely the exponential number e , it may be concluded that such symbolizes the "ultimate gift" of *consciousness*, i.e., the **Holy Spirit**, which empowers people to love everyone as God does. (!)
- For the **Holy Spirit** enables to cultivate *righteousness in peace* (Jas 3:18) in a brotherhood and sisterhood of love (Mt 12:50) that transcends all differences. (!)

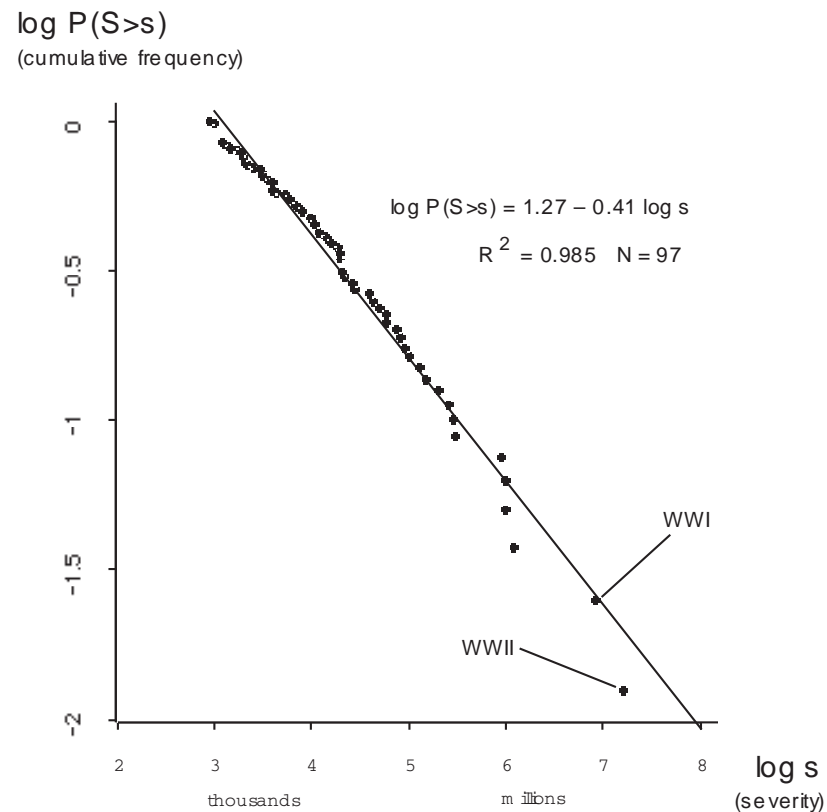
- The exponential function in two dimensions: $r = e^{b\theta}$, i.e., in *polar coordinates*, and leading to the ever present *logarithmic spiral* of nautilus shells, ammonites, hurricanes, and galaxies, also provides additional metaphors.



- For as stressed before, the **positive** spiral (right) travels *outward* seeking *infinity*, i.e., the **unitive 9** or **e** itself, yielding $1 = 0.999 \dots$, while the **negative** spiral (left), **6**, goes *inside*, travels only a *finite length*, and gives $2/3 = 0.666 \dots$.
- For “**the fruit of the Spirit** is *love, joy, peace, patience, kindness, generosity, faithfulness, gentleness, self-control*” (Gal 5:22-23). **Nine** of them, as 9 beatitudes in Matthew. (!)
- In this spirit, $r = e^\theta$, i.e., with **plus one** as “*internal derivative*,” further fulfills the “*essence of calculus*” for such a curve, in a rather beautiful way, always intersects a ray emanating from the *origin* at exactly **45 degrees**, i.e., the very slope of $X = Y$. (!)

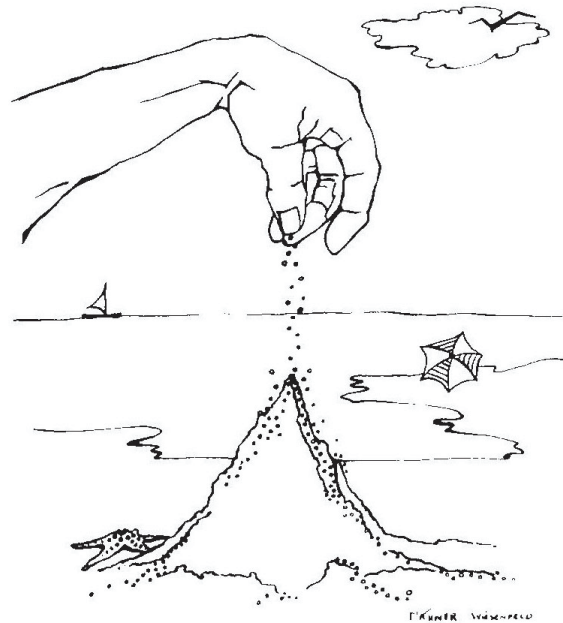
- As the **logarithmic** function, $\ln(x) = \int \frac{1}{x} dx$, the *natural log*, is the *inverse* of the *exponential*, one may see that logically it ought to have a “*negative* connotation.”
- One may see this explicitly in the passage of the vine and the branches when Jesus said that without Him, even if we try to surrender by ourselves, we could do nothing (Jn 15:5).
- This symbolic meaning for the **log** becomes particularly relevant, for many complex *violent* natural processes, such as earthquakes, avalanches and forest fires, are characterized by **power-laws** in their distributions, $P[X \geq x] \sim x^{-c}$, that is, *negative* lines when the axes are changed to logarithmic scales.
- Such “*three negatives*,” that is, **log, log, negative**, as symbolic as the three times the apostle Peter denied Jesus (666) before the cock crowed twice (2/3) (!) (Mk 14:66-72), reflect the fact that such *destructive* processes lack any characteristic scale and reminds us, in the spirit of the class, of the awful consequences of our wrong choices. (!)
- For in perfect metaphoric agreement, the distributions of major **man-made calamities**, including the **wealth inequalities** within and across nations, reflected in 2/3 of the population in **poverty**, and those from **conflicts** and **wars**, are **power-laws**. (!)

- As seen below for wars (after L. E. Cederman, 2003), such are “beautiful fits,” with high coefficients of determination (R^2), but incomplete illusions of straightness that in no way resemble the *peaceful* and *immaculate* condition of **rectitude**, which we inherently desire.



- For simply put, power-laws potently symbolize what happens to us, individually and collectively, when we lose track of our inherent scales and misuse and abuse our powers. (!)

- For although the devil in us incite us not to see the wooden beam on our own eye, that is, the **negative log** (Mt 7:1-5), the “*axis of evil*” runs through each one of us, and it is our own hand, and not at all an “*invisible one,*” the one that leads us to the *criticality* of our power addictions (after Bak, 1996).



- For as the apostle Paul explains, “*The love of money is the root of all evils,* and some people in their desire for it have strayed from the faith and have pierced themselves with many pains” (1 Tm 6:10), and hence it is up to us mend what is clearly broken so that we may build a just world for all.

- At the end, it all boils down to **conversion**, as metaphorical as the three times Peter acknowledged his love for the risen Christ, once filled with the **Spirit** (999) (Jn 21:15-17).
- For “The law of the Lord is **perfect**, refreshing the soul. The decree of the Lord is trustworthy giving wisdom to the **simple**” (Ps 19:8), as Jesus breathed His last for us precisely at the **9th** hour (Mk 15:34-37). (!)
- For God is not a God of disorder but a **God of peace** (1 Cor 14:33), for “the kingdom of God is not a matter of food and drink, but of righteousness, peace and joy in the Holy Spirit” (Rom 14:17), for through Jesus, the **Prince of Peace** (Is 9:5), God gives us a spirit not of cowardice but one of power and love and self-control (2 Tm 1:7).
- For the **code of peace** explained herein is based on: *continued repentance towards the balanced state*, i.e., **Jesus Christ** symbolized by $\sqrt{2}$; *complete surrendering to Him so that we may converge to God our Father*, i.e., the Origin symbolized by π ; and *progressive yielding to the plenitude of Love*, i.e., via the **Holy Spirit** denoted by e .
- For this yields $p = 1/2$ in equilibrium, $\alpha \leq 1$ in the root of the Feigenbaum tree, and $z \rightarrow 1$ in the bell at infinity, i.e., **paz** (peace in Spanish). For “There are three that testify, the **Spirit**, the **water** and the **blood**, and the three are of one accord” (1 Jn 5:7-8). (!)

The following quotations further emphasize God's **Invitations and Admonitions**:

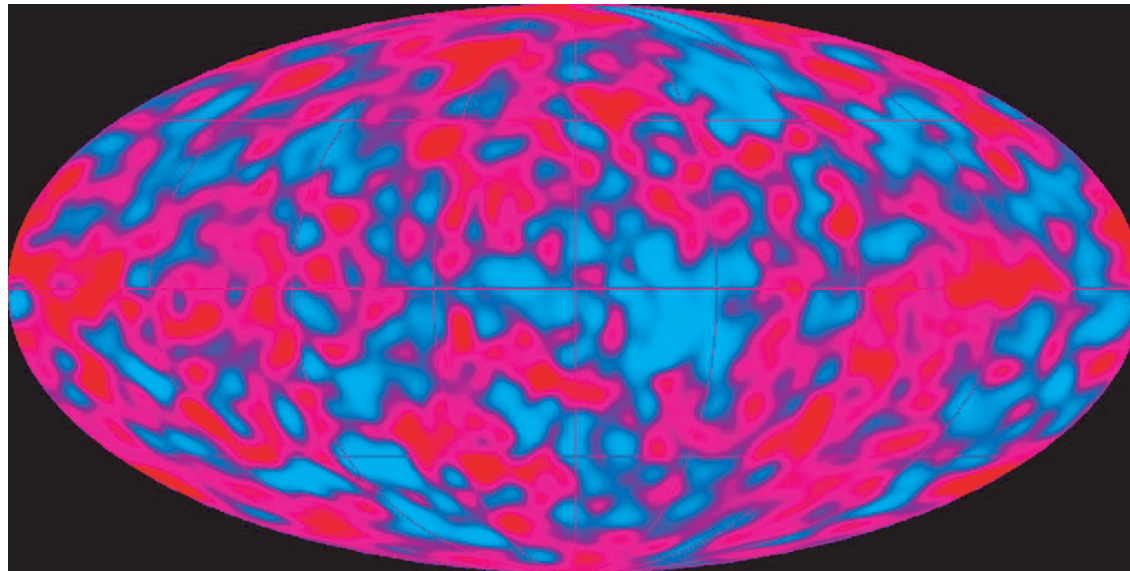
- As summarized in the Bible through the prophet Isaiah, “All you who are thirsty, come to the *water!*” (Is 55:1), this class, appropriately from a “hydrologist,” represents, at the end, an unexpected connection to God’s invitation to the “fullness of love.” (!)
- For as people surrender daily to the *water* of baptism they also receive the “mystical warmth” of the **living water**, the Holy Spirit that accompanies them in their journey (Acts 19:4-6).
- For Jesus, “the **Alpha** and the **Omega**, the first and the last, the beginning and the end” (Rv 22:13), said, “To the thirsty I will give a gift from the spring of *life-giving water*. The victor will inherit these gifts, and I shall be his God, and he will be my son” (Rv 21:6-7).
- As these pages attest, the sought plenitude may only be attained in the “positive cross.” As such, they remind that “There is no salvation through anyone else, nor is there any other name under heaven given to the human race by which we are to be saved” (Acts 4:12).
- Hence the consistent call in the Bible is for people to **repent** and be **baptized** “in the name of Jesus Christ for the forgiveness of sins” to receive the gift of the **Holy Spirit** (Acts 2:38), so that, in the “fullness of faith,” they may fulfill God’s promises.

- For Jesus, consistently crowned with thorns produced by divisive cascades and also present in chaotic trees (Mt 27:29), said, “*Whoever loves me will keep my word*, and my Father will love him, and we will come to him and make our dwelling with him” (Jn 14:23) and “Behold, *I stand at the door and knock*. If anyone hears my voice and opens the door, then I will enter his house and dine with him, and he with me” (Rv 3:20).
- Clearly, and as repeatedly expressed in these lectures, **humility** and **simplicity** are important components in God’s plan for his people.
- “For it is written: ‘I will destroy the wisdom of the wise, and the learning of the learned I will set aside.’ Where is the wise one? Where is the scribe? Where is the debater of this age? Has not God made the wisdom of the world foolish?” (1 Cor 1:19-20).
- “For *the wisdom of this world is foolishness in the eyes of God*, for it is written: ‘He catches the wise in their own ruses,’ and again ‘The Lord knows the thoughts of the wise, that they are vain’ ” (1 Cor 3:19-20, Jb 5:13, Ps 94:11).
- For “God chose the *foolish* of the world to shame the *wise*, and God chose the *weak* of the world to shame the *strong*” (1 Cor 1:27), and for “The revelation of God’s words sheds light, gives understanding to the *simple*” (Ps 119:130). (!)

- For after Jesus told the disciples to rejoice because their names were written in heaven, He Himself “rejoiced in the Holy Spirit and said, ‘I give you praise, Father, Lord of heaven and earth, for although you have hidden these things from the wise and learned you have revealed them to the **childlike**. Yes Father, such has been your gracious will’ ” (Lk 10:21).
- As discussed in class, in an age when “immorality” is excused due to selfishness, when unborn children die in rather large numbers and many kids perish due to lack of water, it is relevant to note that the connections herein, from science to faith, point also to clear admonitions.
- For the Bible states, “Lo, the day of the Lord comes, cruel, with wrath and burning anger; to lay waste the land and destroy the sinners within it!” (Is 13:9), “*See, the day of the Lord! See, the end is coming!* Lawlessness is in full bloom, insolence flourishes, violence has risen to support wickedness” (Ez 7:10), for “Woe to those who call evil good, and good evil, who change darkness into light, and light into darkness” (Is 5:20).
- For as suggested via the ever symbolic fig tree, “Yes, it is near, a day of darkness and gloom, a day of clouds and somberness! Like dawn spreading over the mountains, a people numerous and mighty! Their like has not been from of old, nor will it be after them, even to the years of distant generations” (Jl 2:2).

- Notice how these passages point us naturally to **humility** via Jesus' very awe-inspiring explanation of the parable of the weeds. For “ ‘He who sows good seed is the Son of Man, the field is the world, the good seed the children of the kingdom. The weeds are the children of the evil one, and the enemy who sows them is the devil. The harvest is the end of the age, and the harvesters are angels. Just as weeds are collected and burned up with fire, so will it be at the end of the age. The Son of Man will send his angels, and they will collect out of his kingdom all who cause others to sin and all evildoers. They will throw them into the *fiery furnace*, where there will be wailing and grinding of teeth. Then the righteous will shine like the sun in the kingdom of their Father. **Whoever has ears ought to hear**’ ” (Mt 13:36-43).
- For the prophet Isaiah proclaims, “Come near, O nations, and hear; be attentive, O peoples! Let the earth and what fills it listen, the world and all it produces. The Lord is **angry** with all the nations and is **wrathful** against all their host; he has doomed them and given them over to slaughter. Their slain shall be cast out, their corpses shall send up a stench; the mountains shall run with their blood, and all the hills shall rot. The heavens shall be rolled up like a scroll, and all their host shall wither away, as the leaf wilts on the **vine**, or as the **fig** withers on the tree” (Is 34:1-4).

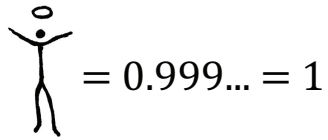
- For children may recognize the *alpha* and the *Omega*, in blue letters on the first quadrant, as a powerful sign in the sky (Lk 21:25) in the recently measured background radiation reflecting the Big Bang, even if the letters are wrongly positioned due to our looking into the past (after NASA):



- For in a future world where, “Neither their **silver** nor their **gold** shall be able to save them on the day of the Lord’s wrath” (Zep 1:18, Bar 3:17-19, Ez 7:19), it is sobering to realize that what is written in the Bible exhibits a remarkable consistency that provides relevance to the prophet’s alarming question, “*What will you do when the end comes?*” (Jer 5:31).

More Powerful Symbols (Petrus Soons, 2010)

halo on head



Jesus Y = X



888

110 + 1 whips

two little coins

$$0 + 0 = \infty$$

deadly parabola

$$2/3 = 0.666 \dots$$

bell

A Ω

1 800

$2^8 = 2^\infty$ flowers

- For, in addition, the powerful words via the prophet Jeremiah, “*Should you not fear me, says the Lord, should you not tremble before me?*” (Jer 5:22) lead to other relevant exhortations by prophets: “But the Lord is in his holy temple; silence before him, all the earth!” (Hab 2:20), “Silence in the presence of the Lord God! for near is the day of the Lord, Yes, the Lord has prepared a slaughter feast, he has consecrated his guests” (Zep 1:7), that certainly calls people to humility before God.
- For, in humility, I sense that what God said to the house of Israel also applies to us all, “*Can I not do to you, as this potter has done?*” says the Lord. Indeed like clay in the hand of the potter, so are you in my hand” (Jer 18:6).
- Consistently then, the invitation starts with a plea, “*Hear me, O coastlands, listen, O distant peoples*” (Is 49:1), i.e., *O fractals (!)*, “Return, rebellious children, says the Lord, for I am your Master” (Jer 3:14), “Return and be converted from your idols; turn yourselves away from all abominations” (Ez 14:6).
- These then are coherently lead to “love from a pure heart, a good conscience, and a sincere faith” (1 Tm 1:5), through the *one* who is the first and the last (Is 44:6), the *one* to whom every knee shall bend and every tongue give praise (Is 45:23, Rom 14:11), the **Christ**.

- For “everyone will be salted with fire” (Mk 9:49), and hence our love should grow such that we not only hear the word but also **fulfill** it (Jas 1:22-25), giving ample **fruit** that may testify to the quality of our work (1 Cor 3:10-15).
- For we, “the sons of God,” are called to be *repairers of the breach* (Is 58:12) and hence are called to action by “releasing those bound unjustly, setting free the oppressed, sharing your bread with the hungry, sheltering the oppressed and the homeless, clothing the naked” (Is 58:6-7), which is the essence of true fasting in accordance with God’s will (Is 58:6), and the *true “fulfillment of our freedom.”*
- The call is then no less than accepting the **fullness** of the invitation to love, which heals the original wound, purifies all our relationships, and leads us to our eternal destination with God, because, as shown geometrically before, “**love** covers a multitude of *sins*” (1 Pt 4:8).
- For, as the Bible explains, through the cleansing blood of Christ, the blood of the lamb of God, God’s perfect will and love for us is shown (Is 43:4), for it cancels our covenant with death and the nether world (Is 28:18) and leads us to a superior condition of “**Salvation and Praise**” (Is 60:18) where, by His placing of His law within our hearts (Jer 31:33, Ez 36:26), we are able to find **peace**. (!)

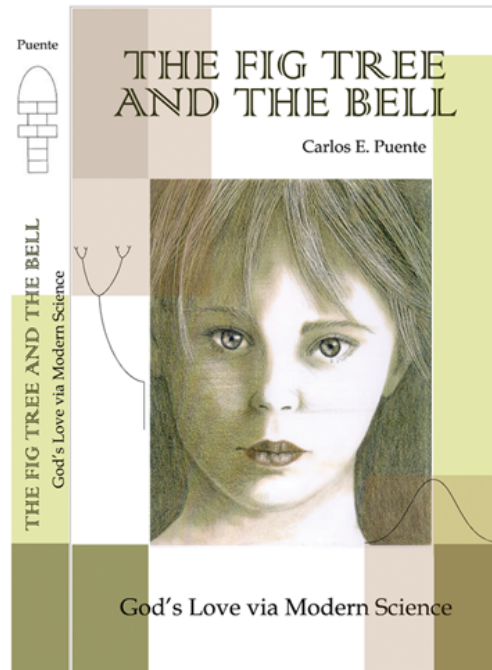
- For as the prophet Isaiah teaches, “There shall be no harm or ruin on all my **holy mountain**; for the earth shall be filled with knowledge of the Lord, as water covers the sea” (Is 11:9), i.e., on God’s majestic bell at infinity, as described in the class. (!)
- For “the Lord,” God, assures that “Those who offer **praise** as a sacrifice honor me; to the **obedient** I will show the salvation of God” (Ps 50:23).
- Why not fully rejoice in a future when the “Shepherd” Himself (Jn 10:11) shall guide the surviving faithful?
- For at that time, “from behind a small voice shall sound in your ears: ‘This is the way; walk in it’, when you would turn to the right or to the left” (Is 30:21), and the Ω point, illustrated in the class via chaos theory, will be fully within grasp.
- For “No longer shall the sun be your light by day, nor the brightness of the moon shine upon you at night; The Lord shall be your light forever, your God shall be your glory” (Is 60:19).
- Why not shed a tear of joy, that is, a **sweet fig**, when realizing that the **water** emanating from God’s temple shall lead to everlasting fruitfulness? (Ez 47:1-12). (!)
- Why not to extol in anticipation as “the **fig tree puts forth its figs**”? (Song 2:13). (!)

- In a day and age when humanity continues showing signs of **complexity** and **chaos**, when divisions based on selfish misconceptions about race, wealth, gender, and religion abound, the resounding Biblical invitation remains: “Seek the Lord, all you humble of the earth, who have observed his law; Seek justice, seek humility; perhaps you may be sheltered on the day of the Lord’s anger” (Zep 2:3), “Come now, **let us set things right**, says the Lord: though your sins be like scarlet, they may become white as snow; Though they be crimson red, they may become white as wool” (Is 1:18).
- For “the Lord” said, “This is the one whom I approve: the **lowly** and **afflicted** man who **trembles** at my word” (Is 66:2), the one that “lets *justice surge like water, and goodness as an unfailing stream*” (Am 5:24), the one who lays his life for his brothers and sisters, as Jesus did (1 Jn 3:16).
- As the Psalmist repeats, we shall “learn to savor how good the Lord is; for happy are those who take refuge in him” (Ps 34:9). We shall fully rejoice in “His coming” and join the applause before the Lord who comes (Ps 98:8-9), for in the strength of the *Holy Spirit*, explained geometrically herein, we may say to those whose hearts are frightened: **“Be strong, fear not!** Here is your God, he comes with vindication; With divine recompense he comes to save you” (Is 35:4).

- It has been great fun for me to share this quarter with you. I hope that you have found the unusual connections herein both relevant and edifying.
- The message of this class may be summarized by a short story and by yet another poem-song. I hope you enjoy them.
- If I could be of help, do not hesitate to come and visit me. Cheers and my best wishes. (!)

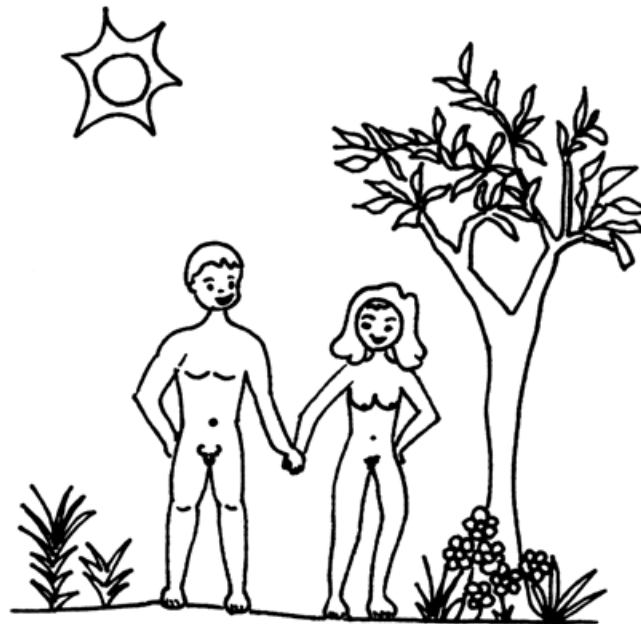
OR SO WE HAVE BEEN TOLD

A Companion to The Fig Tree and the Bell



With illustrations by my beloved wife Marta Puente
and dedicated to my God-given friend Steve Bennett

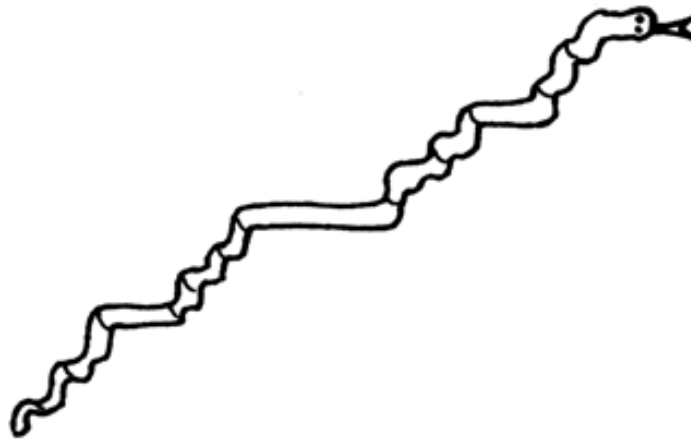
Not too long ago, life was simple,
people had time to dream and take siestas,
or so we have been told.
Then, people trusted, anxiety did not rule,
and leaves did not cover.



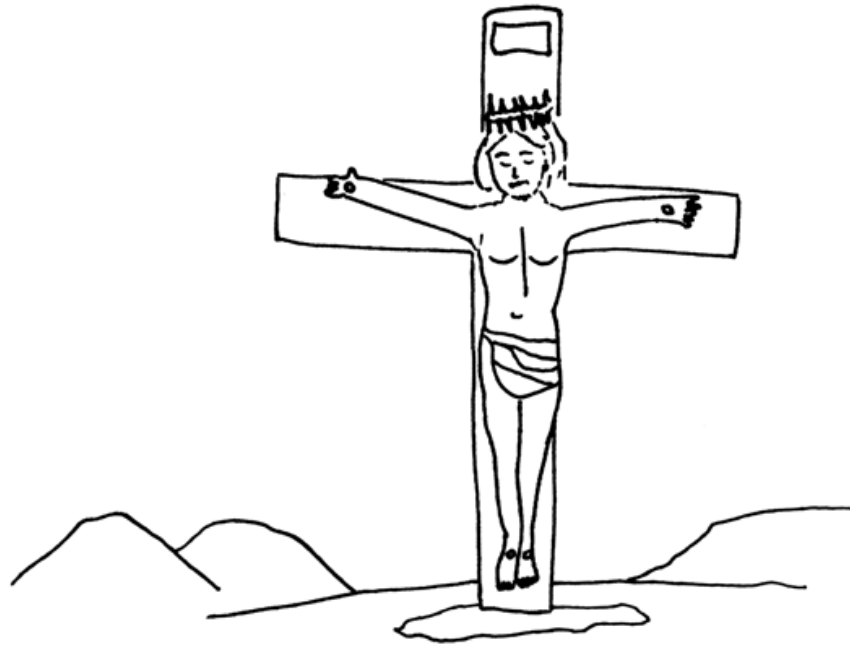
Later appeared the snake,
the inwardly rotating spiral, two thirds,
the inventor of pride, who, by cascading his lies,
vastly changed our landscape.
For equilibrium was broken by the mighty winds,
time became fractured and complex,
and unity was shattered into dirt, multi-dust, death,
or so we have been told,
as we may painfully see.



These were sad days, dark days,
or so we have been told.
For the empty replaced the whole,
and the longest, always longest,
devilish steps displaced the shortest,
and most economic, pathway of brotherhood.



At the appointed time, life arrived to its destiny.
The rose blossomed and her first offspring,
filled with the unitive power of outer love,
offered his ineffable sacrifice,
or so we have been told.



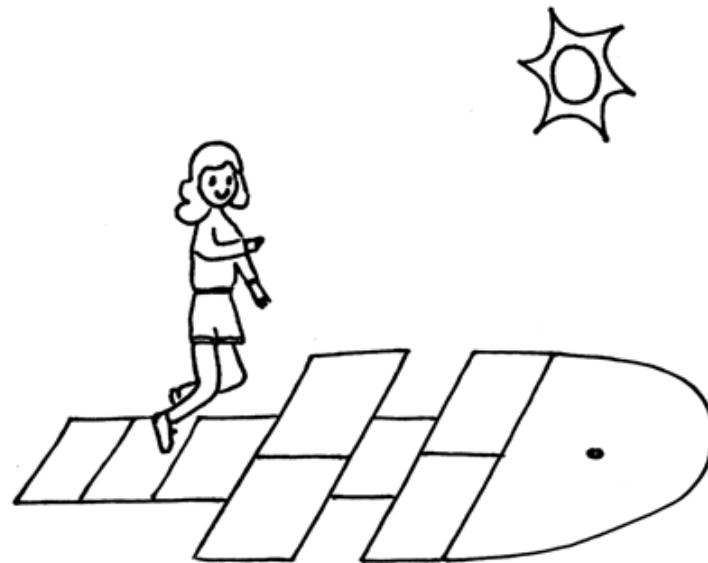
For the ever positive obeyed the voice,
and, by rising, integrated it all,
healing with his grace all dissipation,
and withering with his tenderness all chaos,
or so we have been told,
hence restoring the original song.



These were happy days, amazing days,
or so we have been told.

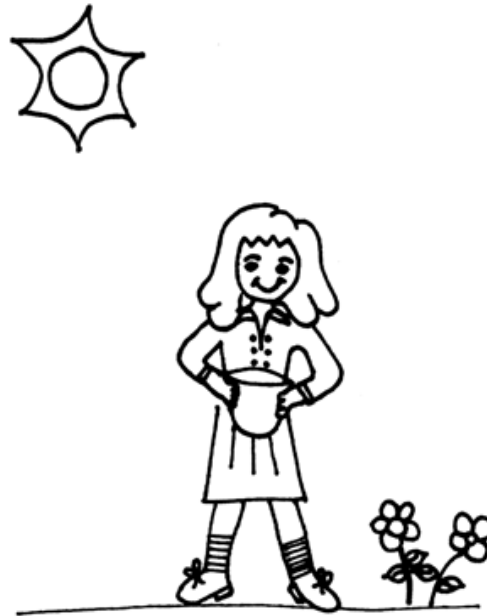
For the scrolls were correct and the logistics faithful.

For humility do shield, as trusting dynamics,
so very unlikely, take children to O,
rescuing them from wandering forever in high heat.



As history evolved, the warmth of everlasting love
and his Spirit were poured into those believing this story,
or so we have been told.

These little ones have power over entropy
and express their fearless freedom
by sharing their pristine waters.



These normal boys and girls
are fully filled-up and belong to the stars,
or so we have been told.

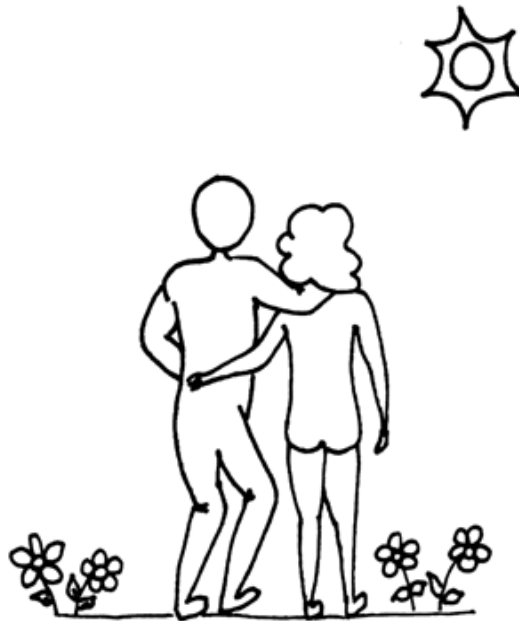
Those avoid non-linearities, greed, avalanches,
violence, turbulence, and anything critical,
for they dream peace and unity.

For they know that treasures are hidden inside the heart,
in calling bells, as one crosses the other side of silence, beyond quarks.



These are sad days or happy days,
virtual realities or truth, market crashes or jubilees,
or so we have been told.

For nature hints it is best to be fit, so that,
by conducting the eternal flames,
we may leave our primeval caves
and find our home in the universe.



O GREAT CONVERGENCE (!)

O great convergence
o saintly design,
the signs announce it
equilibrium is soon back.

O great convergence
o saintly design,
modern science confirms it
equilibrium is soon back.

In a world filled
with ugly inequalities,
2/3 suffering poverty
evading daily tempests,
o simple cascades
the devil's nasty ambush,
o nauseating schemes
pretending to be straight;
o negative line, and in log-log,
that heals no pain at all,
o clearly rotten spiral
weaving all its anathema,
o is just death, I tell you...

O great convergence
o saintly design,
the signs announce it
equilibrium is soon back.

O great convergence
o saintly design,
modern science confirms it
equilibrium is soon back.

And let's talk my friends
of a greater evil,
the many discarded sons
o foolish persecution,
o vain insolence
the one of modern man,
with the same DNA
o incredible disregard;
o clever design, and not by chance,
o bell of mighty love,
evolution with no soul
can not engender reason,
o it is divine, I tell you...

O great convergence
o saintly design,
the signs announce it
equilibrium is soon back.

O great convergence
o saintly design,
modern science confirms it
equilibrium is soon back.

The cosmos o gentleman
reveals its old secrets,
accurate radiations
imply holy beginnings,
o powerful characters
o faithful definition,
in a trace children observe
the ever-present winner;
o mysterious exchange, according to His voice,
in heaven and in earth,
for all dusty turbulence
always loses the war,
o learn from it, I tell you. . .

**O great convergence
o saintly design,
the signs announce it
equilibrium is soon back.**

**O great convergence
o saintly design,
modern science confirms it
equilibrium is soon back.**

As twenty centuries pass
o night and many lessons,
trees lacking godly fruit
chaos for generations,
growing divisive thorns
o disobedient clan,
drifting of the course
not heeding truthful plan;

o eternal sign, fulfilled today,
the fig tree blooms in science,
o improbable enigma
real mercy, not by chance,
o make amends, I tell you. . .

**O great convergence
o saintly design,
the signs announce it
equilibrium is soon back.**

**O great convergence
o saintly design,
modern science confirms it
equilibrium is soon back.**

O come quickly my friend o I tell you
listen the earth shall tremble o yes,
o let justice surge as a spring
for if you love, you will also sing well.

**O great convergence
o saintly design,
the signs announce it
equilibrium is soon back.**

To arrive to your center my friend
you ought to dream now in all truth,
all immensity, all clarity o yes
and all unity growing to the root.

**O great convergence
o saintly design,
the signs announce it
equilibrium is soon back.**

O do not blame others my friend
and return quickly to the route,
forgive it all, o really all,
for the origin has no substitute.

**O great convergence
o saintly design,
the signs announce it
equilibrium is soon back.**

O understand my friend understand
what you are singing is no false trend,
only in balance there is real hope,
and this party, hear me, has no end.

**So make amends now
choose what is clear,
nobody left behind
we are brothers and sisters. (4)**

**Make amends now
we are brothers and sisters.**

O practice brother a loving trick
o turning always the other cheek.

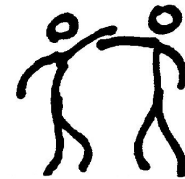
**Make amends now
we are brothers and sisters.**

Remain in goodness o faithful pick
love one another, come get the kick.

**Make amends now
we are brothers and sisters.**

O come on sister, o make a click,
laughter endures, o let's be quick.

**So make amends now
choose what is clear,
nobody left behind
we are brothers and sisters. (2)**



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