# Low Frequency Tuning

resonant intrusive intuitive fantasy

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## **Structure**

 $\forall = relative + rational - e$ 

## Tesla Dynamic Theory of Gravity

T.

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]

#### 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 od 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 =  $\Sigma$  Time Energy =  $\Sigma$  Information Mass =  $\Sigma$  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.

$$\begin{array}{cc} & 0 \\ 0 < & 1 = \bigcirc = \text{life} \\ 0 < 1 < & 2 = \square = \text{machine} \\ 0 < 1 < 2 < & 3 = \triangle = \text{idea} \end{array}$$

#### 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  $\{1,2,3...|N|\}$ 

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".

Time is money, but money is not time.

#### Ether

Ether is a *projective space* of quaternions (x,y,z,t). Beeing 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 oscilations of ether at various frequencies:

$$\mathrm{U}(\mathit{t}) {=} \Sigma \cos(p_{i} * \mathit{t})$$

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.

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. Other terms could be design, art, inspiration, intution, act of god, etc... It could also be viewed as finding a solution to an optimization problem of expending as little "energy" as possible to sustain oneself.

Time advances as cycles are beeing computed, on a

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

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

$$t \leftarrow t + dt$$

Physics = Energy + Frequency + Geometry

#### Matter

$$E = mc^2$$

Time  $\rightarrow$  information (bits, ideas, big numbers)  $\rightarrow$  energy  $\rightarrow$  light  $\rightarrow$  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,...]

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

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,  $\pi$ ]

#### Relativistic Ether

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

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

 $\lambda$  corresponds to apparent geometrical "size" or "scale" in percepted 3D space.

$$\lambda F = c$$

Time is relativistically bound to frequency. At constant  $\lambda$  (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 percieve 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 frequence, 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.

A bit is a quantum of time. ''[bit]'' = 1

Universes can contain other universes.

Prime numbers are blueprints for cosmic machines.

#### **Particles**

Each particle is itself a universe.

 $\begin{array}{l} particle\ configuation\\ q=(x:y:z:t)\\ (x,y,z)\ \text{-}\ position\ of\ a\ particle\ in\ universe\\ t\ \text{-}\ time\ in\ particle\ local\ time } \end{array}$ 

$$\begin{array}{l} E=q^2\\ |E\mid=|q^2| \end{array}$$

 $E = t^2$  (for a static particle)

$$VF = c$$

## 0 addition unit

$$0 + x = x = x + 0$$
$$0 = 1 / \infty$$
$$0 = x + -x$$

## 1 multiplication unit

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

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

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

## $\pi$ trigonometric unit

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

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

## *i* imaginary unit

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

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

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

$$ij k = -1$$

## e logarithmic unit

$$\int e^{t} dt = e^{t}$$

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

$$e^{t} (i^{*} \pi) + 1 = 0$$

## $\Phi$ golden ratio

a: b = b: (a + b) = 
$$\Phi$$
  
 $\Phi$  = 1.6180339887...  
a\*(a + b) = b\* b  

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

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

# **Machines**

#### $N_{15}$

```
0 = (0)
1 = (1+0)
2 = 1 + 1 = 1 \cdot 2
3 = 1 + 2 = 1*3 = 1 + (1+1)
4 = 1 + 3 = 2 + 2 = 2 \cdot 2 = 2 \cdot 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 \cdot 4 = 2 \cdot 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
```

## Q(-1) pra algebra

```
["notation"; "paradoxes"; "hypotheses"]
[.,0,=,{},<]; ["alphabet"]
. < 0; ["algebra"]
0 = (); ["paradox"]
() = 1; ["existance"]
() = ({},{})
. = 0 = ()
0 = 1
```

## Q(0) void

```
["start","algebra"]
({},end)
Paradox: end is not in {}
```

## Q(1) constants

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 = {"true", "false"}
Principle: "you want to live, but your environment
want you to die"
(N,q+1 \mod abs(N)); ["counter"]
({true,false},not q)
(\{1,0\},1-q); ["cosine";"inverter";"clock";"diode"]
(\{-1,1\},-q); ["binary logic";"not";"digital"]
((\cos(q),\sin(q)), \sin(q)^2, \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

```
{rational, transcendent}

{real, imaginary}

{"question", "answer"}

{"inside", "outside"}

{"yin", "yang"}

{0, "infinity"}

{"+","-"}; 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)
```

 $\begin{array}{l} {\rm guest+host=ghost\,(Duchamp)} \\ {\rm philosophy=science+religion} \\ {\rm science}\neq {\rm religion} \end{array}$ 

## U(4) memory

## U(5) resonance

```
\begin{aligned} & \text{major third (music, F * 5/4)} \\ & 5 = 1 + 4 = 1 * 5 \\ & \{0,1,-1,i,-i\} \\ & [1,0,i,0,-1,0,-i,0] \\ & \text{golden ratio phi} \\ & 1\text{:phi = phi:1-phi ; "resonance"} \end{aligned}
```

## 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 [C Major chord (c:e:g:c1)]

 $\begin{array}{c} U16 \\ 16 = 2^4 = 2^(2^2) \end{array}$ 

U17 Number of elementary particles in standard model

# Noise

### Suita

0. aplikacija I. preluda II. invencija III. interluda IIII. fuga V. coda

#### Tracks

 $\dots$ novo sonce... Gesamtkraftwerkprinzip $\dots$ golobi...

## **HoTT** topics

Truth

Type theory

Topology

Projective Geometry

Induction

Equivalence

Ontology

#### Classics

Truth

Geometry

Counting

Logic

Numerology

Trigonometry

Algebra

Calculus

## $Two\ universes\ communicating$