Why is The Law?

Andrej Rehak

On solely mathematical principle 1 establishes the universally valid system.

Its simplicity shows that local constants in contemporary physics are, like the epicycles in Ptolemy’s model of the universe, paradigmatic obstacles on 1’s way of understanding the mathematical truth and fundamental simplicity of 1’s world. 1 shows that all universal equations of motion can be derived from, and therefore are deducible to the fundamental description of equity; 1=1

1 decodes a symphony of harmonic ratios composing nature.

Let 1 create the world.

Before start, few crucial premises are to be considered. 1’s world should be self-organised, self-sufficient and self-sustainable. In other words, 1’s world is not going to have something or someone pulling its strings. 1’s world should be infinitely dynamic, which is the postulate for its everlasting and ever spreading nature. To prevent its collapse, its dynamics should be infinitely precisely tuned. Therefore, 1’s world is going to be infinite. It should be consistent, so it should be built upon The Law. Independent of scale, its Law should be infinitely true. Since the truth implies and is never contradictory, The Law of 1’s world shouldn’t be local but it should apply to all other worlds of 1. Let 1 create the world which is the tautology, valid always and everywhere. Let 1 create the world which can be drawn on a sand for and from all other 1s.

How can any1 or anything create infinity or anything which infinitely applies to infinities? If computer is given a task to render a single facing mirrors image, regardless of its processor power, without restriction of reflections, it would take infinity of time to render it. The smallest and the biggest number cannot be reached so the calculation of infinities can never end. However, two facing mirrors, without any “processor power”, reflects infinities instantaneously. Hence, 1 puts computers or any machine on a side and relies on 1’s ability to grasp the ideas, to conclude, to reflect the infinities, to relate and think. 1 draws circles on sand.

1 argues that the process of imagining, thinking and creating is neither the process of calculating and executing commands, nor the process run by machines, but the process of reflecting and therefore being. Hence, 1’s infinite world of infinite truth is not going to be created. Its world will be reflected. 1 reflects it through the infinitely valid principles of mathematics and geometry.

1 observes. The observation is reflected in questioning, questioning is reflected in relating, relating is reflected in formulating, formulating is reflected in answering, answering is reflected in knowing, and knowing is reflected in understanding the observed.

Since all observed physical entities constantly tend to equilibrium, 1 asks; what principle is responsible for the persistency of spectra of 1’s physical world? Where does that constant tension come from? How come that all infinite wavelengths from which everything in it is composed, do not blend in a single mean wave, infinitely uniform through whole space-time of 1’s universe. 1 understands only the relations 1 can draw. How come that infinitely distinguished 1 exists at all? What is the equilibrium, and how come that the shape of the infinite entropy, which is the measure of “disorder”, is the perfect sphere? Why everything in nature tends to orbit, revolve and evolve? Is the meaning of the universal tendency towards chaos in fact the universal tendency towards perfection? Is this unreachable goal the secret of
infinite dynamics of its perpetual lasting and spreading? Is it the reason why nature tends to form spheres?

Somehow, this law of thermodynamics corresponds to the directed nature of the arrow of time. How is this dynamics reflected in the nature of space? Is there anything one can imagine or describe without some kind of space-time relation and is there a way to express space or time separately without relation to any kind of velocity? Can space, time and the emerging world be drawn on sand?

1 imagines the relation in which the consequence of a tendency to its equilibrium is the constant and spontaneous formation of a sphere. Two infinite polarities emerge. 1 imagines the world among polarities of infinitely strait and infinitely curved...

For the fundamental depiction of the infinite strait, the shape of an infinite line is imposed. For all of its points it is worth that they share the same zero curvature and the same infinite distance from its beginning and its end. If mentioned zero curvature changes for any infinitely small value equally spread among its points, the geometry of the observed infinite line forms a circle of expressible radius \( r \). When this line is infinitely curved, all of its infinite dots are coiled in to a single infinitely dense point, consisted of all the points composing line. 1 notices that the infinities of both polarities are the same. However, point and line are not equal. To write the symbol of equity, 1 requires their relation.

From the tension among described polarities, the geometry of spiral emerges. Each of its orbits forms a circle. The line is constantly winding up around the point, so they both grow. Since the velocity of that winding increase towards centre, each orbit of the described process measure constant acceleration. Being infinite, the line never ceases to be the line, the point never ceases to be the point the orbit never ceases to be the orbit and the constant acceleration never ceases to be the constant acceleration.

For circle and a sphere applies that all their points sharing the same radius lie at equal curvature and are equally distanced from their centre. Hence, the curvature zero of a straight line, changed for any amount, if equally spread among points, forms a circle. All their points share the same infinite distance from their beginning and their end. Hence, all the points share the same curvature spectra of their world. For each arbitrary radius applies that smaller radiuses tend to 1’s zero and bigger to 1’s infinity. Thereby, those tending to zero tend to form what 1 from its orbit perceives as a point, and segments of those tending to infinity tend to form what 1 perceives as a straight line. Since the infinity of points composing circles of any radius is the same, their densities towards radius zero and infinity respectively increase and decrease towards infinity.

Everything perceivable in 1’s world happens between its tangent zero and tangent infinity.

1 draws the idea of an infinite small point through which the idea of an infinite strait line is passing through. At any radius around that point, 1 draws a circle. 1 establishes the unit of 1, equally valid in all directions from its chosen centre zero. Using fundamental shapes of geometry, reflecting the ideas of zero and infinity, through their equilibrium, 1 establishes the relation with its referent orbit 1.

In 1, the infinities of its inner and outer radius meet. At that focal point in which all scalar operations are mirrored, any root or any exponent of 1 leave 1 unchanged. The roots of all numbers between 1 and zero are bigger and their squares smaller while for the numbers between 1 and infinity applies the opposite. Any number between zero and one, multiplied by its mirror projection is 1. Hence the product of their infinite mirrored sets is 1. Therefore, 1 defines the incalculable truth of 1 (1.01);

\[
I = 0 \infty
\]

From there, one reflects (1.02):

\[
I = 1
\]

Written 1 can be anything consisting everything. Above equity doesn't say that 1 equals some other 1. It says that 1 is equal to itself, infinitely unique and precise 1 consisted in and consisted of its infinitely unique infinities. Presented reflection is the tautology valid in all scenarios, it is implicit and therefore free...
of anomalies. It is the fundamental description for the symbol of equity (=). Hence, if not deducible to written reflection, it is not worth (≠). It is the truth and its proof as such.

1 is the whole number, so contrary to the ideas of zero and infinity, √2 and π, 1 appears real, reachable and finite. Hence, if 1 would be its sum with any finite unimaginably small number, fundamental trinity of 1 would not apply (1.03);

\[ n \neq 0 \Rightarrow 1 + n \neq \frac{1}{1 + n} \]

So as zero, infinity, √2 and π, 1 is the idea of unreachable, infinitely precise 1. Each infinitely unique 1 expresses its unique √2, π, zero and infinity.

Accelerating time, time tends to zero, accelerating velocity, velocity tends to infinity. Hence, in equity (1.01), zero is in place of time, infinity is in place of velocity and 1 is in place of space. 1 is the constant measure of constantly perceived change in comparison to constantly measured speed. 1 is the constant unit of its constant change.

From the universal law of 1 the law its world arise.

The equation for velocity \( v \) is the ratio of space \( s \) over time \( t \), whereby \( v \) and \( t \) are the coordinates of all infinite lines emerging from the unreachable idea of the centre of a sphere which radius can be anywhere between zero and infinity. Hence, for all times \( t \) and all spaces \( s \) it is valid (1.04);

\[ v = \frac{s}{t} \]

In the script of mathematics, excluding the nondescriptive mirroring statements such as (1.02)..., it is the first and the simplest relation. Regardless of the educational or experiential level, it is also probably the most known equation. However, despite the fact that it is presentable in geometry, intuitive, trivial and inherently linked to our everyday life, it is one of the most, if not the most abstract equation. In spite their well-known above displayed mathematical description, which tell us that space is propagation of velocity in time and that time is the duration of velocities propagation, the space-time variables and their ratio are the subject of everlasting debate. They cannot be deduced further, and none of them can be expressed without some relation to other two, yet none of them can be proven outside their circular tautology (1.04)... However, when space-time expression is unitised (1.05);

\[ I = \frac{I}{I} \]

It is worth (1.02).

In displayed relation (1.05), the position of seemingly identical units determines the nature of their relationship, i.e. the nature of their relationship determines their position. In fact, their position describes their nature.

Hence, in tautology (1.04) velocity is space above time, time is space over velocity and space is the product of velocity and time.

Respectively, in 1’s world, the velocity is treated as the ratio of space over time i.e. mathematical and geometrical that is natural and universal concept and not the local velocity of some particular, linearly observed, inert or non-inert entity framed by local theory of any kind.
For a system of a constant acceleration $a$, the velocity $v$, measured in time $t$ is expressed (1.06);

$$v = at$$  

Red from the above, in every unit of time $t$, acceleration $a$, is the constant expansion rate of velocity $v$. In $c/a$ referent units of time, by which acceleration $a$ and celeritas i.e. speed of light $c$ are measured, the value of the velocity $v$ reaches the speed of light $c$ (1.07);

$$v = \frac{a}{a} = c$$  

For the electromagnetic wave, the speed of light $c$ can be expressed as a product of its wavelength $\lambda$ and its frequency $f$ (1.08);

$$c = \lambda f$$  

Equalising relations (1.06, 07, 08) 1 writes (1.09);

$$\lambda f = at$$  

In a vt diagram, the value of time $t$, which in observed case amounts $c/a$ time units, on velocities coordinate is the value of acceleration units $a$ contained in reached velocity $c$ (Figure 1.01).

![Figure 1.01](image)

Since for each constantly accelerating system $a$ is measured constant, its amount is treated as the constant length of the wave $\lambda$ (m) whereby time $c/a$ stands up for its appearance in 1’s unit of time light trajectory, i.e. its frequency. Therefore, 1 writes (1.10);

$$c = af$$  

From the above, the frequency $f$ is expressed (1.11);

$$f = \frac{1}{da}$$  

where $d_a$ is the wave-time of wave $a$, i.e. time in which constant speed $c$ exceeds the space $a$. Consequently, 1 writes (1.12);

$$a = cd_a$$  

Considering its dynamic and directed nature, from written equation 1 reads that $a$ is the dilatation of $c$ while $d_a$ is the dilatation of orbital radius space-time units at which acceleration $a$ and speed $c$ are measured. Since $c$, $a$ and $d_a$ are for the observed orbit measured constant, and having in mind that acceleration is the constant expansion rate of velocity $v$ (1.06), 1 goes back to the equation (1.07) and
writes the expression for its very next unit of time by which speed of light and acceleration are measured. In that case, for the velocity value applies (1.13);

\[ v = c + a \]  

1.13

Its ratio with constantly measured speed of light \( c \) equals to (1.14);

\[ \frac{c + a}{c} = 1 + \frac{a}{c} \]  

1.14

As a consequence of expanding velocity, from presented equation 1 reads that each unit of space (conventionally 1 metre) contained in light time unit trajectory (conventionally 1 second) expanded for the dilatation amount \( d_a \) (Figure 1.02).

\[ \text{Figure 1.02} \]

In fiure above1 notices the emerging pattern of symetry. Due to the same mechanism, depending of their wavelengths, all other self simmilar patterns emerge.

Since \( d_a \) is the \( c \) time of flight on trajectory of its dilatation \( a \), the unit of time (1 second) expanded for the same amount. Described principle is reflected in implicit results of Pound-Rebka\(^1\) and OPERA experiment\(^ii\). Hence, contrary to the relativistic concept of their inverse proportionality and implicit misunderstanding and disunity of light speed and gravity, for the same amount dilated units of space and time measure the constant speed of light. Unitising the variables \( c, a \) and \( d_a \) 1 reflects (1.15);

\[ I = \frac{1 + n}{1 + n} = \frac{n}{n} \]  

1.15

Since \( n \) in the above relation can be any uamber in a set from zero to infinity, for all space-time scales of mentioned set applies that their ratio i.e. speed, remains constant. In the system of constant acceleration, in its dynamic now and here, in its infinitely precise and unreachable 1 in which all space-time scalar operations are unchanged and their mathematical rules mirrored, 1 perceives the linear flow of time and the linear spreading of space. The frequency of its dilatation is manifested as the tendency of all universal entities to follow their natural state that is free fall (1.16);

\[ \frac{c}{d_a} \Rightarrow \frac{m}{s^2} \]  

1.16

Like the constantly measured universal ratios \( \sqrt{2} \) and \( \pi \), the speed of light is the infinite universal ratio of space over time that is the expansion of its velocity and the duration of that dilatation. So as time and space, the speed of light is the dynamic, infinitely precise natural constant 1 through which and by which infinities are measured.
Hence, perceived from any expanding 1, the speed systems towards zero and infinity are curved in a way creating perception of "mass" (curvature towards zero, time over space) and "space" (curvature towards infinity, space over time) (Figure 1.03).

Since for the unitised system it is worth (1.17);

\[
\frac{1}{nt} na = \frac{1}{nt} nt = 1
\]  

1.17

for each arbitrary 1 in the presented, scale independent, diagram applies that if moving at constant speed or constantly accelerating, the path travelled that is respectively displayed as the vt squares and triangles area, for all its vt orbits remains constant (Figure 1.03).

The implication is the constant dynamic state of equilibrium among infinite tensions of infinite scale of frequencies. Those frequencies are governed by the same scalar law manifested through all scales of infinity and perceived from referent speed that is infinitely dynamic and constantly measured 1.

When referent radius \( r \) is not equilised with referent velocity \( c \), 1 writes (1.18);

\[
ra = cg
\]  

1.18

where gravity \( g \) is the geometric mean of acceleration \( a \) measured at the surface of the observed radius \( r \) and its value \( a \) at one light time unit radius orbit (since 1 requires mean light speed dilatation in time unit by which that velocity \( c \) is expressed) (1.19);

\[
g = \sqrt{aa_c}
\]  

1.19

1 sees that unlike acceleration \( a \), the value of gravity \( g \) decreases linearly with the distance from its space-time vortex centre, which is reflected in Pioneer's 10"anomalous" route shortage accumulation data diagram.

1 writes (1.20);

\[
g = cd
\]  

1.20

Symmetrically to the equation (1.12), \( d \) in the above relation is the wave-time of the wavelength \( g \). It is the gravitational dilatation of the observed entity of radius \( r \), equivalent to the amount of time change calculated by Schwarzschild’s formula for gravitational time dilation \( \tau \) wherein \( r \) is the Schwarzschild’s radius derived from Newton’s equation for the escape velocity, equalized with the speed of light (1.21);
\[
r_s = \frac{2GM}{c^2} \implies t_d = \frac{1}{\sqrt{1 - \frac{r_s}{c^2}}} = \frac{c + g}{c} \implies t_d - 1 = d
\]

Contrary to conventional time unit change, Schwarzschild’s \( t_d \) is the unit of change as such. Moreover, this unit equals to the spectral shift value, calculated by Einstein’s General Relativity (1.22);

\[
\frac{MG}{rc^2} = d
\]

So it is worth (1.23);

\[
\frac{1}{\sqrt{1 - \frac{r_s}{c^2}}} = 1 + \frac{MG}{rc^2}
\]

Since the so called “universal constant of nature” \( G \) is unknown, all other variables in the above Newton’s, Schwarzschild’s and Einstein’s equations are not understood by no1. It also includes the variable \( r \) where its equivalence to velocity is not recognized. Mathematically they cannot be deduced to a statement \((1 = 1)\) and implicitly, they cannot be proven. Hence, such statements are theories and as such, regardless of their demonstrated finite precision (1.21, 22), irrelevant in proving theorems.

Considering its dynamic and directed nature, the relation (1.20) can be written (1.24);

\[
\vec{g} = c\vec{d}
\]

Translated to words, gravity \( \vec{g} \) is the vector product of vector of time \( \vec{d} \) and their scalar, speed of light \( c \). If scalar is positive, time direction change implies the direction change of its cross product – gravity and vice versa. Stated explains the immutability of the arrows of time and gravity.

Hence, free fall i.e. spreading and lasting is the natural state of all infinite 1’s consisted of, residing in, absorbing and reflecting infinities.

From the relation (1.18), follows that the orbital velocity is the mean velocity of the light speed of a system \( c \) and its mean expansion \( g \) (1.25). Symmetrically to equations (1.12, 20) it can be described as the light speed propagation in time \( \sqrt{d} \) (1.26);

\[
v_o = \sqrt{cg}
\]

\[
v_o = cv\sqrt{d}
\]

In that orbit, gravitational dilatation \( d \) and the dilatation as a consequence of velocity \( v_o \) are in vector equilibrium.

Following solely geometrical principles, from tautology (1.02), universal, scale independent equations of motion, free of unexplained constants and anomalies, are derived (Figure 1.04).
In a displayed diagram, constructed on a principle of squares and their diagonals, measured from each arbitrary 1, orbital velocity of each neighbouring orbit differs by a constant factor $\sqrt{2}$, whereby their angular velocities differ by a factor $\sqrt{2}$. Two motions arise: rotation around and attraction towards the infinite centre that is the idea of a systems space-time “zero”.

In presented unitised system, for each orbit $n$ measured from the referent radius $r$ (equivalent to referent velocity in a referent unit of time) and referent acceleration $a$, which at referent radius therefore equals to referent gravitation $g$ (1.27):

$$t = \frac{r}{c} = \frac{g}{a} = 1 \implies r = c \implies a = g$$

applies (1.28, 29, 30);

$$v_{no} = \frac{1}{\sqrt{n}}$$

$$g_n = \frac{1}{n}$$

$$a_n = \frac{1}{n^2}$$

Where $v_{no}$, $g_n$ and $a_n$ are orbital velocity, gravity and acceleration of any observed orbit $n$. For all orbits of a referent system 1, it is valid that in time $\sqrt{n}$, $n$ and $n^2$, respectively observed, orbital velocity exceeds, while gravity and acceleration reach the referent acceleration 1 of a system. Presented unitised principle in which $c=a$ and implicitly $d=1$ is therefore a system of a so called ”Black Hole”. Reflecting this geometrical principle in all scales of nature, for any orbit $n$ it is true (01.31, 32, 33);

$$v_{no} = r\frac{\sqrt{a}}{n}$$

$$g_n = \frac{ar}{n}$$

$$a_n = \frac{ar^2}{n^2}$$

Where $r$ and $a$ are the observed radius and its acceleration. For the entities which radius is observed larger than our referent speed of light, the relation (1.32) is multiplied by their difference ($r/c$) so $g_n$ is expressed (1.34);
1 concludes that the above points to the necessity of equalising the referent radius \( r \) with the referent speed \( c \) by their mutual time \( 1 (r/c \text{ seconds}) \). In that scenario, 1 mutual radius of 1’s sphere meets its measure of 1.

Constant acceleration presumes the existence of the infinite range of velocities whereby every wave, in its wave-time measures the same speed of light. As a consequence, the energies of all waves in their wave-times are equal. This principle is reflected in all laws of nature. For each wave, from 1’s perspective infinitely big or infinitely small, in duration and propagation, applies its infinitely precise unitised form \( 1=1/1 \). Since presented geometrical principle is therefore scale independent, for each arbitrary point on a described scale of infinity, applies the same universal law. For each arbitrary 1 applies \( 1=1 \). Therefore, each arbitrary 1 from its linearly perceived propagation and duration, constructs the space-time curvature equal to all curvatures perceived from all other arbitrary 1’s (infinitely dynamic nows and heres).

If Plank’s length is denoted as \( \ell_P \) and Plank’s time as \( t_P \), implicitly to all stated, 1 reflects (1.35);

\[
\frac{\lambda}{t_1} = \frac{a}{d_a} = \frac{g}{d} = \frac{\ell_P}{t_P} = c \Rightarrow 1 \frac{1}{1} = 1
\]

Despite the man-made presumptions, conventions and their lobbying, there are no mathematical arguments, i.e. the arguments of truth supporting the existing paradigm inertia of finite space-time divisions in nature. Plank’s space over Plank’s time measure the same speed of light. Hence the appearance of the universe and its law, perceived from Plank’s, or any other space-time dimension, i.e. system of speed, on a scale from zero to infinity, are self-similar to all others (spectrum of colours, spectrum of sound, spectrum of elements..., spectrum of life).

If the infinite precisely tuned law of all infinite orbits governed by their infinite ratios \( \sqrt{2} \) and \( \pi \) would be rounded up to any finite value, all infinite orbits of 1’s world would fall apart. There would be no universe and no mathematic, because there would be no 1 to reflect them.

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