

△ Lacanoid

Low Frequency Tuning

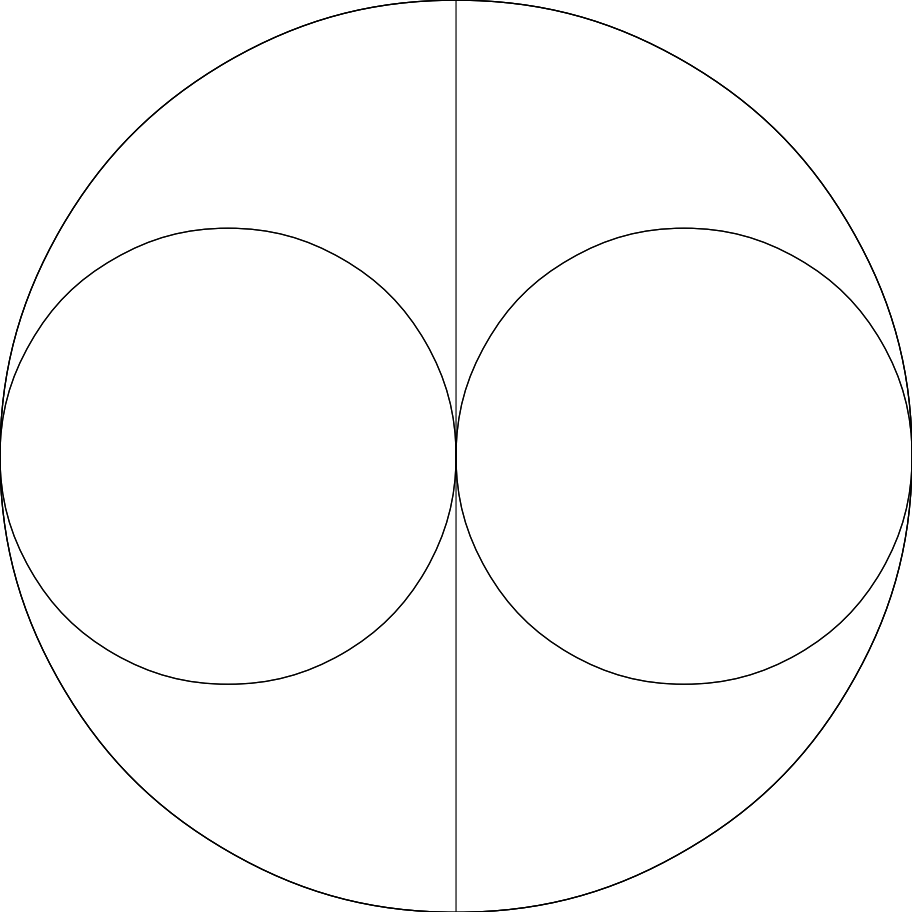
resonant intrusive intuitive fantasy

Table of Contents

Structure.....	6
Tesla Dynamic Theory of Gravity.....	7
Universe.....	11
Formal Universe.....	15
Machine.....	17
Truth.....	19
Time.....	20
Ether.....	22
Life.....	23
Matter.....	30
Death.....	31
Program Loops.....	32
Relativistic Ether.....	34
Perceptive Phenomena.....	36
Resonance.....	39
Information.....	42

Economies.....	43
Particles.....	44
0 addition unit.....	45
1 multiplication unit.....	46
π trigonometric unit.....	47
i imaginary unit.....	48
e logarithmic unit.....	49
Φ golden ratio.....	50
Machines.....	51
N_{15}	53
$Q(-1)$ pra algebra.....	55
$Q(0)$ void.....	56
$Q(1)$ constants.....	57
$Q(2)$ oscillator.....	59
$Q(3)$ relation.....	62
$U(4)$ memory.....	65
$U(5)$ resonance.....	67
Higher levels.....	68
Noise.....	71

Suita.....	72
HoTT topics.....	73
Classics.....	74



Structure

$\forall = \text{relative} + \text{rational} - e$

Tesla Dynamic Theory of Gravity

I.

Akasha, luminiferous ether fills all space.

II.

Ether is acted upon by *Prana*, the life-giving creative force.

III.

Ether is thrown into infinitesimal whirls (micro helices) at near the speed of light, becoming ponderable matter

IV.

When the force subsides and motion ceases, matter

reverts to the ether (a form of atomic decay)

[N. Tesla: Man's Greatest Achievement, 1930]

MAN'S GREATEST ACHIEVEMENT

By Nikola Tesla.

WHEN a child is born its sense-organs are brought in contact with the outer world.

The waves of sound, heat and light beat upon its feeble body, its sensitive nerve-fibres quiver, the muscles contract and relax in obedience: a gasp, a breath, and in this act a marvelous little engine, of inconceivable delicacy and complexity of construction, unlike any on earth, is hatched to the wheel-work of the Universe.

The little engine labors and grows, performs more and more involved operations, becomes sensitive to ever subtler influences and now there manifests itself in the fully developed being—Man—a desire mysterious, inscrutable and irresistible: to imitate nature, to create, to work himself the wonders he perceives.

Inspired to this task he searches, discovers and invents, designs and constructs, and enriches with monuments of beauty, grandeur and awe, the star of his birth.

He descends into the bowels of the globe to bring forth its hidden treasures and to unlock its immense imprisoned energies for his use.

He invades the dark depths of the ocean and the azure regions of the sky.

He peers into the innermost nooks and recesses of molecular structure and lays bare to his gaze worlds

remote. He subdues and puts to his service the fierce, devastating spark of Prometheus, the titanic forces of the waterfall, the wind and the tide.

He tames the thundering bolt of Jove and annihilates time and space. He makes the great Sun itself his obedient toiling slave.

Such is his power and might that the heavens reverberate and the whole earth trembles by the mere sound of his voice.

What has the future in store for this strange being, born of a breath, of perishable tissue, yet immortal, with his powers fearful and divine? What magic will be wrought by him in the end? What is to be his deed, his crowning achievement?

Long ago he recognized that all perceptible matter comes from a primary substance, of a tenuity beyond conception and filling all space—the Akasa or luminiferous ether—which is acted upon by the life-giving Prana or creative force, calling into existence, in never ending cycles, all things and phenomena.

The primary substance, thrown into infinitesimal whirls of prodigious velocity, becomes gross matter; the force subsiding, the motion ceases and matter disappears, reverting to the primary substance.

Can Man control this grandest, most awe-inspiring of all processes

in nature? Can he harness her inexhaustible energies to perform all their functions at his bidding, more still—can he so refine his means of control as to put them in operation simply by the force of his will?

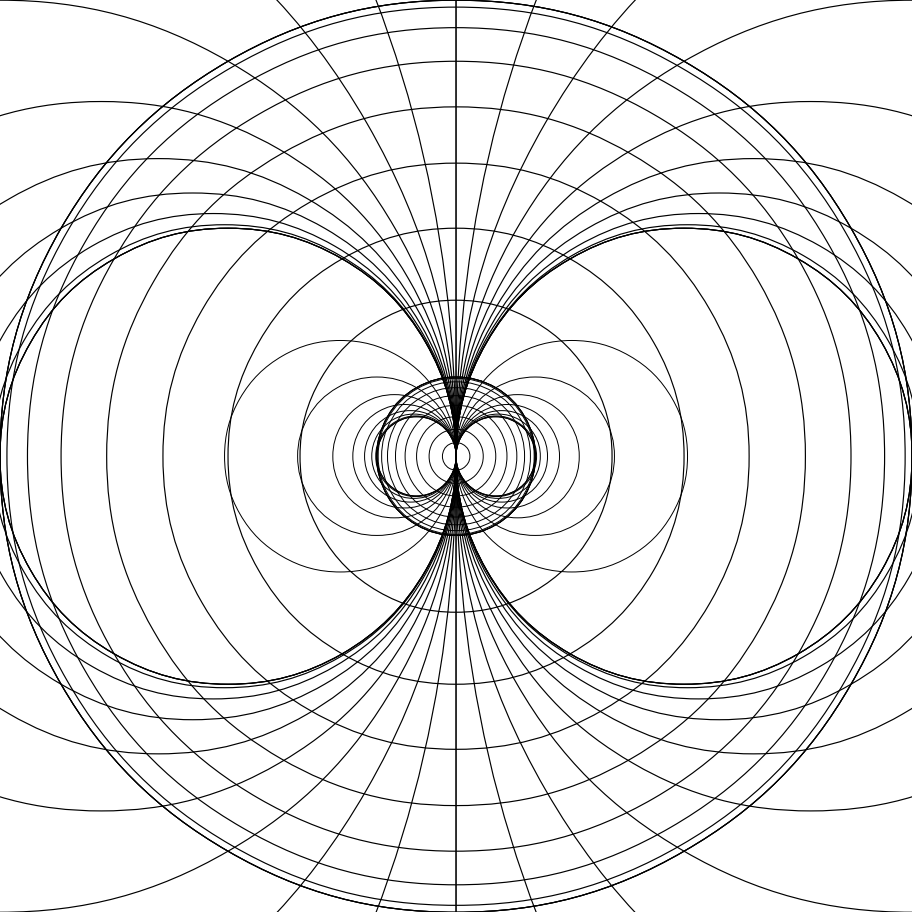
If he could do this he would have powers almost unlimited and supernatural. At his command, with but a slight effort on his part, old worlds would disappear and new ones of his planning would spring into being.

He could fix, solidify and preserve the ethereal shapes of his imagining, the fleeting visions of his dreams. He could express all the creations of his mind, on any scale, in forms concrete and imperishable.

He could alter the size of this planet, control its seasons, guide it along any path he might choose through the depths of the Universe.

He could make planets collide and produce his suns and stars, his heat and light. He could originate and develop life in all its infinite forms.

To create and to annihilate material substance, cause it to aggregate in forms according to his desire, would be the supreme manifestation of the power of Man's mind, his most complete triumph over the physical world, his crowning achievement which would place him beside his Creator and fulfill his ultimate destiny.



Universe

Universe is a computer.

Computer is capable of symbolic computation.

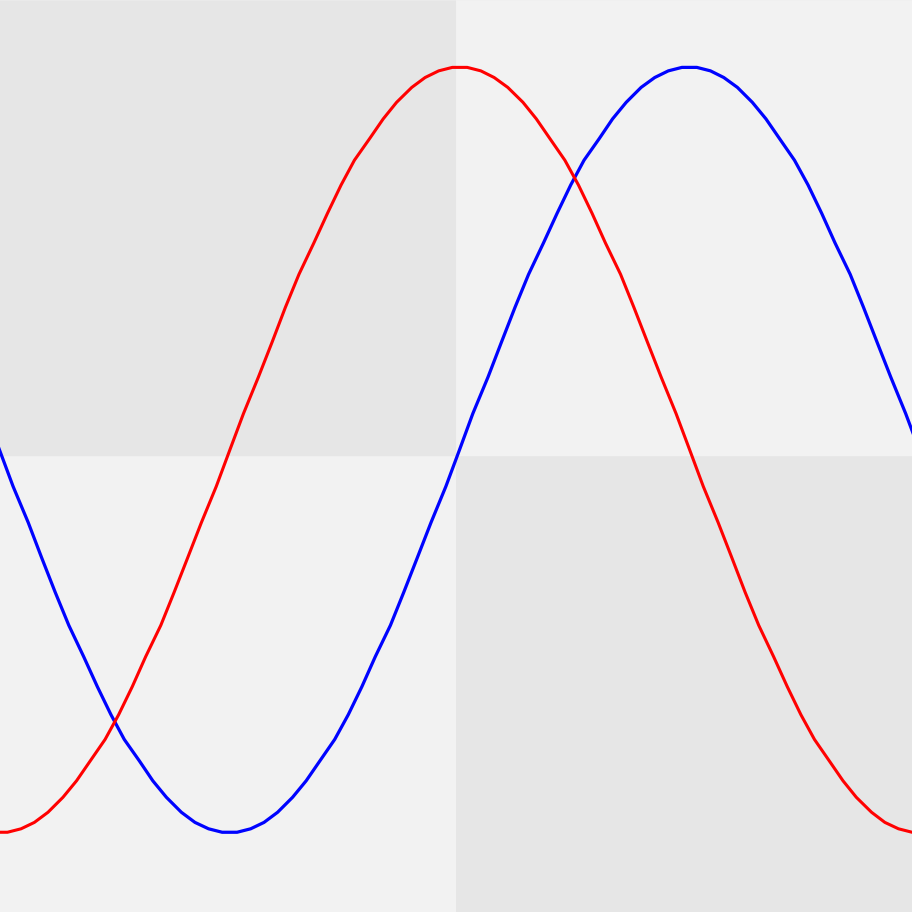
Algebra is a kind of symbolic computation.

Universe is a computation process, trying to find a paradox in a hypothesis.

Universe = Hardware + Software.

The computation process of finding this paradox is determining bits of the state of the universe, thus reducing nondeterminism.

When all the bits of state are determined, the



paradox is found and the universe ends.

It can then be re-run in a bigger machine, to re-test the hypothesis in “bigger” environment.

Frequency is fundamental property of the universe.

Mathematics = Logic * Heuristics

Information = Σ Time

Energy = Σ Information

Mass = Σ Energy

Physics is based on rational numbers. Real numbers are just an idea.

Number of possible states of the universe is finite – a natural number

Force is initiated by *will*.

0

0 <

1 = ○ = life

0 < 1 <

2 = □ = machine

0 < 1 < 2 <

3 = △ = idea

Formal Universe

$U = (q, N, f(q))$; universe with quantum time steps
i.e. "clock ticks"

N : finite set of objects (states of the universe)

f : transition function

q is "state of the universe"

q is element of N

N maps nicely to $\{1, 2, 3 \dots |N| \}$

function is a computation

"time" advances, as function is being computed and state changed.

Universe is a Turing Machine.

Machine

Turning mathematics into universe as a computer simulation, testing for “how long” a certain universe can exist. [see Matrix]

Universe can be represented as a natural number (a.k.a. cosmic configuration). This number has effect on decision making. If right decisions are taken, the universe evolves.

See cellular automata [Wolfram].

Hardware is physics (real, analog)
Software is ideas (imaginary, digital)

Natural number \rightarrow product of primes (with exponents) \rightarrow resonating frequencies (primes without exponents)

Truth

Truth is subjective;

It is what someone is willing to bet his life on.

Reduction of entropy

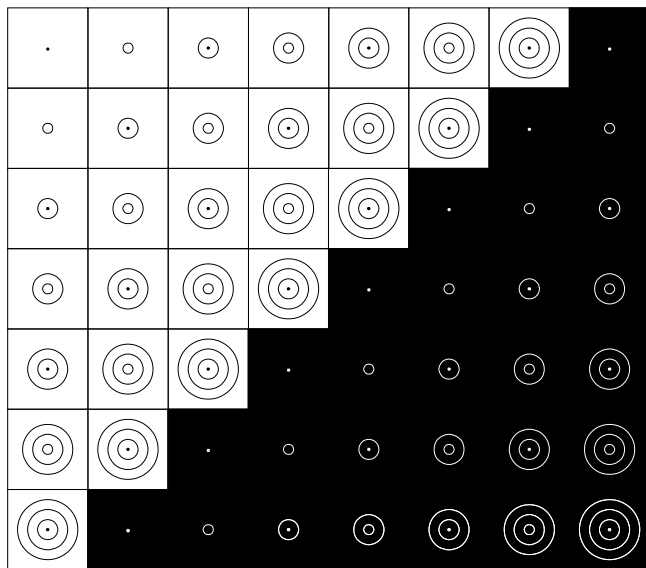
Time

There is no universal time, but time is relative to scale and or frequency. Time advances at that scale when information is produced.

Computing big prime numbers is expensive.

Energy \rightarrow Computation \rightarrow Action \rightarrow Change in balance \rightarrow Optimize to conserve energy

There is no past or future, there is just a state of “now”.



Ether

Ether is a *projective space* of quaternions (x,y,z,t).
Being a projective space, it has no distance, but it preserves geometric ratios. [see Rational Numbers]

Universe at a specific point in time t is a sum of electromagnetic oscillations of ether at various frequencies:

$$U(t) = \sum \cos(p_i * t)$$

where p_i is i -th prime number;

Life

Life is cycles.

Life is having a will to exist.

Free will is choosing one bit: {"stop", "continue"}

Idea exists, when someone believes in it.

Live machine is more than a composite of its' parts;
It is parts + one bit of free will

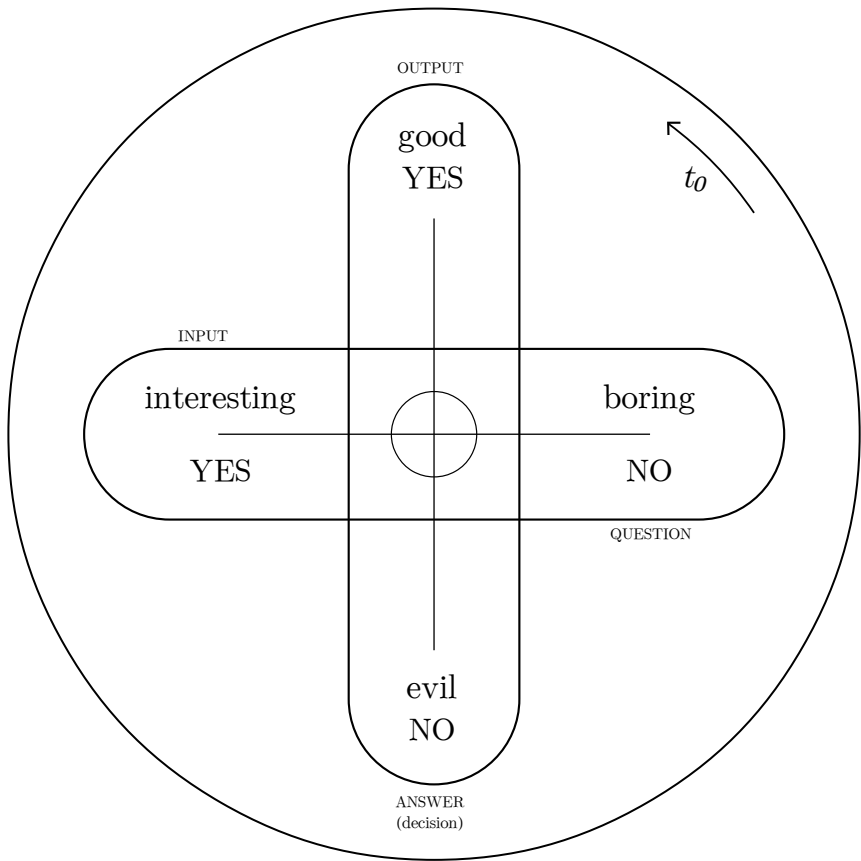
$$M=1+ \Sigma p$$

3 Life-giving creative force (computation)

Decision is a result of a computation. It is measured in bits.

A computer can be imagined (by another computer perhaps) as a natural number, which itself is made of smaller parts, primes.

Time advances, when a decision is taken and information is generated. It can be stored as files on disks, DNA, molecular configurations, etc. on a physical machine, possibly with some kind of “memory”.



Making a decision requires energy. Sometimes lot of energy. Thus information is highly concentrated energy, which can be unleashed with appropriate apparatus.

Time advances as cycles are being computed, on a quantum computer(s), of different sizes running at different frequencies.

Information is a result of a computation by some apparatus of some scale (civilization, animal, plant, computer, cell, etc..), for example finding if particular number is prime.

It could also be viewed as finding a solution to an optimization problem of expending as little “energy” as possible to sustain oneself.

Related terms: design, art, inspiration, intuition,
heuristics

kontinuitet

\mathbb{R}

“physics + food”



“force”



“hunger”

awake

asleep

ANALOG

DIGITAL

kontinuum

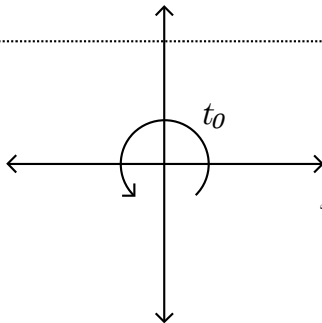
\mathbb{N}

“finite space”

diskontinuum

\mathbb{Q}

“discrete electro-magnetic spectrum”



“sleepiness”

“will”

diskontinuitet

\mathbb{I}

“deep sleep”



← entropy

$$I=\int\limits_{-\pi}^{\pi}U(t)dt$$

$$t \leftarrow \qquad t + dt$$

$$\text{Physics} = \text{Energy} + \text{Frequency} + \text{Geometry}$$

Matter

$$E = mc^2$$

Time → information (bits, ideas, big numbers) →
energy → light → matter

Death

When someone dies, for how long do you keep backing up their files?

.

Program Loops

Imagine a computer program with no input; initial state can be pre-packaged. When the program is run, several things can happen:

Program ends by choosing so itself after a while. [see finite decimal fractions like $1/2, 1/4, \dots$]

Program runs forever in cycles of some length. [see repeated decimal fractions like $1/3, 1/9, \dots$]

Program discovers paradox - crashes, like when running out of memory. [see imaginary numbers like $\sqrt{-1}$, $\log(-1)$]

~~Program runs forever changes internal state in ever-changing sequence.~~ [see irrationals $\sqrt{2}$, e , π]

Relativistic Ether

Particular frequency F has a corresponding wavelength λ when propagating through ether at the constant speed of light c .

$$\lambda = c t_0 = c / F$$

λ corresponds to apparent geometrical “size” or “scale” in perceived 3D space.

$$\lambda F = c$$

Time is relativistically bound to frequency. At constant λ (geometrical size)

$$t_0 F = 1$$

It follows, that if we increase F , we have to reduce t_0 to keep the same geometrical scale.

Perceptive Phenomena

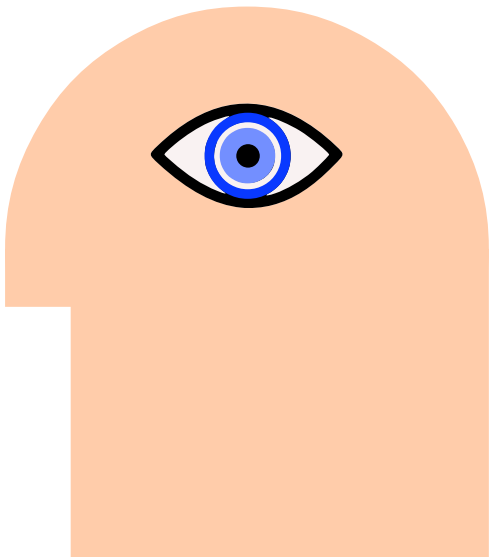
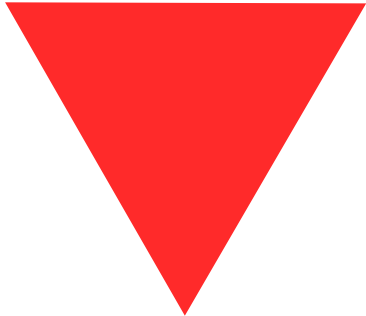
Time and energy are illusions. So-called time moves forward in many contexts simultaneously, at different frequencies.

What we perceive as physical 3D space is a projection of the vibration of 4D ether at various frequencies in our perceptive time-space. This includes light, heat, sound.

History repeats itself.
Different events repeat at different rate.

Imagine a clock, which calculates exact time from geographic coordinates. If you take it on a plane,

time will appear to run at weird perceived speeds, at least according to the clock.



Resonance

Energy moves/is conserved when changing frequency, because of things like:

$$\sin(2t) = 2\sin(t)\cos(t)$$

also,

$$\int \cos(a t) dt = 1/a \sin(a t)$$

Aliasing in computer graphics due to sampling (analog to digital conversion) is also a form of resonance.

By increasing frequency, observable amplitude is

decreased, while keeping same power. (check ?)

Structured number theory: Finite size formal system
“algebra” for representing numbers as trees of
primes. [see Surreal Numbers]

Natural numbers are compositions of prime
numbers.

Natural numbers are software.

Information

A bit is a quantum of time.

$$"[bit]" = 1$$

Universes can contain other universes.

Prime numbers are blueprints for cosmic machines.

Economies

Time is money, but money is not time.

Particles

Each particle is itself a universe.

particle configuration

$$q = (x:y:z:t)$$

(x,y,z) - position of a particle in universe

t - time in particle local time

$$E = q^2$$

$$|E| = |q^2|$$

$$E = t^2 \text{ (for a static particle)}$$

$$VF = c$$

0 addition unit

$$0 + x = x = x + 0$$

$$0 = 1 / \infty$$

$$0 = x + -x$$

1 multiplication unit

$$1 * x = x = x * 1$$

$$1 = x^0$$

$$\sin(t)^2 + \cos(t)^2 = 1$$

$$x = 1 * x + 0 = x^0 * x^1 + 0$$

π trigonometric unit

$$\cos(t+\pi) = -\cos(t)$$

Sine and cosine are a lot like *yes* and *no*.
see Boolean algebra.

i imaginary unit

$$i * i = i^2 = -1$$

$$\sqrt{i} = (1+i) / \sqrt{2}$$

$$1 + i = (2i)^{(1/2)}$$

$$ijk = -1$$

e logarithmic unit

$$\int e^t \, dt = e^t$$

$$e^{R + i \sin(t)} = e^R (\cos(t) + i \sin(t))$$

$$e^{i\pi} + 1 = 0$$

Φ golden ratio

$$a : b = b : (a + b) = \Phi$$

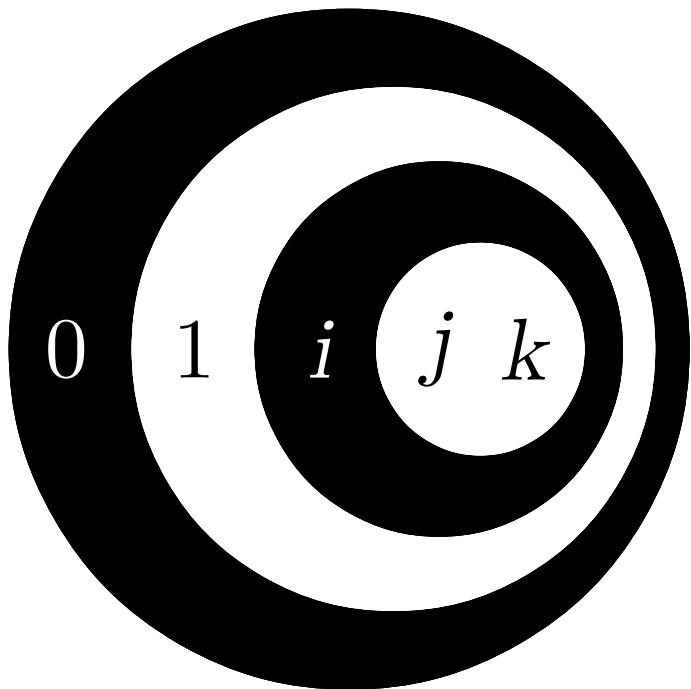
$$\Phi = 1.6180339887\dots$$

$$a * (a + b) = b * b$$

$$2 * \Phi = 1 + \sqrt{5}$$

$$\Phi + 1 = \Phi^2$$

Machines



N₁₅

$$0 = (0)$$

$$1 = (1+0)$$

$$2 = 1+1 = 1*2$$

$$3 = 1+2 = 1*3 = 1+(1+1)$$

$$4 = 1+3 = 2+2 = 2*2 = 2^2$$

$$5 = 1+4 = 1*5 = 1+2^2$$

$$6 = 1+5 = 2*3 = 1+(1+2^2)$$

$$7 = 1+6 = 3+4 = 1*7 = 1+(2+(2*2))$$

$$8 = 1+7 = 4+4 = 2*4 = 2^3$$

$$9 = 1+8 = 3*3$$

$$10 = 1+9 = 2*5$$

$$11 = 1+10$$

$$12 = 3*4 = 3*(2^2)$$

$$13 = 1+12$$

$$14 = 2*7 = 2*(3+2*2) = 2*(3+(2+2))$$

$$15 = 3*5$$

$\mathbb{Q}(-1)$ pre algebra

["notation"; "paradoxes"; "hypotheses"]

[.,0,=,{},<];["alphabet"]

. < 0 ; ["algebra"]

0 = () ; ["paradox"]

() = 1 ; ["existence"]

() = ({}, {})

. = 0 = ()

0 = 1



Q(0) void

["start","algebra"]

({},end)

Paradox: end is not in {}

Q(1) constants

$["truths"; "axioms"; "believing"]$

$A = \{ "cancel" \}$

$(\{1\}, 1)$

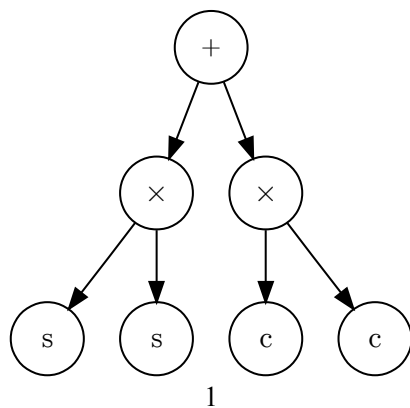
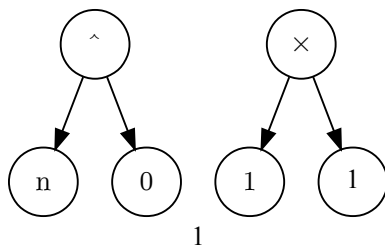
$(\{q\}, q)$

$(\{x\}, x) \Rightarrow x ; ["simplification"; "end"; "death"]$

$(\{ "now" \}, "now") = "now"$

Principle: "Paradox powers the oscillator"

Paradox is an oscillator with infinite frequency.



Q(2) oscillator

["running program";"life";"time";"natural numbers";"energy";"result"]

Octave

$N = \{\text{"true"}, \text{"false"}\}$

Principle: "you want to live, but your environment want you to die"

$(N, q+1 \bmod \text{abs}(N))$; ["counter"]

$(\{\text{true}, \text{false}\}, \text{not } q)$

$(\{1, 0\}, 1-q)$; ["cosine";"inverter";"clock";"diode"]

$(\{-1, 1\}, -q)$; ["binary logic";"not";"digital"]

$$(\{\cos(q), \sin(q)\}, \sqrt{1 - \sin(q)^2}) ; \sin(q)^2 + \cos(q)^2 = 1^2$$

$$(\{\cos(q), \sin(q)\}, T(q))$$

T is any function which inverts the selection q.

T can be analog or digital computer program which takes some deterministic steps to compute the result.

$\{1, i\}$; bases for complex numbers

$\{\text{rational, transcendental}\}$

$\{\text{real, imaginary}\}$

$\{\text{"question", "answer"}\}$

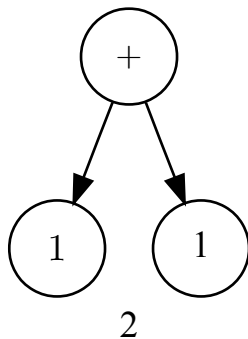
$\{\text{"inside", "outside"}\}$

$\{\text{"yin", "yang"}\}$

$\{0, \text{"infinity"}\}$

$\{\text{"+", "-"}\}$; electric charge in atoms

{"digital","analog"}
{"past","future"}
{"electric","magnetic"}
{relation,inverse relation}



Q(3) relation

$$3 = 1 + 2 = 1 * 3$$

{"philosophy";"science";"art";"religion";"theory"}

fifth (music)

transistor

{-1,0,1}

{n,1,1/n} ; "resonance"

{0,1,i}

{0,1,2} ; "phasor", "sawtooth"

{a,b,a+b}

{"red","green","blue"}

["begin",{ "no","yes","maybe"},"end"]

{"past","now","future"}

{"no","yes","cancel"}

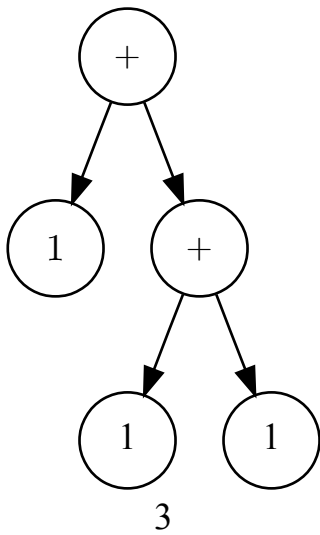
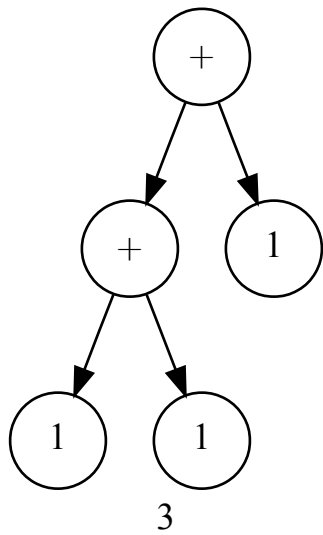
{"left","right","forward"}

um = duh + razum (Kosovel)

guest + host = ghost (Duchamp)

philosophy = science + religion

science \neq religion



U(4) memory

memory, existence, believing

$O = "+"$

$4 = 2 + 2 = 2 * 2 = 2 ^ 2$

$\{1,-1,i,-i\} = \{1,-1\}*\{1,i\}$

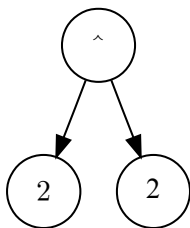
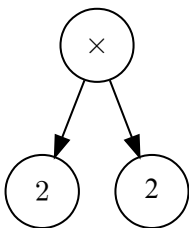
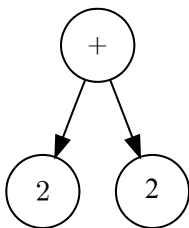
$\{1,i,j,k\}$; quaternions

$\{\text{"return(true)"}, \text{"return(false)"}, \text{"fork()"}, \text{"abort()"}\}$

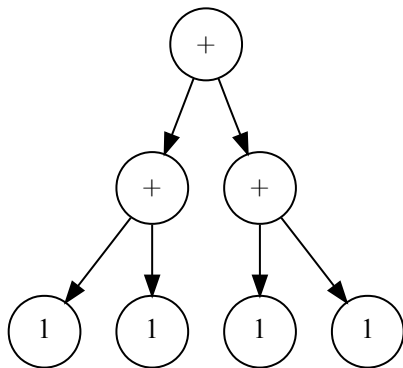
$\{\text{"yes"}, \text{"no"}, \text{"maybe"}, \text{"cancel"}\}$

$\{\text{"yes"}, \text{"no"}, \text{"don't know"}, \text{"pointless question"}\}$

$\{ "+", " * ", " ^ "\}$



4



4

U(5) resonance

major third (music, $F * 5/4$)

$$5 = 1 + 4 = 1 * 5$$

$$\{0, 1, -1, i, -i\}$$

$$[1, 0, i, 0, -1, 0, -i, 0]$$

golden ratio phi

$$1:\text{phi} = \text{phi}:1-\text{phi} ; \text{"resonance"}$$

Higher levels

U6 "tesla coil"

$$6 = 1 + 5 = 2 * 3$$

U7

$$7 = 4 + 3 = 2 * 2 + 3$$

U8

$$8 = 2 * 2 * 2 = 5 + 3 = 2 * 3 + 2$$

U9

$$9 = 3 * 3$$

U10

$$10 = 2 * 5$$

U11

$$11=1+2+3+5$$

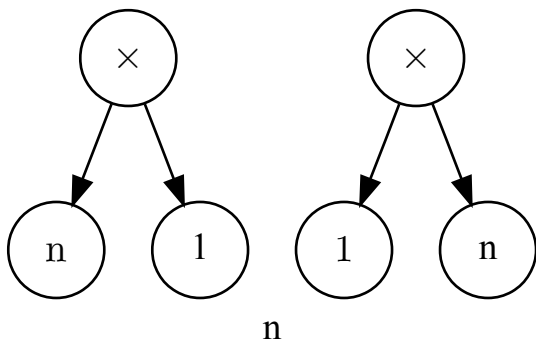
$$1+2+3/2+5/4 \text{ [C Major chord (c:e:g:c1)]}$$

U16

$$16 = 2^4 = 2^{(2^2)}$$

U17

Number of elementary particles in standard model



Noise

Suita

0. aplikacija

I. preluda

II. invencija

III. interluda

IIII. fuga

V. coda

...novo sonce...

Gesamtkraftwerkprinzip

...golobi...

HoTT topics

Truth

Type theory

Topology

Projective Geometry

Induction

Equivalence

Ontology

Classics

Truth

Geometry

Counting

Logic

Numerology

Trigonometry

Algebra

Calculus

Two universes communicating



