On Some Properties of Physical Time and Space

Prof. Dr. Albert I. Veinik

Institute of Physics and Technics, Belarus Academy of Sciences 4 Jodinskaya str., Academy City, 220141, Minsk, Belarus

The Universe is Substantial Material

A new paradigm for theory is proposed. According to this paradigm, heterogeneous SIMPLE substances - chronal (Greek "chronos" - time), metrical (Greek "metron" - measure, size), rotational, vibrational, thermal, electrical, magnetic and others are initial elements of the Universe Temple. Each such sort of substance has its own specific properties and the substance passes these properties to the object if the object includes this substance. If the object does not have the substance, it doesn't have the properties, which correspond to this substance. Photons, for example, do not include an electrical substance (charge) so photons have no special electrical properties as it has no such sort of reaction.

More than 10 years were spent from 1950 to find a special thermal substance (or vermical in German die Warme means the heat) and to explain all thermal phenomena by means of this substance. The factual existence of special particles - "satlons» was proved by experiments [1, p.274].

It was discovered that all simple substances for the macro-world level have continuous properties; for micro-world level they are discrete, portion, or quantum; and at a more subtle level (in nano-world) the substance has force properties. The example is the so-called gravitational and electrostatic field (nanofield). Quantum (minimum portion) sizes of chronal, metrical, rotational and magnetic substances are unknown. The Plank constant can be considered as vibration substance quantum, and as electrical substance quantum we can consider the electron charge. Quantum of vermical substance (vermiant) was detected by many methods. Experiments into heat flow and electric current using the Franz-Videman law, give the result: 3.87×10^{-23} [J/K] [1, p.410; 2, p.177].

The so-called element particle is a group of simple substances, which interact in a SPECIFIC way (between quantums of the same name) and in a UNIVERSAL way (between quantums of the different names). In the electron, for example, universal interaction force between portions of the electrical and thermal substances is equal to 4×10^{-25} N [1, p.412; 3, p.352].

General Theory (GT)

Each simple substance is defined into four quantitative MEASURES: quantity and quality (structure) for substance, and quantity and quality (method) for behaviour (in the common sense) of substance. The substance is primary and its behaviour is secondary, so quantity of behaviour is a function of all quantities of the substance. The differential calculation for this function results in the equation for the first fundamental law, or principle of GT, which is a well-known energy conservation law [1,2,3,4].

In the same way equations are obtained mathematically for the other six principles of GT. This is a complete system of equations and these equations are essential and sufficient for the study of phenomenon at the elemental level. The role of quantity for the substance belongs to the thermodynamical factor of extensivity (extensor) or generalised charge (mass, quantity of thermal substance, electric charge and so on); the role of quality measure for substance belongs to specific capacity and conductivity; the role of UNIVERSAL measure of quantity for the behaviour of any substance is played by energy; the role of the measure of behavioural quality is played by thermodynamical factor of extensivity, or generalised potential, or intensial (square of velocity, absolute temperature, electrical potential and so on).

The second principle of GT is the conservation law of quantity; the third principle is the law of condition, which is a description of the total connection between nature phenomena; the fourth principle is the law of mutuality, which determines the symmetry of mutual influence between phenomena; the fifth law is the law of transfer of substance; the sixth law is the law of entrainment, which describes a symmetry of mutual entrainment between flows of different substances; the seventh law is a dissipation law, or screening law, or plus- and minus-friction law, which joins all the laws above and it makes all these laws incontradictable. Also the seventh law defines the energy balance in the object [1,2,3,4].

The second, third, fourth and seventh laws are new. These laws are proved experimentally from different aspects. Onzanger formulated the fifth and sixth laws.

Heat is Not a Chaotic Motion of Particles

So, among the seven laws above there is no second thermodynamics principle, which includes entropy, and heat death of the Universe. There are no such prohibitions in GT, so more than 20 types of operating devices were created. Devices transform heat from a monothermical source (air, water, earth) into electrical

energy and demonstrate efficiency of more than 100% this is a violation of Clausius second law [1, p.447, 470].

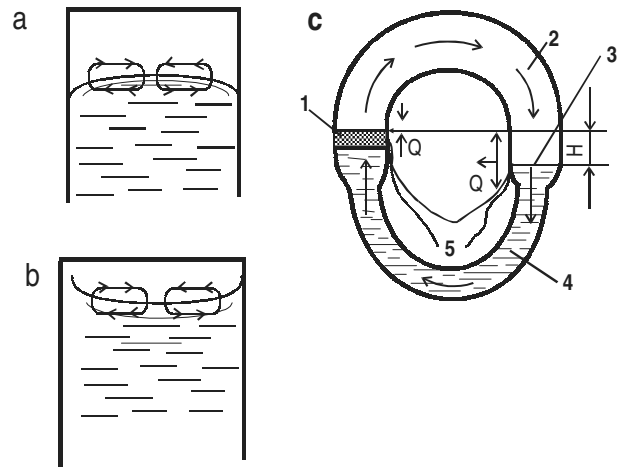

Figure 1

This is the picture of the simplest thermo-phase second type perpetual mobile: in this closed vessel the Thompson-Kelvin equation is violated since liquid is evaporating both in convex meniscus (a) and concave meniscus(b); in a closed circuit (c) of two pipes 2 and 4 the liquid evaporation takes place from the concave menisci of some capillary-porous body 1 (in this place the heat Q is absorbing) and in the flat meniscus 3 the steam condenses (in this place the heat Q is radiated). A temperature difference is created that produces electromotive force EMF 0.5 mkV in the differential thermopair 5. The intensity of the perpetual circulation of steam and liquid in the pipes and electric output of the thermopair is defined by H, i.e. by the curvature of menisci.

R.Clausius of 1865, when he unsuccessfully proved Carno theorem introduced the entropy in science. A.A.Guhman devoted his paper to this gross mistake [5,p.79; 6, p.140]. From properties of the entropy Clauseus came to a conclusion about the unidirectional development of the Universe and about the heat death of the Universe. In 1872 Boltzmann explained the sense of the entropy through the statistical mechanics method, which used ACCIDENT and probability notions. This explanation made the problem more tangled, since heat is considered as a chaotic motion of particles. When Boltzmann realized his mistake and the scientific consequences of it, he committed suicide. N.Wiener and K.Shannon made the question more complex by the application of entropy to information theory [1, p.406].

On Some Properties of Time

Chronal (notion, which is connected with time) and metrical (notion, which is connected with space) are new simple and exotic phenomena, which explain a lot of questions. According to Newton time is the "measure of duration", for example, duration of some processes or some events. All simple phenomena should correspond to seven principles of GT, so by means of simple phenomena it is possible to control time (and space) in the same way, used to control the other simple phenomena - rotational, vibrational, thermal, electrical and magnetic, taking into consideration the specifics of each phenomenon.

It is important to note: real physical time "υ" which is defined by chronal phenomenon and our ordinary time "t" announced by broadcasting, are different in principle.

Duration of "t" is a symbolic description, which is not present in Nature. Man for rational organization of society invented it. Symbolic time "t" "flows" or "moves" strictly even, with CONSTANT VELOCITY from the past to the future, and there is some special time service to measure it.

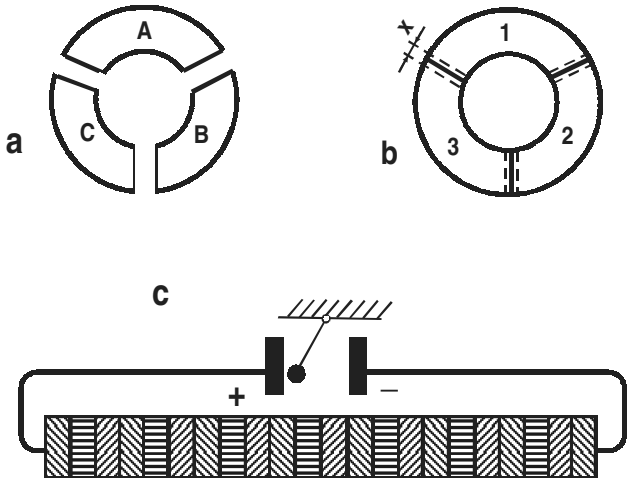

Figure 2

Diagrams of simple thermoelectric (b) and thermoelectromechanical (c) second type perpetual mobile. According to Volt law in an open circuit (a) that is consisting of three (or more) different types of conductors A,B,C the total sum potential difference is equal to zero. In a closed circuit (b) this law is violated by virtue of the non-equal change of thermodynamical properties of conductors 1,2,3 in the area of the contact "x". So, the total electromotive force EMF is not equal to zero (in circuit Cu-Bi-Al-Cu-Te-Al-Cu the EMF is equal to 10 mkV). The wooden ball is re-charges and oscillates between the ends of the circuit eternally (c).

Time "υ" really exists in Nature as the chronal property of some given object (body), from the bacillus to the star; it can "flow" or "move" with any ALTERNATING VELOCITY, from zero to infinity.

So, in principle it is impossible to control the "motion" of symbolic unexisting time "t". To control the velocity of "motion" for real time "υ" it is enough to properly select values for the equations. It is necessary to substitute the value "τ" in the equations. "τ" is a chronal intensitet (or chronal); it is inversely proportional to value "υ". If chronal "τ" increases, the rate of all processes in the body increases also.

It is interesting to note: some known physical laws include real time "υ", but some laws use symbolic time "t", and this leads to serious mistakes. In Newton's second law the denominator of acceleration formula uses real time square ($d\upsilon^2$). So, for two bodies collision experiment when there is a 10-fold difference in the rate of time, the forces of action are 100 times more than the reaction force. So, Newton's third law; the conservation of motion (and momentum) is violated by this. Some noncompensated force is created that allows movement "by means of inner forces" (so call reactionless motion). According to the third principle of GT (law of state) this

process can be created by many methods: for example, a ball moving on the inner side of the ring surface changes its velocity. Another example is a flywheel, which is rotating, and velocity of the rim from one side is added to the velocity of motion at this point on the planet's surface, but from the other side of the flywheel the velocity of the rim is subtracted from the velocity of planet rotation. For different velocities the ball and parts of the rim have different chronal values, so the ball presses on the ring differently; also the rim presses on the axis differently. Some non-compensated force is created as a result. Remember N.A. Kozyrev's experiments, which included rotating gyroscopes, [1, p.444]. According to the third principle of GT more than 30 operating devices were created, which proved the theoretical conclusions [1, p.413,428].

The existence of chronal difference in such sort of devices leads to chronal substance flow (fifth principle of GT) that allows the use of devices as effective chronal radiation generators. By means of such generators it is possible to stimulate or to suppress the vital activity of micro-organisms, to accelerate sugar-spirit transformation, wine ageing, to increase the germinating power of seeds, to increase the velocity of plants development by 2-3 times, to increase the productivity of plants by 1.5 times. In an experiment on aluminium casting, which had been irradiated in the hardening process, it demonstrated an increase of the cohesion limit up to 11%, yield limit up to 46%, and lengthening decreased up to 6%. See the monograph [7] about chronal properties for substances.

Another example: All known physical laws of energy transfer - Fourier's thermal conductivity, Fick's diffusion, Ohm's electro-conductivity, Maxwell's equations and so on, included symbolic time t, that allows us to compare the productivity of different technical devices in practice. This point of view is the reason for the principle mistake of Einstein's relativity theory. From this theory the conclusion about the variability of the velocity of time was made on the basis of the analysis of Maxwell's equations and the well-known Lorentz's transformation, those include symbolic time t "moving" with constant velocity.

On some properties of the space

Space is a simple metrical substance, which provides the objects including itself with sizes and mass, so we can see and sense those objects since we are living in a chronal-metrical world [1, p.247]. All other substances have no specific metrical properties (sizes and mass) so they are invisible and insensible - they are "smeared" inside of space volume, which is CONTINUOUS extended media. This media is created of portions of the metrical substance (by metriant).

In absolute vacuum conditions, named as paren, all substances, metrical also, exists in the absolute rest state. This is the absolute passivity state since the energy and intencitial value is equal to zero (first and third principles of GT). Also paren is an unlimited source of substance. If energy input takes place, different quantums of substances are activated and particles and objects are created in interaction. Some excited metriants are the parts of the created objects. Other metriants are not included in the object, remaining in absolute passivity state of paren, so they are invisible, insensible and they cannot be measured. This is the scheme for space and objects existing in space.

According to the second principle of GT, sizes of metriants conform to the conservation law, so they are equal to volume (mass) and it is impossible to compress or decompress space. In other words, space has solid body properties - "hardness", and it is confirmed by transverse mechanism for electromagnetic waves propagation in a vacuum. Motion of metrical medium takes place by means of flow passive metriants of paren around active metriants, it doesn't violate the continuous quality of space. In the beginning of the motion active metriants force passive metriants to move and it demonstrates the inertia phenomenon. For even and rectilinear motion the scheme doesn't change, and inertia is not demonstrated (Newton's mechanics first law). In another case, for rotation of the body, active metriants make passive metriants move to centre, so inertia force (centrifugal force in real sense) is directed from the centre to the periphery.

All intencitials (and also the differences of intencitials, and therefore the velocities of the processes) are equal to zero in the paren. So, anabsolute vacuum is an absolute system, which also includes ordinary co-ordinates. But for zero-velocity $w=x/\upsilon=0$ some small transferences x are possible since υ is equal to infinity.

There is no friction in the paren but motion of active metriants is connected with some insignificant resistance (the seventh principle of GT). The force of resistance (and inertia) should depend on the body composition, size, configuration and so on, that is proved by experiment [1, p.401].

To control space, in principle it is necessary to cover an ordinary body with an out-of-metrical envelope (insulation). In this case inside of the envelop the body has ordinary metrical properties but outside of the envelop this body has zero size and mass. This body can move through the walls. Since thought is a material object, this body can be directed in space by means of thought (teleportation effect). But we have no such envelop yet...

On so called "Fundamentals of Modern Natural Sciences".

The relativity theory, quantum mechanics theory and theory of information are considered to be such fundamentals. All physics textbooks write that it is impossible in any way to change the VELOCITY of atomic radioactive decay, which is used for determination an objects age and the date of some event. Meanwhile the author increased the velocity for Thorium (Th) decay up to 6% [1, p.347].

The VELOCITY of light in a vacuum is constant according to the relativity theory, but in our experiments the deviation was detected for helium-argon laser beam in non-homogeneous chronal radiation area, which was produced by means of 1.9 Kg gyro-motor. The laser beam length was equal to 28 meters, detector was a photoelement. Photoelement output signal was changed from 42mV to 39.6mV.

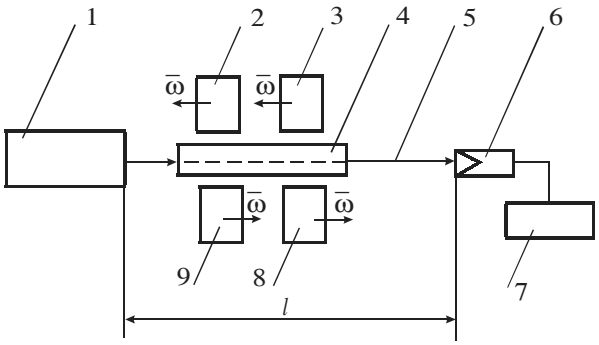

Figure 3

Scheme for experiment to curve a laser beam by means of nonhomogeneous chronal field: 1 - laser, 2,3,8,9 - gyromotors rotating with frequency w; 4 - metal tube; 5 -laser beam; 6 - photodetector; 7 - digital voltmeter; length is equal to 28 m.

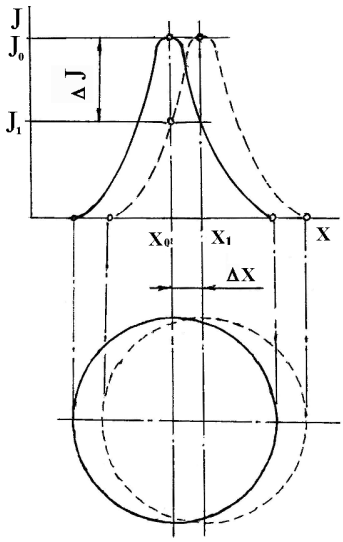

Figure 4

The scheme of intensity change $dJ=J_0-J_1$ for light flow that is received by photodetector, when the centre of the beam is deviated from point x_0 to x_1: x_0 is the position of the detector; J_0 is the intensity of the centre of the beam; J_1 is the intensity for some distance x_1 from the centre.

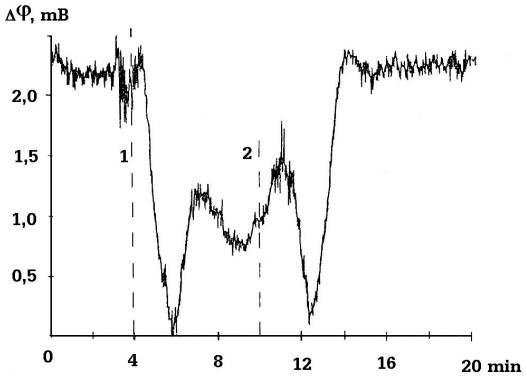

Figure 5

Curve of change of voltmeter data, in the centre t he data $\Delta\varphi$= 42 mV. For position 1 gyro-motors are on, for position 2 gyro-motors are off.

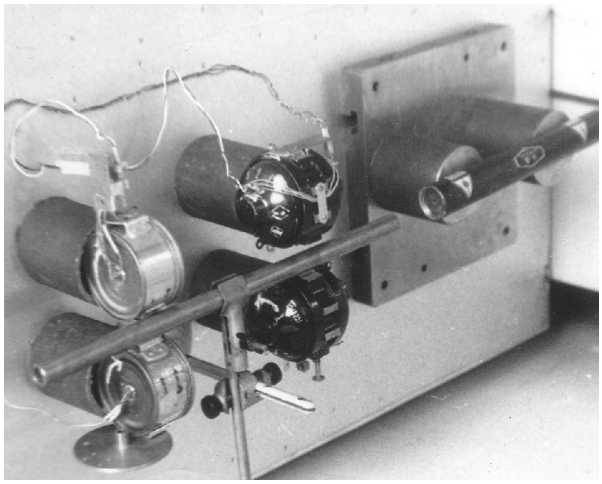

Figure 6 Device for chronal influence to light laser beam.

There are some interesting aspects in relativity principle: sizes of object decreases and mass of the object increases if the velocity of the observer increases. For example, length of your bed is equal to 2 meters and 20 Kg mass, but some observers moving in different rockets with different velocities and looking on the bed will note different sizes and masses in the same moment...

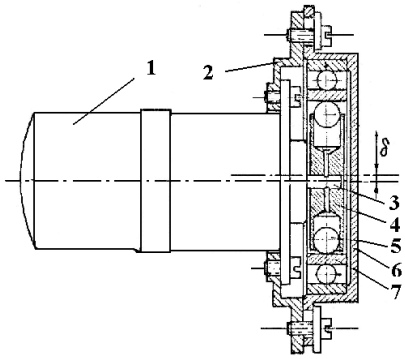

Figure 7

This is the design of a reactionless drive including un-evenly moving balls placed in the ring. This device violates Newton's third law and conservation law of motion. 1 is electromotor, 2 is ring for fastening the motor; 3 is the axis of the motor; 4 is the metal drive, which has 8 radial holes for working balls of 8 mm diameter; 5 are working balls; 6 is top and regulator of eccentricity d; 7 is a ball-bearing 45x68x12 mm. The uncompensated inner force is directed to the eccentricity d side. In this side the velocity of balls is at a minimum. The force (if eccentricity is equal to 0.7 mm and frequency of rotation is equal to 21000 rmp) is equal to $14x10^{-5}$N.

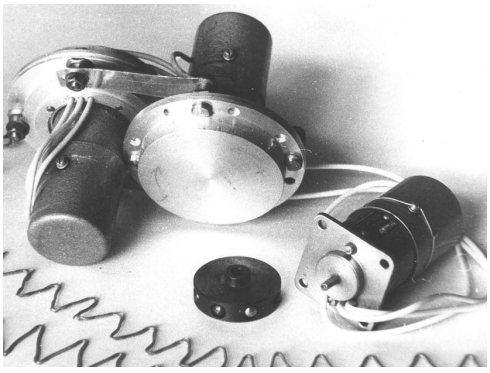

Figure 8

Two paired motors are rotating in opposite directions to compensate the torque.

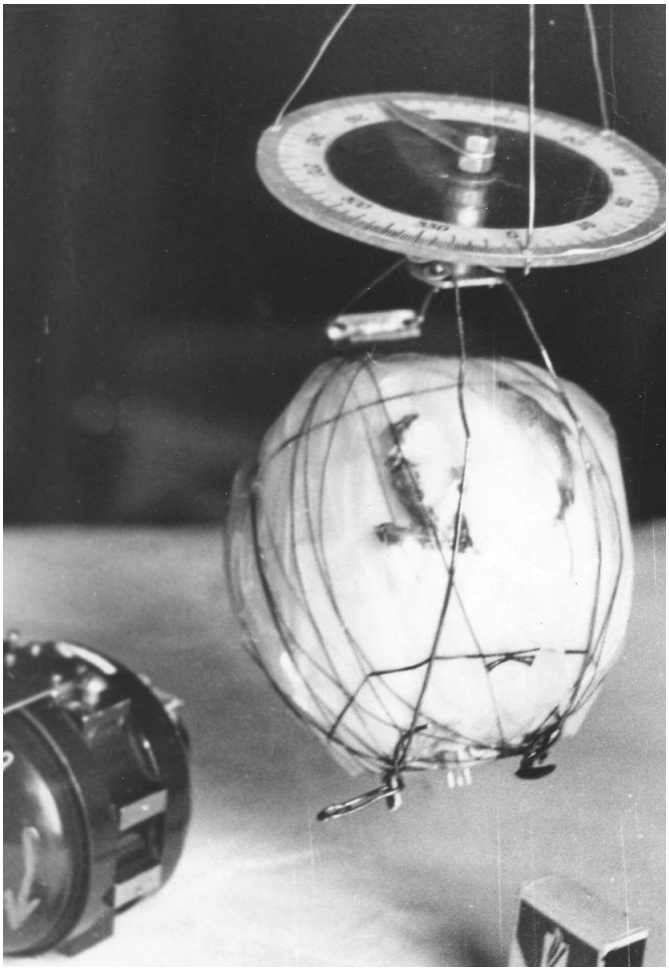

Figure 9
Gyro-motor that produce non-compensated inner force of about $100x10^{-5}$ N.

In the fundamentals of the quantum mechanics and theory of information the CHANCE principle is accepted, and probability of some event is a quantitative expression for it. Usually in conventional physics CHANCE is considered as objective properties of Nature. Below we will consider it in detail.

Non-occasional chances

In the process of the comparison of experimental results, some thought is coming about falsehood. Somebody has led us to believe in a wrong notion about the Universe, Nature and Humans. There is the question: who and why created this falsehood, and what is the real goal?

From the factual existence of chronal and metrical phenomena unknown before, the factual existence of invisible out-of-chronal/out-of-metrical world follows. This world is living out of time and space, without chronal and metrical substances.

More exactly, this world (called as spiritual world) is parallel to our visible chronal-metrical world and it is generating all so call anomalous phenomena: UFO, poltergeists, parapsychological ...[1].

The World of light forces is true in principle, so the dark forces are the reason for our scientific declaration about the invariability of some velocities and CHANCE as a property of Nature.

What is the goal? The goal is to divert human attention from the understanding of the following: in the days of the creation of the Earth, its chronal and rates of all processes, including the speed of light and atom decay rate were millions, billions of times higher than today. So, the billions years of evolution is a mistake.

Also the goal of the falsehoods is to inspire false belief about the CHANCE basis for Nature. In reality, the probability and CHANCE are CALCULATION METHODS we use in the situation, when we can not or we don't wish to study the phenomenon in all its complexity.

In Nature there is no CHANCE, everything is determined and all is essential.

So, ideas about accidental organisation of life from the lifeless matter, about primary matter and secondary spirit... lead to a false conclusion: the Universe was not created, God and soul do not exist, the Devil also does not exist, then we have nothing to afraid of. This wrong conclusion makes Human beings equal to animals, and allows them to live like animals***. This false idea makes mankind free of any moral responsibility because nothing exists after death.***

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