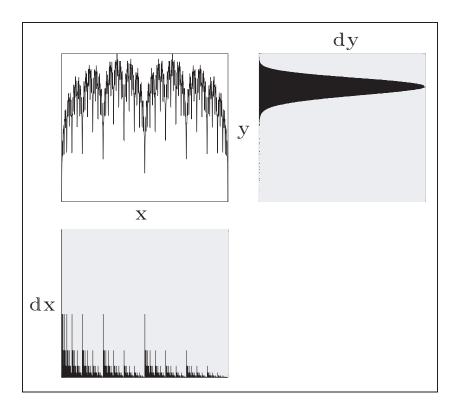
Davis, May 24 2004

Dear Maestro Saramago,

Thanking you for your letter of March 10th and trying to respond some of your profound questions, I write to you after visiting diverse institutions where I shared the talks *"From Plato to Borges"*, *"The hypotenuse, the pathway of peace"* and *"Eschatology and modern science."* Please excuse my late response, but, in truth, since I received your response to my early letter, few days after the ominous March 11th, I had not done more than to give classes here and travel through Canada and the United States.

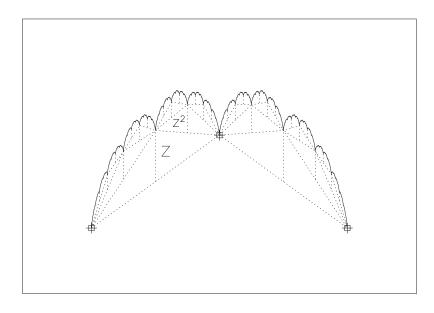
To begin, I should tell you that I understand very well your position in regards to God and his mysteries. And I say it as such, for not too long ago His presence did not make sense to me either. As I try to express in this letter, in my case I required a scientific illumination that transformed my vision and offered a new angle to my life.

It happened that a bit more than 16 years ago there came unexpectedly some beautiful scientific discoveries pertaining to an object central in mathematics and physics known as the bell of Gauss. Not having made enough merits for the finding, a good day we realized with my students how such a bell could be obtained universally as the Platonic "shadow" (technically a projection) of an infinite wire arbitrarily illuminated. Hoping not to overwhelm you, I explain a bit here, referring you to my enclosed book *"Treasures inside the bell,"* for more details.

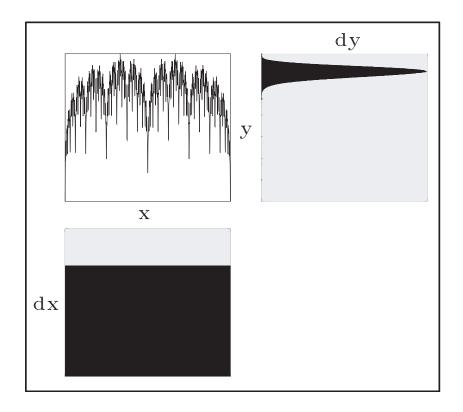


In this figure it is shown how the projection of such a wire (top left), illuminated by the object dx (below), produces a bell over the y axis (right).

As you may recognize it, dx is the same thorny, dusty and diabolical object of the parable "The Hypotenuse" (I send it to you again as I added more notes and some Biblical citations), the one that describes universally the dissipation of natural turbulence and the one that approximates the inequalities in the most powerful country in the world. The bell dy is, clearly, a beautiful symbol of freedom and also a relevant object in nature, as it is related with transport via diffusion and with heat conduction. The wire that gives rise to this result may be built very easily. As shown below, this, shaped as a cloud, is found starting from three initial points (the extreme ones and the one in the middle, denoted by squares with crosses) adding a multitude of points above: the first two occur at a distance Z from the mid point of the lines that join the three points, the following four happen at a distance Z squared starting from the mid point of the four lines shown from left to right, and so on, in powers of Z.

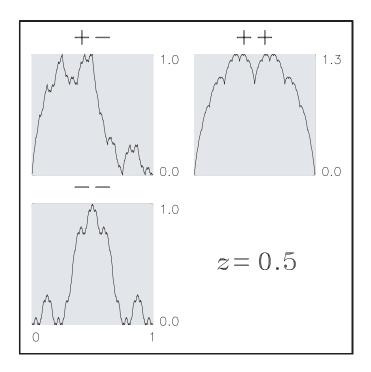


What is shown on the previous page (found when Z is close to the maximal limit of one) happens to be surprising due to its universality, for the same infinite wire **always** gives bells in the y axis for an infinite variety of illuminations. For example, the result is not only found starting from a cascade having division 70-30 such as already seen, but it also happens from any other, including the 50-50 of equilibrium, as shown next.



Amazingly, the same wire transforms any cascade into a harmonic bell without thorns, and this fact naturally brought up a host of essential questions: What are turbulence and diffusion, dissipation and conduction, doing in the same diagram, being them two extremes of natural behavior? Does there exist a mechanism capable of transforming any arbitrary disorder into a harmonic order? Where is such a wire found?

These questions came up when the celebrated chaos theory, with its universal disorder and its amazing fig tree, was flourishing in diverse branches of knowledge (physics, ecology, economics, among others). As such, years before I could appreciate possible eschatological connexions, I tried to find the wire in the realms of science, but I couldn't for I was unable to find coincident observations, for turbulence and calmness do not happen at the same time in nature, as one always precedes the other. Finding a coherent interpretation to the jigsaw puzzle only came later on when diverse symbols became clear, symbols that I started to appreciate despite my intellectual efforts to avoid them. As shown below, there are other similar wires to the one previously described, and these, that resemble profiles of mountains, also give rise to bells.



The signs shown above each wire define their construction. While the "positive-positive" case gives the same cloud as before, with points that are located above straight lines, the others correspond to sequences of points that not only go up but also come down (in powers of Z): the "positive-negative" case comes from going up and down from the lines according to the plus and minus signs respectively, and the "negative-negative" case of alternating going down and up all points, from generation to generation.

At the end, the type of bell that is found as a "shadow" (when Z tends to one) depends on the signs that define the wire. The

"minus-minus" case gives rise to two bells, that oscillate from one to the other, in virtue of the alternating construction from generation to generation. In truth, it wasn't easy to know that there were two, for they are separated by a small amount relative to the totality of the figure, and, as such, at first it appeared that it was only one. The "plus-minus" case (and also "minus-plus," its mirror image) give, in fact, a bell with a **finite** center, for going up and down converges to a unique value in the middle, for all generations.

The "plus-plus" case merits its own paragraph, for, as it may be appreciated in the previous figures for Z = 0.99, this wire produces a bell that ends up being concentrated all the way up, at **infinity**. In the limit, o borgian concept, the wire grows one by one (the powers of one are always one) and, as such, not only does the center travels towards infinity, but the mass, in its infinite majority, gets grouped there, giving rise to an uncommon object, always conducting heat and lacking any entropy, independently of the illumination!

This "mystical" wire, always maximally positive, takes any division (and also equilibrium) into lovely harmony, it raises powerfully any dust towards the aleph, and this allegorical result was impossible not to appreciate, despite my precarious religious education and my intrinsic rebelliousness towards such themes. I could not help it but sense the great difference between clouds and mountains, between "heaven" and "earth," and between plus and minus, and so, in the midst of my surprise, I shared results with family and friends, without fully comprehending what I was seeing.

As weeks passed and when the collective amazement of the discovering was fading, I received, at the proper time, a phone call from a good friend, a classmate of mine in Boston, and whom I secretly envied for it was him, and not me, the one who was a professor at the prestigious Princeton University. My friend started talking about the dangerous state of the world at the time (and let's not consider the present one) and after analyzing together the uncertain future of humanity he told me, bluntly, that it was important to be prepared, for he believed, as the members of his church, that we were living times pointing to the return of Jesus Christ.

I listened to him stupefied and with the respect that always inspired his clear knowledge, some times so profound that appeared to be encyclopedic, and then, controlling my impulses and no doubt calmed by the bell and its symbols, I asked him to explain slowly, for by then, and despite my baptism as a Catholic child, I had not read the Scriptures. He talked about prophets and unbelievable signals and ended up explaining to me the relevance of "being born again" (such a term so named in these latitudes) to enter the improbable omega of the heavens.

As days passed, I convinced myself that I had nothing to lose in trying to have an encounter with the divine. If my friend was right, Jesus was alive and I could schedule an appointment with him. As such, one night, after few failed tries that appeared to me disgracefully silly, I filled myself up with strength, I opened my heart the best I could and it happened.

It was a long monologue on my behalf in which I remembered the many pains that I had experience in my life and the many that I had caused. In a paused reflection touching my abyss, I remembered my first image as a child in the midst of hernia that almost killed me, I relived my happy childhood and its many games, I remembered my shy adolescence with its pains of love, and, after glancing at other labyrinths of life, I plunged into the mystery of death that had stained my existence when, as I was 20 years old, my mother killed herself.

That night I finally confronted the immense pain that prevented me to love as a child, that mean and real feeling that flourished irremediably and subtlety in my times of joy to remind me that all was a lie, the same sentiment that made me feel irrefutably guilty for not having done enough to save my mother. That night, while my wife slept on my side, I cried from my heart, I bit all the dust of my vital cascade and I dared to forgive.

In the midst of a humiliated litany, I forgave my mother for having left my two sisters and me so alone; I forgave my father for not having foreseen the event and for having gotten married so soon; I forgave myself for my blindness of a young intellectual towards her, for having lost dancing with her and for not taking her to the movies in an occasion she asked; and, finally, I forgave God himself (o colossal folly) for having allowed that all these have happened. Then, I ended up my prayer saying sincerely: I wish to know you Jesus, either you exist or this life is a hoax!, to which, right away, I received in my heart a sweet and intense warmth coming from on high, as from the ceiling, that later on extended to my whole body, allowing me to feel an exquisite peace, a lucid peace that I did not know existed.

O clement and consistent algorithm! Forgiving I experienced the forgiveness of God and I was born again when I was 32 years old. During those mysterious instants I learned, in my whole being, that the symbols were correct and that the sought wire was found in my chest, right there, at my hands reach. In that amazing night, my angle of life changed perpendicularly from x to y, from the cynical pain of death to the reality of plenitude in love...

If I would tell you, Maestro Saramago, that my life from then on became of the "color of roses," I would lie. How not to admit that instead it became a battle ground?

The days after my encounter were particularly confusing. My amazement was such that my mind could not stop thinking about the event and, as such, trying to comprehend the Bible in one sip, there came few nights in which I could not sleep. My jubilation was real, and I shared it exaltedly with my beloved, whom started to get worried about me as they listened to me talking, contrary to my essence, about forgiveness and the Christ whom I invoked. Some of them, including my father, thought that I was not doing well and that now it was me who was about to end my life.

I ended up in a sanatorium near San Francisco for a month. My wife remembered one of her platonic loves as a child in a psychiatric doctor, the son of a friend of her mother, and, after consultations, he recommended my hospitalization. As in my past I had suffered from depressions of death and as now I had thoughts clearly manic, the diagnosis was simple. I was interned, without my opposition, for my bipolar disorder.

The experience in the hospital, that appeared to be more a vacation center for its neatness and the variety of activities that patients could do, was like a strange and long dream. Instinctively, I developed a special affinity towards my companions of misfortune, a profound compassion for those around me submerged in their own worlds, and I felt just fine in such an unknown surroundings, without believing that I was ill and simply trying to help.

Tired due to my sleeping fast and despite sedatives, I oscillated between the real clarity of the divine encounter and the confusion of being there, and few days later, misunderstanding the "symbols" that offered me infinity right away falling away from my pinnacle, I bumped my head against a window, which thanks God did not break, for it was rather thick.

From then on the dream turned definitely dark. I was sedated severely and I cohabited irremediably for a couple of weeks with a trembling that most surely still shakes those who saw me. Although I was conscious about the goodness of being alive, I remember those days as the worst of my life. I could only go out to a terrace that always appeared to be filled with smoke, I did not sleep well for I trembled and sweated, and my bell appeared to be vanishing into darkness.

When I was getting better, I awoke to a worse nightmare. It happened that during my sojourn, my wife, who came every day to visit me as noted by other patients who were not, had her own existential crisis (how not to understand her?) in which she concluded, irrefutably, that our marriage of 8 years had been only a mistake. As such, my appointments with my good doctor turned from conversations about my presumable encounter with God to how I should face my life ahead, for I did not belive her, as most likely she did not believe me, that she was about to dissolve our union.

But that is what happened, precisely as a construction built on sand after a storm, all my shelving came tumbling down. My attempts at explanation trying to attain the Christian reconciliation were in vain (we were married by the Catholic Church, of course) and, as months passed, I became a member of the group of people that say that a divorce will not happen to them, for that only occurs to those with less intelligence or to those less loving... Following the advice of my doctor, I returned to Colombia (my paradise of origin) to have the support of my family, and there, for a year and a half, in the midst of more slow readings of the Bible that started to give me company on a daily basis, and with the fine guidance of a classmate of mathematics in college and now a priest, with whom I got reacquainted not my chance at the right moment, I was able to start putting together the jigsaw puzzle of my life. The pain was intense and the doubts hampered me in the dust of my new cascade, but that warmth from above accompanied me with its essential touch and given the consistency I saw between the Scriptures and the research that continued, I was able to understand, bit by bit, and hence to believe in the Gospel.

In retrospect, I can affirm that those times, subsequent to the light, were vital to make me note my great pride, for I certainly believed that I was better than many. For, contrary to what I could believe months before, in those days I comprehended, for the first time, that God was not only with me, but with everyone in this planet of lunatics, and I understood, also for the first time, that the improbable but real host of the malign pulls us all to the madhouse, confounding our free will with its insolent deception.

Although for several years I tried to deny my illness, as if such would devalue my initial illumination, the truth is that I required the help I received in due time. Today, I am thankful for my experience, for when I see couples crumbling I feel compassion and I pray for them, and when I travel to a great city I do not forget that such a man in the street, disdained and hungry, could very well be me, for nobody knows by how many things we go through, confused by the machinations of the enemy, always a lier without any pity. With all of these said, I share my understanding telling you respectfully that God (with a capital G) is in each one of us, in the daily gifts of our lives, in the times of joy that come to give us company in the middle of so much rubbish in the world, in the mysterious talents that we have received (o great one that he has given you to write!), and in the repeated opportunities we have to test the eternal mystery of love, in my case in a new, and third, marriage already in order, and adorned by the company of two beautiful daughters, as faithful additions to true promises.

Did Jesus said that whomever would not be with him would be against him? On my part I do believe that he did, as I also believe that he said there after that whomever did not gathered with him would scatter, or something similar, as attested by the multiple translations of the ancient Word. Here I see, as I try to express it in the parable about the straight hypotenuse, that the affirmation is not only true, for it is rather easy not to love, as he does, and instead accuse and divide (following a cascade) as his opposite always does. For although the historic implementation of true love has been plagued with ample hypocrisy, the invitation to love, the very essence of the good news expressed always by a saintly and contradictory remnant, remains as the only way out from our distress.

In this regard I think it is grave, sharing your understanding, that some "born again" people would use the same word in a mistaken context to justify actions of an empire that are not in tune with the message of love and reconciliation present in the Gospel. For Jesus also says that we must not judge (that I believe), and there are many "rich" in this world who feel that only for them he died on the cross, and as such, believing that they are the owners of the kingdom of heaven, without admitting their mistakes, and as if we did not have to pick up our crosses every day, scatter with their false rhetoric and their inexcusable actions. For if a Christian is recognized by his fruit of love, and if "democracy" is in fact the solution, there is no need to bomb the enemy to show him the way.

Although I have not read your latest novel (I should receive it soon), by the press accounts I realize why you may have enjoyed my parable. By the way, thanks for your words that energize me to keep trying to publish the story, despite the voices of diverse literary agents and not a few editorial houses that tell me that it does not fit their lists. I believe that you are right in showing what is behind the "stones," for truth is unalterable, although at times it may appear that in a march for peace, or in a great sporting triumph, or perhaps in a royal wedding, the inherent needs of people may be fulfilled.

As well expressed by Plato in his allegory of the caveman (always so modern) and as defined in the good news, the persecution of the "illuminated" is an unavoidable reality, and, as such, I try, in the midst of hardships and loneliness, to share an improbable message of love via modern science, trusting in the power of God, in his perfect timing and his truthful promises.

Believe me that it is not easy to show what I have in the middle of a world that lives so fast, in the midst of some many obvious and rooted lies, surrounded my diverse institutions of knowledge, so proud of their dogmas and traditions, that ignore a little one for his "fanaticism" of mixing what should not or for his lack of religious "education." But I fill myself up with courage and, despite the insistent whisper of two thirds, I dare to repeat the impossible, for I sense the triumph that we all yearn, that true and just victory of a conscious and vibrant "communism," that may be achieved only in the incarnate brotherhood of the love of Jesus.

As I have proposed to you before, if you like it, I could visit you to clarify what is not sufficiently explained here. With gladness I would tell you how I experienced other enchanted nights and days, how there came other pieces of the puzzle: the mathematical design of the two-dimensional DNA in the bell of Gauss, the uncommon fig tree of modern science, the Holy Spirit in mathematics and in Sacred Scripture (so I believe, Sacred), the most Holy Trinity in the diagram on page four, and other improbable but coincident curiosities.

I know very well Maestro Saramago that I have not been able to fully answer your questions, for in agreement with the words of the poet León Felipe that you cited, I also do not know many things. It is as such, in that same spirit of humanity, but stirred by the faith that transcends my intelligence, that I send you my best wishes with a fraternal embrace.

With optimism,

Carlos E. Puente cepuente@ucdavis.edu (530) 752-0689 (of), (530) 752-1552 (fax)