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A Lady of 80

A lady of 80 named Gertie
Had a boyfriend of 60 named Bertie.
 She told him emphatically
 That viewed mathematically
By modulo 50 she's 30.

John Ward McClellan

A Mathematician's Nightmare

Suppose a general store—
items with unknown values
and arbitrary prices,
rounded for ease to
whole-dollar amounts.

Each day Madame X,
keeper of the emporium,
raises or lowers each price—
exceptional bargains
and anti-bargains.

Even-numbered prices
divide by two,
while odd ones climb
by half themselves—
then half a dollar more
to keep the numbers whole.

Today I pause before
a handsome beveled mirror
priced at twenty-seven dollars.
Shall I buy or wait
for fifty-nine days
until the price is lower?

JoAnne Growney

A love poem for lonely prime numbers

59 wakes up on the wrong side of the bed,
realizes all his hair is on one side of his head,
takes just under a minute to work out that it's because of the way that he slept.
He gets some clothes and gets dressed.
He can't help but look in the mirror and be subtly impressed
how he looks rough around the edges and yet casually messed.
As he glances out the window, he sees the sight that he gets blessed with
of 60, from across the street.
Now 60 was beautiful.
With perfectly trimmed cuticles,
dressed in something suitable,
never rude or crude at all.
Unimprovable,
right on time as usual,
more on cue than a snooker ball
but liked to play it super cool.
59 wanted to tell her that he knew her favourite flower.
He thought of her every second, every minute, every hour.
But he knew it wouldn't work, he'd never get the girl.
Because although she lived across the street, they came from different worlds.
While 59 admired 60's perfectly round figure,
60 thought 59 was odd.
He romanticized the idea that they were star-crossed lovers.
They could overcome the odds and evens, because they had each other.
While she maintained the strict views imposed on her by her mother
that separate could not be equal.
And though at the time he felt stupid and dumb
for trying to love a girl controlled by her stupid mum,
he should have been comforted by the simple sum.
Take 59 away from 60, and you're left with the one.
Sure enough, after two months of moping around,
61 days later, 61 was who he found.
He had lost his keys and his parents were out.
So one day after school, he went into a house,
as he noticed the slightly wonky numbers on the door.
He wondered why he'd never introduced himself before.
As she let him in, his jaw dropped in awe:
61 was like 60, but a little bit more.
She had prettier eyes, and an approachable smile,
and like him, rough around the edges, casual style,
and like him, everything was in disorganized piles,
and like him, her mum didn't mind if friends stayed while,
because she was like him.

And he liked her.
He reckoned she would like him if she knew he was like her.
And it was different this time, I mean, this girl was wicked.
So he plucked up the courage and asked for her digits.
She said: "I'm 61."
He grinned, said: "I'm 59.
Today, I've had a really nice time,
so tomorrow, if you wanted, you could come over to mine?"
She said: "Sure."
She loved talking to someone just as quirky.
She agreed to this unofficial first date.
In the end, he was only ready one minute early,
but it didn't matter, because she arrived one minute late.
And from that moment on, there was nonstop chatter.
By the end of the night, they knew they were meant together.
And one day, she was talking about stuck-up 60.
She noticed that 59 looked a bit shifty.
He blushed, told her of his crush:
"The best thing that never happened because it led to us."
61 was clever, see,
not prone to jealousy.
She looked him in the eyes and told him quite tenderly:
"You're 59, I'm 61.
Together we combine to become twice what 60 could ever be."
And at this point, 59 had tears in his eyes,
was so glad to have found this one-of-a-kind girl in his life.
He told her the very definition of being prime
was that only one and himself could his heart divide.
And she was the one he wanted to give his heart to.
She felt the same and now she knew the films were half true.
Because that wasn't real love, that love was just a sample.
When it came to real love, they were a prime example.

*Harry Baker
voorgedragen door Hadewijch De Clercq*

A New Solution to an Old Problem

The topologist's child was quite hyper
'Til she wore a Moebius diaper.
The mess on the inside
Was thus on the outside
And it was easy for someone to wipe her.

Eleanor Ninestein

A propos d'Horaces

J'étais alors en proie à la mathématique.
Temps sombre! Enfant ému du frisson poétique,
Pauvre oiseau qui heurtais du crâne mes barreaux,
On me livrait tout vif aux chiffres, noirs bourreaux;
On me faisait de force ingurgiter l'algèbre:
On me liait au fond d'un Boisbertrand funèbre;
On me tordait, depuis les ailes jusqu'au bec,
Sur l'affreux chevalet des X et des Y ;
Hélas! On me fourrait sous les os maxillaires
Le théorème orné de tous ses corollaires;
Et je me débattais, lugubre patient
Du diviseur prêtant main-forte au quotient.
De là mes cris.

Victor Hugo



A Simple Ballad

What are the orders of all simple groups?
I speak of the honest ones, not of the loops.
It seems that old Burnside their orders has guessed:
except for the cyclic ones, even the rest.

Groups made up with permutates will produce some more:
for A_n is simple, if n exceeds four.
Then, there was Sir Matthew who came into view
exhibiting groups of an order quite new.

Still others have come on to study this thing.
Of Artin and Chevalley now we shall sing.
With matrices finite they made quite a list.
The question is: could there be others they've missed?

Suzuki and Ree then maintained it's the case
that these methods had not reached the end of the chase.
They wrote down some matrices, just four by four,
that made up a simple group. Why not make more?

And then came up the opus of Thompson and Feit
which shed on the problem remarkable light.
A group, when the order won't factor by two,
is cyclic or solvable. That's what is true.

Suzuki and Ree had caused eyebrows to raise,
but the theoreticians they just couldn't face.
Their groups were not new: if you added a twist,
you could get them from old ones with a flick of the wrist.

Still, some hardy souls felt a thorn in their side.
For the five groups of Mathieu all reason defied:
not A_n , not twisted, and not Chevalley,
they called them sporadic and filed them away.

Are Mathieu groups creatures of heaven or hell?
Zvonimir Janko determined to tell.
He found out what nobody wanted to know:
the masters had missed 1 7 5 5 6 0.

The floodgates were opened! New groups were the rage!
(And twelve or more sprouted, to great the new age.)
By Janko and Conway and Fischer and Held,
McLaughlin, Suzuki, and Higman, and Sims.

No doubt you noted the last lines don't rhyme.
Well, that is, quite simply, a sign of the time.
There's chaos, not order, among simple groups,
and maybe we'd better go back to the loops.

?



ABC

Axes beget coordinates,
dutifully expressing
functions, graphs,
helpful in justifications,

keeping legendary mathematics
new or peculiarly quite rational

so that understanding's visual
with x, y, z .

JoAnne Growney

Algorhyme

I think that I shall never see
a graph more lovely than a tree.
A tree whose crucial property
is loop-free connectivity.
A tree that must be sure to span
so packets can reach every LAN.
First, the root must be selected.
By ID, it is elected.
Least-cost paths from root are traced.
In the tree, these paths are placed.
A mesh is made by folks like me,
then bridges find a spanning tree.

Radia Perlman
voorgedragen door Simon Van den Eynde

Autrefois

Autrefois j'ai fait des poèmes
Qui contenaient tout le rayon
Du centre à la périphérie et au-delà
Comme s'il n'y avait pas de périphérie mais le centre seul
Et comme si j'étais le soleil: à l'entour l'espace illimité
C'est qu'on prend de l'élan à jaillir tout au long du rayon
C'est qu'on acquiert une prodigieuse vitesse de bolide
Quelle attraction centrale peut alors empêcher qu'on s'échappe
Quel dôme de firmament concave qu'on le perce
Quand on a cet élan pour éclater dans l'Au-delà.
Mais on apprend que la terre n'est pas plate
Mais une sphère et que le centre n'est pas au milieu
Mais au centre
Et l'on apprend la longueur du rayon ce chemin trop parcouru
Et l'on connaît bientôt la surface
Du globe tout mesuré inspecté arpenté vieux sentier
Tout battu

Alors la pauvre tâche
De pousser le périmètre à sa limite
Dans l'espoir à la surface du globe d'une fissure,
Dans l'espoir et d'un éclatement des bornes
Par quoi retrouver libre l'air et la lumière.

Hélas tantôt désespoir
L'élan de l'entier rayon devenu
Ce point mort sur la surface.

Tel un homme
Sur le chemin trop court par la crainte du port
Raccourcit l'enjambée et s'attarde à venir
Il me faut devenir subtil
Afin de, divisant à l'infini l'infime distance
De la corde à l'arc,
Créer par ingéniosité un espace analogue à l'Au-delà
Et trouver dans ce réduit matière
Pour vivre et l'art.

Saint-Denys Garneau



Bewijzen

Een bolleboos riep laatst met zwier
gewapend met een vel A-vijf:
“Er is geen allergrootst getal,
dat is wat ik bewijzen ga.
Stel, dat ik u nu zou bedriegen
en hier een potje stond te jokken,
dan zou ik zonder overdrijven
het grootste kunnen op gaan noemen.
Maar ben ik klaar, roept u gemeen:
‘Vermeerder dat getal met twee!’
Dan zien we zeker en gewis
dat dit toch niet het grootste was.
En gaan we zo nog door een poos,
dan merkt u: dit is onbegrensd.
En daarmee heb ik Q.E.D.
Ik ben hier diep gelukkig door.
Zo gaan,” zei hij voor hij bezwijmde,
“bewijzen uit het ongedichte.”

Marjolein Kool



Cirkel

“Wat zou ik blij zijn als ik nog
ontdekken zou,” zo sprak de man,
“hoe dat ik zonder passer tóch
een cirkel construeren kan.”

Zijn eega lachte: “Hou toch op.
Dat is toch reuzesimpel, schat.”
Ze hief zijn natte koffiekop
van zijn nog maagdelijke blad.

Marjolein Kool



Cirkelkwadratuur

De oude Griek Hippocrates
wou cirkels kwadrateren
en om dat goed te leren
ging Hippo in de eerste les,
het bleek een eclatant succes,
zijn cirkels segmenteren.

Hij gaf elk deel met maantjes aan
en met die cirkelstukken
bleek kwadratuur te lukken.
Zo dacht hij hoopvol door te gaan,
maar ach, helaas, bij volle maan,
wil het nog steeds niet lukken.

Marjolein Kool

Diophantus' tomb

"Here lies Diophantus," the wonder behold.
Through art algebraic, the stone tells how old:
"God gave him his boyhood one-sixth of his life,
One twelfth more as youth while whiskers grew rife;
And then yet one-seventh eve marriage begun;
In five years there came a bouncing new son.
Alas, the dear child of master and sage
Met fate at just half his dad's final age.
Four years yet his studies gave solace from grief;
Then leaving scenes earthly he, too found relief."

Diophantus

Euclid

Old Euclid drew a circle
On a sand-beach long ago.
He bounded and enclosed it
With angles thus and so.
His set of solemn graybeards
Nodded and argued much
Of arc and of circumference,
Diameter and such.
A silent child stood by them
From morning until noon
Because they drew such charming
Round pictures of the moon.

Vachel Lindsay

Euler

“Kind, kijk uit, dit gaat verkeerd.”

Moeder Euler riep geschrokken:

“Strakjes heb je je bezeerd
aan de hoeken van je blokken.”

Vader zei: “Ach, laat hem, meid.”

Maar toen zij maar door bleef klagen,
was hij op den duur bereid,
alle hoeken af te zagen.

Elke ribbe werd twee keer
schuinweg middendoor gesneden.

“Kijk, hier zijn je blokjes weer,”
toonde hij zijn zoon tevreden.

Zoonlief reageerde rap.

Vaders glimlach werd nog breder.

“Isse niet een blokje, pap,
isse kubo-octaëder.”

Marjolein Kool



Extase

Een driehoek heeft een drietal hoogtelijnen
Die ieder loodrecht naar een zijde gaan
En om uw inzicht nog wat te verfijnen:
Ze geven elk voor zich een hoogte aan
En snijden (wat u controleren kunt)
Elkander in precies hetzelfde punt
Wij zien dit als een attractieve stunt
Dus bij dat snijpunt komt een A te staan

Er komen uit de hoeken zwaartelijnen
Exact op 't midden van de zijden uit
Het zal misschien wel onnatuurlijk schijnen
Dat men hier weer op zulk een toeval stuit
Maar heel nauwkeurig snijden ze elkaar
Op 't zelfde punt, dat is onloochenbaar
Dat punt moet dan belangrijk zijn, nietwaar?
We noemen het dus B —een kloek besluit

In zo'n figuur bestaan er dan nog lijnen
(Ze heten middelloodlijnen, naar ik hoor)
Die evenmin gewoon in 't niet verdwijnen
Neen, recht en vastberaden is hun spoor
En dan—het moet gezegd, er is geen keus—
Passeren zij hetzelfde punt, ja heus
Opnieuw zo'n snijpunt is voorwaar curieus
De letter C dient daar uitstekend voor

Dit blijkt ons reeds aanzienlijk op te winden
Waarbij het nog niet alles blijkt te zijn:
We wenen van verrukking, want we vinden
Wanneer we A met B en C verbinden
Als resultaat een prachtig rechte lijn

Marjolein Kool



Fermat

Monsieur Fermat—what have you done?
 Your simple conjecture has everyone
 Churning out proofs,
 Which are nothing but goofs!
 Could it be that your statement's an erudite spoof?
 A marginal hoax
 That you've played on us folks?
 But then you're really not known for your practical jokes.
 Or is it then true
 That you knew what to do
 When n was an integer greater than two?
 Oh then why can't we find
 That same proof... are we blind?
 You must be reproved, for I'm losing my mind.

Jonathan Dowling

Fib

One
 Small,
 Precise,
 Poetic,
 Spiraling mixture:
 Math plus poetry yields the Fib.

Gregory Pincus

Geometry

They say who play at blindman's buff
 And strive to fathom space
 That a straight line drawn long enough
 Regains its starting place
 And that two lines laid parallel
 Which never stop nor swerve
 At last will meet, for, strange to tell,
 Space throws them both a curve.

Such guesswork lets my hopes abide,
 For though today you spurn
 My heart and cast me from your side
 One day I shall return;
 And though at present we may go
 Our lonely ways, a tether
 Shall bind our paths till time be through
 And we two come together.

X. J. Kennedy



Gravity & Levity

The heron resolves itself from the gray lake the water
conversely the woman dissolves in sex, her own

in liquefaction but the flesh reforms like wings
unfolded flight like light drips glistens

the setting sun the horizon first
above now below the bird the evening only local

the spinning earth flings its fluid surface
dissolving itself into itself its ecstasy

the need we feel each for each, the falseness
of any world, at all it is a kind of patience

impossible to distinguish from lassitude
it is a kind of hope indistinguishable

from stupidity. I know (of) a man who killed
himself and the woman he was about to marry

killed herself a month later. He wrote a note:
Until yesterday I had no definite plan to kill myself.

*I do not understand it myself, but it is not
because of a particular event, nor of an explicit matter.*

*Every elliptic curve defined over the rational field
is a factor of the Jacobian of a modular function field*

was another note he wrote. (I have his picture
on my desk, a gray parallelogram,

a thin man in black jacket black
tie bifurcating a horizon behind him

the line just above his ears this point
of view this lonely life there is only

a kind of barrenness in the background and a sky
which is a world, of course, plenty.)

This is a bigger world than it was once
it expands an explosion it can't help it it has

nothing to do with us with whether we know or
not whether our theories can be proved

whether or not a mathematician
knew a better class of circles

(he has a name, Taniyama, a Conjecture)
than was ever known before before—

not circles, elliptic curves. Not doughnuts.
Not anything that is nearly, only is, such

a world is hard to imagine, harder to live in,
harder still to leave. A little like love, Dear.

Bin Ramke



Harmonie

Pythagoras, zo wordt gezegd,
kwam in een smederij terecht
met vier fervente smeden.
Daar werd met slaan uit volle kracht,
een fikse herrie voortgebracht,
maar Pythje riep tevreden:

“Dit klinkt uniek en wonderschoon
want elke hamer heeft zijn toon.
Ik ga ze even wegen.”
En die gewichten, als verwacht
verhielden zich als 6 en 8
en 12 en ook nog 9.

Die 9 is—blijf bij de les—
’t gemiddelde van 12 en 6.
Daarbij—ik ben volledig—
staat 8 min 6 tot 12 min 8
als 6 tot 12. Zo klinkt de pracht
harmonisch evenredig.

En hoe ontstaat die harmonie?
De helft van 12 is 6, en zie:
—het gaat toch niet vervelen?—
tweederde deel van 12 is 8
en 9—dat is mooi bedacht—
dat zijn drievierdedelen.

Zo klinkten kwint, octaaf en kwart
en Pythje riep met juichend hart:
“Dit volkje streelt mijn oren!”
Tot ééntje op zijn vingers sloeg,
toen was er even, sneu genoeg,
een dissonant te horen.

Marjolein Kool



In de hoogte (IV)

Maar 'k danste 't liefst volgens wiskund'ge wet:
Door 't x - y -vlak zwierde ik horizontaal,
En dan met lucht'ge sprongen, vertikaal,
Zweefde als een mug ik op en af langs z ;

Zich weven zag 'k uit schimmig lijnennet
De oneindigheid tot kronkel van spiraal:
Het teken van de almachtige integraal
Heb 'k, toov'naar, steeds met trotse krul gezet.

Huiv'rend zag 'k staan in de omzwaai van de nacht
De Mensenzoon, priester van God's geslacht,
Ov'ral aanwezig heerser, het Getal,

Dat de omtocht van mijn sterrevolken leidt,
En meteoren en kometen smijt,
Schertsend, door 't statig rythme van 't heelal.

Johan Dèr Mouw

In de hoogte (XV)

Jouw zenuwen, spieren, pezen, botten, knurven
Trilden, waar valsch uit de afgrond van 't verdriet
Waanzin de half gewilde val bespiedt,
Maar ik, ik greep je stevig bij je lurven;

'k Zei: "Wat? Zou je niet kunnen? Of—niet durven?
Schaam jij je dan voor Plato's gletschers niet?
Vooruit! Ik maak tot straatweg van graniet
De draad!" En grac'lijk gleed je over de curven.

Jou gaf, als 't scheen dat duizeling je neertrok,
Ik een oneind'ge reeks als balanceerstok,
 e , π , Maclaurin of 't binomium:

Niagara, onder schomm'lende vlonder,
Stortte de wereldloop zijn eeuw'ge donder—
Jou gaf, Blondin, ik 't aequilibrium.

Johan Dèr Mouw

In de hoogte (XVI)

Je zag met de x de spokig toov'rende i
Meefladd'ren, als de zwevende exponent
Neerstreek tot reeks, die naar 't oneind'ge rent
In stormloop naar de kringperipherie:

Omsmolt dan algebraïsche alchemie
Tot tweelingen twee legers, en 't quotiënt,
Vervloeid tot optocht van kentauren, ment
De magiër Logarithme voort naar π .

Ontzaglijke triomfpoort, zag je hem, hoog
Lichtende staan boven de Melkwegboog,
Verweerde band van cyklopisch gewelf;

En, flinkerende triumphatordracht
Rondom je, hing de hemel. En je dacht:
"Io TRIUMPHE" voor mijn eeuwig Zelf!

Johan Dèr Mouw
voorgedragen door Jens Bossaert



Kies exact

“Wiskunde, Trudie,
dat is niets voor vrouwen.
Dat moet je als studie
voor mannen beschouwen.

Jouw hoofd is—met ere,
ik wil je niet krenken—
om crème op te smeren,
maar niet om te denken.

Voor mij hoort een griet
de Bouquetreeks te lezen
en moet ze dus niet
al te slim willen wezen.

Dus neem nou die hobbel
en kies voor je pannen.
De wiskundeknobbel
schiep God voor de mannen.

De knobbels die ik
bij een dame vind horen,
zijn stevig en dik
en die zitten van voren.”

Toen greep ze een pan
en ze schatte de curve
van hier tot haar man.
Ze besloot het te durven.

Constant bleef de straal
toen de boog werd beschreven.
Zo stopt dit verhaal
met het eind van zijn leven.

Drs. P



Love and Tensor Algebra

Come, let us hasten to a higher plane
Where dyads tread the fairy fields of Venn,
Their indices bedecked from one to n
Commingled in an endless Markov chain!

Come, every frustrum longs to be a cone
And every vector dreams of matrices.
Hark to the gentle gradient of the breeze:
It whispers of a more ergodic zone.

In Riemann, Hilbert or in Banach space
Let superscripts and subscripts go their ways.
Our asymptotes no longer out of phase,
We shall encounter, counting, face to face.

I'll grant thee random access to my heart,
Thou'lt tell me all the constants of thy love;
And so we two shall all love's lemmas prove,
And in our bound partition never part.

For what did Cauchy know, or Christoffel,
Or Fourier, or any Boole or Euler,
Wielding their compasses, their pens and rulers,
Of thy supernal sinusoidal spell?

Cancel me not—for what then shall remain?
Abscissas some mantissas, modules, modes,
A root or two, a torus and a node:
The inverse of my verse, a null domain.

Ellipse of bliss, converge, O lips divine!
The product of our scalars is defined!
Cyberiad draws nigh, and the skew mind
Cuts capers like a happy haversine.

I see the eigenvalue in thine eye,
I hear the tender tensor in thy sigh.
Bernoulli would have been content to die,
Had he but known such $a^2 \cos 2\phi$!

Stanislaw Lem



My Dance is Mathematics

They called you *der* Noether, as if mathematics was only for men. In 1964, nearly thirty years past your death, at last I saw you in a spotlight, in a World's Fair mural, "Men of Modern Mathematics."

Colleagues praised your brilliance—but after they had called you fat and plain, rough and loud. Some mentioned kindness and good humor though none, in your lifetime, admitted it was you who led the way to axiomatic algebra. Direct and courageous, lacking self-concern, elegant of mind, a poet of logical ideas.

At a party when you were eight years old you spoke up to solve a hard math puzzle. Fearless, you set yourself apart.

I followed you. I saw you forced to choose between mathematics and other romance. For women only, this exclusive standard.

I heard fathers say, "Dance with Emmy—just once, early in the evening. Old Max is my friend; his daughter likes to dance."

If a woman's dance is mathematics, she dances alone.

Mothers said, "Don't tease. That strange one's heart is kind. She helps her mother clean the house, and cannot help her curious mind."

Teachers said, "She's smart but stubborn, contentious and loud, a theory-builder not persuaded by our ideas."

Students said, "She's hard to follow, bores me." A few stood firm and built new algebras on her exacting formulations.

In spite of Emmy's talents,
always there were reasons
not to give her rank
or permanent employment.
She's a pacifist, a woman.
She's a woman and a Jew.
Her abstract thinking
is female and abstruse.

Today, history books proclaim that Noether
is the greatest mathematician
her sex has produced. They say she was good
for a woman.

JoAnne Growney

Normale verdeling

Er werd op het WK-toernooi
weer zeer normaal gespeeld.
De vrije trappen waren mooi
en zeer normaal verdeeld.

Want 95 procent
bleef doelloos, uur na uur,
zo'n 68, da's bekend,
belandde in de muur.

De 5 procent die overbleef
trof juist een paal of lat,
op een na, die een boog beschreef,
de hoek inging en zat!

Men was ontroerd en stomverbaasd
en alom klonk applaus
en ieder wist, dit moet wel haast
de kromme zijn van Gauss.

Marjolein Kool
voorgedragen door Toon Baeyens

Parler pour ne rien dire

Mesdames et messieurs..., je vous signale que je vais parler pour ne rien dire.

[...]

Mais, me direz-vous, si on parle pour ne rien dire, de quoi allons-nous parler?

Eh bien de rien! De rien!

Car rien... ce n'est pas rien!

La preuve, c'est qu'on peut le soustraire.

Exemple:

Rien moins rien = moins que rien!

Si l'on peut trouver moins que rien, c'est que rien vaut déjà quelque chose!

On peut acheter quelque chose avec rien!

En le multipliant!

Une fois rien... c'est rien!

Deux fois rien... ce n'est pas beaucoup!

Mais trois fois rien!... Pour trois fois rien, on peut déjà acheter quelque chose... et pour pas cher!

Maintenant, si vous multipliez trois fois rien par trois fois rien:

Rien multiplié par rien = rien.

Trois multiplié par trois = neuf.

Cela fait: rien de neuf.

Oui... Ce n'est pas la peine d'en parler!

Raymond Devos

voorgedragen door Emilie Van Driessche



On the Sadness

- 47 The door is closed
2·23 We are going to die if the moon changes
3²·5 The sky is blue then we are going to die if the grass is green
2²·11 We are going to die then we are going to die if the sea is cold
43 The window is open
2·3·7 We are going to die if the sky is blue if men grow old
41 Night comes slowly
2³·5 We are going to die then the sky is blue if the grass is green
3·13 The sky is blue if a girl sings
2·19 We are going to die if the sun is hot
37 Morning comes at five o'clock
2²·3² We are going to die then we are going to die if the sky is blue then we are going to die
5·7 The grass is green if men grow old
2·17 We are going to die if a boy runs
3·11 The sky is blue if the sea is cold
2⁵ We are going to die then the grass is green
31 Fathers go to work
2·3·5 We are going to die if the sky is blue if the grass is green
29 Mothers mind their children
2²·7 We are going to die then we are going to die if men grow old
3³ The sky is blue then the sky is blue
2·13 We are going to die if a girl sings
5² The grass is green then we are going to die
2³·3 We are going to die then the sky is blue if the sky is blue
23 The moon changes
2·11 We are going to die if the sea is cold
3·7 The sky is blue if men grow old
2²·5 We are going to die then we are going to die if the grass is green
19 The sun is hot
2·3² We are going to die if the sky is blue then we are going to die
17 A boy runs
2² We are going to die then we are going to die then we are going to die
3·5 The sky is blue if the grass is green
2·7 We are going to die if men grow old
13 A girl sings
2²·3 We are going to die then we are going to die if the sky is blue
11 The sea is cold
2·5 We are going to die if the grass is green
3² The sky is blue then we are going to die
2³ We are going to die then the sky is blue
7 Men grow old
2·3 We are going to die if the sky is blue
5 The grass is green
2² We are going to die then we are going to die
3 The sky is blue
2 We are going to die

Noot: de lijnen volgen het patroon van de factorisatie in priemfactoren van 47 tot 2: priemgetallen corresponderen met een vastgekozen uitdrukking, vermenigvuldiging met 'if', machten met 'then'.

Carl Andre

Parabool

Een parabool die heel bedaard
zojuist zijn raaklijn had bezocht,
die vloog daarna in volle vaart,
vlak voor zijn toppunt uit de bocht.

Zijn hele auto total loss!
En dat zou niet het ergste zijn,
maar hij was ook nog zelf de klos:
hij werd op slag een rechte lijn.

“Hoe kan dat nou?” vroeg men op straat.
Hij zei: “Ik zag een mooie meid
en ach, u weet wel hoe dat gaat,
toen werd ik even afgeleid.”

Marjolein Kool
voorgedragen door Roxanne Daelman



Racine carrée

Il y a des racines de tout' les formes
Des pointues, des rond' et des difformes
Cell' de la guimauve est angélique
Il y a une Racin' qui est classique
Et la mandragore est diabolique
Mêmem' s'il nous bassin' on n'y peut plus rien
Mais la racine que j'adore
Et qu'on extrait sans effort-eu
La racin'carrée, c'est ma préférée
Une racine qu'à un aspect louche
C'est cell' de l'arbre de couche
Le drogué vend son âme
Pour cell' de l'arbre à cames
Si la racine du manioc a
De quoi fair' du tapioca
Evitons tout' not' vie
(de bouffer) Celle du pissenlit
Il y a des racin' qui s'vend' en bottes
Le radis, l'navet ou la carotte
Vous connaissez celle de la bruyère
Dans laquell' on taille des pip' en terre
Il y a la racin' de canne à pêche
Cultivez-la donc, qu'est-ce qui vous empêche?
Mais la racine que j'adore
Et qu'on extrait sans effort-eu
La racin'carrée, c'est ma préférée.

Boris Vian

Rubaiyat (323)

In these twin compasses, O Love, you see
One body with two heads, like you and me,
Which wander round one center, circlewise,
But at the last in one same point agree.

*vertaling door Edward Whinfield
Omar Khayyam*

Scheef

Een tor bewoonde al een poosje
het hulsje van een lucifersdoosje.
Totdat een koe een poot verzette
en zo de torrenwoning plette.
Het hele huisje uit het lood.
De kleine tor, nog net niet dood,
bewoont nu ietwat uit zijn hum
een parallellepipedum.

Marjolein Kool
voorgedragen door Jozefien D'haeseleer



Scooping the Loop Snooper

No general procedure for bug checks will do.
Now, I won't just assert that, I'll prove it to you.
I will prove that although you might work till you drop,
you cannot tell if computation will stop.

For imagine we have a procedure called P
that for specified input permits you to see
whether specified source code, with all of its faults,
defines a routine that eventually halts.

You feed in your program, with suitable data,
and P gets to work, and a little while later
(in finite compute time) correctly infers
whether infinite looping behavior occurs.

If there will be no looping, then P prints out "Good."
That means work on this input will halt, as it should.
But if it detects an unstoppable loop,
then P reports "Bad!"—which means you're in the soup.

Well, the truth is that P cannot possibly be,
because if you wrote it and gave it to me,
I could use it to set up a logical bind
that would shatter your reason and scramble your mind.

Here's the trick that I'll use, and it's simple to do.
I'll define a procedure, which I will call Q ,
that will use P 's predictions of halting success
to stir up a terrible logical mess.

For a specified program, say A , one supplies,
the first step of this program called Q I devise
is to find out from P what's the right thing to say
of the looping behavior of A run on A .

If P 's answer is "Bad!", Q will suddenly stop.
But otherwise, Q will go back to the top,
and start off again, looping endlessly back,
till the universe dies and turns frozen and black.

And this program called Q wouldn't stay on the shelf;
I would ask it to forecast its run on itself.
When it reads its own source code, just what will it do?
What's the looping behavior of Q run on Q ?

If *P* warns of infinite loops, *Q* will quit;
yet *P* is supposed to speak truly of it!
And if *Q*'s going to quit, then *P* should say "Good."
Which makes *Q* start to loop! (*P* denied that it would.)

No matter how *P* might perform, *Q* will scoop it:
Q uses *P*'s output to make *P* look stupid.
Whatever *P* says, it cannot predict *Q*:
P is right when it's wrong, and is false when it's true!

I've created a paradox, neat as can be,
and simply by using your putative *P*.
When you posited *P* you stepped into a snare;
Your assumption has led you right into my lair.

So where can this argument possibly go?
I don't have to tell you; I'm sure you must know.
A reductio: There cannot possibly be
a procedure that acts like the mythical *P*.

You can never find general mechanical means
for predicting the acts of computing machines;
it's something that cannot be done. So we users
must find our own bugs. Our computers are losers!

Geoffrey Pullum

The Hunting of the Snark

Taking Three as the subject to reason about
—A convenient number to state—
We add Seven, and Ten, and then multiply out
By One Thousand diminished by Eight.

"The result we proceed to divide, as you see,
By Nine Hundred and Ninety and Two:
Then subtract Seventeen, and the answer must be
Exactly and perfectly true.

Lewis Carroll

The Kiss Precise

For pairs of lips to kiss maybe
Involves no trigonometry.
'Tis not so when four circles kiss
Each one the other three.
To bring this off the four must be
As three in one or one in three.
If one in three, beyond a doubt
Each gets three kisses from without.
If three in one, then is that one
Thrice kissed internally.

Four circles to the kissing come.
The smaller are the benter.
The bend is just the inverse of
The distance from the center.
Though their intrigue left Euclid dumb
There's now no need for rule of thumb.
Since zero bend's a dead straight line
And concave bends have minus sign,
The sum of the squares of all four bends
Is half the square of their sum.

To spy out spherical affairs
An oscular surveyor
Might find the task laborious,
The sphere is much the gayer,
And now besides the pair of pairs
A fifth sphere in the kissing shares.
Yet, signs and zero as before,
For each to kiss the other four
The square of the sum of all five bends
Is thrice the sum of their squares.

Frederick Soddy



The Mad Reviewer's Song

He thought he saw a strategy
Undominated, strict:
He looked again, and found it was
Quite Easy to Depict.
I'll never play a game, he said,
So simple to predict!

He thought he saw a Nash profile
Remaining unrefined:
He looked again, and found it was
Induction from Behind.
Before more doubts arise, he said,
Apply it! Never mind!

Alexander Mehlmann

There's a Delta for Every Epsilon

There's a delta for every epsilon,
It's a fact that you can always count upon.
There's a delta for every epsilon
And now and again,
there's also an n .

But one condition I must give:
the epsilon must be positive
A lonely life all the others live,
In no theorem
A delta for them.

How sad, how cruel, how tragic,
How pitiful, and other adjectives
That I might mention.
The matter merits our attention.
If an epsilon is a hero,
Just because it is greater than zero,
It must be mighty discouragin'
To lie to the left of the origin.

This rank discrimination is not for us,
We must fight for an enlightened calculus,
Where epsilons all, both minus and plus,
Have deltas
To call their own.

Tom Lehrer

Transseksueel

Toen ik in moeders armen lag
—ze voelde zich bijzonder rijk—
riep zij vol trots naar wie mij zag:
“Het is een echte kubus, kijk!”

Ik was een kubus, naar men zei,
met zijden, hoeken, waterpas,
maar ach, mijn ziel vertelde mij,
dat ik een piramide was.

Ik trok vanuit een diepe drang
steeds piramidekieren aan.
Ik vocht ertegen jarenlang,
maar ging steeds piramider staan.

Mijn psychiater gaf het op.
Geen praatgroep wist een therapie.
Ik vond na jarenlang getob
mijn redding in de chirurgie.

In een luguber soort kliniek,
waar men van hoge prijzen houdt,
werd ik—de ingreep was uniek—
tot piramide omgebouwd.

Nu zit ik lekker in mijn vel
en mijn probleem is opgelost,
al heeft die hele grap me wel
vier ribben uit mijn lijf gekost.

Marjolein Kool



Triangle

Qui?
Parmi...
Les mystères?
Toutes les mers?
A bien mieux que moi
Réussi à égarer les navires?
De mon angle parfois droit, ou pas
J'ai aidé, aidé les hommes, aidé à bâtir
Sur la terre infinie des dieux grands pharaons
D'immenses tombeaux, tous de pierres et de sable
Dont chaque face éclairé porte désormais mon nom.
Tantôt acutène, tantôt rectangle, isocèle, ou bien équilatéral,
Trois points me définiront, mais le plus souvent simple, scalène.
De mes trois points vitaux dessinés de la main même du génial Euler
Droites et cercles dansent en chœur. Galilée! Toute la géométrie règne
En mon sein; moi, nécessaire! Déséquilibré boiteux rempli de mystères...

David Tainturier

Valentine

You are the fairest of your sex,
Let me be your hero,
I love you as one over x ,
As x approaches zero.

Michael Stueben

Verdwijnpunt

"Stop, hou op, niet verder stomen,"
riep de stoker, "Ik ontdek
dat daarginder, dat is gek,
onze rails tezamen komen.

Sla alarm en sluit de bomen,
neem een hamer op je nek,
kom, ik wil dat deze plek
onder handen wordt genomen."

Na een halve dag marcheren,
ging de tocht hen deprimeren.
't Einddoel bleek zo ver dat zij
maar besloten om te keren.
En wat zagen toen de heren?
"Hé? We zijn er al voorbij!"

*Marjolein Kool
voorgelezen door Wouter Van Steenberge*

Vierkante cirkel

Er was eens een Helleen (een Griek),
geleerd, klassiek, normaal postuur,
een filosoof, maar fanatiek
gericht op cirkelkwadratuur.

Hij was het die gesproken had:
“Van elke cirkel die men geeft,
maak ik meteen een vierkant
dat dezelfde oppervlakte heeft.”

Toch bleek dat niet zo simpel
want hij kwam er niet echt verder mee.
De passer gleed hem uit zijn hand,
zijn liniaaltje brak in twee.

Misnoegd zei Anaxagoras:
“Ik dacht dat ik iets aardigs vond.
Doch hoe ik hier ook meet en pas,
ik krijg dat vierkant maar niet rond.”

Marjolein Kool

Vlieger

Een ruit die tot een vlieger zei:
“Ik ben een vlieger net als jij,”
bracht hem daarmee in zielenstrijd
inzake zijn identiteit.

De arme vlieger dacht en dacht,
maar kreeg de stelling niet ontkracht,
waarop hij riep vol kwade zin:
“Ik gooi die vent zijn ruiten in.”

Helaas een ruit is louter lijn,
heeft vensterbank noch raamkozijn.
Zodat er bij gebrek aan glas
geen represaille moog'lijk was.

De vlieger bracht nog hoopvol uit:
“Ben ik misschien dan ook een ruit?”
Maar nee, helaas, alweer een strop,
ook deze vlieger ging niet op.

Marjolein Kool
voorgedragen door Roxanne Daelman



We shall find the Cube of the Rainbow

We shall find the Cube of the Rainbow.
Of that, there is no doubt.
But the Arc of a Lover's conjecture
Eludes the finding out.

Emily Dickinson



Where are the zeros of zeta of s ?

Where are the zeros of zeta of s ?

G.F.B. Riemann has made a good guess.

They're all on the critical line, said he,
and their density's one over $2\pi \log t$.

This statement of Riemann's has been like trigger
and many good men, with vim and with vigor,
have attempted to find, with mathematical rigor,
what happens to zeta as $\text{mod } t$ gets bigger.

The efforts of Landau and Bohr and Cramer,
and Littlewood, Hardy and Titchmarsh are there,
in spite of their efforts and skill and finesse,
in locating the zeros there's been no success.

In 1914 G.H. Hardy did find,
an infinite number that lay on the line.
His theorem however won't rule out the case,
there might be a zero at some other place.

Let P be the function π minus li .
The order of P is not known for x high.
If \sqrt{x} times $\log x$ we could show,
then Riemann's conjecture would surely be so.

Related to this is another enigma,
concerning the Lindelöf function $\mu(\sigma)$,
which measures the growth in the critical strip,
on the number of zeros it gives us a grip.

But nobody knows how this function behaves!
Convexity tells us it can have no waves.
Lindelöf said that the shape of its graph,
is constant when σ is more than one-half.

Oh, where are the zeros of zeta of s ?
We must know exactly, we cannot just guess,
in order to strengthen the prime number theorem,
the integral's contour must not get too near 'em.

Tom Apostol
voorgedragen door Bart Michels

