# The Principle of Relations

# The Principle of Relations:

Paradigma Principia Relationum

Ву

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Cambridge Scholars Publishing



The Principle of Relations: Paradigma Principia Relationum

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ISBN (10): 1-5275-0536-7 ISBN (13): 978-1-5275-0536-0 To Evy, Sven-Erik, Eta, Rebecca, Marcus, Pierre, Emel, Judith, Seth, Alwin and Wincent

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### **PREFACE**

Through the history of man and toward the future, there are three questions that will always follow humanity:

- 1. How can we understand the world?
- 2. What are the things and the beings in the world?
- 3. Why are things and beings changing?

During a short life we will see things happen, but we will never fully understand. Most of reality is out of reach for man, since our eyes and ears, even with the help of a microscope and telescope, cannot see all of reality.

It is, as we all know, impossible for humans to understand why the universe and its contents exist, we can only understand how, in the best case, the universe and its contents behave.

This is a fact.

That is life!

The conclusion is simple: be open-minded and broad-minded.

Trying to fully understand the meaning and inner quality of concepts, so the match with reality is complete, is the ultimate challenge for humanity. The process of creating such concepts takes time and can only be possible with an intense focus from an open mind and a persistent and stubborn personality.

The Principle of Relations is based on a quite different starting point, foundation and base than the established sciences. Concepts such as gravitation, energy, forces and time lead to certain conclusions, while the concept of relation leads to quite different conclusions.

To increase knowledge by finding new facts is a well proven method, while finding new concepts, theories and principles by theoretical investigations which can lead us to new insights in the reality, is of utmost importance and has to be restored.

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With this treatise I hope to engage and encourage investigations of "holy" concepts within most sciences, in order to reach a deeper grade of understanding and knowledge about reality.

The ultimate challenge for humans is not to be President, CEO, rich, Professor, set the world record in one hundred metres or to climb Mount Everest, however honorable, it is to formulate principles that can explain the entire reality and from which it is possible to deduce how different parts of reality behave.

There are through history many people, mostly men, who have tried to explain what they have seen in nature and society. Even if some theories turned out to be useful, over time all theories will be shown to be false.

The most remarkable fact of the history of science is how the science establishment lacks the quality not only to accept, but also to understand new ideas.

Humanity's need, longing and desire for order is basic. Once any human being has an order, scheme, structure or design, you can "kill" for just this order, whether it is in science, politics or religion.

To overcome the gap between words and reality is the most demanding task for any human. This goes not only for science, but also for politics and religions. In our daily life, however, where we live and in the businesses where we work, there is not so often a gap between words and reality, for the simple reason that we need to survive.

Sometimes in my life I have understood I was wrong in some idea and opinion, both in science and politics, as well as in business. This is always sad and painful, however healthy and helpful.

The Principle of Relations is a Theory of Everything, my view of the world and it is a piece of art, i.e. art gives insight into reality from another perspective and can be a start to new scientific findings. The intuition, fantasy and creativity of art are very important in understanding reality. Art and science are closely connected, but art can be ahead, in front of and prior to science.

Just as Ohad Naharin developed the movement language Gaga and as Picasso developed a new language of painting, so we must develop the new language of natural science. We must cross all established borders to reach a new language.

The conclusions of the Principle are dramatic; it becomes a fundamental questioning of all established thinking, both in natural sciences and politics.

To fully understand the Principle, the remaining work is enormous.

At this point in time the Principle of Relations can be understood only by persons not imprisoned in their existing thinking.

The study of this book has to focus on understanding the Principle, not to tell why it is wrong compared to establish thinking. The Principle is a discontinuance, cut, end, interruption and stop towards established paradigms, meaning a dramatic and revolutionary new thinking.

Normally a book has notes, but since most of the knowledge mentioned in these pages is commonly known and the purpose is to launch a new principle and a new paradigm, which point to the future, notes would focus too much on established thinking when we need to move forward. However I want to thank the persons who made it possible, both with knowledge, illustrations and pictures, to better understand, since all material is used for scientific understanding and to further develop human knowledge.

Starting from new postulates, a new principle and new equations, reading is demanding as well as writing, i.e. it is important to have no references and no quotes, since they can confuse the new idea.

This paradigm starts from new postulates and a new principle, and that is the main purpose; so try your best to understand this new principle and theory, and do not try to look at my mistakes concerning the established theories, which there of course are.

Please give the Principle of Relations a chance, try for some minutes to apply the Principle to the research you are doing or to some phenomenon you have seen and experienced.

At this stage it is impossible to do all that is proper in the traditional academic approach.

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I am sorry about this, that's why I have to write detailed books later on for each field of reality, i.e. the universe, species, the human and society.

I will furthermore need help from persons who are willing to spend some time pushing this idea forward and move the idea to new heights.

Please, then, mail me: thomas@paradigmor.com

For inspiring and constructive comments I thank Christian Geisler, Victor Stampe Damgaard Christensen and Stig Svensson.

Bromölla, Sweden - November 2017

### INTRODUCTION

We all need a principle that guides us in the world.

To orient ourselves in the world, we need a map - ideas, concepts, theories, ideologies, common sense and/or religions. Most of us will follow established ideas: either a theory, an ideology or a religion.

As I was born without a map, I have to create my own map.

I seek the principle of simplicity that guides the world - a simple principle of everything.

However, I don't believe that mankind fully can understand it All.

Even so, we must keep moving.

The earliest ancient Greeks did not distinguish between *being* and *things* as they ought to be, as contemporary science does. This distinction has been extremely rewarding for modern man – and so for the sake of utility we must continue to distinguish what is from what should be. However, in order to contemplate the depths of eternity, we must also allow what is and what should be to fuse. In doing so, we will release the vast potential of free will, allowing us to explore previously unknown worlds.

Classical philosophers and scientists of nature and culture, such as Aristotle, St Augustine, Hobbes, Newton, Spinoza, Wittgenstein and Einstein always started from a fundamental basis and tried to enclose all in the universe. We need to establish this tradition again, for the reason that today all sciences are split up into small pieces and now it is impossible to find the entire structure of the world.

Albert Einstein: "I came to the conviction that only the discovery of a universal formal principle could lead us to assured results. How, then, could such a universal principle be found?" Einstein also explained the impulse to devise new theories: "This is the striving toward unification and simplification of the premises of the theory as a whole (i.e., Mach's principle of economy, interpreted as a logical principle)."

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According to Aristotle, wisdom is knowledge of principles and causes, so studying principles and causes is the most fundamental and valuable study in philosophy. Aristotle wrote in the book Physics: "... if we are to gain scientific knowledge of nature as well, we should begin by trying to decide about its principles".

Principles are the base for many ideas within science, politics, religions and in daily life. Human thinking is based on Principles. Most advanced thinking starts with a Principle.

How possible is it that different parts of the reality and Nature are based on separate principles? Can Nature have the capacity to let different parts of the reality be controlled by different principles?

I believe the answer must be no. Nature always follows the easiest way of behavior for the reason of simplicity. Then there are no doubts, in all cases of behavior, how Nature will behave.

The conclusion must then be that there is only one principle that guides all in Nature.

So, which is the principle?

These are examples of Principles, defined as a fundamental law or truth from which others are derived:

- > The Principle of non-contradiction
- > The Principle of equivalence
- > The principle of relativity
- > The principle of quantum
- > The Principle of superposition
- ➤ The Principle of Archimedes
- ➤ The Principle of uncertainty
- > The Principle of randomness.

Now I want to add The Principle of Relations.

Human history is a battle between Principles and in this book I focus on Principles. Please accept the fact that no one fully understands all Principles and their impact on equations, experiments and observations.

Even when I try to deal with some details concerning equations, it is the Principle that counts, since the formulation of new Principles will both challenge established thinking and push science forward.

The method I have used is to take one part of the reality and find out the principle that governs the masses in this part. Then apply this principle to everything in universe. Since we cannot see the elementary particles or all of the galaxies in the universe, we have to start with what we can see.

Of course in some experiments it is possible to see such things as the frequencies and masses of elementary particles, but this is not how elementary particles behave in Nature. There is a big difference in how Nature is in itself and how man can manipulate some parts of Nature. All experiments are based on existing theories, which might be false, but they can manipulate parts of Nature to behave according to the theory.

This is also a road to cross the limit and border between what we can know and what we cannot know, a bridge from the known to the unknown, which Immanuel Kant's philosophy described as the world of the phenomenon and the Thing in Itself, i.e. the noumenal world. This is also a way to in some part overcome Wittgenstein's statement "Whereof one cannot speak, thereof one must be silent".

There are three levels of thinking. The first is impression thoughts about concrete experienced actions and objects in our daily life. The second is interpretation of our daily experiences through our application of a concept, whether it is a religious, political or scientific dogma, a theory or a paradigm. Now, it is time to look deeper, to find new concepts on a fundamental level, i.e. the third level, to find a new fundament and a new paradigm.

We need to establish a new and deeper understanding between the concepts and the reality, which have to be better integrated. It is often said that mathematics is the language of nature, but first we need to understand nature and the world as they are, then, afterwards, we can speak of the language of nature. So, the starting point for understanding nature and culture is a genuine listening to nature and culture. Pure mathematics doesn't have this ambition.

Sometimes mathematical equations are called the laws of nature, but we have to realize that Euclid's, Newton's and Einstein's equations are only interpretations of Nature. At best they are a rather good approximation of nature's manifestations, but they are far from being the laws of Nature.

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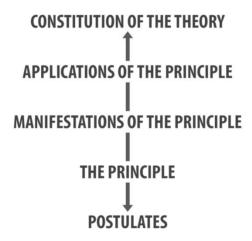
All science starts with thinking, based on sensory experience, then formulation of sentences, which leads to a principle and finally some equations.

If we really want to understand, we cannot just take one equation, understand it and continue to calculate. Instead we must go back to point zero and start thinking all over again, until we have formulated new sentences, new principles leading to new logic and new equations.

We can show this by the following scheme:

Nature  $\leftrightarrow$  Observation  $\leftrightarrow$  Thinking  $\leftrightarrow$  Sentence  $\leftrightarrow$  Principle  $\leftrightarrow$  Logic  $\leftrightarrow$  Equation  $\leftrightarrow$  Observation  $\leftrightarrow$  Nature

The Principle of Relations follows the pattern of postulates, the principle, manifestations, applications and constitution of the theory, where each part is similar to each other.



Science must be built on a solid foundation. If scientific concepts are based on a weak foundation, then all conclusions, whether conceptual or equational, are false. That is the reason to question all of today's accepted concepts, which needs to be done now and then.

Aristotle, most of all, formulated the concepts and structure of sciences, called logic, physics, biology, ethics, politics, poetics, rhetoric, dramaturgy, zoology, meteorology and metaphysics.

Since then this is how science has been understood.

Today, however, these basic sciences have turned into over 633 different sciences and it has been an exponential development over the last centuries. Almost any field of study has a name, ending with "-ology" from the Greek word logos, such as cardiology for the study of the heart, sociology for the study of society, carpology for the study of fruit and entomology as the study of insects to mention four out of the 633.

Mostly the sciences are divided into four categories, i.e. science of nature including mathematics, science of society including humanities, technology and medicine.

The concept of energy is fundamental in natural science today. Once stipulated, it is mostly used without worrying. At this point, we need to seek the roots of the concept. It all starts with Aristotle in the third century before Christ. Energy, in Greek ἐνέργεια (Energeia), was called Vis viva, living force or being at work.

Leibniz made a formal definition in 1695 and defined energy as the product of the mass of an object and velocity squared.

In 1802, Thomas Young used the concept energy instead of *Vis viva* and from that year the concept energy has been employed. In his published lectures he wrote:

"The product of the mass of a body into the square of its velocity may properly be termed its energy."

103 years later, in 1905, Albert Einstein had formulated the equation  $E=mc^2$  in the theory of special relativity.

From that point in time, science has not questioned the concept of energy. But, still, we do not know the proper significance of the concept or even if it is a useful concept for the interpretation of physical phenomena and appearances in Nature.

Once a concept has been established and is used without any reflection, we are trapped. The word and concept of energy has more than any other concepts let and led humanity into a dead-end when it comes to really

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understanding Nature. Even if the concept in its applications really has lit up the world, we need to investigate the concept itself again.

Since Aristotle and through history, philosophers and natural scientists, such as Leibniz, Frege, Russell, Wittgenstein, Newton and Einstein, have used the analogy that nature is a house, built up by parts. Once formulated, it is easy to accept this basic logic. The belief that nature consists of some small pieces, elementary-particles and all are synonymous, with rules of connection, enables the creation of any structure and conclusion. From axioms theorems can be deduced, atoms with bindings create molecules, elementary-particles create atoms with bosons, and planets are connected by attraction. Furthermore these elements and conclusions are either true or false. All models of science through history and up till now are based on this model, as are the Standard Model, the theory of relativity and others.

These are all human constructions, by analogy of how a house is built, i.e. block by block connected by bonding.

From The Principle of Relations we will understand that concepts such as *a priori* and *a posteriori*, analytic and synthetic sentences, true and false, realism and nominalism are not valid dichotomies.

It is human beings who invented, developed and created both logic and mathematics. They do not exist *a priori* in Nature.

The distinction between analytic and synthetic statements is analogous to the distinction between reason and fact, i.e. truths of reasoning and truths of fact. A scientific law is a combination of reason and fact, i.e. a combination of an equation and observations.

But we are always free to find an alternative and to find new relations between all existing branches of knowledge. Perhaps it is time to find the foundation which integrates science, religion and politics in one Paradigm.

Today we can identify at least these paradigms:

- 1.  $P_L$  The Paradigm of Logic
- 2. P<sub>P</sub>- The Paradigm of Relativity and Quantum theories in Physics
- 3.  $P_{E}$  The Paradigm of Evolution theories

- 4. P<sub>H</sub> The Paradigm of Human Body theories
- 5. P<sub>I</sub> The Paradigm of Ideologies

Table 1 below is from the book "Number", by John McLeish, 1991.

Paradigm			
	Earlier paradigm	Replaced by	"Normal" activities
Astronomy	The Ptolemaic conception of the world	The Copernicus conception of the world	Star map
Geology	"Terra firma"	Continental drift	Mapping
Physics	Newton's system	The theory of relativity	e.g. ballistics
Biology	"Creationism"	Darwinism	Description of species and sub species
Chemistry	The theory of flogiston	Burning by oxygen	Chemical analysis
Mathematic	Greek geometry	Non-Euclidean geometry	Accountancy and calculation

#### Table 1

Once a paradigm has been created, researchers in all universities will be performing normal activities. (The concept paradigm was popularized by Thomas Kuhn.) It is very important, but the real challenge is to find the next paradigm and this cannot be done in established institutions.

A paradigm is "home" for almost all people. In this universe, in this paradigm, they live their lives, not for one single day questioning the paradigm, whether it is within science, religion or politics. People build institutions and create hierarchies with the task of defending and protecting the paradigm, and they establish rules by writing books and performing ceremonies. We can see this in a church, a mosque, an institution at a university, and in a political ideology with flags, to mention some.

The structure and organisation of science today shows that it is divided into pieces which are too small, and even philosophy, when you look at any institution worldwide, is only a result of its history: one professor in logic and analytics, another professor working with ethics. No one has a new angle on reality.

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We must now find a theory which can explain the underlying facts of all these paradigms and theories.

The theory of relations is one attempt to do this.

So, I want to add a new paradigm,  $P_R$ -The Paradigm of Relations, i.e. The Principle and Theory of Relations.

Matter has been one main focus throughout the history of science and religion. The appearance of matter has been explained as a result of energy (Einstein), of form, source of causes and purpose/end (Aristotle), of spirit, body and soul (Christianity).

Now we can add the Principle of Relations and how relations affect matter.

The amount of knowledge in the world cannot be known by any single person, nor even a group of persons. All scientific knowledge of today is massive. Even within a specific discipline it is impossible to know everything. The only way to get hold of all aspects of reality is to formulate a principle. When testing the Principle you can only apply it to a small part of reality. Then if there are any reasonable judgements, statements and arguments supporting the Principle, we can continue with further investigations for other parts of reality.

We must be able to associate these fundamental concepts of the Theory of Relations with natural and cultural objects, otherwise the theory is useless. Ultimately the theory has to be verified with empirical tests and observations.

The Principle of Relations is formulated based on five postulates, transformed to equations and then applied to all fields of reality, i.e. the universe, elementary particles, changes of species, the human body, the human consciousness and psyche, and international relations.

We are dealing with a principle valid not only for the micro- and macrouniverse, but also for biology, medicine, physiology and society. This Principle holds for the whole of Nature, i.e. all masses such as quarks, leptons, atoms, molecules, genes, DNA, cells, organs, human bodies, species, planets, suns, moons, galaxies and the entire universe.

The Principle of Relations is a platform on which applications for all fields of reality can be understood, such as:

- ➤ Gravity
- > Strong nuclear force
- Changes of species
- Cancer
- ➤ Alzheimer's
- ➤ AV-block III
- > War
- > Poverty
- > Prosperity and Welfare.

The Principle of Relations is the third stage of understanding Nature:

- 1. Euclidian geometry
- 2. Non-Euclidian geometry
- 3. The Logic of Relations, i.e. nature and the entire universe is not geometry.

The Principle of Relations is a Theory of Everything, a new view of the world and a piece of art.

The conclusions of the Principle are dramatic: it becomes a fundamental questioning of all established thinking, both in natural sciences and politics.

The Principle of Relations, its postulates and manifestations, is the fundament for a new science

This is what I am trying to do and this is the platform on which I, for the rest of my life, in detail, will investigate all applications and manifestations of the principle.

### **CHAPTER ONE**

### **POSTULATES**

- All consists of the world today, the world of the past and the world of tomorrow
  - 1.1 Everything that ever existed, exists or will exist is a part of All.
  - 1.2. All is dynamic All is "alive".
  - 1 3 A11 = X.
- 2. One world exists today.
  - 2.1. The world is a part of All.
  - 2.2. Anything that does not exist today is not part of this world.
  - 2.3. The world is dynamic the world is "alive".
- **3.** Any world is differentiated into component parts each one of which stands in relation to another.
  - 3.1. It all hangs together.
  - 3.2. Nothing lives in isolation.
  - 3.3. It all hangs together through a relation R.
    - 3.3.1 Since it all hangs together, nothing is in isolation.
    - 3.3.2 The relation is superior to the parts, **a**, **b**, **c** ...
  - 3.4. If the relation is superior, there will be no cause and effect between the parts.
  - 3.5. The relation makes the parts' existence possible.
    - 3.5.1 Without relation the part will die and disappear.
  - 3.6. The concept of relation explains a system.
  - 3.7. All systems are arranged in a logical hierarchy. If a superior system collapses, then all subordinate systems will collapse.
  - 3.8. All systems of relation, at a certain time, constitute the world.
    - 3.8.1 Everything that happens, happens only one time. Nothing that happens will happen again. The unique disappears and will never come again.
    - 3.8.2 Everything which is will be something new.

Postulates 11

- **4.** Everything that exists is physically concrete.
  - 4.1. Meaningful concepts are concretely interrelated.
  - 4.2. Abstract concepts must be able to be derived from concrete concepts.
  - 4.3. The sentence expresses the thought in a way which is perceptible for the senses.
  - 4.4. There are no meaningful concepts without concrete meanings.
  - 4.5. The contents of thoughts are concrete.
  - 4.6. That which is concrete either exists or does not at a certain point of time
  - 4.7. The combination of article 3.9 and articles 4.1 4.6 is the world alive.
- **5.** Thoughts about concrete facts are meaningful propositions at a certain point of time.

### CHAPTER TWO

### THE PRINCIPLE OF RELATIONS

Based on the postulates the principle is

#### X = aRb

where the concepts are the following:

All = X and X is any A, B, C, D, E, F, G ... in All.

a is any system, unit, entity, part, element in any field of Nature.

b is any system, unit, entity, part, element in any field of Nature.

R is a flow of packages,  $p_{1-n}$ , between a and b in any field of Nature.



Figure 2-1

Between all systems and all parts of systems there is a continuous flow of packages.

Since R exists, there is no empty space, whether in the cosmos or between particles, i.e. R is present with its contents all over space all the time.

Manifestations of the flow of packages are what science calls gravitation, energy, interaction and force, to mention a few.

The packages are needed for any system's survival as well as its change. Over time the packages change any system, e.g. the earth's surface, the age of humans and the degree of prosperity.

If this flow of packages for some reason is interrupted or stopped, being too weak or too strong or with damaged content, the receiving system will be damaged. For the human being there will be disease, for elementary particles there will be a nuclear explosion, for the society there will be crisis, violence, poverty and war.

Some examples of equations, to be investigated fully later, are the following:

E = aRb

Where E is energy, a can be the sun, b can be a leaf and R is a flow of packages, photons, with material, based on article 3 of the postulates, between a and b.

G = aRb

Where G is gravitation, a can be the sun, b can be the earth, and R is a flow of packages, not yet discovered, with material, based on article 3 of the postulates, between the sun and the earth. This flow of packages is shown up as gravitation. The mechanism is however more complex as shown later.

A = aRb

Where A is what we today call an atom, a can be the combination of protons and neutrons, b can be the electron and R is a flow of packages with material, based on article 3 of the postulates, between a and b.

C = aRb

Where C is cancer, a can be blood cells, b can be the testicle and R is a flow of packages with material, based on article 3 of the postulates, between a and b.

# The logical hierarchy of relations based on axioms and article 3.8 of the postulates

The axioms are:

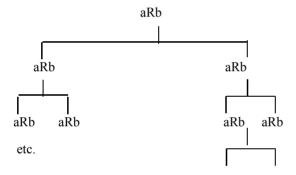
 $a_{1-n}$ 

 $b_{1-n}$ 

 $R_{1-n}$ 

aRb

Then the hierarchy can be illustrated as below in figure 2-2:



Now we must identify all a, R and b, which leads us to this table:

$$R_1 = a_1 = b_1 = R_2 = a_2 = b_2 = etc.$$

And so on for an endless amount of billions of billions ... for all areas of Nature.

## The Principle of Relations is valid for all systems at all levels in the entire Nature

- $ightharpoonup R_S$  is the system of all relations within a certain a or b and between a and b.
- R is the organizational mechanism of masses and how elements are organized.

- ➤ All structures and parts of it are changing over time by transportation- and transformation-systems in and between a and b as the mechanism of change.
- When any R is broken, disorder and damage will occur.

## The organizational mechanism of masses in the universe, species and the human body

It is R that organizes b, i.e. the packages from a in R have an impact on b. We are dealing with a principle valid not only for the micro- and macro-universe, but also for biology, medicine, physiology and society, i.e. for any given system.

#### Transportation- and transformation-systems

Any transportation-system has the same logic. It contains instructions as to how contents are delivered. There are addresses, carriages, details of how the content is loaded and unloaded, size of the content, how the content fits into different parts of the transport, calls for content, "doors" to the cover of a system and a mechanism to open "doors".

At all points of delivery the content will change appearance. It will look different. It will be transformed.

A cover has an important role in all systems of Nature. Any system has covers, from one cover up to many. A cover protects the system and has a mechanism for taking in packages from outside. They all have the mechanism of transforming R, i.e. relations contents, to the inside of the system. According to aRb, both a and b have covers, which change the system of themselves when R affects them.

### The mechanism of change

**R** is the transformational factor (tf) in Nature, in and between all systems.

tf = f(R)

The factor R has a different size and content for different systems.

The bigger the system, the bigger the size of R, i.e. the amount of  $p_{1-n}$ ; see equation below.

In R there are packages that change m, i.e. the mass, so over time, t, all  $m_{1-n}$  (= $a_{1-n}$  and  $b_{1-n}$ ) will change and disappear.

However a is part of a system, where  $R_1$  will change, increase or decrease, the content of b, now changing to  $b_{11}$  ... (in  $a_{11}$  the first 1 means a specific element and the second 1 means at a certain time; the same goes for b, then  $b_{11}$  changes to  $a_{12}$  and via  $R_2$   $b_{12}$  will occur)

When comparing a and b at different t, we can find out the content of R.

This mechanism will be shown for the whole of Nature, i.e. all masses such as quarks, leptons, atoms, molecules, genes, DNA, cells, organs, human bodies, species, planets, suns, moons, galaxies and the entire universe. (This is now very abstract, however later on it will be clarified.)

All structures and parts of structures are changing over time based on article 3.9.1 of the postulates.

The flow of packages will over time change each of a, b, R and aRb. At  $t_1$  the structure and its content have one appearance and at  $t_2$  the structure and its content have another appearance.

**R** contains  $p_{1-n}$  and the equation of R is as below:

$$R = \sum p_{1\text{-}n} = \ p_1 + p_2 + p_3 \ ... p_n$$

Or in the common form

n

$$R = \sum_{i=1} p_i = p_1 + p_2 + p_3 \dots p_n$$

This content will over time change any structure a, b, c ...

### Examples of key figures for different systems, which will change over time

The key figures, to mention just a few, are: for the human body - pulse, fever, blood pressure, weight, creatinine, sedimentation rate and saccharine level; for the solar system's planets and the sun - weight, size, distance to other planets and the sun; for the nation - gross national product, exports, imports; for the international system - poverty, diseases and wars; for companies - income, costs, profit, liquidity, solidity, products, market and customers, lead times in the production chain etc.

#### The networks of R<sub>s</sub>

- 1. Everything is included in a network, connected by relations. This is valid for atoms, molecules, planets, solar systems, galaxies, organs, human being, groups and nations.
- 2. NW = network.
- 3. NW =  $(aRb)^{\infty}$
- 4.  $NW = R^{\infty}$
- 5.  $\mathbf{R}_{\mathbf{S}}$  is the system of relations.
- 6. The stratum/levels of the reality = the hierarchy of Nature = postulate 3.8.
- 7. The most basic stratum has impact on the next level of stratum/strata.
- 8. The reality consists of many strata.
- 9. Today we are told that the strong force between elementary particles is based on interaction between quarks, mediated by gluons. However it is the opposite, i.e. it is R between the elementary particles that are the source of the so called strong force.
- 10. Some particles belong with certain other particles and some particles cannot co-exist with others.
- 11. When we know all the relations  $R_{1-n}$  in Nature, we can know the specific answer to the question concerning position and momentum for any particle, i.e. opposite to the principle of uncertainty. Then the principle of uncertainty is not valid.

# Based on the postulates, the fundamental concepts and the fundamental equations behind the laws of relations are the following:

#### **Basic concepts:**

- 1. X = A11
- 2 N = Nature
- 3. X = Systems in N

4. 
$$N = X$$

There are words that explain the same content, which then are synonymous words.

All = X, has the content of everything, there is nothing outside. In Nature = N, the content is also everything and nothing more can be present. So All and Nature are synonymous words, i.e. X = N.

- 5.  $X = \text{all qualities in N, such as A, B, C, D, E, F, G} \dots$
- 6. X = A, B, C, D, E, F, G ...
- 7. W = World
- 8. S = System
- 9.  $S_{1-n} = Systems$

A system's content is less than N and X, so N and X consist of many systems, S.

A system can be the human body, the earth, the atom, the galaxy, the sun, the moon, organs, organisms, animals and galaxies or nations, to mention a few

10 P = Part

11. p = package

Packages are contents, which are different in different systems. P can be the elements of any S, such as the kidney, the testicle, the heart, the sun or an atom. The difference between S and P can sometimes be subtle.

12. R = Relation

13.  $R_S$  = systems of relations

A relation is a flow of packages between systems.

14. t = time

Since time doesn't exist in N, but is invented by humans, it means the difference in an object, that difference now measured in human time.

### 15. T = Temperature

Temperature doesn't exist in N, since it is a consequence of the speed of the packages.

16. NW = Network