< ※ Some parts of this paper have been revised. If you want to see the revisions, please move to the new entries in **"26. Significant common defects of classical physics and modern physics, and necessity of new alternatives."**(← click)>

Flaws of Newton's Mechanics and Distorted Concepts Adopted by Modern Physics (1)

- For new advances and reflection of physics -

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Abstract

1. In the initial prerequisite to adopt the law of universal gravitation, Newton stated that the position of the earth and an apple is relative and the gravitation of the earth is combined with that of an apple. However, in the mathematical formula of universal gravitation, the motion of an apple pulled by the earth's gravity was only reflected but that of the earth was omitted. In short, the operating principle and the formula of universal gravitation were comprised of a logic under different conditions.

2. The quantum mechanics of modern physics adopted a distorted concept of the law of universal gravitation and provided the world view of physics with a chance to evolve anomalously. As an example, there is no differentiation between elementary particles pulling with gravitation and elementary particles pulled by gravitation. However, the role of elementary particles pulling with gravitation is entirely different from that of elementary particles pulled by gravitation. In short, elementary particles pulling with gravitation creates an energy field while elementary particles pulled by gravitation has response functions to an energy field.

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Ⅰ. Introduction

The law of universal gravitation argued by Newton describes the operating principle of gravity and shows its effect in mathematical formula. However, the formula of universal gravitation contains only a part of the descriptive contents and omits another part of it. The argument presented by the author can be conveniently understood by the process of universal gravitation's formula resolution in an inverse operation.

In case of formula resolution of universal gravitation composed of $\frac{m_1 \times m_2}{r^2}$, the result of resolution concluded to $m_1 \times \frac{m_2}{r^2}$. Also, in the structural property of $m_1 \times \frac{m_2}{r^2}$, it can be discovered that the mass of an apple(m_1) is conserved as its original scale but the mass of the earth(m_2) reduces at the rate of $\frac{1}{r^2}$.[3]

The formula, $m_1 \times \frac{m_2}{r^2}$, gives a crucial evidence in the process of understanding the operating principle of gravity. In other words, as the formula $m_1 \times \frac{m_2}{r^2}$ stands for, it only describes the process that the mass (m_1) of an apple is being pulled by the gravitation($\frac{m_2}{r^2}$) of the earth and omits the process that the mass(m_2) of the earth is being pulled by the gravitation($\frac{m_1}{r^2}$) of an apple. This reflects that the falling motion of an apple and that of the earth are not combined into a vector.

All objects(elementary particle) in the earth creates gravitational energy, and exists in a state of spatialization. The gravitational energy of spatialization contactually acts on the mass of an apple, inducing a kinetic

effect to the apple. The falling motion of an apple and that of the earth proceed as an independent system in here. This theory means that the mass of an apple and that of the earth are not directly connected, contrary to Newton's argument.

The distorted concept in the law of universal gravitation implicitly was passed on to the theory of relativity and quantum mechanics and provided a confusing situation. It is because every means of description is composed in the form of $\frac{m_1 \times m_2}{r^2}$ as the formula for universal gravitation.

In this study, a logical error in the law of universal gravitation will be established. Also, the process of passing on the distorted concept of the universal gravitation to the theory of relativity and quantum mechanics will be presented and the necessity for an alternative in a new paradigm for the theory of relativity and quantum mechanics will be explained.

Ⅱ. Body

1. Misunderstanding and Confusion over Newton's Universal Gravitation

Newton discovered universal gravitation acting mutually between two objects and described the effect of universal gravitation in the formula,

$$F = G\frac{m_1 \times m_2}{r^2} \quad \cdots\cdots\cdots\cdots\cdots\cdots (1)$$

In this formula, F is a scale of gravitation(motion), G is a gravitational constant, m_1 is the mass of an apple, m_2 is the mass of the earth, and r is the distance between the apple and the earth.

In the descriptive operating principles of universal gravitation, the relative position of an apple and the earth and the functional connection

of an apple's mass and the earth's mass are required. The subject that pulls with gravitation and the one pulled by it are not differentiated in here.

The mass of an apple has a response function on gravitation and keeps its value conserved. However, the gravitational energy of the earth pulling the mass of an apple is in inverse proportion to the square of distance($\frac{1}{r^2}$). The motion(gravitation) of an apple being pulled towards the earth should be described as:

$$F = G(m_1 \times \frac{m_2}{r^2}) \quad \cdots\cdots\cdots\cdots\cdots\cdots \quad (2)$$

Also, the motion of the earth pulled toward an apple shouldbe described as

$$F = G(m_2 \times \frac{m_1}{r^2}) \quad \cdots\cdots\cdots\cdots\cdots\cdots \quad (3)$$

As the structures of formula (2) and (3) stand for, sequential process(response function) pulled by gravitation and the process pulling (dominant function) with it go through an entirely different procedure.

The final results of formula (2) and (3) have one thing in common, to be concluded in a form of formula (1) and are not differentiated in the view of quantitative value. Thus, the structure of formula (1) embracing the final results of both formula (2) and (3) can be utilized representatively.

However, the sequential process of formula (2) has to be strictly differentiated with that of (3). As an example, gravitation of the earth with the process of formula (2) is reduced to the scale of $\frac{m_2}{r^2}$ and that of the earth with the process of (3) is reduced to the scale of $\frac{m_1}{r^2}$.

Gravitational energy of spatialization exists as an independent phase after completely getting out of original elementary particles. In addition, the energy in an independent phase acts contactually on other reactive elementary particles. Therefore, a sequential process of formula (2) and that of (3) are not allowed to have functional connectivity.

If the falling motion(gravitation) of an apple towards the earth and that of the earth towards an apple combines into a vector, another object, as a subject, has to be placed in the middle point between them. The motion of the object affected by the gravitation of an apple and the earth simultaneously can be described as an aggregate structure in here,

$$(m_1 \times \frac{m_2}{r^2}) + (m_2 \times - \frac{m_1}{r^2}) \quad \cdots\cdots\cdots\cdots\cdots\cdots \quad (4)$$

This falling motion of an apple and that of the earth proceed to an independent system and do not interfere mutually.

2. New proposal for an alternative to the Theory of Relativity and Quantum Mechanics

In modern physics'theory of relativity and quantum mechanics, each elementary particle's physical quantity is in an inverse proportion($\frac{1}{r^2}$) to the square of the distance(r), and it is recognized that the physical quantity of two interactive elementary particles(m_1, m_2) is directly connected each other. The basic concept and descriptive operating system of quantum mechanics(or the theory of relativity) are composed of the logic with the same conditions.

In case the physical quantity of two elementary particles(m_1, m_2) interact with each other, like the basic concept of quantum mechanics and descriptive operating principle of universal gravitation, the mutual gravitation of two elementary particles is described in the form of

$$F = G\left(\frac{m_1}{r^2} \times \frac{m_2}{r^2}\right)$$

$$F = G\frac{m_1 \times m_2}{r^4} \quad \cdots\cdots\cdots\cdots\cdots\cdots\cdots \quad (5)$$

However, the gravitation of two elementary particles observed practically is not in inverse proportion to the biquadrate of distance($\frac{1}{r^4}$) but to the square of distance($\frac{1}{r^2}$). In case the gravitation of two elementary particles is not in inverse proportion to the biquadrate of distance, the basic concept of quantum mechanics postulating that the relations of two elementary particles are in relative position should be discarded.

All kinds of elementary particles create and emit an energy field of spatialization permanently. Also, the energy field of spatialization supplies environmental condition for other elementary particles to move autonomously. In short, every elementary particle has a response function on energy field and a production function of energy field, simultaneously. The new model of elementary particles in this condition is minutely described in the author's present works(Title: Absolute Theory: Volume I and II). [2], [3]

Elementary particles(electrons) absorb light wave sat the speed of light and emit it in an instant. This effect means that the activation energy at the speed of light works in the present state inside of elementary particles. Here, the activation energy of elementary particles creates an energy field of spatialization infinitely. Therefore, if each elementary particle is assumed to have an activation energy, various conundrums of elementary particles can be answered bya simple theory.

In the process of expression of **"electric force kinetic effect"**,

electrons'activation energy and electropositive wave of spatialization act contactually. Here, if it is assumed that the activation energy of electrons is Es, the electropositive wave created by protons is Wa, and the distance between protons and electrons is r, the kinetic force(Fe) of electrons should be described as:

$$Fe = Es \times \frac{Wa}{r^2} \quad \cdots\cdots\cdots\cdots\cdots (6)$$

Each of the descriptive operating principles and mathematical formulas described in the law of universal gravitation is composed of logic with different conditions. In addition, in a descriptive operating principle of the theory of relativity and quantum mechanics which adopted the distorted concept of physical phenomenon, the sequential process of a physical phenomenon is not explained in a substantive functional view. Thus, a new theory should be pioneered to replace the theory of relativity and quantum mechanics.

III. Conclusion

In Newton's universal gravitation, it is described that the position of an apple(m_1) and the earth(m_2) is relative and the gravitation of an apple and that of the earth are combined(synthesized). However, the mathematical formula of universal gravitation only reflects the kinetic effect of the mass of an apple(m_1) pulled by the gravitation($\frac{m_2}{r^2}$) of the earth unilaterally and omits the kinetic effect of the earth(m_2) pulled by the gravitation($\frac{m_1}{r^2}$) of an apple.

The mathematical formula of the theory of relativity and quantum mechanics has been validly utilized. However, their descriptive operating principles are not established logically as the law of universal gravitation. When it comes to considering the situation of these conditions, it is

necessary to re-examine the validity of the theory of relativity and quantum mechanics.

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* Difference becomes specialty, Ideal becomes reality,
at the center of world in the name of center

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