# You Must Be Joking... The Poetry of Science

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## ABSTRACT

**They say that music and mathematics are intertwined. I am not sure this is true, but I always wanted to use the word intertwined. The point is that my call for poetry received a overwhelmingly enthusiastic response from at least five people. My mailbox was literally flooded (I have a small mailbox). This article is a tribute to the poetry of science, or, as I like to call it, the Poetry of Science. You will be amazed.**

## 1. INTRODUCTION

I had a friend in high-school who said, "when I do my geometrical problems, if I listen to music, the solution comes easier". It was very interesting to hear. At first, it sounds believable, but as a scientific mind, one has to wonder "why"? Specifically, why did she have to tell me such lame bulls**t?

Supposingly, harmony is based on mathematics, beauty in architecture can be captured in geometrical relationships, music composition follows mathematical structures, harmony follows physics laws. It's crazy. Of course, we don't realize this, as it happens at a lower deeper level, somewhere between the diaphragm and the navel. An exception is Ralph Lauren who solves a set of semi-definite differential equations before producing his spring collection. And clearly it works.

Although the focus here is music, let me elaborate on the architectural aesthetics here: you have already heard of the Golden Ratio *now*, even if you have not heard about it before, because you just did. Aesthetics [1] is very tricky to define: what are the properties that make something look good? There are several ways to approach aesthetics and its fundamental questions. For example, are there any fundamental rules that describe good aesthetics or is everything subjective?

The Golden Ratio comes to rescue: two quantities are in the golden ratio if the ratio between the sum of those quantities and the larger one is the same as the ratio between the larger one and the smaller:

$$\frac{a+b}{a} = \frac{a}{b}$$

Interestingly, the golden ratio is often denoted by the Greek letter $\phi$, which incidentally is the first letter of my last name. I am just saying. $\phi = 1.6181...$ and is an irrational number. In contrast, I am a very rational person.

How can we use the Golden Ratio? Here is one case. It can help us define the proportions that make a rectangle visually pleasing. Rumours have it for example, that the Parthenon proportions follow the Golden Ratio. In fact, one of the key architects, Phidias, has become associated with the Golden Ratio, which is also known as the mean of Phidias. By the way, "phidi" means "snake", but it is not clear if the guy was a snake-dealer.

## 2. WHAT ABOUT POETRY?

Poetry is fascinating, especially if you try to define it, because there is no real definition. Forget trying to define what is "aesthetically pleasing" in poetry. We can't even define what poetry is.

**Structure and rules of poetry.** When I was growing up, I was told that poems must have rhythm and rhyme. However, modern poetry has demolished this. In fact, some of my favorite poems of all times (by Manolis Anagnostakis) are like prose with funny line breaks.

**The aesthetics of poetry.** In primary school, people were saying that poems should be beautiful and uplifting and inspiring. However, the said the same thing about music: "music can tame wild animals"[2].

So, what is poetry? It's anything you say it is. If you write a recipe on a Post-it note, and say, hey, read my new poem, it's poetry. Any other definition of poetry would have a rule that excludes some creations as non-poems. Then, some poet would come along break the rules, and become famous for breaking them, and establish the new form as poetry as well. You want an example? Think of painting. Initially, there were rules: if nothing else paintings had to resemble something. Then, modern art and pop art kicked in, and now you can go to a museum and see a big painting in one solid color hanging on the wall. I have seen that painting: it is red. Anyone with a brush, a bucket of red color and basic motor-skills could have done this.

## 3. THE POEMS

Having suffered my annoying introduction, here is what you have been waiting for. The poetry of science created by our community, fresh for the purpose of my call. The poets surpassed my expectations.

Parental advisory: some of the lyrics contain strong language that some people may find offensive. Viewer discretion is advised.

Also, if some of the poems are read backwards, they sound like prayers to the devil.

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[1]Greek word that comes from "aisthanesthai" which means "to sense" or "to feel".

[2]There is a Greek fable here, but if I was telling you every related Greek story, we would never get done.

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**Communications is a lonely game**
by Craig Partridge

One transmits, hundreds hear,
all but one discard –
in wireless and lectures.

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**Untitled**
by John Wroclawski

ambition high
reality tempers hope
deadlines loom

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**Reckful Roaming**
by Matthias R. Brust

Given any topology from initial,
A seem-to-be chaos of nodes and links
Does it make any sense,
May I make any order visual?
It's required that the resulting topology has to be efficient,
Can this be done solely by the clustering coefficient?

But what's this, no action allowed, not globally
What a surprise: Reckful Roaming can do it 2-hop locally!

Removing superfluous links, of course, reckfully,
That might result in a local decrease of the coefficient,
But, relax, empirically proven, it's increasing globally.
Isn't it highly efficient?

Checking its complexity, however, what a (small) deception,
It's exploding due to the problem of 2-hop neighborhood synchronization.

The network space is blooming and blooming,
God bless you, my Reckful Roaming!

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**Gangsta Research (Gonna get me some)**
by Michalis Faloutsos - lyrics for a rap song

I wrote my code, did CVS
I pinged my homies, sent an SMS
I send a query using XML
I think it's slow with my DSL
check it out

Chorus:
Gonna get me some
Gonna get me
Gonna get me some
Gonna get me
(backup vocals shout:) late night research done

(spoken) pump up the bandwidth

I gotta protect the pimpin' websites
I must kill virus' and parasites
the email spam said "click here to find"
as a fool I clicked, now I am loosing my mind

check it out

Chorus

Read that paper, it's all gibberish
I gotta to review 7 more, I am feverish
they drop equations without excuse
I keep on reading but I am confuse'
check it out

Chorus

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by Alexander Pelov

They say that every atom in my body
was once a part of a star.
A star that had to die
so that I could exist.
Here and now.
Wandering and wondering.
What is the purpose of all this?
Of all these neighbors of mine?
And all the obstacles I simply ignore?
And all that space that lies before me?
Just waiting to be conquered.

How long have I been here?
At that very spot.
Frozen.
Motionless.
Am I really free?
Or am I just a pawn
in the game of the destiny?
Where should I be going next?
So many options and so little time!

Does it matter at all
if I choose my destination based on reason?
Or is it better just to throw a coin?
And have faith.
And never turn back.
Pursue the goal relentlessly,
until I gloriously reach it!
And stop to listen to the silence of success.

Oh, god, did that star really had to die?

Title: **The Node and the Random Waypoint Mobility Model**

Comment: I am proud to say that this is the only poem I know that the title must be at the end. Isn't it great? All along one thinks that Alexander has taken the whole thing seriously, and then he hits you at the end bringing us back to our geeky ways. And then you go back, and you realize that this is a great poem even without the title surprise. I loved it.

## 4. CONCLUSION

I would like to thank all the poets who dared to share the poems. For the next step, I propose to encourage poetry reading in the Outrageous Opinions Session in SIGCOMM of poems written by us for topics somewhat related to our community.

One thing is for sure: we are an awesome community.