

# JUST MATHS

LAVENDER OF THE IDEAL

TOMMI KAUPPINEN

Just maths

Lavender of the ideal

To my mother

My sincere thanks to Rebecca Mills for her valuable comments.

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# Just Maths

Lavender of the ideal

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A  
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$$1 = 1$$

Everything is perfect in itself;  
only through others does one become imperfect.

## A ∪ B

I exist in a flux of contradictions  
of hermit life and jet set.  
The monastery of thought  
and materiality of  
pleasure,  
combining into a single perspective.  
How can I build a tower for the mind  
without succeeding,  
how not to succeed, when dark hands join  
hands, tier after tier, raising me up to the top of  
the supply chain pyramid?  
How I envy those who do not understand,  
while thinking they hold the truth.

I exist in a flux of contradiction  
of the empire built on empiricism  
and the distant calls of what once was, I  
hope, a union with Nature.  
It is an impossible mission  
to herd these flocks of goats—who  
spend their days knowing they are right  
—into the same pasture,  
to find a plausible solution to their differences.  
I know I am not the only one caught in the flux.  
What are we waiting for?

$$1 + 1 = 2$$

When a person walks a gravelled path,  
they feel nothing but stones.  
These foundations, however, shift and shake  
underfoot, shoulder to shoulder.

When a swan swims in a lake, it does not feel  
the mud below.

However,  
the lake bed knows the swan is there,  
from the tug and pull of the unknown.

“We can only observe”: the truth split into two lies.  
“No man is an island”: a well-rehearsed line.  
There is an interaction; the neighbour  
is not always the one closest to the eye or the  
ear or the mouth.

It speaks no words, but we can still listen.  
We do not observe;  
the object perceives us, becoming a subject.  
How does it feel? How can we understand it?  
No object is an island,  
not even an island.



$A \cap B$ 

A solitary individualist  
does not enlighten.  
There needs to be  
                                a significant other  
for a common law.

$$2 - 1 = 1$$

Everybody must choose, repeatedly,  
day after day,  
year after year  
to believe and remember  
or to forfeit and forget.

Even if everything *was* written by Fate,  
would it be,  
in the world of quarks and fractals,  
impossible to find anything more beautiful?

$$1 - 1 = 0$$

Every word you speak  
is the reality;  
                          thoughts you think  
  are the truth.

If they remain  
in the objective world,  
your subject is an artist.

$$0 - 1 = -1$$

Summer in the ruins of a mansion:

by a wall, I grow and bleed

yellowish sap, not caring for  
anything except the truth of my own.

$f: 1 \rightarrow 0$

When my boat was destroyed  
I half sank, half dove  
to the ocean floor.  
Half-dead, half-unconscious,  
I searched my way to the surface,  
drinking the air afterwards.

Now I reside in shallow water,  
staying hidden,  
keeping safe,  
not trusting the gods.  
They have not mapped this abyss  
like a thing called I has.

$$2^{-1} = \frac{1}{2}$$

Flinger of light yellow eye  
the crown imperial proud  
an open palm does not deny  
a spruce by moss endowed

$f^{-1}: 0 \rightarrow 1$

Live your life, they say,  
with all the lies they muster.

Rather: do not lie to;

rather,

lie down, lie with

lie in

between

the lines,

converse with the abyss

of no meaning

or

words.

Without money to burn

their lies die down to ash

and new

life!

(with soft  $f$ , without hard  $v$ )

adding

truth, like water,

is born.

0 = 0

It lies in the back  
of our minds,  
lying in all the language games known.

Tread softly,  
for the burden is heavy, the knowledge  
better left untapped.

Better not look too closely  
into the darkness.

Do not bring light.

Tread lightly,  
to not to awaken

– Oh, the conquest, the glory! –  
the beast in the dark.

Look what you have done.

The act of love is treason.

Bearing a child is selfishness.

Tread lightly  
to not awaken.

We are all beyond  
good and evil.



$$i = \sqrt{-1}$$

Whales eat plankton, I too live like that  
although I miss the sea.

Stars of the Milky Way, they are as far away as  
her absolution,

as the water's caress on my shore,  
her breath, her eyes.

How could I know her depths?

$$i^5 = i$$

*The* juxtaposed against *a*,  
a subject with the object,  
a humanity and the nature.  
Becoming against eternity,  
for with longing,  
betrayal, community  
beast and culture.  
Liminal and dead,  
birth without direction.  
How easy, how hard;  
*enten eller*, this and that.

While alive:

There is a light in the darkness  
and a darkness in the light

$$P(A \cup B) = P(A) + P(B) - P(A \cap B)$$

I sit on a bench, my face still ingénue,  
but I am impatient while impatiens grow  
and I fly, like a wind-up bird  
to times long past, where quicksilver,  
not the dog's mercury,  
was a life potion,  
and understand the sorrow  
I still need to hate the world.  
It is the same sorrow  
that created calculus.

$$P(A|B) = \frac{P(A \cap B)}{P(B)}$$

(i)

Mind striving for escape velocity.  
The escapee tied by social injustice,  
polite lies, and uncertainty ad infinitum.  
I want my child to learn my past,  
staring into her eyes, in the safety  
of summer.

(ii)

There is so much that is invisible.  
Inequality.  
Climate change.  
The beast in the dark.  
Your nature.  
The world.

(iii)

Fire pushes acrid smoke  
out of coal power plants, fluttering  
somewhere distant, while  
a sparrow flies across my window.  
I take no notice. I am about to log out  
of countless social media.  
Soon we shall take off.

(iv)

My cry grew wild  
in the Tropic of Capricorn.  
Will you now hear me,  
my child?  
There I learned pride in humility,  
and humility in pride.

(v)

Gravelled suburban landscape  
gives no clues to the memory path  
from my childhood  
to where I stand, to the competing  
narratives, fool's gold, flux of contradictions  
of western life  
all fade into the background.  
The summer is over, we have returned, again.

(vi)

I walk the autumn street with my child, we see  
leaves drop to the ground,  
fluttering first this way,  
then the other.  
Are we like them? The choice  
eludes me. The chance eludes me.

Convict B \	cooperate	defect
Convict A /		
cooperate	-1,-1	-5,0
defect	0,-5	-2,-2

I do not remember our first kiss.  
 There was a desk, blue,  
 and an uneasy feeling that I was staring;  
 you in your bed,  
 I on a stool, the sky the hues of dawn.

There was a question in the air:  
 should I come down to lie with you  
 or go home to get some sleep,  
 (not an hour too soon)?

I left you there on your bed,  
 but called in a day or two,  
 to ask you if I could come by for a while  
 to stare at you some more.

Just us, sitting on your balcony,  
 deciding how our world should be,  
 smoking cigarettes.

I do not remember our first kiss.  
 I always forget it,  
 but not you.

$$U: x \rightarrow z$$

There are at least two ways  
of viewing the world:

First, you can view everything  
with the certainty that it is homogeneous,  
everything is alive and alike.

Second, you can view everything  
with the certainty that you do not know  
what it is: it is strange and unlike  
anything you have seen before.

When taking the first approach,  
one must discover love towards everything,  
for everything is similar and in unison.

One seeks to learn the mystery of love  
by reaching out and finding oneself  
by giving up one's individuality.

One loses one's self but finds love.

When taking the second approach,  
one must study everything meticulously,  
for no reason can grant complete certainty  
on the exact nature of things foreign.  
One seeks to learn of the world outside,  
with rigorous analysis of the world and the self.  
One finds fear as one finds knowledge.

The first approach is called Faith,  
the second approach is called Science.  
All you need is fear, not love.  
But the fear of stupidity  
brings the love of wisdom,  
and with love of life comes fear of dying.  
Fear from love from fear from love, etc.  
Could they be the same?



## U as utility

You offered a group of economists a lift.

You gave them a place to hop on,  
and the time of departure.

Then you gave them a place where they can hop  
off, and an ETA.

They decided to reallocate the resources, making  
your vehicle (which you borrowed from a friend)  
a common asset, to be maximally utilised  
for optimal capital use.

You were politely asked to drive  
to three different destinations  
to collect the economists when it suited them  
best, and to do the same with the drop off.  
Therefore, you were supplied alongside the vehicle,  
as it is convenient to have a driver in a car.

I admit, transportation is a scarce resource—  
and therefore, you too can be allocated  
more effectively for the common good.

## Shared utility

The forest is a common good,  
the consumer a selfish unit,  
devoid of other than rational choice.  
I choose to be like the forest.

But I cannot, for the forest  
knows how to create oxygen. As does  
the sea, where the coral reefs abide.

I would like to share my utility; it grows greater  
than arithmetic allows, for the cinema for two is  
worth three cinemas alone, and a bar with nobody  
else is a torture chamber with beer on tap.

If there is somebody who needs a blanket,  
or shelter in a refugee camp,  
what is my need for a euro or two?

We live together, the forest and me.

Utility of Convict A can contain a part of  
utility of Convict B or vice versa

Enlightenment is abysmal:  
there will be no other End of the world.

Efficiency = max {output}  
s. t. input conditions are met.

They came.

no ammo left

treads of

fear

wrath of the righteous

the enemies we make

just just gust

blowing the icy alleys

no one left to stand upright

why what was done was wrong

religious doctrine

invading army

high shrieks, sick sea gulls

gladioli a charade of justice.

They came. Wave after wave

for an instant

we stood our  
ground,  
painted red by the crimson families  
howling  
blood-broidered  
highways  
my city true to the world,  
now to a priest  
true god of hate.

They  
sentenced me to  
civilian confinement  
there were others  
I am  
sure.

$$\lim_{x \rightarrow p} U(x) = L$$

I ran for cover,

seeds

in

my pocket.

Would you now think

of a sunflower,

name it after me?

For there is beauty in death,

and in truth.

One of them

bears my name.

$$|U(x) - L| < \varepsilon; 0 < |x - p| < \delta.$$

What else would justify  
righteousness and moralism  
than knowing what is the truth?  
O apple from the tree of good and evil.

We could, instead, live like monkeys on a rock,  
deciding what is the truth on a daily basis.

Would it now be, maybe,  
a little self-righteous and immoral  
to claim  
that mathematics  
does not belong in this equation?

$$\frac{d}{dx}U(a) = \lim_{x \rightarrow a} \frac{U(x) - U(a)}{x - a}$$

Love is.

Wisdom is.

Regarding Power I am an agnostic

(because “I” holds The Power).



Sufficiency =  $\min \{\text{input}\}$   
s. t. output conditions are met.

And there it goes, the free jetset life,  
thrown from a window  
of a soon-to-be demolished cabriolet,  
because some fool communist hippie  
decided for me that it does not belong to my quota.

Nowadays we live in a society, at the same time  
*where* and *nowhere*, for the maps  
are distributed only for hiking trips,  
and some idiot decides whether I need to fly at all.

For generations we have done whatever we want,  
for I have suckled on the nipple of privilege from birth,  
knowing I know, because Power is knowledge.  
Stupid hippies! Come and give it a shot,  
you failed in 1917,  
you won't succeed this time either!

The Cold War was because of you, and Putin.

*Ett brev från afar,*

Yours,

The shadow of Le Roi Soleil

$$V_s = \frac{4}{3}\pi r^3$$

The chance for us to survive  
was initially quite small,  
but I sprayed  
the violet lilac's bloom into blue.  
Epeius approved the solution.  
In every coherence, there is pain.

$$\vec{e}, \vec{t}, \vec{d} \in \mathbf{R}^n$$

String theory demands twelve dimensions,  
*divide et impera*,  
a group of more than a dozen  
needs at least thirteen to settle their disputes.

I sometimes walk home with a coffee  
bought from the train station.  
Frivolously, I always drop the empty cup  
into the same rubbish bin,  
regardless of the time of day or season.

## $\vec{e}$ and $\vec{t}$ define future trends

Economic growth demands innovation.  
Technological development supports welfare.  
Therefore, we need development and growth.

Green growth will be sustainable.  
The way Covid-19 was handled is not suitable for  
tackling climate change.  
By changing the type of technology, we  
consciously decouple  
from our need for more energy.  
Mining for metals can be done ethically,  
but it is not necessary.  
The more resources, the more pirates.

## $\vec{e}$ is projected development of economy

Familiar form from ancient Babylon:

the big eat the small,

weeds suffocate

the lavender of the ideal,

academics complaining

about teaching

already two and a half millennia ago.

All the same, only the scale has changed.

The Hanseatic traders knew it in medieval times,

the mega corporations know it now:

the big eat the small, only the scale matters.

When their homeland is far behind them,

the lost are always eager to reach their

destination.

The found know there is nowhere to get to.

$\vec{t}$  is projected development of technology

To augur a metastructure, where  
somehow decisions are results, not  
beginnings,  
and “new” is as old as the first techne.

The last four hundred years have been a triumph  
and a cancer.  
Scientists must read the horrible end in the stars,  
but they prefer to continue building a terminator.

Who would throw a spear at the mouth  
of the ravaging Dame of Northland?

## $\vec{d}$ is degrowth

There is a need for low-tech tools,  
e.g. the shovel.  
There is a need to

stop,  
but the only pedal is that of a taffodil,  
a taisy to remember me by.

I want more, you want more, we all want more.  
Such a simple, vicious problem with no  
solution.  
(but what is more?)

It is better to make people unhappy  
than it is to make them suffer.  
I begin to understand Power  
but turn my head; I do not fight.

Search a glade  
as far away as possible  
beyond the stars.

$$\vec{d} = \vec{e} \times \vec{t}$$

To push through to the unimaginable,  
one needs to leave the plane of the rational  
and mundane.

Like a normal vector with a cross product,  
one grows to soaring heights  
and all of it takes on a new dimension.

Uprooted, falling from the sky, like Icarus,  
or a fly hitting the light bulb, stunned and bewildered,  
trembling in a vision of the beast in the dark,  
having a conversation with the lord of the flies.

There is nothing more solid  
than the plan(e) to catch you  
when you fall.



## Wittgenstein

It is elementary to view  
by only one truth's possibility  
any fresh mathematical dew  
with all of beauty's fragility.

A language can be a game of chess  
against nature, and/or theft,  
creating oh what a lovely mesh  
babbling about what in the world is left.

The language the world surrounds  
like an intellectual troop assembly.  
Can you hear music, or sounds?  
There are multiple points of entry.

## There is more than one possible mathematics

As there is an interaction  
with a fantasy of reality,  
epiphany becomes muddled, impure  
with references from outside it.

Application takes a pure idea and  
mangles it into the works of the world.  
I feel amazed that a thought can even survive!  
It is only possible via the theory of Ideas.

However, a machine still works  
even if it never has worked justly,  
and after four hundred years of externalities  
the destruction floods our doors into perception.

I am confident that there is another miracle,  
another ideal, than a machine to employ.  
Lavender will not do well because of the mud,  
but maybe they will teach us what we need.

I still believe we have hope to survive.

## Metaxyphysics

Beginning from ethics and eternity,  
we slowly ascend into empiricism and relativism,  
but if the ascension is a spiral staircase,  
we are going to return to eternity.

Everything is relative, including mathematics.  
Empirical thinking has its merits,  
and downsides in abundance.  
Defining the problem results in the answer.

The solution is both immanent and transcendent,  
both here and nowhere.

For every object to have a perspective and relations,  
and a shared unconscious to feel these relations.

There is hope and there is faith.  
Realise how imperfect every interaction is.

## Gödel

There cannot be anything  
because “I” destroys anything that is.

Take the truth of temporality, then, rather  
than an axiomatized proof of continuity.



HAARAS

A  
R  
T