

Sir Isaac Newton and the Three Laws of Determinism

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In the foreword to the first edition of the well-known "Mathematical Principles of Natural Philosophy" the great physicist, Sir Isaac Newton wrote, in particular, that it would be desirable to extend the harmonious principles of mechanics to other natural phenomena. Since then, there were some attempts to identify certain analogies to mechanics in a number of separate sciences. However in a broad sense, the wish of Newton remained unrealized.

Today, with the advent of the concept *Ring Determinism*, we at last, have an opportunity to generalize the mechanics of Newton over a wide range of phenomena.

Let's start with the First law of Newton, which states: In the absence of external influences, a material body *remains in a condition of rest or continues in uniform and rectilinear movement through inertia*. This law is also known as "the law of inertia". And what is **inertia**? As a matter of fact, it describes the ability of a body to **preserve** the initial parameters **of its own motion**.

The formula of the Newton's second law is: $F = m \cdot a$, where F = the size of the external force, m = size of inert mass, a = size of the acceleration of a body. If we rewrite this as: $a = F / m$ it becomes obvious, that the larger the mass of a body, the greater external effort is required to apply the same acceleration to it. Actually, inertial mass here acts as a measure **of its own internal resistance** to the influence of the external force.

The third law of Newton states that any external influence on a body causes an equal and opposite action from the body. In other words, any separate body can adequately "**answer**" an external influence.

It is necessary to pay attention to the fact that in these laws, there is transparently implied for each separate material body, a certain special **internal self-determining** mechanism, the origin of which demonstrates an ability towards **self-preservation** and **resistance** to external influences. Until now, only teleology tried to explain the presence in each separate body of a special internal determination. There is no such explanation in the framework of materialism.

With the advent of the concept of *Ring Determinism*, it is possible to give this a strict scientific explanation and to generalize this and apply it to a wide range of phenomena. The concept of ring determinism asserts that in the case of casual or intentional closure of the ends of a segment of any causal chain, there is the creation of a closed causal steady or quasi-stable natural formation. Through continuous internal circulation, a specific internal determining stream can arise. The idea is that the presence of this continuous internal stream gives rise to creation **of a new determining origin**, which allows new formations. This is not only to affirm itself as a separate natural factor with a set of its own special properties, but also to oppose itself against the world and every possible external influence in material, power, force, information and other aspects.

Inertia is an example of a *mechanical* display of internal determining origins. Generally, displays of this origin can be rather diverse. It concerns the sphere of electromagnetic phenomena, and

processes in biology, anthropology, politics, sociology, pedagogics and other spheres. But in all cases, the panel of regulations noted by Newton, can be generalized by way of the following *three laws of determinism*:

The first law of determinism: In the absence of external influences, the separate natural formation retains its condition or continues motion, function, behaviour, development under the influence of its own internal determination.

The second law of determinism: the more strongly (of higher power) its own internal determining origin is expressed (developed), the greater the external effort that must be applied to its movement (life, behaviour, development) to induce change.

The third law of determinism: any external influence on a separate natural formation causes a corresponding reaction, as long as it keeps its structural and functional integrity. Clearly, this action is organized, carried out and directed by its own internal determination.

This necessarily applies the widest spectrum of things surrounding us, including temporary social groups, mighty atmospheric formations, computer software products, psychological aims and others that exhibit a separate natural formation.

So, the generalization of Newton's laws apply to a broad range of experience and enable us to say that they conform to constructive ordered principles. Furthermore the general theory of determinism receives a necessary modification.