Jesus, the equilibrium

A translation of https://campanitasdefe.com/2018/01/27/jesus-el-equilibrio/

Summary. Based on the universal way in which turbulence occurs in the air, this little bell explains, step by step and in a logical and particularly geometric fashion, why the love of Jesus is related to the concept of equilibrium and to His defining statement: "I am the Way, the Truth, and the Life" (In 14:6). Employing symbolic spirals, the theme is summarized by the song "6 0 9," which invites to the fullness of love and unity. This joyful Cuban-style Colombian-cumbión may be enjoyed in Spanish here. The song can also be heard and visualized in Spanish in a YouTube video by the end of the text.

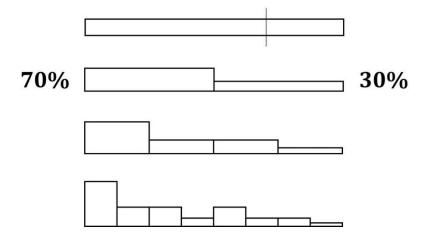
The conference **Jesus, the hypotenuse, the only way to the Father**, in English, as I shared it at **Ateneo Pontificio Regina Apostolorum** in **Rome** in 2013, summarizes the theme of this little bell and also the **next one**. The YouTube video of this talk can be accessed **here** and also at the end of the text.

The blog <u>Presentation</u> provides information about the purpose of these little bells and the blog <u>Organization</u> shows how the entries are grouped by categories. This entry belongs to the categories "Jesus, the equilibrium, the hypotenuse and Y = X," "Calls to conversion," "Numerical little bells" and "About matrimony."

This little bell, and the <u>next one</u>, summarize what is found in my parable <u>The Hypotenuse</u> and in the first chapter of my book <u>The Fig Tree & The Bell</u>, as also recorded, in Spanish, in a lecture <u>From the Nobel to peace</u>.

This exposition, longer than previous little bells as it is a *lesson from modern science to the love of God*, is based on a couple of processes that illustrate how *fragmentation* occurs.

The first one is a *game of kids* that may be easily understood molding *modeling clay*:



Drawn above is a *uniform bar*, just as it comes out of the box. The game begins by *cutting* it by a given ratio, say 70% from the left, as indicated by the vertical line. Then, the game continues by *piling up* the larger piece to the left and *enlarging* the second piece, also to the left, so that they make two contiguous pieces of equal horizontal size. Clearly, the first piece is taller than the *original bar*, while the second is shorter.

The process continues by repeating the same steps on each piece and in the *same proportion*. As such, at the next level, there appear four elements of equal horizontal sizes, whose masses, from left to right, are: 70% of 70%, or 49%; 30% of 70%, or 21%; 70% of 30%, also 21% and 30% of 30%, which is 9%. Clearly, 49 + 21 + 21 + 9 equals 100%, following the well-known principle of "*conservation of modeling clay*," something that does not hold very well if there are playful *kids* at home.

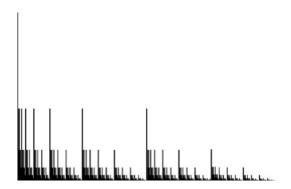
As observed, the next level contains eight pieces, and the most massive rectangle continues to grow in height. Since the base of such a rectangle measures half of half of half, or 1/8, that is, 1/2 cubed, and as the area of the rectangle (in truth a volume) equals 0.7 cubed, the height results in 1.4 cubed, which is 2.74 times greater than the *original uniform bar*.

It is possible to calculate — without much difficulty — what the game produces when using arbitrary partitions p and q, beyond 70% and 30%. At the first level of the game, below the *initial bar*, the mass quantities are precisely p and q. At the second level, the sequence obtained is p of p, or p squared; p times q; q times p and q squared, which is nothing else but the familiar expansion of p plus q all squared.

Since, at each level, the masses *divide* by multiplying by p on the left and by q on the right, after n levels there appears the expansion of p plus q all raised to the power p. This game, related to the celebrated *Pascal's triangle*:

is known as a *multiplicative cascade*, as also the horizontal sizes of all its rectangles come from the *multiplication* of 1/2, a total of n times.

After twelve levels, the *original bar breaks* into 4,096 (or 2 to the twelve) "*spines*" or "*thorns*," all having equal horizontal sizes of 1/2 to the twelve. As seen below, these elements are arranged in *layers* or *strata*, such that, for p = 0.7, the vertical scale of the largest *thorn* becomes 1.4 to the power twelve, or 56.69 units:



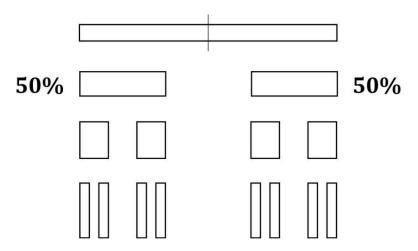
As observed, the visible *spines*, also *painfully* perceptible when touched from above, have varying *densities*. The *tallest spine*, shown compressed for otherwise it wouldn't fit within the little bell, occurs *once* and contains *p to the 12* of the total mass. The *smallest rectangle* on the right, and practically invisible like a tiny dot, also happens *once* and contains *q to the twelve* of the mass. Then, there are *12 large thorns* containing *p to eleven times q* of the mass, and also *12 tiny rectangles* (also invisible) containing *p times q to the eleven* of the mass. Following the pattern, there are then *66 spines* with *p to the 10 times q squared* of the mass and *66* others with *p squared times q to the 10*, and so on, organized into *13 levels*. As seen, the *layers* of *spines* interweave intricately, with their densities increasing symmetrically as we move deeper into *Pascal's triangle* from both sides.

Certainly, walking across this object is no easy task — and less so when the number of *levels* is truly large and grows toward *infinity*, for to go from one place to another, even when moving within the same *layer* or *stratum* of modeling clay, one must descend and ascend countless times, as such *spines*, regardless of the *layer*, turn out to be separated, as seen, by *gaps* or *holes* containing *spines* of different sizes.

This *divisive* game, aptly called *the game of imbalances*, eventually produces an *infinite* number of *layers* of *thorns* — *thin* as a dot yet *infinitely* large — (what a play on words without limit!) that, in fact, do not touch one another when belonging to the same *stratum*.

As such, each layer of *identical spikes* emerges from a *dispersed* and *infinite* collection of points separated by some space, and, then, those points have the *hollow* structure of *dust*. What was once *united* is fragmented by this *silly game* into *infinitely* many *infinite thorns* defined over *infinite dusts* and the resulting object given by the game is well known as a *multifractal*, as it is multiply *fragmented*.

To fully appreciate the *empty* structure that exists within each *layer* of the *unbalanced* little game — which, incidentally, could have been explained with the left and right locations swapped to avoid political suspicions — it is pertinent to introduce another *game of kids*, as described below:



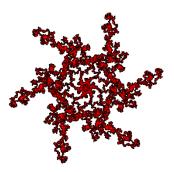
This process is also played by molding *modeling clay*, but instead of *cutting* the *original bar* by a value of *p* equal to 70%, it is done by the *middle*, and *piling up* the two pieces to the left and to the right such that there is a *gap* of one-third in the middle. Just like before, the game continues by *dividing* each piece in the same manner and *piling up* using the *same proportion*, in such a way that, in the end, it produces a multitude of equally-sized rectangles (volumes) that, since they do not touch, define a curious and precise construction of *perfect spaghetti*.

Clearly, this simple yet *divisive* game, known as *the game of voids*, is another *multiplicative cascade* that generates *equal thorns*, which, since they emerge from a collection of points separated by *gaps*, are supported, once again, by the *dispersed* and *hollow* structure of *dust*.

Interestingly, it happens that, by varying the size of the gap or hole in this $second\ game$, from a value of 1/3 to an arbitrary size h, the construction adjusts the empty topological

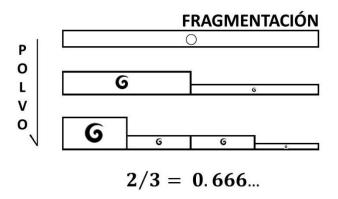
structure of each *layer* or *stratum* present in the *first game*. While the *denser layers* in the *game of imbalances* require the propagation of a *small gap* in the *game of voids*, those *more dispersed* in the *first game* correspond to *larger gaps* in the *second game*.

The moral of the story is that the *two games*, although they may seem different, are, in the end, *deeply interconnected*. Both are *divisive cascades* that *fragment* the *original bar* into *thorns* over *dust*, with the exception that the *game of voids* lives within the *game of imbalances* inside each one of its *layers* ...



... It turns out that the *first game of kids* is related to the way *natural turbulence* occurs in the *air*, the same common process full of *sudden* and *violent* movements that frighten *kids* when traveling, for example, on an airplane.

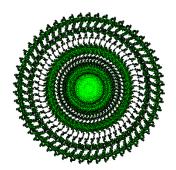
When the *Reynolds number*, $Re = (v \cdot L)/\mu$, is sufficiently large, that is, when the *inertia* of a *fluid*, given by the product of its *velocity* v and a *characteristic length* L (in the numerator), overcomes the *fluid's cohesion*, given by its *viscosity* μ (in the denominator), the *fluid* — in this case, the air — can no longer remain *united* and *breaks apart* into an *irreversible cascade* of *fragmentation* (*fragmentación*) given by *eddies* or *vortices*, which divide into *eddies*, which divide into even smaller *eddies*, and so on, traveling towards the emptiness of *dissipation* and *dust* (*polvo*):



These rotating elements, which *always* travel *inwards* — that is, from *plus* to *minus* or from *more* to *less* in terms of *pressures*, as it appears in the terrifying *spiral* of a *hurricane's* flow — carry with them unequal amounts of *energy* that correspond *precisely*, in a truly astonishing way, to the masses in the *uneven cascade*, with the *imbalance p* set at 70%.

In an unexpected manner, as reported by researchers **Charles Meneveau** and **Katepali Sreenivasan** in 1988, observations of various airflows — both natural and experimental, including *atmospheric turbulence*, *boundary layers*, *cylinder wakes*, and more — *always* exhibit *layers* or *strata* of *energy* when measured along a line, and such are consistent with the successive breakup of *eddies* into smaller *eddies*, following *always* the 70-30 ratio of the *first game for kids*. What an incredible *simplicity* in something so *complex!*

However, even though *natural violence* stems from something so *elemental*, as *kids* playing with *modeling clay*, *turbulence* remains highly *complex* due to its unpredictability. This is so because the most massive *eddies* from level to level do not always occur on the left, but instead, they do appear on both sides, as if guided by "*chance*," and because, in addition, the *kinetic cascade* does not continue indefinitely but rather *ends up dissipating* its *energy* in the form of *heat*, once the eddies become sufficiently *small* ...



... Since the increase in *entropy* in *natural turbulence* occurs *universally* through a *simple cascade*, one day it occurred to me — undoubtedly inspired by the *violent* situation then in my homeland, *Colombia* — to use the cascading processes to model how we, as humans, create our own turbulence. After all, and beyond being a mere metaphor, *we the kids*, from *Afghanistan* to *Zimbabwe*, face "*inertial forces*" that break our "*internal cohesions*," and when this happens, that is, when we cross the *threshold* of our own *Reynolds numbers*, we generate "*intermittent*" and "*turbulent*" behaviors that eventually lead to unwanted *violence*. Because, whether we like to admit it or not, we often make mistakes habitually and sin by repeating the same errors, *breaking* things over and over again — whether driven by postures of *superiority* (or *inferiority*):



or by explicitly *preventing* some from participating in the *game of life*:

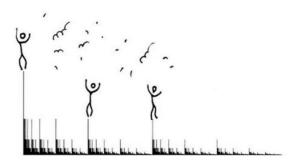


In this spirit, while the *first game* can vividly illustrate the proliferation of *inequalities* generated by our *preferential* and *competitive* instincts that give rise to a marked *cynicism* and *disillusionment* in people (as it happens to one who never gets the ball), the *second cascade* can represent the horrific effects of *discrimination*, along with the resulting *distrust* and *fear* (as experienced by someone who knows might lose more than just the ball, including his/her *employment* and his/her *freedom*) when "*equalities*" are imposed, arbitrarily, by *force*. Clearly, these *negative* traits are not exclusive to one game, as, for instance, *fear* also arises in the *first game* due to external forces of "*invisible hands*" (as we are told the "*market*" operates), thus reinforcing the fact that these *two divisive and generic systems* are, in the end, deeply interconnected.

It turns out that these simple ideas and their curious *anthropomorphic diagrams* are more than just faithful caricatures of the *political systems* that have governed the world, for they also reflect our own **selfish** postures and actions. Clearly, they help us visualize, even if not to explain in detail, why the "*third world*," comprising 2/3 of the global population, that is, 0.666... of all — the very same number that appears step by step in the sequence of *eddies* above — lives under *poverty* (according to *Peruvian* economist *Hernando de Soto*, 2000); why over 1,000 children *die* daily from lack of *water* (*UNICEF*, 2025); and why we find ourselves, whether we admit it or not, in an era of *violence*, *confusion*, and *terror*.

Certainly, the drawings above — proudly a *Colombian* product, as they were created by my brother <u>duartecito</u> — might seem amusing at a first glance, but in truth, they are not. On one hand, interpersonal relationships — <u>friendships</u> and <u>marriages</u> — have failed and continue to fail due to the proliferation of <u>imbalances</u> or <u>voids</u> that prevent <u>communication</u>, or because of more "<u>sophisticated</u>" <u>games of kids</u> that combine both <u>divisive</u> elements. And on the other hand, far too many have <u>died</u> and still <u>die</u> in <u>real gaps</u> or <u>voids</u>, led there by hatred or other "<u>self-justifications</u>" from one side against another, including, in a truly deplorable way, <u>precious children</u> rejected from their mother's wombs.

As history has shown, and continues to show today, that the **second game** does not work due to its **fallen walls**, its **conspicuous voids**, and its **inherent hatred** — even though some totalitarian societies refuse to acknowledge this and there are some **kids** who, in their desire of "**change**," fail to foresee potential **violent** dangers — it is relevant to ask, however inappropriate or politically incorrect it may seem, whether the **globalization** of the **first cascade** is truly the solution to the problems that afflict us:

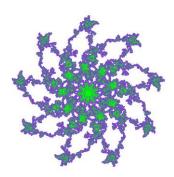


In this regard, it is useful to recall *Pascal's triangle* and perform some calculations. If we take an imbalance of p = 0.7, as in *natural turbulence*, and consider n = 20 levels of the *uneven cascade*, we can analyze where the *modeling clay* is located. Under these conditions, the top 5%, 10%, 20%, and 40% of the *largest spines* contain, respectively, 57%, 70%, 84%, and 95% of the total mass. This, sadly, matches the **skewed** wealth distribution in the world's **most powerful** country, the **United States**, for in 1998, at the end of the **20th** century, the wealthiest there held, for the same percentiles, 59%, 71%, 84%, and 95% of the nation's resources.

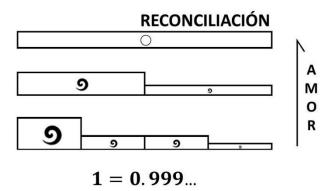
Certainly, this coincidence, between a **great nation** and a **flawed game of kids**, is both shocking and undesirable, as it is the fact that **King Solomon** received **666** talents of gold annually (1 Kgs 10:14), as it is that the same that such a number also corresponds to the name of the **great wrongdoer** to come (Rv 13:18). Curiously, the sequence of **eddies** in the **uneven cascade** traces out this ominous number, really 2/3 = 0.666... if the game is carried out to infinity, and from here emerge a **truthful warning** and a **clear moral lesson**.

If *imbalances* continue their unchecked spread, as they already happen in the 21st century — for instance, in the **United States** as of 2024, the richest 0.1% astonishingly hold 13.5% of all wealth, the top 1% control nearly 33%, while the poorest 50% have only 2% of the resources — the *laws of physics* and *common sense* (the *truthful common sense*, clearly reinforced also by the real *fragmentation* of interpersonal relationships in the "*anything goes*" culture of modern times) assure us that *energies* may in truth *dissipate*, causing us to collectively "*bite the dust*." And this is so, for the wealth distribution of *any country in the world*—and not just for the current *superpower* but also, today, for the very *people* chosen

by **God**, even if they were once ruled by the *wisest of kings*—can be modeled by a **simple divisive multiplicative cascade**, even if such requires usage of variable partitions from level to level ...



... Thus, from these reflections, both *generic* and *universal*, and not forgetting that "man shall not live by bread alone, but by every word that proceeds from the mouth of God" (Mt 4:4), we can recognize that there is only one solution rooted in truthful common sense for our inner peace and for "all of humanity that groans in chains" — as expressed in the National Anthem of Colombia, my homeland — and such corresponds to achieve reconciliation (reconciliación) through love (amor):



This *solution* is based on three actions that *we the kids* can take, although in reality they are one: to *invert* the direction of the *natural cascade* to repair what is *broken*; to *live* at *low Reynolds numbers* in order to avoid *violence* and the *anxieties* of the modern world; and, to put in the language of the ancient prophets, "to fill in the valleys and cut mountains" (Is 40:4, Lk 3:5) to repair the *breach* and restore *unity*.

For in an eminently graphic way, the *reconciliation* that returns to the *original bar* is composed of an *infinity* of *loving spirals*, elements that *always* travel in a *non-natural* way from *less* to *more*, or from *minus* to *plus*, or from the *negative* to the *positive*, consistently seeking the *good* of the other, like when we are first in love and "*everything flows*" in a beautiful ebb and flow of doing "*whatever you say*." All of this is so because the *unitive nines*

that reflect the best *harmonious* relationship between us, and in particular those of couples, are opposed to the *negative spirals* (in polar coordinates, of course) induced by the *diabolical power of the air*, to be redundant on purpose.

For the **devil** himself, the "ruler of the power of the air" (Eph 2:2) and the "ruler of this world" (In 12:31), is the one who, through his division in cascade or chain, is our common enemy. For it is **he** who falsely whispers in the ears of us the kids that death prevails and that brotherhood and peace are an unattainable utopia in this world, in which **he** is the prince of disorder and chaos.

Thus, here we can see for ourselves, based on simple *geometry*, that there is only *one possible solution*, which reflects that "*we must not play divisive games*," but rather we must make germinate *good* to overcome *evil*, so that the *dignity* of all may be *recognized* and *restored*, that is, the intrinsic *greatness* that has been given *equally* to *us the kids*.

Clearly and from a practical standpoint, the key is in maintaining the *original bar of modeling clay*, just as it came out of the *paradisiacal* box at *level zero* — what a way to remember *Adam and Eve*, the *serpent* and its *dust*, and the future promise in the **Woman's** offspring (Gn 3:1–24)! — by practicing the **proverbial 50-50** without exceptions, that is, without *gaps* or *voids*, giving our *love* to all those around us, *praying* for everyone including our *enemies*, thus avoiding the accumulation of *inertial forces* into *hatred*, and augmenting our *internal cohesions* by drawing closer to **God** in *truth*, in order to build true *brotherhood* in *friendship*.

This certainly means a vital *conversion*, that is, living at *low Reynolds numbers*, "*slowly*" and at a scale consistent with the "*day-to-day*" (to thus decrease our *inertia*) and increasing our "*viscosity*" through *prayer* (to enhance our *internal cohesion*). In this way, we end up growing *spiritually*, *asking for forgiveness* and *forgiving*, so that by avoiding the *thorns* of *anxiety* (Mk 4:18–19) we may satisfy, instead, the *sanctifying* power of *zero* that provides *unity*:

$$= 0.999... = 1$$

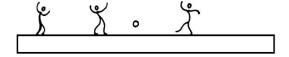
For without a doubt, the greatest *power* is that of the obedient **little saint**, for such allows us, to *us the kids*, through its intrinsic *humility* and *surrendering*, to reflect **love** towards

others without any *selfishness* and thus to experience the longed-for *peace* and *unity* of *union*.

This *unity*, it should be clarified, does not mean that we all must *have the same* or that we should all receive *the same compensation* for our varied work, but it does contain, in the *conscious* expression of *love*, a call to *solidarity* among all of us, as expressed, for example, in: "*Your surplus* at the present time should supply *their needs*, so that *their surplus* may also supply *your needs*, that there may be *equality*. As it is written: 'Whoever had *much did not have more*, and whoever had *little did not have less*.'" (2 Cor 8:14–15)

Certainly, "having is not a sign of wickedness, nor is not having proof of virtue," as eloquently stated by the Cuban singer-songwriter <u>Silvio Rodríguez</u>, and thus the invitation to *holiness* applies to everyone, *to us kids*, regardless of whether some who are so "rich" may believe that they do not need others because they are "poor," for to all, to each one of *the kids*, has been given our own *honor*, and, in a pluralistic way, our own *talents* (Mt 25:14–30) and gifts (Is 11:2–3, 1 Cor 12:7–12), which we must use in consequence to reach eternal life (Mt 25:31–46).

As can be understood, in the context of the *generic cascades* and their combinations, there exists only one **straight** and **solid** condition like a **rock** that, by not containing **thorns** or **dust**, we can walk in complete **freedom** and without **fear**. This turns out to be, in a way consistent with the **Word of God**, **Jesus Christ Our Lord**, the true **equilibrium** defined as **good** without **evil**, for as **John the Baptist** explained by recalling the words of the prophet **Isaiah** mentioned earlier, "**Every valley shall be filled**, **and every mountain and hill shall be made low**; the **winding roads** shall be made **straight**, and the **rough ways** made **smooth**, **and all flesh shall see the salvation of God**" (Lk 3:5–6). As such, through the path of **reconciliation** through **love**, and healing step by step until the **original bar of modeling clay**, we all shall appreciate **Jesus Christ**, **the salvation of God**, that is, and to emphasize it one more time, **Jesus**, **the equilibrium**, in veritable dynamics as an **ode in proportion**:



Although for some this association may seem arbitrary and perhaps intransigent regarding the non-ecumenical possibility of **a single way**, the *victorious* condition is open to *all the kids*, and its *reconciled* state — keeping the **truth** in *uniformity* by not playing *false games*,

that is, by not lying or sinning — *always* maintains the vital energy without *dissipating* it, and for this reason, it is capable of defeating death, or dust, to provide life. In this way, Jesus is also, in fact, "the Way, the Truth, and the Life," as He stated categorically (Jn 14:6). In the end, the ideas in this colorful little bell invite to repentance, forgiveness, (*seventy times seven times*, as in the second level of the *uneven cascade*, Mt 18:22), rectification, and, of course, to true love. In no way, it ought to be clarified, do the notions suggest a possible *balance* between *good* and *evil*, but rather the exclusive reign of *good*.

The ideas here also remind us of our personal and collective choices: *equilibrium* or *turbulence*; *calmness* or *violence*; *rectitude* or *wickedness*; *reconciliation* or *separation*; *integration* and its symbol in the slender letter "s", \int , or *division* and its symbol \$ that denies the integral — because "the love of money is the root of all evils" (1 Tm 6:10); *unity* and its *positive* and *loving* spirals *going outward* 1 = 0.999... or *dust* and its *lying*, *selfish*, and *diabolical* fraction 2/3 = 0.666...; *completeness* or *emptiness*; and *life* or *dissipation*, which is worth emphasizing, is *death*. For the practice of any *divisive cascade*, employing a *tiny imbalance* or propagating an *infinitesimal void*, *always* generates, eventually, *thorns* and *dust*—oh subtle reality the one of *habitual sin*, which in the end is *inexcusable* unless it is duly *forgiven*!

Below is a song, whose title has already been drawn in three colorful rosettes, which expresses the desired transition from a *selfish* and *negative* 6 to an always *saintly* and *virtuous* 0 and also to a *loving* and *positive* 9. This transformation is reflected in the diametrical difference that exists between *darkness* and *light*, just as it precisely occurred from the *sixth* hour to the *ninth* hour when Jesus Christ, always holy and crowned with the thorns of our *cascades* of *corruption* and *sin*, was *crucified* — in a plus sign, of course — to bite our *dust* and *die* to *redeem us*, out of *love*, precisely at the *ninth* hour (Mk 15:33—34).

To **HIM** be *all honor* and *all glory*, for only **HIS LOVE** *always* defines the *truthful conversion* and the *imperishable triumph!*

6 0 9

Lessons in spirals!

Six, zero, nine, a dear song numbers unfolding daylong,

six, zero, nine, a clean gong symbols inviting us to love.

From six to six revolving inwards, from six to six I went downwards.

From six to six lying endlessly, from six to six dividing selfishly.

From six to six trying to be a rose, from six to six being only a nasty thorn.

Six, zero, nine, a dear song numbers unfolding daylong, six, zero, nine, a clean gong symbols inviting us to love.

From six to zero
I tapered my speed,
from six to zero
the tempest did not lead.

From six to zero
I no longer postponed,
from six to zero
I finally atoned.

From six to zero
I experienced peace,
from six to zero
my loneliness ceased.

Six, zero, nine, a dear song numbers unfolding daylong, six, zero, nine, a clean gong symbols inviting us to love.

From six to zero: with clarity with zero and nine: oh holy truth...

From six to zero, with zero and nine taste and see you can do it.

With zero and nine the spiral turned over, with zero and nine I dared to love others.

From six to zero, with zero and nine taste and see you can do it.

With zero and nine I attempted prayers, With zero and nine I became a repairer.

From six to zero, with zero and nine taste and see you can do it.

With zero and nine infinity flowed free, with zero and nine unity grew in me.

Shanti Setú...

With my song, from the heart come join my chant.

From nine to nine
weaving my reality
from nine to nine
dreaming its totality.
With my song, from the heart
come join my chant.

From nine to nine conquering my greed, from nine to nine planting a new seed.

With my song, from the heart come join my chant.

From nine to nine despite a clear spite, from nine to nine: knowing there is light.

With my song, from the heart come join my chant.

Come join my chant. (8)

Shanti Setú...

Come join my chant. (4)

From nine to nine six lost, with zero and nine Love won!

$$0.999... = 1$$

(December 1997/August 2022)



The song in Spanish, beautifully arranged by *Lázaro Alemán López* and interpreted by *Justo Emilio Rueda Bravo*, may be heard and visualized <u>here</u>.

The video of my conference *Jesus, the hypotenuse, the only way to the father*, in English, which summarizes the theme of this little bell and the <u>next one</u>, can be listened to <u>here</u>.