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# For the Love of Poetry and Mathematics: January 6, 2012

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## Synopsis

Together we combine to become twice what 60 could ever be.  
The same ghost looked into my eyes.  
Also, the center of the circle is inside the circle.  
There is no way to draw a line, other than a border line,  
A language as precise as poetry to delineate universe and being,  
Deceptive as one over  $n$  as  $n$  goes to infinity, summed.  
The world is a complex system  
not defined by any voice factored out of my voicelessness,  
the hypotenuse of course is the man who came between us  
doubting every figured guess,  
so, inductively, all of God's natural numbers fail.

The poem above comprises lines or phrases from several pieces that were presented at "A Reading of Poetry with Mathematics" on Friday, January 6, 2012, during the Joint Mathematics Meetings in Boston, MA. The sources of the individual lines and the event as a whole will be discussed in the following.

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## Introduction

My interest in mathematical poetry stems back to college. I majored in the two subjects in which I found I was taking the most classes: mathematics and English. (Despite attempts to find a "useful" major, I discovered my passion remained with the two subjects that were my favorites in high school.) I had dabbled in poetry throughout high school, so I signed up for the poetry writing class (being a popular but low-admittance class, several attempts

were required before I earned a seat). The course was an intimidating but very rewarding experience—with, however, one black mark. We had private sessions with the professor to go over submitted poems (and then he selected a poem or two to be discussed by the entire class). I had composed a love poem that followed the logic of proof by induction to prove the infinite longevity of a lover's affections (ultimately a flawed proof). I was proud of my attempt to bring my other passion, mathematics, into my poetry, but then I was struck down when the professor passed over that particular poem, saying he didn't understand it, and quickly moved on to another he found more compelling. I was blind-sided (shouldn't everyone know what induction is?) and didn't put up a strong protest. This experience greatly discouraged me from bringing mathematics into my poetry. I felt isolated in the gray area between the sciences and the arts.

After graduating from college, I was fortunate to find my double major useful after all, obtaining a job at an independent book publisher, A K Peters, Ltd. (now an imprint of CRC Press), who produced mathematics books—monographs and textbooks but also unique titles for the general audience. Several years into the job, I had the surprise delight one day of being asked by editor Klaus Peters for my opinion on a book proposal for a collection of poems involving mathematics.

An old flame instantly flared up, in a where-have-you-been-all-my-life way. There are other poets who incorporate mathematics into their writing! (I only had one glowing example from my past scholarship—"A Valediction Forbidding Mourning" by John Donne, which contains a wonderful metaphor with a circle-drawing compass—but that was from a time when the arts and the sciences were less compartmentalized.) The book was accepted and published: *Strange Attractors: Poems of Love and Mathematics*, edited by Sarah Glaz and JoAnne Growney [10]. I was closely involved in the project. (I don't think Klaus could have kept me away, even if he had wanted to.)

Glaz and Growney organized a poetry reading held on January 7, 2009, in Washington, DC, in conjunction with the Joint Mathematics Meetings, the first after the book was published. I was so inspired by working on the collection that I had composed a mathematical love poem, my first since the discouraging experience described above, which I shared at that reading. With this success under my belt, I have eked out several pieces since—conveniently about one piece a year that I have been able to share at subsequent poetry events at the national mathematics meetings.

It is with this background and as a “participating fan” that I recount the event that Friday evening at the Hynes Convention Center in Boston.<sup>1</sup>

## A Reading of Poetry with Mathematics

The bitter cold weather that greeted JMM 2012 attendees earlier in the week turned mild by Friday evening (that is, above freezing). The reading was open to the public, and several people from outside the confines of the meeting joined the scheduled readers and gathered mathematicians in Room 312 of the Hynes Convention Center for an evening of poetry.

A reoccurring theme of the evening was the combination of passions, the two obvious ones—mathematics and poetry—but also several others: art, literature, music, film, crafts. A range of artists presented or were evoked: writers, painters, sculptors. The mathematical muses varied as well: counting, primes, geometry, calculus, fractals, topology, the act of “doing math,” and mathematicians and teachers themselves.

Co-organizer Gizem Karaali, one of the founding editors of the *Journal of Humanistic Mathematics*—which hosted the event—and mathematics professor at Pomona College, opened the evening with greetings to the approximately sixty people in attendance. Karaali described the mission of the journal, which aligns well with the consequences of the reading. The diversity of authors published in the journal reflects the diversity of those gathered to read. Both endeavors bridge the gap between the “two cultures” (famously coined by C. P. Snow in his 1959 lecture).

### *Harry Baker, “59” (presented by Gizem Karaali)*

The reading kicked off with an audio-visual presentation: a short film by 19-year-old British mathematics student Harry Baker, “59” (check it out on YouTube [4]). The rhyming narration describes the unrequited love of 59 with 60—and then the happiness 59 finds with twin prime 61 (note the consoling line from 61 in the opening poem of this article). The qualities of prime and composite numbers feature strongly in this playful and well-produced piece. (Again, I strongly recommend that you check it out yourself—and then share the link with colleagues, family, and friends!)

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<sup>1</sup>**Editor’s note:** This report by Henderson contains several excerpts from the poems read at the poetry reading of January 6, 2012. For complete texts of the poems, see the attached Poetry Folder.

*Tatiana Bonch-Osmolovskaya, "By the father's order sent to the school of mathematics I perceive the beginning of transcendence," "Gaze," "Old Chair" (presented by John Hiigli)*

John Hiigli, American artist, inventor, and educator, read several poems by Tatiana Bonch-Osmolovskaya, a Russian writer, philologist, and artist based in Australia. Hiigli's pieces (see [15]) are very geometric, and one of his paintings from a series involving the nesting of various polyhedra (see Figure 1) inspired Bonch's poem "Gaze," which is also very geometric in content and form. I feel that it could be seen as the story of a ray of light striking the painting, passing through the nested polyhedra:

EDGE  
becomes a prism, breaking the ray, splitting it into visible  
SPECTRUM

White gives way to bursts of color at the center of the painting. The bright poem ends with a playful, "See you!" like a child playing peek-a-boo.

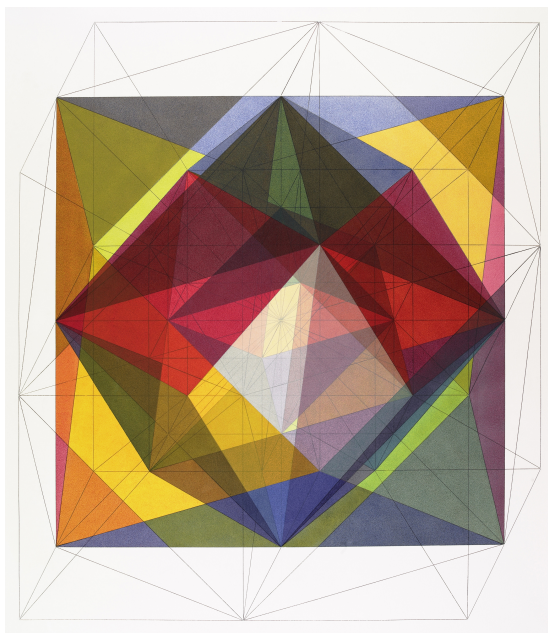


Figure 1: John Hiigli's *Cr 163: Cuboctahedron, Rhombic Dodecahedron, Octahedron II Tetrahedron, Octahedron: Top View Tetranet Series*, 2002–2005, transparent oil on canvas, 56 × 64 in (142 × 183 cm). Reproduced with permission.

Changing moods, particularly haunting was Bonch's poem of three-line stanzas "By the father's order sent to the school of mathematics I perceive the beginning of transcendence":

I woke up at home at midnight.  
A full moon in the window  
Is peering at me, or is it a ghost?

...

At a dinner table I rolled up a rice ball.  
The hand stopped halfway to mouth –  
The same ghost looked into my eyes.

The circle is not the only ghost; it or the quantity  $\pi$  materialize in each stanza, in straightforward or more hidden ways:

Call seven young girls together,  
Give them twenty-two ribbons.  
Their suffering would not come close to mine.

Even the stanza length is an echo of  $\pi$ , 3 being its closest integer approximation.

I particularly enjoyed "Old Chair," a fractal poem with self-reflections of repeated phrases. The words draw the listener into an infinite, repeating space like that created by two facing mirrors.

Above an old chair in our house –  
...  
There was a wooden-framed picture, cracks on the frame:  
A house on a street ...  
With an open window, through it I saw a room,  
A table, a wardrobe, a piano, a chair,  
Above the chair – ...

*Marion Cohen, "Points Were Blinking," "A Mathematician Just Sits There," "What Drove Me Into Math"*

Poet and mathematician Marion Deutsche Cohen read several poems published in her collection *Crossing the Equal Sign* [5], which she describes as

poetry about the experience of mathematics. The first two, I feel, reflect on an aspect of the profession of “doing mathematics”: the frustration of working towards but still awaiting epiphany. Here is that sentiment in “Points Were Blinking”:

Lines were beckoning.  
 ...  
 How was I to know  
 the lines would not line up?

Cohen’s second, concise piece would reverberate with any cat owner, as it did with me. When faced with a blank page, “[t]he cat believes his sitting will fill it up.” Sadly, the same is not true for the cat-owner mathematician.

Cohen’s piece “What Drove Me Into Math” (which also appears in [10]) presents the appeal of the mystery of the known,

I preferred the factoring of the difference of two squares.  
 And Cantor’s stretched-out one-dimensional lace.  
 Also, the center of a circle is inside the circle.

drawing contrast with the more dramatic unknown—for example, the long-unproved Fermat’s Last Theorem—often cited as reasons for interest in mathematics. I personally side more with Cohen’s point of view.

*Sandra DeLozier Coleman, “Escher on Escher,” “Between You and the Root of Two,” “Wild Sphere”*

Next to share her varied passions was a retired mathematics professor with strong interest in art that has connections to mathematics, including poetry and visual arts. Sandra DeLozier Coleman gracefully merges all three subjects in her piece “Escher on Escher” inspired by the Dutch artist M. C. Escher, particularly famous for his mathematically inspired prints. The first two lines have really stuck with me (as exhibited by the fourth line in the opening poem)

There is no way to draw a line,  
 Other than a border line,

as a simple observation with profound reverberations when examined in depth. The poem continues into the dualities created by two-dimensional forms:

That is, one form is viewed as space  
 On which the other form is placed.  
 Unless the two-space world we build  
 Is with congruent objects filled

In the latter case, the duality is replaced with continuous infinity—when you think about it, a truly marvelous transformation.

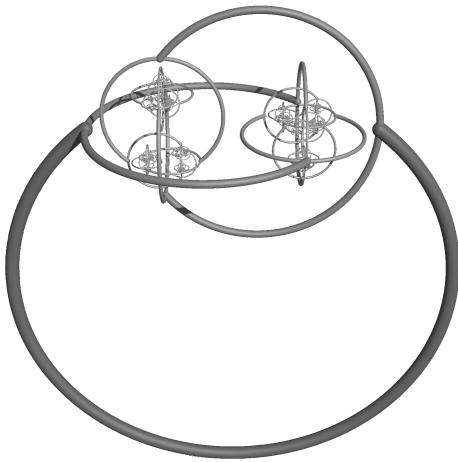


Figure 2: Alexander horned sphere [2].



Figure 3: Helaman Ferguson's *Alexander's Horned Wild Sphere: Wildfire*, bronze, 1985. (Photograph by Helaman Ferguson, printed with his permission.)

Coleman's presentation also included a poem inspired by a sculpture of an Alexander horned sphere (see Figure 2) by a favorite mathematical sculptor of mine, Helaman Ferguson [8, 9]. The poem is "Wild Sphere" and the sculpture *Alexander's Horned Wild Sphere: Wildfire* (see Figure 3). A different two-ness appears here, as the "wild sphere" consists of infinite bifurcations, to which the speaker relates:

And I saw a clear relation  
 To the wilder side of me.  
 ...  
 Torn by bifurcate desires  
 Never satisfied, I fear.



Though infinitely more well formed, Coleman’s “Between You and the Root of Two” is similar to my failed poem by induction in that it describes an attempt to utilize our familiar, comfortable mathematical tools to comprehend a romantic relationship—again, a rather futile effort.

I have less chance of knowing you  
than of writing out the root of two.

...

At least, as this square root unfolds,  
the mind accepts what it is told.

Carol Dorf, “Dear Ivar,” “Euclidean Shivers,” “Lost Information” (presented by Elizabeth Langosy)

The muse of mathematical artwork gave way to the muse of mathematical prose. A high-school mathematics teacher, poet, and poetry editor of *Talking Writing*, Carol Dorf composed “Dear Ivar” as a fan letter to an expository writer of mathematics for a general audience [6]. Particularly striking is her admission

I had learned mathematics could not correspond  
to poetry in a one-to-one intensity.

Would your book have mattered to me, then?

Most likely, I would not have read it.

At the time of writing the fan letter, however, she sees mathematics more as “a language as precise as poetry.” Such a philosophy had helped me rationalize—it felt necessary then, but not anymore—my double major: can one not see a correlation between the concise language of a poem and of a mathematical proof?

The prose muse lingered: Edwin Abbott [1] and his mathematical novella *Flatland* are evoked in Dorf’s “Euclidean Shivers.” Though *Flatland* is highly credited as a creative presentation of the differences between dimensions, providing inspiration for how we three-dimensional beings might comprehend four dimensions, it embodies a very Victorian-era culture of class separation and gender inequality: as Dorf refutes,

So, how does the Triangle relate  
to the Circle; and this has nothing  
to do with gender, or class . . .

The poem ends with a beautiful line of consonance and, in my mind, a comment on gender equality:

... Preoccupied  
with tangents, it is hard to visualize  
chords, a concordance, to be in accord.

It may seem a cliché to say that we can find mathematics in our daily lives, but Dorf presents a poetic perspective of that sentiment in “Lost Information,” presenting familiar places—such as those seen during a drive down Main Street—in the language of group theory (i.e., sets in our lives that intersect):

Group elements develop more complexity  
than the smooth surface of empty Sunday streets  
suggests. ...

Dorf’s poems were read by Elizabeth Langosy, executive editor of the magazine *Talking Writing* (<http://talkingwriting.com/>).

*JoAnne Growney, Reminiscences: selected poems from a JMM reading in Baltimore, January 1992*

I spoke earlier of the poetry reading at JMM 2009, and there has been a poetry event of some form at every JMM since then.<sup>2</sup> But, the history of mathematical poetry readings did not start in 2009. JoAnne Growney, co-organizer of this January’s reading, reminisced about previous readings held in the late 1980s and early 1990s. In particular, she read humorous offerings from a JMM reading in 1992, organized by herself and Alvin White and sponsored by the Humanistic Mathematics Network. (Poetry from that reading was later published in the April 1992 issue of the *Humanistic Mathematics Network Journal* [3]; special thanks go to Jim Tattersall for access to the copy from his personal archive.)

No humorous collection is complete without a limerick; Growney shared one by Helen Lewy, widow of mathematician Hans Lewy:

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<sup>2</sup>**Editor’s note:** Interested readers might like to learn that there will be a similar reading, sponsored again by the *Journal of Humanistic Mathematics*, at the JMM 2013 in San Diego, CA.

A math prof who lived in Gillette  
 Was dating a girl friend called Bette  
     Said she, “Tell me Dove,  
     All you know about love!”  
 To which he replied, “Empty Set”!

Growney’s comedic reminiscences included a math teacher’s lament by Dan Kalman and the opening stanza’s of Fred Gass’s “Math 101”—in which Gass compares gathered students to a rookery of birds, whose

Heads bob and peer  
 Until, hovering,  
 I have eased them  
 Back into normal  
 Distribution.

A highlight of the evening was when Growney shared “Ode by an Inveterate Paper Grader” by John Hodges, which is subtitled “(with apologies to Edgar Allen Poe and his pet bird?!)” The tell-tale starting line, “Once upon a midnight dreary,” built up our anticipation for the final line, and when it neared

As I searched both earth and sky.  
 For quantifiers on both  $x$  and  $y$ ,  
 Will I find them, I implore?

Growney invited the audience to join her in its recitation, which we did with vigor:

QUOTH THE RAVEN “NEVERMORE”!

*Charlotte Henderson, “Crocheted Hyperbolic Plane,” “Freshman Year”*

The theme of merging multiple passions was also central in my own work presented at the meeting, “Crocheted Hyperbolic Plane”—poetry, mathematics, and needlework (a poem about mathematical fabric art). A hyperbolic plane with constant negative curvature can be modeled using crochet, as discovered by Daina Taimiņa (see [22]).

Powerful, what  
 I hold in my hands;  
 ...  
 Impossible (yet made with my hands)  
 So Hilbert proved ...

The shadowed history of non-Euclidean geometry (and Euclid's elusive parallel postulate) comes into play, as well as the tension of what's real or impossible. Also, the construction of the poem models the crochet technique, with the length of each line growing at an exponential rate.

"Freshman Year" draws as a metaphor for naïveté the harmonic series, which often deceives calculus students:

Deceptive as one over  $n$   
 As  $n$  goes to infinity, summed  
 Converging summands promising convergence

I remember it clearly as one of a limited number of examples of convergent sequences that do *not* translate to a convergent series; the fact that it is named gives it even more prominence, much like "true love" or "first heartbreak."

*Rosanna Iembo and Irene Iaccarino (poetry with violin), "I with you—Math poetry for peace," "Once upon a time," "The game of confetti"*

Though I have seen this mother-daughter duet perform at previous readings, the impact had not diminished with repetition: the effect of mixing spoken word with music was still very powerful. The rise and fall of poetic phrases voiced by Rosanna Iembo echoed in the musical phrases coaxed from Irene Iaccarino's violin. Iaccarino has played since she was five years old and participates in symphony-string orchestras, duets, and solo concerts. A mathematician and member of IMA, MAA, and SIGMA, Iembo is also a philosopher, theologian, and poet.

Accompanied by "Meditation" by Jule Massenet from Thais, Iembo's "I with you—Math poetry for peace" offers, in almost a rhythmic chant, a string of seeming opposites, for example,

Some say the world has North and South  
 Some say the world is science and art

The sought spiritual guide for answers to these dilemmas is a mathematician:

Oh man, lover and dreamer  
 first you fall in love and then you wake from your dream.  
 And search a mathematician  
 who with the wisdom of old and philosopher shows the way.

In the end, the solution for peace is love.

Iembo's poem "Once upon a time" memorializes Pythagoras and his school, reflecting especially on his discovery of the harmonic scale:

... thus ...  
 did he find a harmony of ratios and proportions  
 a harmony of numbers and shapes  
 and he gifted to humanity  
 a theory without time

There is a poignant moment, a short stanza marked by slightly longer pauses between stanzas (and recall that the pauses are not silence but filled with music), emphasizing that women were allowed at the school:

he was not teaching  
 only what is true and what is false  
 ...  
 but love and loyalty  
 respect and coherence.

Also for women.

Yes, also for women

Such educational equality was lost for a span of history. The accompanying music played by Iaccarino here was the second movement from the *Konzert for violin and orchestra* in D major by Peter Tchaikowsky.

The creative flow of our muses can act in the opposite direction. In addition to her daughter's live performance of "Schön Rosmarine" by Fritz Kreisler, during Iembo's reading of "The game of confetti," she shared an illustration of hers inspired by that poem: a Möbius road lined with symbols of the continents of our world and traveled by a mother and son, the characters of the poem—further representing the infinite love between a mother and her child that is a central theme of the poem. The poem imagines a young boy making a game of picking up confetti from a Carnival, a game that would go on for infinity—the symbol for which is also the silhouette of the Möbius band.

Judith E. Johnson, “*The Blob Speaks to its Mother*,” “*Maurits Eschers Impossible / Buildings*,” “*Flight of the Monarchs*”

Judith E. Johnson, retired English and women’s studies professor, is a prolific poet with eight published volumes of poetry; she shared pieces from three of them, pieces rich with mathematical language—which is particularly strong in “The Blob Speaks to its Mother” [16]. The blob’s search for identity is punctuated by mathematical symbolism:

not always to be approaching some limit other  
 than can be derived from me. not to be possessed by your voice.  
 not defined by any voice factored out of my voicelessness.  
 not to leave remainders of myself each place  
 i pass over.

Part of a much larger piece from Johnson’s collection *Cities of Mathematics and Desire* [18], “Flight of the Monarchs” imparts the striking image of a migration of monarch butterflies spanning the Hudson river.

Though they travel, not in one cloud  
 but in small bursts,  
 particles of mottled  
 and jeweled light  
 shot from the swirling steam  
 as if from an accelerator,  
 their passage is a wave.

A counterpointed subsection of the poem is a dialog between the monarchs and the George Washington Bridge, a prevailing image in which is the curve: the curve of the bridge’s suspension wires and of the flights of the butterflies.

*the line you fly, though at its crest*  
*it is a rising, ...*  
 ...  
*... I, gravity’s whole,*  
*free arc, see how you will be pulled*  
*away and away in a widening curve*

M. C. Escher surfaces as a muse here as well. The previous Escher-inspired poem by Sandra Coleman reflected mostly on his tessellation works;

Johnson instead draws on his paradoxical pieces based on impossible objects, especially *Ascending and Descending* [7] and its Penrose square, in “Maurits Escher’s Impossible / Buildings” [17]. Escher’s defiance of the conventions of reality in a way reflect creativity in general

when to go back in space or  
time is to go up or  
down as the artist’s mind will  
require of you, to what end serve  
orders and made conventions, our  
disappearing line, our vanishing  
point, our signals, renaissance, globes,  
perspectives? i shift them around ...

creativity found in art, poetry, mathematics, ....

*Jacqueline Lapidus, “Several Hypotheses and a Proposition”*

Another poet and nonmathematician, Boston-based editor, teacher, and translator Jacqueline Lapidus commented on the bravery in takes for a layperson like her to voice her interpretations of mathematical concepts in front of a group of mathematicians. She read her piece “Several Hypotheses and a Proposition” (also featured in [10] and [19]), which is in the voice of a heart-broken women. Alluding to the common term “love triangle,” the geometry of triangles features very strongly in the piece, especially as the speaker tries to find comfort in drawing diagrams (see also line 9 of the opening poem):

or drawing graphs  
on which we appear as two sides  
of a right triangle one upright one  
flat the hypotenuse of course  
is the man who came between us  
and held us irrevocably  
perpendicular

The poem ends on a slightly hopeful note:

one of these days  
we’ll intersect again

JoAnne Growney, “Portrait of a Mathematician,” “Counting the Women,” “The Principle of Mathematical Induction”

Capping the scheduled program, JoAnne Growney returned to the microphone to read her own work. Her first piece, “Portrait of a Mathematician” [12], follows a restrictive abecedarian form, with each word beginning with the next successive letter of the alphabet, and it ended with the dramatically delivered “wrong *xs*, *ys* – zapped.”

Growney’s  $5 \times 5$  syllable-square poem “Counting the Women” [13] succinctly comments on the scarcity of women in STEM fields, a concern, I believe, shared by many in the audience; her own smile at the end was mirrored by at least one in attendance (and very likely many more).

In exploring poetry and mathematics, Growney has looked at not just how allusions to mathematics can enrich poems but also how the language of mathematics can be poetic in its own right. The latter is featured in her poem “The Principle of Mathematical Induction” [14]. Growney’s explorations and discoveries are chronicled in her blog *Intersections–Poetry with Mathematics* (<http://poetrywithmathematics.blogspot.com/>); I highly recommend it to anyone who shares my love of poetry and mathematics.<sup>3</sup>

### Open Reading

After Growney, the floor was open to audience members willing to share their own pieces or favorite pieces by other poets. The volunteers who stepped forward included Ann Perbohrner, Mary Buchinger, Pedro Poitevin, Joshua Holden, Jason Samuels, Chris Caragianis, Seth Goldberg, and Rip Coleman.

A librarian at Dartmouth College in the physical sciences library, Ann Perbohrner took the microphone as a nonmathematician poet, revealing that some of the mathematics and science from her work has filtered into her poetry, in her poem “Quark/Antiquark”:

we spoke of love, affirming our self-same  
similarities. As lovers, dynamic forces  
strengthened or weakened, responding  
to processes of attraction and revulsion.

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<sup>3</sup>**Editor’s note:** A review of Growney’s blog, by Gregory E. Coxson, can be found in this issue of the *Journal of Humanistic Mathematics*.



Through the spacetime boundaries  
of our marriage, fundamental weak interactions became charged.

Mary Elizabeth Buchinger, a widely published poet as well as an English and communications studies professor at a health sciences college, reflected on the power of three in many contexts: for example,

Two points muster a line  
but three, a shape.  
Only three can jump a dimension:

...

Three primary colors.  
Three constituents of an atom.  
Three toes has the sloth.

A mathematician in a family of poets, Pedro Poitevin has, among other things, written several palindromes in Spanish. He shared a piece published in *The Mathematical Intelligencer*, “Divertimentum Ornithologicum” [21], that, once again, draws on the concept of mathematical induction (see the last line of the opening poem). He also shared a piece about that infamous fractal, the Mandelbrot set:

My eyes zoom in acutely on the edge  
and find, within its widening trace, a part  
identical yet smaller than the whole,

Mathematician and fiber artist Joshua Holden shared a mathematical limerick.

Mathematician Jason Samuels read a poem on perspective and vanishing points (which ‘drift away from me as fast as I approach’), shifting from one- to two- to three-point perspective.

Chris Caragianis brought us back to the plight of a mathematician examining a problem: “every problem looks easy from a safe distance” but not so as we come closer to it. Even as we reach a solution, another question arises: “glinting in the glass ... we see another problem.”

Seth Goldberg shared a found poem, drawing on the text of a theorem much like Growney’s “The Principle of Mathematical Induction.” Another

piece he read was inspired by the cover photograph of *God Particles* by Thomas Lux [20].

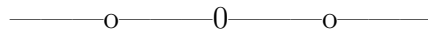
Rip Coleman read a favorite piece by Marion Cohen that reflects his own interests in meteorology, art, and music, also people watching and sky watching. For people that share joy in star gazing, it is distance that brings them together.

## Conclusion

An evening of poetry with mathematics brought together mathematicians and artists and those who are both, blurring the lines between the often-delineated sciences and arts. The mood of the audience was respectful and engaged—when the mood called for it, quietly pensive or alternatively laughing out loud—and showed its appreciation for each presenter with applause. I was overcome with a sense of gathered kindred spirits, many unknown to each other before this night. It is humbling to be a part of such a community, one that in my college years I could not have imagined existed. I am truly in awe of those professional writers and those amateurs like me who read at these events.

And I admire those who go even further: for example, beyond the influence of her writing, Marion Cohen teaches, at Arcadia University, a course she developed called “Mathematics in Literature,” spreading the word to a younger generation.<sup>4</sup>

I am not a prolific writer, but I make an attempt to have a new mathematical piece to share at possible annual poetry readings. I strongly encourage the continuation of such events and the continued (and hopefully expanding) support for them from the community. There is, indeed, as Jacqueline Lapidus put it, bravery involved in building bridges over the long-established and often torrential waters separating “the two cultures.” Those of us who ford the waters regularly encourage others to join us. Jump in, the water’s fine!




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<sup>4</sup>**Editor’s note:** A mathematical memoir by Cohen, entitled “The Night I Almost Didn’t Grow Up,” is included in this issue of the *Journal of Humanistic Mathematics*.

*Sources for the lines of the opening poem (inspired by [11])*

Line 1. “59” by Harry Baker.

Line 2. “By the fathers order sent to the school of mathematics I perceive the beginning of transcendence” by Tatiana Bonch.

Line 3. “What Drove Me Into Math” by Marion Deutsche Cohen.

Line 4. “Escher on Escher” by Sandra DeLozier Coleman.

Line 5. “Dear Ivar” by Carol Dorf.

Line 6. “Freshamn Year” by Charlotte Henderson.

Line 7. “I with you—Math poetry for peace” by Rosanna Iembo.

Line 8. “The Blob Speaks to its Mother” by Judith Johnson.

Line 9. “Several Hypotheses and a Proposition” by Jacqueline Lapidus.

Line 10. “Portrait of a Mathematician” by JoAnne Growney.

Line 11. “Divertimentum Ornithologicum” by Pedro Poitevin.

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